

## **State Energy Data Report 1996**

### **Consumption Estimates**

The *State Energy Data Report 1996* presents estimates of annual energy consumption at the State and national levels by major economic sector and by principal energy type for 1960, 1965, 1970, 1975, and 1980 through 1996. Included in the report are documentation describing how the estimates were made for each type of energy, the source references for all input data, and a summary of changes from the *State Energy Data Report 1995*, which was published in December 1997.

Publication of this report is in keeping with responsibilities given to the Energy Information Administration (EIA) in Public Law 95-91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information....

### **Contacts**

The *State Energy Data Report* is prepared by the Integrated Energy Statistics Division of the Office of Energy Markets and End Use, Energy Information Administration, under the direction of Katherine E. Seiferlein, 202-586-5695 (kitty.seiferlein@eia.doe.gov).

Questions concerning the contents of the *State Energy Data Report* may be referred to Julia F. Hutchins (202-586-5138 or julia.hutchins@eia.doe.gov) or Roy M. Stanley (202-586-5839 or roy.stanley@eia.doe.gov).

### **General Information**

General questions on energy statistics may be directed to the National Energy Information Center at the address, telephone, and telecommunications numbers shown under **Ordering Information**.

Released for Printing: February , 1999

GPO Stock No. 061-003-00000-0



Printed with soy ink on recycled paper.

### **Ordering Information**

This publication and other Energy Information Administration (EIA) publications may be **purchased** from the Superintendent of Documents, U.S. Government Printing Office. An order form for this publication is provided in the back of this report. Orders may be directed to:

Superintendent of Documents  
U.S. Government Printing Office  
P.O. Box 371954  
Pittsburgh, PA 15250-7954

202-512-1800  
Fax: 202-512-2250  
8 a.m. to 4:30 p.m., eastern time, M-F

**Complimentary** subscriptions and single issues are available to certain groups of subscribers, such as public and academic libraries; Federal, State, local, and foreign governments; EIA survey respondents; and the media. For further information and for answers to questions on energy statistics, contact EIA's National Energy Information Center at:

National Energy Information Center, EI-30  
Energy Information Administration  
Forrestal Building, Room 1F-048  
Washington, DC 20585

202-586-8800  
Fax: 202-586-0727  
Internet E-Mail: [infoctr@eia.doe.gov](mailto:infoctr@eia.doe.gov)  
TTY: For people who are deaf  
or hard of hearing: 202-586-1181  
9 a.m. to 5 p.m., eastern time, M-F

### **Electronic Access**

The *State Energy Data Report 1996* and data files containing the complete time series (1960-1996) are available electronically. At the EIA **Internet** address, <http://www.eia.doe.gov>, select "State Data" to access Adobe Acrobat readable files of the report pages, HTML versions of the report tables, and ASCII comma-delimited files of data.

The report and data are also available on EIA's **CD-ROM**, the *Energy InfoDisc*, along with over 200 other EIA reports, databases, and models. For more information, call NEIC, or to order, call 1-800-STAT-USA.

# **State Energy Data Report 1996**

## **Consumption Estimates**

**February 1999**

**Energy Information Administration**  
Office of Energy Markets and End Use  
U.S. Department of Energy  
Washington, DC 20585

This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy of the Department of Energy or any other organization.

# Contents

	<i>Page</i>
<b>Introduction</b> . . . . .	1
<b>Tables</b>	
1996 Summaries . . . . .	7
United States Summaries: Selected Years 1960 through 1996 . . . . .	19
State Summaries: Selected Years 1960 through 1996 . . . . .	27
(Listed alphabetically by State)	
<b>Appendices</b>	
A. Documentation . . . . .	335
Section 1. Documentation Guide . . . . .	335
Section 2. Coal . . . . .	339
Anthracite . . . . .	339
Bituminous Coal and Lignite . . . . .	340
Net Imports of Coal Coke . . . . .	343
Section 3. Natural Gas . . . . .	345
Section 4. Petroleum . . . . .	347
Petroleum Overview . . . . .	347
Asphalt and Road Oil . . . . .	347
Aviation Gasoline . . . . .	350
Distillate Fuel . . . . .	351
Jet Fuel . . . . .	355
Kerosene . . . . .	358
Liquefied Petroleum Gases . . . . .	360
Lubricants . . . . .	364
Motor Gasoline . . . . .	365
Petroleum Coke . . . . .	367
Residual Fuel . . . . .	368
Other Petroleum Products . . . . .	371
Petroleum Summaries . . . . .	376

	<i>Page</i>
A. Documentation (Continued)	
Section 5. Renewable Energy . . . . .	379
Section 6. Electricity. . . . .	387
Section 7. Total Energy . . . . .	407
B. Combined State Energy Data System Variables. . . . .	409
C. Sources of Independent Variables in the Combined State Energy Data System . . . . .	445
D. Thermal Conversion Factors . . . . .	477
E. Resident Population . . . . .	495
F. Metric and Other Physical Conversion Factors . . . . .	499
G. Carbon Dioxide Emission Factors for Coal, 1980 through 1996 . . . . .	503
H. Summary of Changes Since the <i>State Energy Data Report 1995</i> . . . . .	509
I. State Data in Other EIA Reports. . . . .	513
 <b>Glossary</b> . . . . .	 517

# Introduction

## Purpose

The *State Energy Data Report (SEDR)* provides annual time series estimates of State-level energy consumption by major economic sectors. The estimates are developed in the Combined State Energy Data System (CSEDS), which is maintained and operated by the Energy Information Administration (EIA). The goal in maintaining CSEDS is to create historical time series of energy consumption by State that are defined as consistently as possible over time and across sectors. CSEDS exists for two principal reasons: (1) to provide State energy consumption estimates to Members of Congress, Federal and State agencies, and the general public and (2) to provide the historical series necessary for EIA's energy models.

## System and Report

Efforts are made to ensure that the sums of the State data equal the national totals as closely as possible for each energy type and end-use sector as published in other EIA publications. Estimates in this *State Energy Data Report (SEDR)* are generally comparable to the statistics in the *Annual Energy Review 1997* and the *Monthly Energy Review*, March 1998.

Due to page-size constraints, *SEDR* tables show data for selected years from 1961 through 1979; however, data for all years 1960 forward are maintained in CSEDS, are included in the data files available via Internet, and are covered by the documentation in this report.

Extensive documentation follows the data tables in this report. Appendix A describes how the estimates were derived for each individual energy source. Appendix B lists alphabetically all of the variable names and formulas used. Appendix C lists the sources of all data series. Appendix D lists the

conversion factors used to convert physical units into British thermal units and cites the sources for those factors. Appendix E provides the State resident population statistics that are used in per capita calculations. Appendix F provides metric and other physical conversion factors for measures used in energy analyses. Appendix G contains carbon dioxide emission factors. Appendix H summarizes the changes made since the last report, which was released in December 1997. Appendix I lists other EIA reports containing State-level data.

## Improvements

Several data series were refined slightly: coal coke imports and exports gained 3 decimal places of accuracy for 1980 forward; renewable energy use by nonutility power producers was revised from 1992 forward; fossil fuel heat rate conversion factors used to convert kilowatthours of electricity generated from hydroelectric, wind, and solar energy sources were revised from 1989 forward; and several Federal Highway Administration motor gasoline data series that are used to estimate motor gasoline and liquefied petroleum gases consumption from 1984 forward were revised.

Commercial sector wood consumption for 1990 forward was previously available at the national level only and the values were included in the U.S. residential wood consumption total in *SEDR* tables. In this version of CSEDS, a method was developed to estimate State-level commercial wood consumption, and the estimates are now show on each State's commercial sector table.

**Appendix H.** Detailed information about all data revisions in this edition of *SEDR* is contained in Appendix H. All data with revisions since the last edition of CSEDS that are large enough to be seen in the report tables' level of rounding are preceded with an "R" in the report tables.

## Data

**Estimation Methodologies.** CSEDS develops estimates of energy consumption by principal energy sources and major end-use sectors, by State, for a 37-year period. Energy consumption is estimated by using data from existing surveys of energy suppliers that report consumption, sales, or distribution of energy at the State level. Most of the CSEDS estimates rely directly on collected State-level consumption data. (See box below that summarizes the status of current data sources used.) Some consumption

estimates in CSEDS are based on a variety of surrogate measures. The measures were selected principally on the basis of applicability as an indicator of consumption, availability, continuity over time, and consistency. For instance, for petroleum, "product supplied" is a surrogate for consumption and is derived by summing field and refinery production, plus imports, minus exports, plus or minus changes in stocks. State-level sales survey data are used to disaggregate the national petroleum product supplied totals to the States. The measures of consumption and estimation methodologies are explained in detail under each energy source in Appendix A.

### Collected Data and Estimated Values in CSEDS

**Coal.** U.S. anthracite, bituminous coal and lignite, and total coal consumption data by sector are taken directly from EIA's *Quarterly Coal Report (QCR)* or are unpublished data from EIA's Weekly Coal Production database. Total coal consumption by State and for most sectors is from the *QCR*, except where values are withheld and must be estimated. The State-level disaggregation of the *QCR*'s combined residential and commercial sector and the combined anthracite and bituminous coal and lignite use in all sectors (except electric utilities) are estimates. Data on electric utility coal consumption by State and coal type are data from the Form EIA-759, "Monthly Power Plant Report," database.

**Natural Gas.** Natural gas consumption by State and sector come directly from the EIA's *Natural Gas Annual (NGA)*. Natural gas consumed as lease fuel and plant fuel and natural gas delivered to industrial consumers are combined in CSEDS as industrial sector consumption. Natural gas consumed as vehicle fuel and pipeline fuel are combined in CSEDS as transportation sector consumption.

**Petroleum.** U.S. total consumption for each petroleum product is the "product supplied" data from EIA's *Petroleum Supply Annual*. State values for distillate fuel and residual fuel consumption at electric utilities are unpublished data from EIA's Form EIA-759 database. All other State and sector values for consumption of petroleum products are estimates based on sales data from several sources.

**Renewable Energy.** • Residential and commercial sectors consumption of wood and solar energy are estimated. • Industrial consumption of wood and waste is also estimated. Industrial consumption of hydroelectric power is data collected by the Federal Power Commission for 1960 through 1978, CSEDS' estimates for 1979 through 1989, and data collected by EIA on Form EIA-867, "Annual Nonutility Power Producer Report," for nonutility power production for 1990 forward. Industrial consumption of geothermal, wind, solar thermal, and photovoltaic energy is collected on the Form EIA-867. • State-level transportation use of ethanol is estimated, although the U.S. data are collected on several forms and reported in EIA's *Renewable Energy Annual*. • All sources of renewable energy used for electricity generation at electric utilities (i.e., wood and waste, hydroelectric power, geothermal, wind, solar thermal, and photovoltaic energy) by State are from EIA's *Electric Power Annual (EPA)* or are unpublished data from the Form EIA-759 database.

**Nuclear Electric Power.** Nuclear electricity generation by State is from the *EPA*.

**Electricity.** Electricity consumption is sales data by sector and State from the *EPA* with one exception. The *EPA* "Other" category is allocated to the transportation and commercial sectors in each State by estimation.

**Electrical System Energy Losses and Net Interstate Flow of Electricity.** These series are estimated in CSEDS.

Methods are also applied to estimate State electrical system energy losses that are not available from any survey. See the box below for a discussion about losses and how they are reflected in *SEDR* tables. U.S. total electrical system energy losses are allocated to each individual State's end-use sectors in proportion to the sectors' electricity sales. The estimation method does not separately identify electrical system energy losses from interstate flow of electricity. Therefore, specific estimates are developed for Alaska and Hawaii and for the 48 contiguous States. The Electricity section of Appendix A on page 390 explains the methodology in detail. EIA is examining a method to disaggregate the estimates of net interstate flow of electricity and electrical system energy losses that are currently combined. The explanation and Tables A10 through A20 in the Electricity section of Appendix A (pages 393–405) discuss and illustrate the alternative methodology.

**Data Sources.** The original source documents cited in Appendix C include descriptions of the data collection methodologies, universes, imputation or adjustment techniques (if any), and errors associated with the processes. Due to the numerous collection forms and procedures associated with those reports, it is not possible to develop a meaningful numerical estimate of the overall errors of the integrated data published here.

Reliable, consistent series for long periods of time—especially in the earlier years—are difficult to develop, and estimates and assumptions must be applied to fill data gaps and to maintain definitional consistency. Although CSEDS incorporates the most consistent series and procedures possible, users of this report should recognize the limitations of the data that are due to changing and inadequate data sources.

### Energy Consumption Measures—Total and Site

Sources of energy can be categorized as primary and secondary. Primary sources of energy, such as coal, petroleum, and natural gas are consumed directly. Electricity is a secondary form of energy that is created from primary energy sources. The amount of electricity actually consumed by the end user (site consumption) does not include the energy lost in the generation and delivery of the electricity to the point of use.

Primary sources of energy are measured in applicable physical units. Coal is measured by the short ton (equal to 2,000 pounds); petroleum, by the barrel (equivalent to 42 gallons); and natural gas, by the cubic foot. Energy sources are also measured by their heat content, generally expressed in British thermal units (Btu). For example, in 1996, the average short ton of bituminous coal and lignite consumed at electric utilities contained 20.5 million Btu (Table D13), the average barrel of distillate fuel contained 5.825 million Btu (page 490), and the average cubic foot of natural gas consumed at electric utilities contained 1,015 Btu (Table D3).

Electricity, a secondary form of energy, can also be measured in physical units, commonly kilowatthours, and by heat content. The conventional

thermal conversion factor for electricity consumed by the end user (site consumption) is 3,412 Btu per kilowatthour.

Table A10 on page 395 shows that electric utilities consumed 32.1 quadrillion Btu of primary energy in 1996 in order to provide 10.6 quadrillion Btu of electricity for sale. These data indicate that 67 percent of the primary (embodied) energy in the fuels consumed to generate the electricity was used (or “lost”) in converting the primary energy to electricity and transmitting and distributing the electricity to the consumers, and 33 percent was used as site (point-of-use) electricity by consumers.

In evaluating energy consumption in this report, tables titled “Total Energy Consumption” include all primary energy sources, including those used to generate electricity; the electricity generated is not included. Tables showing “Total End-Use Sector Consumption” include columns for the primary sources and electricity that are consumed by the sector, as well as a column for the estimated energy lost in the electrical system processes. The “Total” column in those tables includes all energy consumed by the sector and the associated energy lost in the generation and transmission of electricity. The column titled “Net” is site energy consumption—that is, the sum of the primary sources and electricity, excluding the electrical system energy losses.

In reports prepared by the Bureau of Mines in the late 1960's and early 1970's, petroleum consumption was equated to demand. Later, consumption was equated to apparent demand and, more recently, to product supplied. Changes in surveys and reduction of data collections, especially after 1978, disturbed the continuity of some petroleum consumption series, most notably for distillate fuel, residual fuel, kerosene, and liquefied petroleum gases. These and other data inconsistencies are explained in detail under "Additional Notes" for each energy source in Appendix A. All data series with recognized data inconsistencies are footnoted in the *SEDR* tables.

## Comparison with Other Energy Consumption Reports

EIA conducts numerous energy-related surveys. In general, the surveys can be divided into two broad groups. One group of surveys, called supply surveys, is directed to the suppliers and marketers of specific energy sources. Those surveys measure the quantities of specific fuels supplied to the market. The results of supply surveys are combined and published in a number of EIA publications, including the *Monthly Energy Review* and *SEDR*. The second group of surveys, called energy consumption surveys, gathers information directly from end users of energy. Although there are some elements in common, the supply survey data and the consumption survey data have substantially different approaches, capabilities, and objectives. Thus, care must be taken in analyzing *SEDR* data in conjunction with consumption survey data for the following reasons:

- *SEDR* is designed to be a broad accounting of energy consumption, covering all energy use and splitting it into major sectors as clearly as possible. The energy consumption surveys are designed to be comprehensive and representative within individual sectors. However, the sectors are restricted for purposes of creating relatively homogeneous, well-defined populations and for aiding in sampling and data collection. For example, the Residential Transportation Energy Consumption Survey covers only household vehicles; CSEDS covers all uses of energy for transportation of persons and commodities. Similarly, the Commercial Buildings Energy Consumption Survey covers only energy consumption in commercial buildings, while CSEDS includes other commercial consumption, such as street lighting and public services; and the Manufacturing Energy Consumption Survey covers only manufacturing

establishments, while CSEDS includes other industrial energy consumption (i.e., mining, construction, agriculture, fisheries, and forestry). Further, the consumption surveys do not cover all energy-using sectors. Therefore, energy consumption surveys cannot be summed together to account for all energy use.

- Energy consumption surveys provide user characteristics that allow for both macro-level (for major sectoral sub-populations) and micro-level (at the unit of data collection) interpretive analysis. The surveys of energy consumption by residential households from the Residential Energy Consumption Survey (Form EIA-457 series), for personal transportation from the Residential Transportation Energy Consumption Survey (Form EIA-876 series), and by commercial buildings from the Commercial Buildings Energy Consumption Survey (Form EIA-871 series) provide detailed information about the energy end users, their size, their stock of energy-consuming equipment and appliances, and their total energy consumption and expenditures. The Manufacturing Energy Consumption Survey (Form EIA-846 series) collects consumption by type of use and fuel switching capability from manufacturing establishments grouped by manufacturing classification. CSEDS, on the other hand, provides limited characterization of the end users of energy but greater geographic and energy product detail, as well as annual historical time series.
- Sectoral classification in CSEDS is generally based on supplier classifications of customer accounts, by whatever means suppliers choose to use. (See discussion in next section.) Sectoral classification for the energy consumption surveys is based upon a categorization, verified by end user, of the primary economic activity of the data collection unit (household, vehicle, building, or establishment).
- The energy consumption surveys provide data at national and Census region and/or Census division levels, whereas the estimates in CSEDS are on national and State levels.
- The reference periods are also different in that CSEDS covers calendar years from 1960 through 1996, while the consumption surveys are for selected years, and the residential end-use surveys taken prior to 1987 cover a heating season year (i.e., April through



March). Beginning with the 1987 residential end-use survey, the reference period is a calendar year.

For a more detailed description of the differences between CSEDS and the energy consumption surveys, see the EIA analysis report *Energy Consumption by End-Use Sector: A Comparison of Measures by Consumption and Supply Surveys*, DOE/EIA-0533, April 1990.

## Energy Consuming Sectors

The consumption estimates in CSEDS are based on data collected by various surveys that do not necessarily define the consuming sectors exactly the same way. Appendix A of this report describes in detail for each energy source how the collected data series are combined and assigned to CSEDS consuming sectors. To the degree possible, energy consumption in this report has been assigned to the five sectors according to the following general definitions:

- The **residential sector** is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.
- The **commercial sector**, as defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

- The **industrial sector** comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in this sector range from steel mills to small farms to companies assembling electronic components.
- The **transportation sector** consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.
- The **electric utility sector** consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

**Sector Definition Discrepancies.** Although the end-use allocations are made according to these aggregations as closely as possible, some data are collected by using different classifications. For example, electric utilities may classify commercial and industrial users by the quantity of electricity purchased rather than by the business activity of the purchaser. Agricultural use of natural gas was collected and reported in the commercial sector through 1995. Beginning with 1996 data, deliveries of natural gas for agricultural use are reported in the industrial sector instead. Another example is master-metered condominiums and apartments and buildings with a combination of residential and commercial units. In many cases, the metering and billing practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. No adjustments for these discrepancies were made.

CSEDS does not provide further disaggregated end-use consumption estimates. For example, the industrial sector cannot be broken down into the chemical or rubber industries, all manufacturing, or agriculture. The input series for the system are provided in broad end-use categories from the data collection forms and are not available by the individual components. Additional disaggregated regional information, such as counties or cities, are also not available from CSEDS.

## **1996 Summaries**

**Table 1. Energy Consumption Estimates by Source and End-Use Sector, 1996**  
(Trillion Btu)

State	Total Energy <sup>b</sup>	Sources								End-Use Sectors <sup>a</sup>			
		Coal	Natural Gas <sup>c</sup>	Petroleum	Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Residential	Commercial	Industrial <sup>b</sup>	Transportation
Alabama	1,975.0	887.5	336.3	562.5	315.6	114.6	164.6	0.1	-405.9	353.2	182.6	991.3	448.0
Alaska	696.8	11.2	443.6	224.0	0.0	13.1	5.6	(s)	0.0	49.5	66.7	419.2	161.4
Arizona	1,114.8	343.2	121.7	427.4	306.4	98.0	23.1	3.6	-206.9	251.6	238.2	226.8	398.3
Arkansas	1,012.9	260.2	277.7	309.7	141.9	28.9	71.9	1.1	-78.6	195.3	119.4	430.2	268.0
California	7,697.1	53.9	1,865.1	3,341.9	362.2	487.6	218.6	354.2	1,016.2	1,340.4	1,193.5	2,289.7	2,873.5
Colorado	1,133.5	340.3	314.7	412.2	0.0	17.6	17.9	0.2	35.6	255.0	240.2	302.4	335.9
Connecticut	824.5	24.4	131.5	412.5	66.1	15.7	52.7	0.2	118.5	254.7	189.9	164.4	215.5
Delaware	273.2	50.8	55.9	139.0	0.0	0.0	9.1	(s)	18.4	57.3	42.8	106.0	67.1
Dist. of Col.	177.4	0.6	34.2	35.4	0.0	0.0	2.5	(s)	104.8	38.3	110.0	3.2	25.9
Florida	3,579.4	694.5	510.7	1,629.6	270.6	2.2	91.2	28.4	352.4	1,002.7	761.1	582.0	1,233.6
Georgia	2,634.5	725.6	392.2	1,017.1	317.9	51.6	118.1	0.2	11.9	561.8	391.9	835.7	845.1
Hawaii	242.0	3.6	2.8	221.4	0.0	1.1	6.5	6.6	0.0	21.5	23.8	76.3	120.3
Idaho	491.1	7.3	69.0	159.4	0.0	138.9	22.5	(s)	93.3	91.1	82.9	202.0	115.1
Illinois	3,897.4	906.9	1,140.6	1,272.8	741.2	1.1	57.9	0.1	-213.3	986.5	722.4	1,356.5	832.0
Indiana	2,663.6	1,372.1	579.8	859.2	0.0	4.6	24.6	(s)	-173.1	503.5	301.9	1,242.7	615.6
Iowa	1,090.7	380.5	274.3	371.3	41.7	9.7	13.8	(s)	3.1	240.5	156.3	417.5	276.4
Kansas	1,060.0	338.6	362.0	379.7	87.2	0.1	8.1	(s)	-115.5	210.9	183.3	389.3	276.5
Kentucky	1,776.8	951.8	248.0	599.1	0.0	36.2	27.5	(s)	-85.4	327.7	199.6	848.0	401.5
Louisiana	3,994.9	205.6	1,737.7	1,612.2	167.5	10.0	107.8	0.1	154.3	326.6	222.0	2,617.3	829.0
Maine	538.4	5.9	5.8	253.2	53.8	76.3	135.1	0.1	(s)	102.1	57.8	271.9	106.6
Maryland	1,349.1	292.2	198.1	518.2	128.5	25.4	39.6	(s)	147.2	387.6	322.3	277.7	361.6
Massachusetts	1,533.5	113.1	367.5	690.7	56.6	16.8	81.1	0.2	203.6	426.4	371.3	312.9	422.9
Michigan	3,249.2	789.3	1,026.7	998.4	285.0	26.2	116.3	0.2	4.9	795.9	577.8	1,099.5	776.0
Minnesota	1,688.9	345.5	375.1	638.6	128.5	92.9	85.2	0.9	9.1	377.8	227.5	635.6	448.0
Mississippi	1,098.4	128.1	277.4	424.0	98.0	0.0	72.6	(s)	98.4	205.3	117.5	432.4	343.2
Missouri	1,744.7	629.7	297.5	721.1	94.4	12.8	21.8	0.1	-31.8	459.4	337.1	374.8	573.5
Montana	395.1	135.7	63.2	175.3	0.0	143.0	9.0	(s)	-131.3	70.4	55.6	167.6	101.5
Nebraska	604.4	179.0	133.8	235.6	100.5	16.6	7.6	(s)	-67.3	140.5	123.2	160.1	180.6
Nevada	575.4	169.5	127.6	216.1	0.0	22.4	4.3	35.0	0.6	108.9	88.8	198.1	179.5
New Hampshire	302.2	36.2	19.4	156.6	104.6	29.2	34.3	(s)	-81.4	83.9	55.6	78.9	83.8
New Jersey	2,574.9	62.4	624.6	1,228.0	117.1	-1.0	52.3	0.5	491.7	565.3	520.4	655.0	834.1
New Mexico	595.2	279.2	228.2	209.4	0.0	2.2	6.6	0.5	-129.6	87.5	101.8	217.5	188.4
New York	4,129.6	294.3	1,159.9	1,569.3	374.2	343.3	167.6	0.5	212.4	1,104.7	1,118.9	949.8	956.2
North Carolina	2,416.5	687.0	220.8	885.1	358.2	66.2	96.7	0.2	104.8	583.1	414.1	773.3	646.0
North Dakota	351.9	404.1	51.5	119.8	0.0	40.8	2.3	(s)	-268.5	61.7	46.5	168.2	75.5
Ohio	4,115.7	1,448.8	972.0	1,236.6	147.9	4.1	94.6	(s)	218.0	930.8	649.2	1,640.5	895.2
Oklahoma	1,405.7	349.9	580.2	469.6	0.0	21.5	25.0	0.1	-41.0	273.1	196.2	550.3	386.0
Oregon	1,108.1	20.3	175.3	363.9	0.0	491.3	80.4	0.5	-33.2	234.9	180.0	386.3	306.9
Pennsylvania	3,927.3	1,432.3	752.7	1,329.3	729.5	23.2	128.4	0.5	-465.2	935.8	607.8	1,477.9	905.8
Rhode Island	235.9	0.1	87.7	97.3	0.0	9.4	7.5	(s)	30.7	72.1	52.2	52.4	59.2
South Carolina	1,426.8	352.5	154.1	445.1	462.9	23.6	74.2	(s)	-85.6	291.5	191.0	614.1	330.2
South Dakota	244.7	33.2	37.4	116.7	0.0	82.5	4.4	(s)	-28.3	61.8	41.1	61.5	80.4
Tennessee	2,067.9	648.6	289.3	690.9	243.5	111.6	65.6	0.1	18.5	475.3	139.4	905.1	548.0
Texas	11,278.2	1,475.4	4,123.0	5,166.4	379.9	9.9	56.7	1.3	77.5	1,310.2	1,080.4	6,542.3	2,345.3
Utah	674.4	355.0	167.8	251.6	0.0	10.8	8.3	4.1	-123.1	120.0	106.5	254.2	193.7
Vermont	162.4	(s)	7.4	85.2	40.4	41.0	14.3	(s)	-33.4	46.1	27.3	36.7	52.4
Virginia	2,115.2	378.8	248.4	792.9	279.2	6.2	71.1	0.1	341.4	518.7	451.9	532.5	612.2
Washington	2,135.3	90.9	247.5	842.1	59.4	1,045.5	130.1	0.3	-266.8	435.5	321.2	757.8	620.8
West Virginia	803.4	898.3	164.5	257.6	0.0	14.8	12.3	(s)	-544.1	150.9	97.2	391.1	164.2
Wisconsin	1,791.4	452.8	408.0	550.0	107.5	29.3	186.6	0.2	60.7	403.6	278.9	708.8	400.3
Wyoming	423.2	473.0	107.6	145.5	0.0	12.7	3.2	(s)	-318.7	41.0	44.5	235.3	102.3
United States	93,398.5	20,519.6	22,598.1	35,866.2	7,167.6	3,881.3	2,939.2	440.6	0.0	18,930.0	14,429.2	35,420.3	24,619.0

<sup>a</sup> End-use sector data include electricity sales and associated electrical system energy losses.

<sup>b</sup> U.S. total energy and U.S. industrial sector include -0.3 trillion Btu of net imports of coal coke that has not been allocated to the States. State and U.S. totals include 60.5 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in "Sources" columns. See data in appendix Table A8.

<sup>c</sup> Includes supplemental gaseous fuels.

<sup>d</sup> Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the total energy.

<sup>f</sup> "Other" is electricity generated from geothermal, wind, photovoltaic, and solar thermal energy. It includes net imports of electricity generated from geothermal energy.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 2. Energy Consumption Estimates in Physical Units, 1996**

State	Coal Million Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power Billion Kilowatthours
			Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kerosene	LPG	Lubricants	Motor Gasoline	Residual Fuel	Other <sup>b</sup>	Total	
			Million Barrels											
Alabama	37.1	325.5	5.7	0.1	23.1	3.5	0.1	5.0	0.9	55.0	3.2	6.6	103.2	29.7
Alaska	0.7	448.1	(s)	0.1	8.6	18.7	(s)	0.2	0.1	6.7	0.9	4.1	39.5	0.0
Arizona	16.8	120.3	2.5	0.2	16.3	7.9	(s)	1.7	0.6	49.4	0.1	0.1	78.7	28.8
Arkansas	14.8	270.7	1.0	0.1	16.6	1.5	(s)	3.2	0.7	32.1	0.2	2.1	57.4	13.4
California	2.3	1,807.3	12.4	0.8	67.4	103.8	0.3	11.2	4.7	318.3	40.9	46.6	606.3	34.1
Colorado	17.2	307.3	3.9	0.1	14.8	7.8	(s)	4.0	0.6	43.0	(s)	1.8	76.1	0.0
Connecticut	0.9	127.9	1.6	(s)	22.5	2.7	0.2	1.5	0.4	32.7	10.4	1.6	73.7	6.2
Delaware	2.0	54.0	0.3	0.1	3.8	0.1	0.2	1.7	0.1	8.5	5.5	4.6	24.9	0.0
Dist. of Col.	(s)	33.9	(s)	(s)	2.0	0.0	0.1	(s)	0.1	3.9	0.3	0.0	6.4	0.0
Florida	28.4	486.3	5.9	0.5	39.2	29.3	0.4	7.9	1.3	159.0	47.6	3.6	294.8	25.5
Georgia	31.2	383.4	5.4	0.2	41.6	17.3	0.2	7.3	1.2	101.1	4.9	8.1	187.3	29.9
Hawaii	0.2	2.7	0.4	0.2	4.4	10.1	(s)	1.4	0.1	9.4	10.4	2.5	38.8	0.0
Idaho	0.4	67.0	2.0	0.1	9.5	0.9	(s)	2.7	0.2	14.2	(s)	(s)	29.5	0.0
Illinois	44.4	1,119.3	9.1	0.2	37.9	12.1	0.4	23.9	3.3	111.6	2.0	37.7	238.2	69.8
Indiana	64.0	573.5	8.5	0.2	35.7	12.6	0.4	7.8	1.7	69.6	1.4	18.6	156.4	0.0
Iowa	21.2	272.7	2.1	0.1	20.3	0.8	0.1	10.3	0.7	35.9	0.1	0.7	71.0	3.9
Kansas	19.1	363.5	3.6	0.2	17.0	2.0	(s)	10.1	1.0	30.9	0.3	6.4	71.5	8.2
Kentucky	40.9	236.4	2.7	(s)	28.4	5.6	0.7	6.6	1.0	43.5	0.2	21.3	110.1	0.0
Louisiana	12.5	1,664.4	1.7	0.1	39.3	29.0	0.1	68.4	1.9	50.9	27.0	89.3	307.6	15.8
Maine	0.2	5.7	0.4	(s)	15.2	0.9	1.5	1.8	0.2	15.0	9.7	0.2	44.9	5.1
Maryland	11.4	192.5	3.6	(s)	22.1	3.9	0.8	2.9	0.7	51.8	4.4	4.3	94.6	12.1
Massachusetts	4.5	357.8	1.3	0.1	34.9	6.9	0.2	2.5	0.8	59.8	15.5	2.4	124.3	5.3
Michigan	36.7	1,014.6	3.7	0.2	29.5	9.0	0.4	16.7	3.1	110.5	1.8	14.0	188.9	26.8
Minnesota	19.3	368.4	6.7	0.1	24.6	10.6	0.1	10.9	1.1	54.9	0.8	8.5	118.3	12.1
Mississippi	5.8	269.3	2.6	0.1	14.5	7.2	(s)	9.2	0.6	34.2	3.5	7.2	79.1	9.2
Missouri	34.4	294.2	5.4	0.1	27.9	12.1	0.1	11.8	1.5	69.9	0.4	5.6	134.8	8.9
Montana	8.0	61.4	1.7	0.1	9.8	1.0	(s)	1.7	0.2	11.8	0.2	5.1	31.5	0.0
Nebraska	10.4	132.9	1.8	0.1	17.0	1.0	(s)	3.5	0.4	19.5	0.2	(s)	43.4	9.5
Nevada	7.6	123.2	1.4	0.1	9.5	7.8	(s)	1.0	0.1	19.0	0.3	0.1	39.3	0.0
New Hampshire	1.4	19.1	0.6	(s)	7.9	0.4	0.5	2.4	0.1	13.9	2.9	0.1	28.9	9.8
New Jersey	2.4	602.9	5.4	0.1	35.9	43.0	0.8	3.7	2.2	86.0	9.9	34.4	221.6	11.0
New Mexico	15.3	221.7	1.6	0.1	10.0	1.6	(s)	2.1	0.3	20.2	0.2	2.3	38.5	0.0
New York	11.3	1,130.5	6.2	0.1	73.2	11.5	2.9	6.9	2.0	131.0	37.0	11.2	281.9	35.2
North Carolina	27.6	213.2	4.0	0.1	33.4	9.1	2.9	13.6	1.1	88.1	6.9	5.8	165.3	33.7
North Dakota	30.5	49.0	0.9	0.1	8.5	0.2	(s)	2.0	0.2	8.7	0.1	1.3	22.0	0.0
Ohio	59.8	936.5	11.3	0.3	45.2	12.0	1.2	14.6	3.6	115.4	1.7	22.8	228.0	13.9
Oklahoma	20.1	566.6	2.8	0.1	20.5	4.7	(s)	3.7	1.3	43.8	0.4	8.5	85.8	0.0
Oregon	1.1	168.6	2.7	0.2	14.1	5.2	0.1	1.7	0.7	35.2	3.3	2.8	66.0	0.0
Pennsylvania	57.2	728.0	7.5	0.1	62.6	11.8	3.1	6.0	3.9	113.6	12.0	19.3	240.0	68.7
Rhode Island	(s)	82.7	0.3	(s)	6.1	0.5	(s)	0.5	0.1	9.0	1.0	(s)	17.7	0.0
South Carolina	13.9	149.6	2.4	0.1	15.6	1.3	0.7	3.6	0.5	47.4	3.0	7.7	82.3	43.6
South Dakota	1.9	36.9	1.1	0.1	6.7	1.0	(s)	2.6	0.2	10.1	(s)	(s)	21.9	0.0
Tennessee	26.7	280.3	5.2	0.2	27.6	9.3	0.6	3.9	1.2	64.9	0.2	13.5	126.5	22.9
Texas	99.0	3,991.3	12.0	0.6	92.8	99.9	0.2	405.4	5.1	226.4	20.6	206.2	1,069.1	35.8
Utah	15.2	161.0	2.4	0.1	9.9	6.3	(s)	2.7	0.3	21.2	0.1	3.1	46.0	0.0
Vermont	(s)	7.3	0.3	(s)	5.9	0.1	0.2	1.8	0.1	7.3	0.3	0.0	16.0	3.8
Virginia	15.0	239.1	3.5	0.1	36.1	9.2	1.9	5.0	0.9	79.2	4.1	5.4	145.5	26.3
Washington	5.7	238.6	3.7	0.3	19.0	22.3	0.1	3.3	0.7	61.6	13.0	26.3	150.3	5.6
West Virginia	36.1	155.0	0.9	(s)	9.4	0.2	0.5	2.2	0.6	18.9	0.4	14.6	47.7	0.0
Wisconsin	24.0	402.8	4.1	0.4	25.5	1.5	0.1	10.1	1.0	56.3	1.0	3.3	103.4	10.1
Wyoming	26.6	101.4	0.8	0.2	12.5	0.2	(s)	1.7	0.2	7.9	(s)	2.7	26.2	0.0
United States	983.3	21,966.6	177.2	7.4	1,231.7	577.5	22.6	736.3	55.3	2,888.0	310.5	694.5	6,701.1	674.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

(s)=Number less than 0.05.

Notes: • Totals may not equal sum of components due to independent rounding. • Total electricity generation by electric utilities and the industrial sector from hydroelectric power, wood and waste, and

geothermal, wind, photovoltaic, and solar thermal energy are not available in billion kilowatthours. Wood and waste used by the industrial sector for other purposes are also not available in physical units. The Btu equivalents are shown in Table 3.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 3. Energy Consumption Estimates by Source, 1996**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>c</sup>	Biomass <sup>d</sup>	Other <sup>e</sup>	Net Interstate Flow of Electricity/Losses <sup>f</sup>	Total <sup>g</sup>
			Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kero-sene	LPG	Lubri-cants	Motor Gasoline	Residual Fuel	Other <sup>b</sup>	Total						
Alabama	887.5	336.3	37.9	0.5	134.6	19.9	0.7	18.0	5.7	288.9	20.2	36.3	562.5	315.6	114.6	164.6	0.1	-405.9	1,975.0
Alaska	11.2	443.6	0.2	0.7	49.8	105.8	(s)	0.9	0.7	35.4	5.7	24.9	224.0	0.0	13.1	5.6	(s)	0.0	696.8
Arizona	343.2	121.7	16.3	0.8	94.9	44.9	(s)	6.0	3.5	259.6	0.7	0.7	427.4	306.4	98.0	23.1	3.6	-206.9	1,114.8
Arkansas	260.2	277.7	6.5	0.6	96.6	8.7	0.1	11.6	4.0	168.5	1.3	11.8	309.7	141.9	28.9	71.9	1.1	-78.6	1,012.9
California	53.9	1,865.1	82.3	3.9	392.7	588.4	1.7	40.5	28.2	1,671.8	257.4	275.0	3,341.9	362.2	487.6	218.6	354.2	1,016.2	7,697.1
Colorado	340.3	314.7	25.9	0.6	86.4	44.0	0.2	14.4	3.7	226.0	0.1	10.8	412.2	0.0	17.6	17.9	0.2	35.6	1,133.5
Connecticut	24.4	131.5	10.4	0.2	131.3	15.4	1.3	5.4	2.6	171.6	65.6	8.7	412.5	66.1	15.7	52.7	0.2	118.5	824.5
Delaware	50.8	55.9	2.0	0.3	22.3	0.4	1.3	6.1	0.8	44.4	34.5	26.9	139.0	0.0	0.0	9.1	(s)	18.4	273.2
Dist. of Col.	0.6	34.2	0.1	(s)	11.9	0.0	0.6	(s)	0.4	20.3	2.1	0.0	35.4	0.0	0.0	2.5	(s)	104.8	177.4
Florida	694.5	510.7	39.3	2.6	228.3	166.4	2.3	28.6	8.1	835.4	299.4	19.3	1,629.6	270.6	2.2	91.2	28.4	352.4	3,579.4
Georgia	725.6	392.2	36.0	0.8	242.4	98.0	1.2	26.5	7.2	530.9	30.5	43.5	1,017.1	317.9	51.6	118.1	0.2	11.9	2,634.5
Hawaii	3.6	2.8	2.7	0.8	25.7	57.2	(s)	4.9	0.5	49.2	65.3	15.0	221.4	0.0	1.1	6.5	6.6	0.0	242.0
Idaho	7.3	69.0	13.5	0.3	55.1	4.9	0.1	9.8	1.0	74.5	(s)	0.1	159.4	0.0	138.9	22.5	(s)	93.3	491.1
Illinois	906.9	1,140.6	60.6	1.0	220.9	68.5	2.3	86.4	20.0	586.0	12.6	214.5	1,272.8	741.2	1.1	57.9	0.1	-213.3	3,897.4
Indiana	1,372.1	579.8	56.6	0.9	207.8	71.3	2.5	28.1	10.3	365.5	8.5	107.7	859.2	0.0	4.6	24.6	(s)	-173.1	2,663.6
Iowa	380.5	274.3	13.6	0.4	118.1	4.6	0.3	37.3	4.1	188.6	0.6	3.7	371.3	41.7	9.7	13.8	(s)	3.1	1,090.7
Kansas	338.6	362.0	23.8	0.9	98.8	11.4	0.2	36.6	5.8	162.5	1.8	38.0	379.7	87.2	0.1	8.1	(s)	-115.5	1,060.0
Kentucky	951.8	248.0	18.0	0.2	165.1	31.7	3.8	23.9	6.1	228.7	1.6	119.9	599.1	0.0	36.2	27.5	(s)	-85.4	1,776.8
Louisiana	205.6	1,737.7	11.4	0.4	228.9	164.6	0.3	247.1	11.5	267.2	169.7	511.1	1,612.2	167.5	10.0	107.8	0.1	154.3	3,994.9
Maine	5.9	5.8	2.5	0.1	88.7	5.1	8.7	6.5	1.1	78.6	61.1	0.9	253.2	53.8	76.3	135.1	0.1	(s)	538.4
Maryland	292.2	198.1	24.0	0.2	128.9	22.1	4.5	10.6	4.2	272.1	27.6	24.1	518.2	128.5	25.4	39.6	(s)	147.2	1,349.1
Massachusetts	113.1	367.5	8.4	0.5	203.5	39.0	1.2	9.1	4.8	314.1	97.4	12.7	690.7	56.6	16.8	81.1	0.2	203.6	1,533.5
Michigan	789.3	1,026.7	24.6	1.1	171.8	51.3	2.4	60.2	18.8	580.6	11.2	76.5	998.4	285.0	26.2	116.3	0.2	4.9	3,249.2
Minnesota	345.5	375.1	44.3	0.6	143.1	60.2	0.7	39.5	6.4	288.2	5.0	50.4	638.6	128.5	92.9	85.2	0.9	9.1	1,688.9
Mississippi	128.1	277.4	17.3	0.3	84.4	40.6	0.3	33.2	3.8	179.5	22.1	42.5	424.0	98.0	0.0	72.6	(s)	98.4	1,098.4
Missouri	629.7	297.5	35.7	0.5	162.4	68.8	0.7	42.6	9.2	367.4	2.3	31.5	721.1	94.4	12.8	21.8	0.1	-31.8	1,744.7
Montana	135.7	63.2	11.3	0.5	57.2	5.7	(s)	6.0	1.4	61.7	1.2	30.4	175.3	0.0	143.0	9.0	(s)	-131.3	395.1
Nebraska	179.0	133.8	11.8	0.4	99.2	5.7	0.1	12.6	2.2	102.3	1.1	0.2	235.6	100.5	16.6	7.6	(s)	-67.3	604.4
Nevada	169.5	127.6	9.5	0.5	55.4	44.5	0.1	3.6	0.6	99.6	1.8	0.6	216.1	0.0	22.4	4.3	35.0	0.6	575.4
New Hampshire	36.2	19.4	4.2	0.1	46.3	2.0	2.6	8.7	0.5	73.2	18.3	0.7	156.6	104.6	29.2	34.3	(s)	-81.4	302.2
New Jersey	62.4	624.6	35.7	0.6	209.2	243.8	4.8	13.5	13.6	452.0	62.0	192.9	1,228.0	117.1	-1.0	52.3	0.5	491.7	2,574.9
New Mexico	279.2	228.2	10.9	0.5	58.0	9.2	0.1	7.5	1.9	106.4	1.2	13.7	209.4	0.0	2.2	6.6	0.5	-129.6	595.2
New York	294.3	1,159.9	41.0	0.3	426.2	65.4	16.4	25.0	12.0	688.0	232.5	62.4	1,569.3	374.2	343.3	167.6	0.5	212.4	4,129.6
North Carolina	687.0	220.8	26.8	0.7	194.5	51.7	16.4	49.2	6.9	463.0	43.7	32.0	885.1	358.2	66.2	96.7	0.2	104.8	2,416.5
North Dakota	404.1	51.5	6.0	0.3	49.6	1.4	(s)	7.2	1.0	45.6	0.9	7.8	119.8	0.0	40.8	2.3	(s)	-268.5	351.9
Ohio	1,448.8	972.0	74.7	1.7	263.5	67.8	6.8	52.7	22.0	606.0	10.8	130.6	1,236.6	147.9	4.1	94.6	(s)	218.0	4,115.7
Oklahoma	349.9	580.2	18.3	0.6	119.3	26.7	0.2	13.5	7.8	229.9	2.5	50.9	469.6	0.0	21.5	25.5	0.1	-41.0	1,405.7
Oregon	20.3	175.3	18.2	1.0	82.1	29.7	0.5	6.0	4.3	184.7	20.8	16.7	363.9	0.0	491.3	80.4	0.5	-33.2	1,108.1
Pennsylvania	1,432.3	752.7	49.6	0.6	364.6	67.1	17.7	21.5	23.4	596.9	75.7	112.2	1,329.3	729.5	23.2	128.4	0.5	-465.2	3,927.3
Rhode Island	0.1	87.7	2.2	0.2	35.2	3.1	0.2	1.9	0.8	47.3	6.3	0.1	97.3	0.0	9.4	7.5	(s)	30.7	235.9
South Carolina	352.5	154.1	16.0	0.3	90.9	7.3	3.8	13.0	3.1	249.1	19.1	42.5	445.1	462.9	23.6	74.2	(s)	-85.6	1,426.8
South Dakota	33.2	37.4	7.5	0.3	39.0	5.7	(s)	9.6	0.9	53.3	0.3	0.1	116.7	0.0	82.5	4.4	(s)	-28.3	244.7
Tennessee	648.6	289.3	34.3	1.2	160.5	52.8	3.3	14.1	7.1	340.7	1.3	75.4	690.9	243.5	111.6	65.6	0.1	18.5	2,067.9
Texas	1,475.4	4,123.0	79.4	3.2	540.3	566.2	1.3	1,464.5	30.7	1,189.2	129.7	1,161.8	5,166.4	379.9	9.9	56.7	1.3	77.5	11,278.2
Utah	355.0	167.8	15.7	0.3	57.8	35.7	0.1	9.7	1.7	111.2	0.6	18.9	251.6	0.0	10.8	8.3	4.1	-123.1	674.4
Vermont	(s)	7.4	1.9	0.1	34.1	0.6	1.4	6.5	0.4	38.5	1.8	0.0	85.2	40.4	41.0	14.3	(s)	-33.4	162.4
Virginia	378.8	248.4	23.3	0.4	210.6	52.2	11.0	18.2	5.5	415.8	26.0	29.9	792.9	279.2	6.2	71.1	0.1	341.4	2,115.2
Washington	90.9	247.5	24.5	1.5	110.5	126.5	0.8	11.8	4.0	323.6	81.6	157.0	842.1	59.4	1,045.5	130.1	0.3	-266.8	2,135.3
West Virginia	898.3	164.5	6.3	0.2	54.7	1.0	2.8	7.8	3.9	99.3	2.2	79.6	257.6	0.0	14.8	12.3	(s)	-544.1	803.4
Wisconsin	452.8	408.0	27.4	1.9	148.7	8.7	0.4	36.6	5.9	295.8	6.5	18.2	550.0	107.5	29.3	186.6	0.2	60.7	1,791.4
Wyoming	473.0	107.6	5.5	1.1	72.6	0.9	0.2	6.1	1.2	41.5	(s)	16.4	145.5	0.0	12.7	3.2	(s)	-318.7	423.2
United States	20,519.6	22,598.1	1,175.9	37.4	7,174.5	3,274.2	128.1	2,660.4	335.5	15,170.4	1,952.1	3,957.6	35,866.2	7,167.6	3,881.3	2,939.2	440.6	0.0	93,398.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>c</sup> Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.

<sup>d</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>e</sup> "Other" is electricity generated from geothermal, wind, photovoltaic, and solar thermal energy. It includes net imports of electricity generated from geothermal energy.

<sup>f</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold

within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>g</sup> U.S. total includes -0.3 trillion Btu of net imports of coal coke that has not been allocated to the States. State and U.S. totals include 60.5 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 4. Residential Energy Consumption Estimates, 1996**  
(Trillion Btu)

State	Coal			Natural Gas <sup>a</sup>	Petroleum				Wood	Solar <sup>b</sup>	Electricity	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>b</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Distillate Fuel	Kerosene	LPG	Total						
Alabama .....	0.4	0.0	0.4	58.4	0.1	0.4	10.6	11.0	13.8	0.1	87.5	171.1	182.0	353.2
Alaska .....	2.6	0.0	2.6	16.0	7.6	(s)	0.7	8.3	2.2	(s)	6.0	35.2	14.3	49.5
Arizona .....	(s)	0.0	(s)	28.0	(s)	(s)	2.8	2.9	9.4	3.6	67.4	111.3	140.2	251.6
Arkansas .....	0.0	0.0	0.0	47.5	(s)	0.1	5.4	5.5	5.2	1.1	44.1	103.5	91.9	195.3
California .....	1.4	0.0	1.4	489.1	0.6	0.6	14.7	15.9	64.8	18.5	243.6	833.4	507.0	1,340.4
Colorado .....	0.1	0.0	0.1	113.6	0.4	0.1	7.6	8.1	8.2	0.2	40.5	170.7	84.3	255.0
Connecticut .....	0.0	0.1	0.1	45.0	78.0	0.7	3.7	82.4	12.0	0.2	37.3	176.9	77.7	254.7
Delaware .....	(s)	(s)	0.1	10.1	6.4	1.0	3.1	10.6	2.1	(s)	11.2	34.1	23.2	57.3
Dist. of Col. ....	0.2	0.0	0.2	17.4	1.8	(s)	(s)	1.8	1.9	(s)	5.5	26.9	11.5	38.3
Florida .....	(s)	0.0	(s)	18.1	1.3	1.5	13.9	16.6	11.1	28.4	301.3	375.5	627.2	1,002.7
Georgia .....	(s)	0.0	(s)	130.0	0.9	0.8	14.0	15.7	18.9	0.2	128.8	293.7	268.2	561.8
Hawaii .....	0.0	0.0	0.0	0.6	(s)	(s)	0.4	0.4	0.0	1.1	9.1	11.2	10.3	21.5
Idaho .....	0.2	0.0	0.2	15.4	3.1	0.1	1.6	4.8	2.4	(s)	22.2	44.9	46.2	91.1
Illinois .....	1.5	(s)	1.5	549.0	4.4	0.5	16.7	21.7	19.7	0.1	128.1	719.9	266.6	986.5
Indiana .....	2.7	0.1	2.8	181.9	8.5	1.6	16.2	26.4	10.0	(s)	91.6	312.8	190.7	503.5
Iowa .....	1.9	0.0	1.9	88.6	4.6	0.2	17.0	21.8	6.9	(s)	39.4	158.6	81.9	240.5
Kansas .....	0.7	0.0	0.7	85.2	0.1	0.1	6.3	6.5	6.4	(s)	36.4	135.2	75.8	210.9
Kentucky .....	1.0	0.0	1.0	73.7	3.9	2.5	9.7	16.1	12.4	(s)	72.9	176.1	151.6	327.7
Louisiana .....	0.0	0.0	0.0	59.1	(s)	0.1	2.9	3.0	8.9	0.1	82.9	154.0	172.6	326.6
Maine .....	0.0	0.1	0.1	1.0	44.6	7.8	4.5	56.9	5.4	0.1	12.6	76.0	26.1	102.1
Maryland .....	0.4	(s)	0.4	88.0	34.3	3.4	6.4	44.1	13.5	(s)	78.4	224.4	163.2	387.6
Massachusetts .....	0.1	0.3	0.4	117.3	108.5	0.8	5.9	115.3	22.4	0.2	55.5	311.0	115.4	426.4
Michigan .....	2.3	(s)	2.4	414.0	22.8	1.3	34.5	58.6	17.0	0.2	98.6	590.7	205.2	795.9
Minnesota .....	1.0	0.0	1.0	144.9	20.4	0.3	19.1	39.8	11.4	0.3	58.5	256.0	121.8	377.8
Mississippi .....	0.0	0.0	0.0	31.0	(s)	0.1	8.7	8.8	8.2	(s)	51.1	99.0	106.3	205.3
Missouri .....	1.6	0.0	1.6	138.7	2.0	0.3	25.1	27.4	13.4	0.1	90.2	271.5	187.8	459.4
Montana .....	(s)	0.0	(s)	22.8	2.6	(s)	1.9	4.4	2.0	(s)	13.3	42.6	27.8	70.4
Nebraska .....	0.0	(s)	(s)	49.3	0.7	(s)	5.0	5.7	4.0	(s)	26.4	85.5	55.0	140.5
Nevada .....	(s)	0.0	(s)	23.5	0.8	(s)	2.0	2.8	3.2	0.2	25.7	55.4	53.4	108.9
New Hampshire .....	(s)	0.1	0.1	7.1	27.4	2.2	6.3	36.0	4.6	(s)	11.7	59.5	24.3	83.9
New Jersey .....	0.0	0.1	0.1	230.8	71.9	1.6	5.8	79.3	16.7	0.5	77.2	404.6	160.7	565.3
New Mexico .....	0.1	0.0	0.1	34.8	(s)	(s)	3.1	3.1	3.5	0.5	14.8	56.8	30.7	87.5
New York .....	1.2	2.1	3.4	413.6	178.7	8.2	17.0	203.9	59.9	0.5	137.5	818.6	286.1	1,104.7
North Carolina .....	1.8	0.0	1.8	60.9	25.2	14.4	23.1	62.7	20.3	0.2	141.9	287.7	295.4	583.1
North Dakota .....	0.7	(s)	0.8	13.2	4.8	(s)	3.3	8.2	1.7	(s)	12.3	36.2	25.6	61.7
Ohio .....	5.4	0.2	5.5	389.1	22.3	4.6	21.4	48.4	19.2	(s)	152.1	614.2	316.5	930.8
Oklahoma .....	(s)	0.0	(s)	78.4	0.1	0.1	5.2	5.5	7.3	0.1	59.0	150.2	122.9	273.1
Oregon .....	0.0	0.0	0.0	34.7	4.8	0.2	1.7	6.7	11.3	0.5	59.0	112.2	122.7	234.9
Pennsylvania .....	1.1	12.9	14.0	288.1	122.3	13.7	11.6	147.6	26.8	0.5	148.9	625.8	309.9	935.8
Rhode Island .....	0.0	(s)	(s)	20.2	20.6	0.2	1.2	22.0	3.8	(s)	8.5	54.5	17.6	72.1
South Carolina .....	0.2	0.0	0.2	30.3	4.2	3.2	6.7	14.1	10.2	(s)	76.8	131.6	159.9	291.5
South Dakota .....	(s)	0.0	(s)	14.3	3.7	(s)	5.9	9.7	1.8	(s)	11.7	37.4	24.3	61.8
Tennessee .....	1.0	0.0	1.0	72.7	1.6	2.6	9.2	13.3	16.8	0.1	120.6	224.4	250.9	475.3
Texas .....	0.0	0.0	0.0	237.7	(s)	0.2	8.4	8.6	15.7	0.5	340.0	602.5	707.7	1,310.2
Utah .....	0.8	0.0	0.8	56.7	0.6	(s)	0.9	1.5	3.4	(s)	18.7	81.1	38.9	120.0
Vermont .....	0.0	(s)	(s)	2.6	14.0	1.2	4.7	19.9	2.5	(s)	6.8	31.8	14.2	46.1
Virginia .....	3.5	(s)	3.5	79.1	34.1	8.8	11.0	53.8	17.8	0.1	118.2	272.6	246.1	518.7
Washington .....	0.2	0.0	0.2	65.0	8.7	0.6	4.5	13.9	19.5	0.3	109.2	208.1	227.3	435.5
West Virginia .....	0.9	0.0	0.9	39.7	3.5	2.1	1.7	7.3	5.4	(s)	31.7	85.0	65.9	150.9
Wisconsin .....	0.9	0.0	0.9	149.8	22.8	0.2	23.9	47.0	9.2	0.2	63.8	270.9	132.7	403.6
Wyoming .....	2.4	0.0	2.4	14.4	0.2	(s)	1.7	1.9	1.1	(s)	6.9	26.7	14.4	41.0
United States .....	38.3	16.2	54.5	5,390.2	929.8	88.8	438.7	1,457.3	595.0	59.2	3,693.5	11,249.7	7,680.3	18,930.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 5. Commercial Energy Consumption Estimates, 1996**  
(Trillion Btu)

State	Coal			Natural Gas <sup>a</sup>	Petroleum						Wood <sup>b</sup>	Electricity	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Distillate Fuel	Kerosene	LPG	Motor Gasoline	Residual Fuel	Total					
Alabama	0.7	0.0	0.7	30.0	2.8	0.1	1.9	0.2	(s)	5.0	0.3	47.6	83.5	99.0	182.6
Alaska	4.9	0.0	4.9	27.0	4.7	(s)	0.1	1.5	0.0	6.4	0.5	8.3	47.0	19.6	66.7
Arizona	(s)	0.0	(s)	29.3	2.3	(s)	0.5	0.2	(s)	3.1	0.2	66.7	99.3	138.9	238.2
Arkansas	0.0	0.0	0.0	31.8	1.5	(s)	1.0	0.2	(s)	2.6	0.2	27.5	62.1	57.3	119.4
California	2.7	0.0	2.7	242.9	10.2	0.4	2.6	1.2	0.1	14.4	1.0	302.6	563.7	629.8	1,193.5
Colorado	0.2	0.0	0.2	70.6	5.7	(s)	1.3	1.4	0.0	8.5	0.6	52.0	131.9	108.3	240.2
Connecticut	0.0	0.1	0.1	40.9	17.5	0.4	0.6	4.3	2.9	25.8	1.8	39.4	107.9	82.0	189.9
Delaware	0.1	(s)	0.1	6.9	2.3	(s)	0.6	(s)	1.4	4.3	0.2	10.1	21.7	21.1	42.8
Dist. of Col.	0.4	0.0	0.4	16.5	5.7	0.6	0.1	0.6	0.6	7.0	0.6	27.8	52.2	57.8	110.0
Florida	(s)	0.0	(s)	46.4	12.5	0.6	2.4	0.5	0.6	16.7	1.3	226.1	290.5	470.6	761.1
Georgia	(s)	0.0	(s)	62.8	6.8	0.2	2.5	0.3	0.1	9.9	0.7	103.4	176.8	215.1	391.9
Hawaii	0.0	0.0	0.0	2.3	0.9	(s)	0.1	0.1	0.1	1.1	0.0	9.6	13.0	10.9	23.8
Idaho	0.4	0.0	0.4	11.9	3.6	(s)	0.3	0.9	(s)	4.8	0.4	21.3	38.7	44.3	82.9
Illinois	2.7	(s)	2.7	222.2	10.7	0.4	2.9	1.0	1.2	16.2	1.1	155.8	398.1	324.3	722.4
Indiana	5.0	0.1	5.1	88.4	5.7	0.4	2.9	0.8	0.1	9.9	0.6	64.2	168.2	133.7	301.9
Iowa	3.5	0.0	3.5	54.9	2.1	(s)	3.0	1.3	(s)	6.4	0.2	29.6	94.7	61.6	156.3
Kansas	1.2	0.0	1.2	57.1	3.3	(s)	1.1	0.5	(s)	4.9	0.3	38.9	102.5	80.9	183.3
Kentucky	1.9	0.0	1.9	43.0	7.0	0.6	1.7	0.2	(s)	9.6	0.7	46.9	102.0	97.5	199.6
Louisiana	0.0	0.0	0.0	26.9	0.7	(s)	0.5	0.2	(s)	1.5	0.1	62.8	91.2	130.7	222.0
Maine	0.0	(s)	(s)	2.6	14.3	0.8	0.8	0.1	3.2	19.3	1.5	11.2	34.6	23.3	57.8
Maryland	0.7	(s)	0.7	47.1	19.3	0.9	1.1	0.2	0.7	22.2	2.0	81.2	153.2	169.1	322.3
Massachusetts	0.2	0.2	0.4	98.6	33.3	0.3	1.0	0.3	15.5	50.5	3.4	70.8	223.8	147.4	371.3
Michigan	4.3	(s)	4.4	208.7	10.4	0.8	6.1	0.4	(s)	17.8	1.1	112.2	344.1	233.6	577.8
Minnesota	1.8	0.0	1.8	100.3	6.0	0.2	3.4	0.3	0.9	10.7	0.6	37.0	150.4	77.1	227.5
Mississippi	0.0	0.0	0.0	22.8	2.0	(s)	1.5	0.3	0.0	3.9	0.2	29.4	56.3	61.2	117.5
Missouri	3.0	0.0	3.0	73.6	7.7	0.2	4.4	0.6	(s)	13.0	0.8	80.1	170.4	166.6	337.1
Montana	(s)	0.0	(s)	15.3	1.8	(s)	0.3	0.1	(s)	2.2	0.2	12.3	30.0	25.6	55.6
Nebraska	0.0	(s)	(s)	41.1	1.4	(s)	0.9	0.1	0.0	2.4	0.1	25.8	69.5	53.7	123.2
Nevada	(s)	0.0	(s)	21.2	3.9	(s)	0.4	0.1	0.0	4.3	0.4	20.4	46.4	42.4	88.8
New Hampshire	(s)	0.1	0.1	7.2	7.8	0.2	1.1	0.1	2.9	12.1	0.8	11.5	31.7	23.9	55.6
New Jersey	0.0	0.1	0.1	156.0	29.2	1.4	1.0	0.4	8.2	40.2	3.0	104.2	303.5	216.9	520.4
New Mexico	0.1	0.0	0.1	27.3	0.9	(s)	0.5	0.1	(s)	1.5	0.1	23.6	52.7	49.2	101.8
New York	2.2	1.4	3.7	259.5	91.8	4.3	3.0	1.1	81.8	181.9	9.5	215.6	670.2	448.7	1,118.9
North Carolina	3.3	0.0	3.3	41.9	16.7	1.0	4.1	1.6	1.4	24.8	1.7	111.1	182.9	231.2	414.1
North Dakota	1.4	(s)	1.4	12.8	1.2	(s)	0.6	0.1	(s)	1.9	0.1	9.8	26.0	20.4	46.5
Ohio	10.0	0.1	10.1	197.2	7.9	0.9	3.8	1.9	(s)	14.5	0.8	138.5	361.0	288.2	649.2
Oklahoma	(s)	0.0	(s)	47.2	2.3	(s)	0.9	0.2	0.0	3.4	0.2	47.2	98.0	98.2	196.2
Oregon	0.0	0.0	0.0	26.7	3.6	0.2	0.3	0.2	0.5	4.8	0.4	48.1	80.0	100.0	180.0
Pennsylvania	2.0	8.6	10.6	159.9	36.3	3.1	2.0	0.5	8.3	50.3	3.7	124.4	349.0	258.9	607.8
Rhode Island	0.0	(s)	(s)	13.2	4.8	(s)	0.2	0.1	4.3	9.3	0.5	9.5	32.5	19.7	52.2
South Carolina	0.3	0.0	0.3	20.9	5.7	0.1	1.2	0.2	0.2	7.4	0.6	52.5	81.8	109.3	191.0
South Dakota	(s)	0.0	(s)	11.8	1.5	(s)	1.0	0.1	0.0	2.6	0.2	8.6	23.1	17.9	41.1
Tennessee	1.8	0.0	1.8	60.4	5.3	0.5	1.6	0.3	0.2	7.9	0.6	22.3	93.0	46.5	139.4
Texas	0.0	0.0	0.0	185.1	13.7	0.2	1.5	0.9	0.0	16.2	1.4	284.8	487.6	592.8	1,080.4
Utah	1.4	0.0	1.4	30.8	2.9	(s)	0.2	0.1	0.1	3.3	0.3	22.9	58.8	47.7	106.5
Vermont	0.0	(s)	(s)	2.9	4.7	0.1	0.8	(s)	0.5	6.1	0.5	5.8	15.3	12.0	27.3
Virginia	6.4	(s)	6.4	61.5	20.1	1.6	1.9	0.7	1.6	25.9	2.1	115.5	211.4	240.4	451.9
Washington	0.4	0.0	0.4	49.9	3.9	(s)	0.8	0.3	1.1	6.2	0.4	85.8	142.6	178.6	321.2
West Virginia	1.7	0.0	1.7	29.7	1.6	0.2	0.3	0.1	0.0	2.2	0.2	20.6	54.4	42.8	97.2
Wisconsin	1.7	0.0	1.7	95.0	5.8	0.1	4.2	0.4	0.8	11.3	0.6	55.2	163.9	115.0	278.9
Wyoming	4.5	0.0	4.5	10.3	2.1	(s)	0.3	0.2	(s)	2.6	0.2	8.7	26.3	18.2	44.5
United States	71.2	10.8	81.9	3,250.4	476.0	21.0	77.4	26.7	139.5	740.7	49.0	3,347.3	7,469.2	6,960.0	14,429.2

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> U.S. total is estimated to be 2 percent of total wood consumption.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified

and are included in residential consumption.  
(s)=Number less than 0.05.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 6. Industrial Energy Consumption Estimates, 1996**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum									Hydro-electric power	Wood and Waste	Other <sup>c</sup>	Electricity	Net Energy <sup>d</sup>	Electrical System Energy Losses <sup>e</sup>	Total <sup>d</sup>
			Asphalt and Road Oil	Distillate Fuel	Kerosene	LPG	Lubricants	Motor Gasoline	Residual Fuel	Other <sup>b</sup>	Total							
Alabama .....	150.1	221.9	37.9	26.0	0.3	5.2	2.9	3.6	4.5	36.3	116.7	0.0	150.2	0.0	114.4	753.2	238.1	991.3
Alaska .....	(s)	367.4	0.2	14.8	(s)	0.1	0.1	0.3	2.5	24.9	42.8	0.0	2.2	0.0	2.0	414.5	4.7	419.2
Arizona .....	13.4	27.3	16.3	16.1	(s)	2.6	1.5	2.3	0.5	0.7	40.0	0.0	11.7	0.0	43.6	136.0	90.8	226.8
Arkansas .....	8.4	150.7	6.5	17.3	0.1	5.0	1.5	2.4	0.7	11.8	45.4	(s)	66.5	0.0	51.7	322.7	107.5	430.2
California .....	49.8	786.7	82.3	47.1	0.7	21.3	12.1	14.4	1.9	275.0	454.8	30.2	145.5	216.2	196.8	1,880.0	409.6	2,289.7
Colorado .....	7.9	113.9	25.9	24.0	(s)	5.3	1.4	3.3	(s)	10.8	70.7	1.2	4.1	0.0	33.9	231.8	70.6	302.4
Connecticut .....	0.0	33.4	10.4	4.8	0.1	1.0	1.2	1.2	6.2	8.7	33.6	1.0	34.1	0.0	20.2	122.3	42.1	164.4
Delaware .....	4.1	14.7	2.0	3.0	0.3	2.4	0.4	0.4	9.3	26.9	44.7	0.0	6.8	0.0	11.6	81.9	24.1	106.0
Dist. of Col. ....	0.0	0.0	0.1	0.1	(s)	(s)	(s)	0.2	(s)	0.0	0.5	0.0	0.0	0.0	0.9	1.4	1.8	3.2
Florida .....	31.9	154.0	39.3	33.4	0.2	11.8	3.5	6.0	25.0	17.4	136.5	0.0	78.7	0.0	58.7	459.8	122.2	582.0
Georgia .....	49.9	185.9	36.0	32.4	0.2	9.5	3.6	4.8	22.0	43.5	152.1	0.5	98.4	0.0	113.2	600.1	235.6	835.7
Hawaii .....	3.6	0.0	2.7	1.9	(s)	4.4	0.1	1.4	6.1	15.0	31.6	0.9	6.5	5.5	13.3	61.3	15.0	76.3
Idaho .....	6.7	35.6	13.5	17.0	(s)	7.9	0.3	2.2	(s)	0.1	41.0	10.8	19.8	0.0	28.6	142.5	59.5	202.0
Illinois .....	150.1	328.5	60.6	45.4	1.3	65.9	11.3	7.7	3.8	213.0	409.0	0.9	25.9	0.0	143.5	1,057.9	298.6	1,356.5
Indiana .....	269.3	292.4	56.6	27.6	0.5	8.6	6.3	4.2	6.5	105.9	216.3	0.0	10.4	0.0	147.4	935.9	306.8	1,242.7
Iowa .....	65.7	114.7	13.6	36.9	0.1	16.9	1.1	5.8	0.6	3.7	78.7	0.2	2.8	0.0	50.5	312.5	105.0	417.5
Kansas .....	3.9	159.1	23.8	28.5	0.1	29.1	2.3	5.4	0.8	38.0	127.9	0.1	1.2	0.0	31.5	323.7	65.6	389.3
Kentucky .....	93.7	101.7	18.0	36.0	0.7	12.3	3.1	6.3	1.6	119.9	197.9	0.0	13.9	0.0	143.1	550.2	297.8	848.0
Louisiana .....	2.1	1,317.9	11.4	64.0	0.2	243.5	7.4	4.1	4.8	511.1	846.5	10.0	98.7	0.0	111.0	2,386.2	231.1	2,617.3
Maine .....	5.8	2.2	2.5	7.9	0.1	1.1	0.4	0.9	49.4	0.9	63.2	22.3	128.2	0.0	16.3	238.0	33.9	271.9
Maryland .....	19.7	51.4	24.0	12.2	0.3	2.9	2.4	1.8	8.7	24.1	76.4	0.0	24.0	0.0	34.5	206.0	71.7	277.7
Massachusetts ..	0.9	102.6	8.4	7.2	0.1	1.9	2.2	2.0	10.8	12.7	45.3	2.8	55.3	0.0	34.4	241.3	71.6	312.9
Michigan .....	106.7	368.4	24.6	23.0	0.2	18.5	10.3	7.4	2.7	76.5	163.5	1.5	96.6	0.0	117.7	854.5	245.0	1,099.5
Minnesota .....	31.6	104.3	44.3	38.4	0.2	16.5	1.9	3.5	4.1	44.1	153.0	3.6	59.3	0.5	91.9	444.3	191.3	635.6
Mississippi .....	5.6	86.7	17.3	19.7	0.1	22.7	2.0	2.3	0.7	42.5	107.4	0.0	64.1	0.0	54.7	318.5	113.9	432.4
Missouri .....	25.9	72.3	35.7	18.8	0.2	12.7	3.9	8.8	2.0	31.5	113.5	0.0	6.3	0.0	50.9	268.9	105.9	374.8
Montana .....	2.4	21.1	11.3	20.2	(s)	3.7	0.3	3.5	1.1	30.4	70.5	0.6	6.8	0.0	21.5	122.9	44.8	167.6
Nebraska .....	5.4	36.4	11.8	27.2	0.1	6.6	0.2	4.1	1.1	0.2	51.2	0.0	2.0	0.0	21.1	116.1	44.0	160.1
Nevada .....	4.0	33.9	9.5	15.7	(s)	1.2	0.1	1.1	0.8	0.6	29.1	0.2	0.6	34.9	31.0	133.7	64.4	198.1
New Hampshire ..	0.0	5.0	4.2	2.3	0.1	1.2	0.1	0.6	6.1	0.7	15.3	5.2	28.9	0.0	8.0	62.4	16.6	78.9
New Jersey .....	0.2	208.3	35.7	11.4	1.8	6.4	9.5	3.1	10.6	192.9	271.5	0.2	31.9	0.0	46.4	558.4	96.6	655.0
New Mexico .....	1.6	107.9	10.9	10.3	0.1	3.5	0.7	3.5	1.2	13.7	43.9	0.0	1.8	0.0	20.2	175.4	42.0	217.5
New York .....	72.5	331.9	41.0	18.0	3.9	4.6	5.9	5.9	15.7	62.4	157.4	19.1	96.1	0.0	88.5	765.5	184.3	949.8
North Carolina ..	58.7	107.9	26.8	25.8	0.9	21.6	3.3	5.3	40.2	32.0	155.9	19.6	72.3	0.0	116.5	530.9	242.5	773.3
North Dakota ....	90.0	20.5	6.0	17.2	(s)	3.3	0.1	3.0	0.8	7.8	38.3	0.0	0.1	0.0	6.3	155.1	13.0	168.2
Ohio .....	142.2	361.6	74.7	33.1	1.3	26.7	13.8	6.3	10.2	130.6	296.7	0.1	68.3	0.0	250.4	1,119.3	521.2	1,640.5
Oklahoma .....	16.4	280.3	18.3	20.0	(s)	7.2	3.3	6.4	1.7	50.9	107.8	0.0	18.0	0.0	41.5	464.0	86.4	550.3
Oregon .....	1.9	91.6	18.2	10.1	0.1	3.7	1.3	3.0	0.9	16.7	53.9	4.2	68.7	0.0	53.9	274.1	112.2	386.3
Pennsylvania ....	398.4	255.2	49.6	26.4	0.8	7.3	15.8	4.5	21.0	104.0	229.5	4.7	93.8	0.0	161.1	1,142.7	335.2	1,477.9
Rhode Island ....	0.0	27.7	2.2	1.7	(s)	0.4	0.4	0.2	2.0	0.1	7.1	0.1	3.2	0.0	4.6	42.8	9.6	52.4
South Carolina ..	50.1	98.4	16.0	12.6	0.5	4.9	1.6	2.4	14.4	42.5	94.8	0.6	63.4	0.0	99.6	406.8	207.3	614.1
South Dakota ....	6.9	7.7	7.5	13.5	(s)	2.5	(s)	2.8	0.3	0.1	26.8	0.0	1.3	0.0	6.1	48.8	12.7	61.5
Tennessee .....	91.8	130.6	34.3	22.0	0.2	2.9	3.2	4.7	1.2	75.4	144.0	9.2	48.2	0.0	156.2	580.0	325.1	905.1
Texas .....	73.8	2,558.9	79.4	118.6	0.9	1,453.7	19.7	21.2	13.4	1,161.8	2,868.6	0.1	38.2	0.9	325.2	5,865.5	676.8	6,542.3
Utah .....	40.0	72.3	15.7	10.7	(s)	8.6	0.6	1.7	0.5	18.9	56.6	0.3	4.5	0.0	26.1	199.8	54.4	254.2
Vermont .....	0.0	2.0	1.9	1.9	0.1	0.8	0.1	0.5	1.3	0.0	6.7	1.8	10.0	0.0	5.2	25.7	10.9	36.7
Virginia .....	91.9	88.8	23.3	25.8	0.6	5.1	2.4	4.0	11.4	29.9	102.6	0.9	48.2	0.0	64.9	397.4	135.1	532.5
Washington .....	3.0	118.4	24.5	14.7	0.1	5.9	1.2	3.0	2.1	157.0	208.5	4.6	105.4	0.0	103.2	543.1	214.8	757.8
West Virginia ....	84.2	60.4	6.3	18.6	0.4	5.8	2.4	1.0	2.2	79.6	116.3	9.6	6.7	0.0	36.9	314.3	76.8	391.1
Wisconsin .....	40.1	151.5	27.4	27.9	0.1	8.1	2.9	4.8	5.5	17.4	94.0	3.0	169.2	0.0	81.4	539.2	169.5	708.8
Wyoming .....	40.2	74.2	5.5	17.9	0.1	4.1	0.3	2.4	(s)	16.4	46.8	0.0	1.7	0.0	23.5	186.4	48.9	235.3
United States ....	2,422.5	10,446.2	1,175.9	1,127.1	18.3	2,129.5	172.5	201.3	340.9	3,937.1	9,102.8	170.1	2,200.5	257.9	3,515.6	28,115.3	7,305.0	35,420.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>c</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy sources. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> U.S. total includes -0.3 trillion Btu of net imports of coal coke that has not been allocated to the States.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 7. Transportation Energy Consumption Estimates, 1996**  
(Trillion Btu)

State	Coal	Natural Gas <sup>a</sup>	Petroleum								Ethanol <sup>b</sup>	Electricity	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total
			Aviation Gasoline	Distillate Fuel	Jet Fuel	LPG	Lubricants	Motor Gasoline	Residual Fuel	Total					
Alabama	0.0	19.8	0.5	103.9	19.9	0.3	2.8	285.1	15.7	428.2	0.3	(s)	448.0	(s)	448.0
Alaska	0.0	2.0	0.7	18.9	105.8	(s)	0.5	33.5	(s)	159.4	0.7	0.0	161.4	0.0	161.4
Arizona	0.0	17.5	0.8	75.8	44.9	0.1	2.0	257.1	0.0	380.7	1.7	0.0	398.3	0.0	398.3
Arkansas	0.0	12.8	0.6	77.2	8.7	0.2	2.5	166.0	0.0	255.2	(s)	0.0	268.0	0.0	268.0
California	0.0	20.2	3.9	334.1	588.4	1.8	16.1	1,656.2	249.2	2,849.7	6.7	1.2	2,871.1	2.4	2,873.5
Colorado	0.0	11.2	0.6	56.1	44.0	0.3	2.3	221.3	(s)	324.7	4.9	(s)	335.8	(s)	335.9
Connecticut	0.0	1.5	0.2	30.6	15.4	0.1	1.4	166.1	0.2	214.0	0.3	0.0	215.5	0.0	215.5
Delaware	0.0	(s)	0.3	9.3	0.4	(s)	0.4	44.0	12.8	67.1	0.0	0.0	67.1	0.0	67.1
Dist. of Col.	0.0	0.2	(s)	4.0	0.0	(s)	0.3	20.0	0.0	24.3	0.0	0.4	25.0	0.9	25.9
Florida	0.0	6.4	2.6	171.9	166.4	0.4	4.6	828.9	52.0	1,226.8	0.1	0.1	1,233.3	0.3	1,233.6
Georgia	0.0	8.7	0.8	199.1	98.0	0.4	3.6	525.8	7.9	835.6	0.0	0.3	844.6	0.5	845.1
Hawaii	0.0	0.0	0.8	9.6	57.2	(s)	0.4	47.8	4.5	120.3	0.0	0.0	120.3	0.0	120.3
Idaho	0.0	6.2	0.3	31.4	4.9	0.1	0.8	71.4	0.0	108.9	0.0	0.0	115.1	0.0	115.1
Illinois	0.0	14.7	1.0	157.2	68.5	0.8	8.7	577.3	0.2	813.7	9.9	1.2	829.6	2.4	832.0
Indiana	0.0	12.7	0.9	163.9	71.3	0.4	4.0	360.4	1.9	602.8	3.6	(s)	615.5	0.1	615.6
Iowa	0.0	12.7	0.4	73.8	4.6	0.3	3.0	181.5	0.0	263.6	3.6	0.0	276.4	0.0	276.4
Kansas	0.0	38.2	0.9	65.9	11.4	0.1	3.5	156.6	0.0	238.3	0.2	0.0	276.5	0.0	276.5
Kentucky	0.0	27.8	0.2	116.4	31.7	0.2	3.0	222.2	0.0	373.7	0.4	0.0	401.5	0.0	401.5
Louisiana	0.0	70.8	0.4	163.0	164.6	0.2	4.1	263.0	163.0	758.2	0.1	(s)	829.0	(s)	829.0
Maine	0.0	0.0	0.1	21.8	5.1	(s)	0.8	77.6	1.3	106.6	0.0	(s)	106.6	(s)	106.6
Maryland	0.0	2.7	0.2	58.5	22.1	0.2	1.8	270.1	4.8	357.7	0.2	0.4	360.8	0.8	361.6
Massachusetts	0.0	2.2	0.5	51.8	39.0	0.2	2.7	311.8	12.8	418.7	0.0	0.7	421.5	1.4	422.9
Michigan	0.0	26.9	1.1	114.0	51.3	0.8	8.5	572.7	0.8	749.1	1.6	(s)	776.0	(s)	776.0
Minnesota	0.0	20.2	0.6	77.5	60.2	0.5	4.6	284.4	0.0	427.9	9.5	0.0	448.0	0.0	448.0
Mississippi	0.0	50.5	0.3	62.1	40.6	0.2	1.8	177.0	10.7	292.7	(s)	0.0	292.7	0.0	343.2
Missouri	0.0	7.6	0.5	132.6	68.8	0.3	5.4	358.0	0.1	565.7	1.0	0.1	573.3	0.1	573.5
Montana	0.0	3.5	0.5	32.4	5.7	0.1	1.1	58.2	0.0	97.9	0.0	0.0	101.5	0.0	101.5
Nebraska	0.0	4.6	0.4	69.7	5.7	0.1	2.0	98.1	0.0	176.0	1.3	0.0	180.6	0.0	180.6
Nevada	0.0	0.8	0.5	34.8	44.5	0.1	0.5	98.5	0.0	178.8	0.0	0.0	179.5	0.0	179.5
New Hampshire	0.0	(s)	0.1	8.6	2.0	0.1	0.3	72.6	(s)	83.7	0.0	0.0	83.8	0.0	83.8
New Jersey	0.0	3.2	0.6	94.2	243.8	0.2	4.1	448.4	38.4	829.8	0.8	0.4	833.4	0.8	834.1
New Mexico	0.0	27.9	0.5	46.5	9.2	0.3	1.2	102.8	0.0	160.5	1.3	0.0	188.4	0.0	188.4
New York	0.0	8.1	0.3	131.4	65.4	0.4	6.1	681.1	41.2	926.0	1.7	7.2	941.3	15.0	956.2
North Carolina	0.0	7.6	0.7	123.5	51.7	0.5	3.6	456.1	2.1	638.3	2.5	0.0	646.0	0.0	646.0
North Dakota	0.0	5.0	0.3	25.4	1.4	(s)	0.9	42.5	0.0	70.5	0.4	0.0	75.5	0.0	75.5
Ohio	0.0	21.2	1.7	196.8	67.8	0.8	8.2	597.8	0.5	873.6	6.4	0.1	894.9	0.3	895.2
Oklahoma	0.0	34.5	0.6	96.4	26.7	0.1	4.5	223.3	0.0	351.6	0.0	0.0	386.0	0.0	386.0
Oregon	0.0	8.3	1.0	63.5	29.7	0.4	3.0	181.6	19.4	298.5	0.0	(s)	306.8	0.1	306.9
Pennsylvania	0.0	42.1	0.6	171.3	67.1	0.5	7.5	592.0	21.3	860.4	4.1	1.1	903.5	2.3	905.8
Rhode Island	0.0	0.7	0.2	7.7	3.1	(s)	0.4	47.0	(s)	58.4	0.0	0.0	59.2	0.0	59.2
South Carolina	0.0	3.2	0.3	66.9	7.3	0.2	1.5	246.6	4.2	327.0	0.0	0.0	330.2	0.0	330.2
South Dakota	0.0	2.9	0.3	20.2	5.7	(s)	0.9	50.4	0.0	77.5	1.1	0.0	80.4	0.0	80.4
Tennessee	0.0	25.0	1.2	128.8	52.8	0.4	3.9	335.8	(s)	523.0	(s)	(s)	548.0	(s)	548.0
Texas	0.0	78.4	3.2	404.2	566.2	1.0	11.0	1,167.1	114.2	2,266.9	1.4	(s)	2,345.3	(s)	2,345.3
Utah	0.0	3.9	0.3	43.3	35.7	0.1	1.1	109.4	0.0	189.8	0.1	0.0	193.7	0.0	193.7
Vermont	0.0	(s)	0.1	13.4	0.6	0.1	0.3	38.0	0.0	52.4	0.0	0.0	52.4	0.0	52.4
Virginia	0.0	8.1	0.4	128.6	52.2	0.2	3.0	411.1	7.8	603.4	3.0	0.2	611.7	0.5	612.2
Washington	0.0	7.2	1.5	83.1	126.5	0.6	2.9	320.4	78.5	613.4	1.0	(s)	620.7	0.1	620.8
West Virginia	0.0	34.5	0.2	28.9	1.0	(s)	1.4	98.2	(s)	129.8	(s)	0.0	164.2	0.0	164.2
Wisconsin	0.0	4.3	1.9	91.3	8.7	0.4	3.0	290.6	0.2	395.9	4.3	(s)	400.3	(s)	400.3
Wyoming	0.0	8.7	1.1	51.8	0.9	0.1	0.9	39.0	0.0	93.6	0.2	0.0	102.3	0.0	102.3
United States	0.0	737.1	37.4	4,543.2	3,274.2	14.7	163.0	14,942.4	865.7	23,840.6	74.4	13.4	24,591.1	28.0	24,619.0

<sup>a</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and gas consumed as vehicle fuel.

<sup>b</sup> Ethanol blended into motor gasoline is included in motor gasoline, but is also shown separately to display the use of renewable energy by the transportation sector. It is counted only once in the total.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted

for electrical system energy losses.  
(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 8. Estimates of Energy Input at Electric Utilities, 1996**  
(Trillion Btu)

State	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>d</sup>	Wood and Waste	Geothermal Energy <sup>e</sup>	Other <sup>f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b</sup>	Light Oil <sup>c</sup>	Petroleum Coke	Total						
Alabama .....	736.3	0.0	736.3	6.3	0.0	1.7	0.0	1.7	315.6	114.6	0.0	0.0	0.0	1,174.5
Alaska .....	3.6	0.0	3.6	31.2	3.2	3.8	0.0	7.1	0.0	13.1	0.0	0.0	0.0	55.0
Arizona .....	329.8	0.0	329.8	19.5	0.1	0.6	0.0	0.7	306.4	98.0	0.0	0.0	0.0	754.4
Arkansas .....	251.8	0.0	251.8	34.8	0.5	0.6	0.0	1.1	141.9	28.9	0.0	0.0	0.0	458.5
California .....	0.0	0.0	0.0	326.3	6.2	0.8	0.0	7.0	362.2	457.4	0.6	119.3	0.1	1,276.9
Colorado .....	332.1	0.0	332.1	5.5	0.1	0.2	0.0	0.3	0.0	16.4	0.0	0.0	0.0	354.2
Connecticut .....	24.2	0.0	24.2	10.7	56.3	0.4	0.0	56.7	66.1	14.7	4.5	0.0	0.0	180.3
Delaware .....	46.5	0.0	46.5	24.2	11.0	1.3	0.0	12.3	0.0	0.0	0.0	0.0	0.0	83.0
Dist. of Col. ....	0.0	0.0	0.0	0.0	1.5	0.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.8
Florida .....	662.6	0.0	662.6	285.8	221.8	9.2	1.9	233.0	270.6	2.2	0.0	0.0	0.0	1,454.2
Georgia .....	675.6	0.0	675.6	4.8	0.5	3.2	0.0	3.8	317.9	51.0	0.0	0.0	0.0	1,053.2
Hawaii .....	0.0	0.0	0.0	0.0	54.6	13.4	0.0	68.0	0.0	0.2	0.0	0.0	0.0	68.2
Idaho .....	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	128.1	0.0	0.0	0.0	128.7
Illinois .....	752.5	0.0	752.5	26.2	7.4	3.2	1.5	12.1	741.2	0.2	1.4	0.0	0.0	1,533.6
Indiana .....	1,094.8	0.0	1,094.8	4.4	0.0	2.1	1.8	3.9	0.0	4.6	0.0	0.0	0.0	1,107.8
Iowa .....	309.3	0.0	309.3	3.4	0.0	0.8	0.0	0.8	41.7	9.5	0.2	0.0	(s)	364.9
Kansas .....	332.8	0.0	332.8	22.5	1.0	1.0	0.0	2.0	87.2	0.0	0.0	0.0	0.0	444.5
Kentucky .....	855.3	0.0	855.3	1.9	0.0	1.8	0.0	1.8	0.0	36.2	0.0	0.0	0.0	895.1
Louisiana .....	203.5	0.0	203.5	263.0	1.9	1.2	0.0	3.1	167.5	0.0	0.0	0.0	0.0	637.0
Maine .....	0.0	0.0	0.0	0.0	7.2	0.1	0.0	7.3	53.8	54.0	(s)	0.0	0.0	123.2
Maryland .....	271.5	0.0	271.5	8.8	13.3	4.6	0.0	17.9	128.5	25.4	0.0	0.0	0.0	452.0
Massachusetts ..	111.3	0.0	111.3	46.8	58.3	2.6	0.0	60.9	56.6	14.0	0.0	0.0	0.0	293.6
Michigan .....	675.9	0.0	675.9	8.8	7.8	1.7	(s)	9.5	285.0	24.8	0.0	0.0	0.0	1,007.6
Minnesota .....	311.2	0.0	311.2	5.3	(s)	0.8	6.4	7.2	128.5	89.3	4.4	0.0	(s)	568.5
Mississippi .....	122.5	0.0	122.5	86.4	10.7	0.5	0.0	11.2	98.0	0.0	0.0	0.0	0.0	318.2
Missouri .....	599.2	0.0	599.2	5.3	0.2	1.3	0.0	1.5	94.4	12.8	0.3	0.0	0.0	713.6
Montana .....	133.3	0.0	133.3	0.5	0.0	0.2	0.0	0.2	0.0	142.4	0.0	0.0	0.0	276.5
Nebraska .....	173.5	0.0	173.5	2.3	0.0	0.3	0.0	0.3	100.5	16.6	0.1	0.0	0.0	293.3
Nevada .....	165.4	0.0	165.4	48.1	0.9	0.2	0.0	1.1	0.0	22.2	0.0	0.0	0.0	236.8
New Hampshire ..	36.0	0.0	36.0	(s)	9.3	0.2	0.0	9.5	104.6	24.0	0.0	0.0	0.0	177.3
New Jersey .....	62.0	0.0	62.0	26.3	4.8	2.5	0.0	7.2	117.1	-1.2	0.0	0.0	0.0	211.6
New Mexico .....	277.4	0.0	277.4	30.3	(s)	0.3	0.0	0.3	0.0	2.2	0.0	0.0	0.0	310.2
New York .....	214.8	0.0	214.8	146.8	93.8	6.3	0.0	100.1	374.2	324.2	0.4	0.0	0.0	1,170.5
North Carolina ..	623.2	0.0	623.2	2.5	0.0	3.3	0.0	3.3	358.2	46.7	0.0	0.0	0.0	1,033.8
North Dakota .....	311.9	0.0	311.9	(s)	0.0	0.9	0.0	0.9	0.0	40.8	0.0	0.0	0.0	355.9
Ohio .....	1,291.0	0.0	1,291.0	3.0	0.0	3.4	0.0	3.4	147.9	4.1	0.0	0.0	0.0	1,449.3
Oklahoma .....	333.4	0.0	333.4	139.9	0.8	0.5	0.0	1.3	0.0	21.5	0.0	0.0	0.0	496.1
Oregon .....	18.3	0.0	18.3	14.1	0.0	0.1	0.0	0.1	0.0	487.1	0.0	0.0	0.0	529.3
Pennsylvania .....	994.9	14.5	1,009.4	7.4	25.0	8.3	8.2	41.5	729.5	18.5	0.0	0.0	0.0	1,806.9
Rhode Island .....	0.0	0.0	0.0	25.8	0.0	0.4	0.0	0.4	0.0	9.2	0.0	0.0	0.0	38.8
South Carolina ..	301.9	0.0	301.9	1.2	0.2	1.6	0.0	1.8	462.9	23.1	0.0	0.0	0.0	790.9
South Dakota .....	26.3	0.0	26.3	0.7	0.0	0.2	0.0	0.2	0.0	82.5	0.0	0.0	0.0	109.6
Tennessee .....	554.0	0.0	554.0	0.6	0.0	2.7	0.0	2.7	243.5	102.3	0.0	0.0	0.0	903.1
Texas .....	1,401.6	0.0	1,401.6	1,063.1	2.1	3.9	0.0	6.0	379.9	9.9	0.0	0.0	(s)	2,849.9
Utah .....	312.8	0.0	312.8	4.2	0.0	0.3	0.0	0.3	0.0	10.5	0.0	4.0	0.0	331.9
Vermont .....	0.0	0.0	0.0	(s)	0.0	0.1	0.0	0.1	40.4	39.2	1.4	0.0	0.0	88.5
Virginia .....	277.0	0.0	277.0	10.9	5.2	2.0	0.0	7.2	279.2	5.3	0.0	0.0	0.0	579.5
Washington .....	87.4	0.0	87.4	6.9	0.0	0.1	0.0	0.1	59.4	1,040.9	3.7	0.0	0.0	1,185.9
West Virginia .....	811.4	0.0	811.4	0.2	0.0	2.1	0.0	2.1	0.0	5.1	0.0	0.0	0.0	818.8
Wisconsin .....	410.1	0.0	410.1	7.4	0.0	0.9	0.8	1.7	107.5	26.3	3.3	0.0	0.0	556.9
Wyoming .....	425.9	0.0	425.9	0.1	0.0	0.6	0.0	0.6	0.0	12.7	0.0	0.0	0.0	439.4
United States .....	17,946.2	14.5	17,960.7	2,774.3	606.0	98.4	20.5	724.9	7,167.6	3,711.3	20.3	123.3	0.1	32,543.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> Heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>c</sup> Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>d</sup> Includes net imports of hydroelectricity. A negative number in this column results from pumped storage for which, overall, more electricity is expended than created to provide electricity during peak demand periods.

<sup>e</sup> Includes net imports of electricity generated from geothermal energy.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> Includes 60.5 trillion Btu of net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

(s)=Number less than 0.05.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 9. Energy Consumption by Sector, Ranked by State, 1996

Rank	Residential Sector		Commercial Sector		Industrial Sector		Transportation Sector		Total Consumption	
	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu
1	California	1,340.4	California	1,193.5	Texas	6,542.3	California	2,873.5	Texas	11,278.2
2	Texas	1,310.2	New York	1,118.9	Louisiana	2,617.3	Texas	2,345.3	California	7,697.1
3	New York	1,104.7	Texas	1,080.4	California	2,289.7	Florida	1,233.6	New York	4,129.6
4	Florida	1,002.7	Florida	761.1	Ohio	1,640.5	New York	956.2	Ohio	4,115.7
5	Illinois	986.5	Illinois	722.4	Pennsylvania	1,477.9	Pennsylvania	905.8	Louisiana	3,994.9
6	Pennsylvania	935.8	Ohio	649.2	Illinois	1,356.5	Ohio	895.2	Pennsylvania	3,927.3
7	Ohio	930.8	Pennsylvania	607.8	Indiana	1,242.7	Georgia	845.1	Illinois	3,897.4
8	Michigan	795.9	Michigan	577.8	Michigan	1,099.5	New Jersey	834.1	Florida	3,579.4
9	North Carolina	583.1	New Jersey	520.4	Alabama	991.3	Illinois	832.0	Michigan	3,249.2
10	New Jersey	565.3	Virginia	451.9	New York	949.8	Louisiana	829.0	Indiana	2,663.6
11	Georgia	561.8	North Carolina	414.1	Tennessee	905.1	Michigan	776.0	Georgia	2,634.5
12	Virginia	518.7	Georgia	391.9	Kentucky	848.0	North Carolina	646.0	New Jersey	2,574.9
13	Indiana	503.5	Massachusetts	371.3	Georgia	835.7	Washington	620.8	North Carolina	2,416.5
14	Tennessee	475.3	Missouri	337.1	North Carolina	773.3	Indiana	615.6	Washington	2,135.3
15	Missouri	459.4	Maryland	322.3	Washington	757.8	Virginia	612.2	Virginia	2,115.2
16	Washington	435.5	Washington	321.2	Wisconsin	708.8	Missouri	573.5	Tennessee	2,067.9
17	Massachusetts	426.4	Indiana	301.9	New Jersey	655.0	Tennessee	548.0	Alabama	1,975.0
18	Wisconsin	403.6	Wisconsin	278.9	Minnesota	635.6	Minnesota	448.0	Wisconsin	1,791.4
19	Maryland	387.6	Colorado	240.2	South Carolina	614.1	Alabama	448.0	Kentucky	1,776.8
20	Minnesota	377.8	Arizona	238.2	Florida	582.0	Massachusetts	422.9	Missouri	1,744.7
21	Alabama	353.2	Minnesota	227.5	Oklahoma	550.3	Kentucky	401.5	Minnesota	1,688.9
22	Kentucky	327.7	Louisiana	222.0	Virginia	532.5	Wisconsin	400.3	Massachusetts	1,533.5
23	Louisiana	326.6	Kentucky	199.6	Mississippi	432.4	Arizona	398.3	South Carolina	1,426.8
24	South Carolina	291.5	Oklahoma	196.2	Arkansas	430.2	Oklahoma	386.0	Oklahoma	1,405.7
25	Oklahoma	273.1	South Carolina	191.0	Alaska	419.2	Maryland	361.6	Maryland	1,349.1
26	Colorado	255.0	Connecticut	189.9	Iowa	417.5	Mississippi	343.2	Colorado	1,133.5
27	Connecticut	254.7	Kansas	183.3	West Virginia	391.1	Colorado	335.9	Arizona	1,114.8
28	Arizona	251.6	Alabama	182.6	Kansas	389.3	South Carolina	330.2	Oregon	1,108.1
29	Iowa	240.5	Oregon	180.0	Oregon	386.3	Oregon	306.9	Mississippi	1,098.4
30	Oregon	234.9	Iowa	156.3	Missouri	374.8	Kansas	276.5	Iowa	1,090.7
31	Kansas	210.9	Tennessee	139.4	Massachusetts	312.9	Iowa	276.4	Kansas	1,060.0
32	Mississippi	205.3	Nebraska	123.2	Colorado	302.4	Arkansas	268.0	Arkansas	1,012.9
33	Arkansas	195.3	Arkansas	119.4	Maryland	277.7	Connecticut	215.5	Connecticut	824.5
34	West Virginia	150.9	Mississippi	117.5	Maine	271.9	Utah	193.7	West Virginia	803.4
35	Nebraska	140.5	District of Columbia	110.0	Utah	254.2	New Mexico	188.4	Alaska	696.8
36	Utah	120.0	Utah	106.5	Wyoming	235.3	Nebraska	180.6	Utah	674.4
37	Nevada	108.9	New Mexico	101.8	Arizona	226.8	Nevada	179.5	Nebraska	604.4
38	Maine	102.1	West Virginia	97.2	New Mexico	217.5	West Virginia	164.2	New Mexico	595.2
39	Idaho	91.1	Nevada	88.8	Idaho	202.0	Alaska	161.4	Nevada	575.4
40	New Mexico	87.5	Idaho	82.9	Nevada	198.1	Hawaii	120.3	Maine	538.4
41	New Hampshire	83.9	Alaska	66.7	North Dakota	168.2	Idaho	115.1	Idaho	491.1
42	Rhode Island	72.1	Maine	57.8	Montana	167.6	Maine	106.6	Wyoming	423.2
43	Montana	70.4	Montana	55.6	Connecticut	164.4	Wyoming	102.3	Montana	395.1
44	South Dakota	61.8	New Hampshire	55.6	Nebraska	160.1	Montana	101.5	North Dakota	351.9
45	North Dakota	61.7	Rhode Island	52.2	Delaware	106.0	New Hampshire	83.8	New Hampshire	302.2
46	Delaware	57.3	North Dakota	46.5	New Hampshire	78.9	South Dakota	80.4	Delaware	273.2
47	Alaska	49.5	Wyoming	44.5	Hawaii	76.3	North Dakota	75.5	South Dakota	244.7
48	Vermont	46.1	Delaware	42.8	South Dakota	61.5	Delaware	67.1	Hawaii	242.0
49	Wyoming	41.0	South Dakota	41.1	Rhode Island	52.4	Rhode Island	59.2	Rhode Island	235.9
50	District of Columbia	38.3	Vermont	27.3	Vermont	36.7	Vermont	52.4	District of Columbia	177.4
51	Hawaii	21.5	Hawaii	23.8	District of Columbia	3.2	District of Columbia	25.9	Vermont	162.4
	United States	18,930.0	United States	14,429.2	United States	35,420.3	United States	24,619.0	United States	93,398.5

Source: Combined State Energy Data System 1996.

Table 10. Energy Consumption by Source and Total Consumption per Capita, Ranked by State, 1996

Rank	Coal		Natural Gas		Petroleum		Electricity <sup>a</sup>		Total Consumption per Capita	
	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Trillion Btu	State	Million Btu
1	Texas	1,475.4	Texas	4,123.0	Texas	5,166.4	Texas	950.1	Alaska	1,151.8
2	Ohio	1,448.8	California	1,865.1	California	3,341.9	California	744.2	Louisiana	920.3
3	Pennsylvania	1,432.3	Louisiana	1,737.7	Florida	1,629.6	Florida	586.3	Wyoming	881.6
4	Indiana	1,372.1	New York	1,159.9	Louisiana	1,612.2	Ohio	541.1	Texas	590.8
5	Kentucky	951.8	Illinois	1,140.6	New York	1,569.3	New York	448.8	North Dakota	547.6
6	Illinois	906.9	Michigan	1,026.7	Pennsylvania	1,329.3	Pennsylvania	435.4	Alabama	460.7
7	West Virginia	898.3	Ohio	972.0	Illinois	1,272.8	Illinois	428.5	Kentucky	457.7
8	Alabama	887.5	Pennsylvania	752.7	Ohio	1,236.6	North Carolina	369.5	Indiana	457.0
9	Michigan	789.3	New Jersey	624.6	New Jersey	1,228.0	Georgia	345.7	Montana	450.7
10	Georgia	725.6	Oklahoma	580.2	Georgia	1,017.1	Michigan	328.6	West Virginia	441.3
11	Florida	694.5	Indiana	579.8	Michigan	998.4	Indiana	303.3	Maine	434.7
12	North Carolina	687.0	Florida	510.7	North Carolina	885.1	Tennessee	299.1	Oklahoma	426.6
13	Tennessee	648.6	Alaska	443.6	Indiana	859.2	Virginia	298.9	Idaho	413.6
14	Missouri	629.7	Wisconsin	408.0	Washington	842.1	Washington	298.3	Kansas	411.0
15	Wyoming	473.0	Georgia	392.2	Virginia	792.9	Kentucky	262.8	Mississippi	405.2
16	Wisconsin	452.8	Minnesota	375.1	Missouri	721.1	Louisiana	256.8	Arkansas	404.1
17	North Dakota	404.1	Massachusetts	367.5	Tennessee	690.9	Alabama	249.4	Tennessee	389.6
18	Iowa	380.5	Kansas	362.0	Massachusetts	690.7	South Carolina	228.9	Washington	386.9
19	Virginia	378.8	Alabama	336.3	Minnesota	638.6	New Jersey	228.2	South Carolina	383.9
20	Utah	355.0	Colorado	314.7	Kentucky	599.1	Missouri	221.2	Iowa	383.0
21	South Carolina	352.5	Missouri	297.5	Alabama	562.5	Wisconsin	200.4	Delaware	377.6
22	Oklahoma	349.9	Tennessee	289.3	Wisconsin	550.0	Maryland	194.5	Ohio	368.7
23	Minnesota	345.5	Arkansas	277.7	Maryland	518.2	Minnesota	187.5	Nebraska	366.6
24	Arizona	343.2	Mississippi	277.4	Oklahoma	469.6	Arizona	177.7	Minnesota	363.3
25	Colorado	340.3	Iowa	274.3	South Carolina	445.1	Massachusetts	161.4	Nevada	359.4
26	Kansas	338.6	Virginia	248.4	Arizona	427.4	Oregon	161.0	Georgia	359.2
27	New York	294.3	Kentucky	248.0	Mississippi	424.0	Oklahoma	147.7	Wisconsin	348.1
28	Maryland	292.2	Washington	247.5	Connecticut	412.5	Mississippi	135.2	New Mexico	347.8
29	New Mexico	279.2	New Mexico	228.2	Colorado	412.2	Colorado	126.5	Oregon	346.7
30	Arkansas	260.2	North Carolina	220.8	Kansas	379.7	Arkansas	123.3	Utah	334.3
31	Louisiana	205.6	Maryland	198.1	Iowa	371.3	Iowa	119.4	Michigan	333.9
32	Nebraska	179.0	Oregon	175.3	Oregon	363.9	Kansas	106.8	South Dakota	331.8
33	Nevada	169.5	Utah	167.8	Arkansas	309.7	Connecticut	97.0	North Carolina	330.6
34	Montana	135.7	West Virginia	164.5	West Virginia	257.6	West Virginia	89.1	Illinois	329.0
35	Mississippi	128.1	South Carolina	154.1	Maine	253.2	Nevada	77.0	District of Columbia	329.0
36	Massachusetts	113.1	Nebraska	133.8	Utah	251.6	Nebraska	73.3	Pennsylvania	326.2
37	Washington	90.9	Connecticut	131.5	Nebraska	235.6	Idaho	72.1	Missouri	325.3
38	New Jersey	62.4	Nevada	127.6	Alaska	224.0	Utah	67.8	New Jersey	321.8
39	California	53.9	Arizona	121.7	Hawaii	221.4	New Mexico	58.6	Virginia	317.3
40	Delaware	50.8	Wyoming	107.6	Nevada	216.1	Montana	47.2	Colorado	297.0
41	New Hampshire	36.2	Rhode Island	87.7	New Mexico	209.4	Maine	40.0	Vermont	277.0
42	South Dakota	33.2	Idaho	69.0	Montana	175.3	Wyoming	39.2	Maryland	266.6
43	Connecticut	24.4	Montana	63.2	Idaho	159.4	District of Columbia	34.6	New Hampshire	260.5
44	Oregon	20.3	Delaware	55.9	New Hampshire	156.6	Delaware	32.9	Connecticut	252.3
45	Alaska	11.2	North Dakota	51.5	Wyoming	145.5	Hawaii	32.0	Massachusetts	252.0
46	Idaho	7.3	South Dakota	37.4	Delaware	139.0	New Hampshire	31.1	Arizona	251.4
47	Maine	5.9	District of Columbia	34.2	North Dakota	119.8	North Dakota	28.4	Florida	248.2
48	Hawaii	3.6	New Hampshire	19.4	South Dakota	116.7	South Dakota	26.4	California	241.6
49	District of Columbia	0.6	Vermont	7.4	Rhode Island	97.3	Rhode Island	22.5	Rhode Island	238.7
50	Rhode Island	0.1	Maine	5.8	Vermont	85.2	Vermont	17.9	New York	227.7
51	Vermont	(s)	Hawaii	2.8	District of Columbia	35.4	Alaska	16.3	Hawaii	204.6
	United States	20,519.6	United States	22,598.1	United States	35,866.2	United States	10,569.7	United States	352.2

<sup>a</sup> Electricity sold to end users, not including the losses incurred in the generation, transmission, and distribution of the electricity.

(s)=Number less than 0.05.  
Source: Combined State Energy Data System 1996.

## **United States Summaries**

**Table 11. Energy Consumption Estimates by Source, Selected Years 1960-1996, United States**

Year	Coal	Net Imports of Coal Coke	Natural Gas <sup>a</sup>	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>c,d</sup>	Biomass <sup>e</sup>	Other <sup>f</sup>	Total <sup>g</sup>	
				Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kero-sene	LPG	Lubri-cants	Motor Gasoline	Residual Fuel	Other <sup>b</sup>						Total
				Million Short Tons	Billion Cubic Feet	Million Barrels													Billion Kilowatthours
1960	398	(s)	11,967	111	59	685	136	99	227	43	1,453	559	214	3,586	1	154	(s)	(s)	-
1965	472	-1	15,280	134	44	776	220	98	307	47	1,676	587	313	4,202	4	197	(s)	(s)	-
1970	523	-2	21,139	163	20	927	353	96	447	50	2,111	804	393	5,364	22	253	(s)	1	-
1975	563	1	19,538	153	14	1,041	365	58	486	50	2,436	899	455	5,958	173	309	(s)	3	-
1980	703	-1	19,877	145	13	1,049	391	58	538	58	2,408	918	665	6,242	251	300	(s)	5	-
1981	733	-1	19,404	125	11	1,032	368	46	535	56	2,404	762	521	5,861	273	297	(s)	6	-
1982	707	-1	18,001	125	9	975	370	47	547	51	2,387	627	446	5,583	283	342	(s)	5	-
1983	737	-1	16,835	136	9	982	382	46	551	53	2,417	519	464	5,559	294	371	(s)	6	-
1984	791	(s)	17,951	150	9	1,041	430	42	576	57	2,449	501	501	5,756	328	364	1	8	-
1985	818	-1	17,281	155	10	1,047	445	42	584	53	2,493	439	473	5,740	384	325	1	9	-
1986	804	-1	16,221	164	12	1,064	477	36	552	52	2,567	518	501	5,942	414	330	1	10	-
1987	837	(s)	17,211	170	9	1,086	506	35	588	59	2,630	462	538	6,083	455	299	1	11	-
1988	884	2	18,030	171	10	1,143	530	35	606	57	2,685	504	585	6,326	527	258	2	10	-
1989	890	1	18,801	165	9	1,152	544	31	609	58	2,675	500	581	6,324	529	279	2	9	-
1990	895	(s)	18,716	176	9	1,103	556	16	568	60	2,641	449	625	6,201	577	h NA	h NA	h NA	-
1991	888	(s)	19,035	162	8	1,066	537	17	616	53	2,623	423	594	6,101	613	NA	NA	NA	-
1992	892	1	19,544	166	8	1,090	532	15	642	54	2,660	401	665	6,234	619	NA	NA	NA	-
1993	926	1	20,279	173	8	1,110	536	18	633	55	2,729	394	635	6,291	610	NA	NA	NA	-
1994	930	1	20,708	177	8	1,154	557	18	686	58	2,774	373	662	6,467	640	NA	NA	NA	-
1995	941	1	21,581	178	8	1,170	553	20	693	57	2,843	311	637	6,469	673	NA	NA	NA	-
1996	983	(s)	21,967	177	7	1,232	578	23	736	55	2,888	311	695	6,701	675	NA	NA	NA	-

  

Year	Trillion Btu																		
	Coal	Net Imports of Coal Coke	Natural Gas <sup>a</sup>	Asphalt and Road Oil	Aviation Gasoline	Distillate Fuel	Jet Fuel	Kero-sene	LPG	Lubri-cants	Motor Gasoline	Residual Fuel	Other <sup>b</sup>	Total	Nuclear Electric Power	Hydro-electric Power <sup>c,d</sup>	Biomass <sup>e</sup>	Other <sup>f</sup>	Total <sup>g</sup>
1960	9,830.5	-5.6	12,385.4	733.8	297.9	3,991.7	738.5	563.3	911.7	258.8	7,630.8	3,517.2	1,275.7	19,919.3	6.0	1,656.8	1.5	0.8	43,794.6
1965	11,582.4	-18.5	15,779.5	890.3	221.6	4,519.1	1,214.5	553.3	1,231.8	285.8	8,805.6	3,690.5	1,833.2	23,245.7	43.2	2,057.6	2.8	4.2	52,696.9
1970	12,268.9	-57.7	21,692.7	1,082.5	100.5	5,401.0	1,972.7	544.2	1,688.5	301.4	11,090.9	5,056.6	2,283.4	29,521.6	239.3	2,654.1	3.7	11.3	66,334.1
1975	12,655.6	13.5	19,977.1	1,014.2	71.0	6,061.3	2,047.1	328.8	1,807.1	304.3	12,797.5	5,649.3	2,651.5	32,732.2	1,899.8	3,219.0	2.0	70.2	70,569.3
1980	15,461.0	-35.0	20,384.0	962.2	64.3	6,110.3	2,190.4	328.7	1,976.0	353.9	12,647.9	5,771.6	3,799.1	34,204.4	2,739.2	3,117.5	4.5	109.8	75,985.3
1981	15,937.7	-15.9	19,928.4	827.8	56.3	6,014.2	2,062.2	262.6	1,948.9	339.4	12,630.6	4,790.9	2,999.4	31,932.1	3,007.6	3,105.4	3.8	123.0	74,022.2
1982	15,269.0	-21.7	18,515.2	829.4	47.0	5,678.6	2,071.5	266.3	1,978.4	309.5	12,538.0	3,938.9	2,574.8	30,232.4	3,131.1	3,572.0	3.4	104.7	70,806.3
1983	15,867.1	-15.6	17,347.8	904.1	47.7	5,719.7	2,140.9	262.8	1,990.2	324.0	12,696.9	3,260.5	2,705.3	30,052.1	3,202.5	3,898.9	4.0	129.4	70,486.1
1984	17,013.6	-11.5	18,502.8	992.1	43.9	6,065.1	2,413.7	239.2	2,071.2	345.5	12,867.0	3,151.0	2,864.3	31,053.1	3,552.5	3,799.9	9.2	165.0	74,084.7
1985	17,540.1	-13.5	17,843.0	1,029.5	50.3	6,097.8	2,496.9	235.7	2,102.7	322.0	13,097.6	2,759.0	2,733.2	30,924.7	4,148.8	3,397.8	14.4	198.5	74,053.8
1986	17,240.9	R -16.8	16,718.4	1,085.7	58.9	6,196.3	2,682.4	203.3	2,009.5	314.9	13,486.7	3,254.9	2,905.4	32,198.0	4,471.2	3,446.2	12.3	219.4	74,289.6
1987	17,949.9	8.6	17,749.7	1,130.0	45.6	6,328.4	2,842.8	195.7	2,152.5	356.0	13,815.9	2,901.5	3,095.5	32,863.9	4,906.0	3,117.3	15.4	229.3	76,840.0
1988	18,885.7	39.6	18,562.9	1,136.3	49.0	6,655.1	2,981.8	199.6	2,213.4	343.3	14,105.1	3,170.4	3,369.2	34,223.1	5,661.3	2,662.3	17.3	217.4	80,269.4
1989	18,916.6	30.4	19,386.1	1,096.0	47.6	6,711.7	3,058.9	174.4	2,242.7	352.1	14,050.0	3,143.9	3,331.7	34,209.0	5,676.8	R 2,912.3	R 20.5	R 197.1	R 81,348.9
1990	18,996.5	4.8	19,280.3	1,170.2	45.0	6,422.1	3,129.5	88.0	2,058.9	362.3	13,871.8	2,819.9	3,583.9	33,551.6	6,160.9	R h 3,123.8	R h 2,633.0	h 423.3	R h 83,978.5
1991	18,753.6	8.9	19,605.0	1,076.5	41.7	6,209.9	3,025.0	95.8	2,227.4	324.2	13,781.0	2,657.0	3,407.3	32,845.8	6,578.9	R 3,156.9	R 2,642.1	R 438.4	R 83,989.3
1992	18,846.2	27.2	20,138.7	1,102.2	41.1	6,350.8	3,001.3	85.9	2,328.2	330.5	13,972.5	2,518.1	3,794.2	33,524.9	6,607.3	R 2,819.1	R 2,788.1	R 456.9	R 85,168.2
1993	19,482.8	17.3	20,848.2	1,149.0	38.4	6,466.0	3,028.0	102.7	2,282.3	336.5	14,334.6	2,478.7	3,625.9	33,842.2	6,519.1	R 3,104.6	2,784.0	474.5	R 87,014.8
1994	19,511.1	23.6	21,313.1	1,172.9	38.1	6,723.3	3,154.5	101.3	2,493.9	351.7	14,574.4	2,342.5	3,781.2	34,733.9	6,837.3	R 2,933.4	2,838.5	480.9	R 88,736.8
1995	19,678.9	26.4	22,189.1	1,178.2	39.6	6,817.7	3,132.2	111.8	2,511.7	345.7	14,933.5	1,954.7	3,638.8	34,663.9	7,177.1	R 3,443.0	R 2,845.0	R 423.5	R 90,456.5
1996	20,519.6	-0.3	22,598.1	1,175.9	37.4	7,174.5	3,274.2	128.1	2,660.4	335.5	15,170.4	1,952.1	3,957.6	35,866.2	7,167.6	3,881.3	2,939.2	440.6	93,398.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>c</sup> The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>d</sup> Through 1989, includes all net imports of electricity. From 1990, includes only the portion of net imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> "Other" is electricity generated from geothermal, wind, photovoltaic, and solar thermal energy. From 1990, includes net imports of electricity generated from geothermal energy.

<sup>g</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>h</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. - =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 12. Residential Energy Consumption Estimates, Selected Years 1960-1996, United States**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite	Anthracite	Total		Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Total						
	Million Short Tons			Billion Cubic Feet	Million Barrels				Thousand Cords	Billion Kilowatthours				
1960	11	6	17	3,103	269	62	85	417	0	0	201	-	502	-
1965	7	4	11	3,903	294	59	108	461	0	0	291	-	695	-
1970	4	2	7	4,837	322	53	153	528	0	0	466	-	1,131	-
1975	3	1	4	4,924	310	28	142	481	0	0	588	-	1,419	-
1980	2	1	3	4,752	226	19	88	333	0	0	717	-	1,746	-
1981	2	1	3	4,546	197	15	85	297	0	0	722	-	1,722	-
1982	2	1	3	4,633	180	17	82	279	0	0	730	-	1,753	-
1983	2	1	3	4,381	159	15	98	271	0	0	751	-	1,799	-
1984	3	1	4	4,555	165	16	80	261	0	0	780	-	1,816	-
1985	2	1	3	4,433	171	28	91	290	0	0	794	-	1,866	-
1986	2	1	3	4,314	174	21	89	284	0	0	819	-	1,885	-
1987	2	1	3	4,315	177	21	98	296	0	0	850	-	1,943	-
1988	2	1	3	4,630	182	25	98	305	0	0	893	-	2,019	-
1989	2	1	2	4,781	179	21	109	308	0	0	906	-	R 2,034	-
1990	2	1	3	4,391	144	11	101	256	e 29	e 14	924	-	R 2,021	-
1991	2	1	2	4,556	143	13	108	263	31	15	955	-	R 2,079	-
1992	2	1	2	4,690	148	11	106	265	32	15	936	-	R 1,998	-
1993	2	1	2	4,956	157	13	111	281	R 27	16	995	-	R 2,100	-
1994	2	1	2	4,848	151	11	109	271	R 27	16	1,008	-	R 2,102	-
1995	2	1	2	4,850	152	13	112	276	R 30	17	1,043	-	2,170	-
1996	2	1	2	5,241	160	16	121	297	30	17	1,082	-	2,251	-

  

Trillion Btu														
1960	251.9	156.4	408.3	3,211.8	1,568.2	354.1	342.9	2,265.3	0.0	0.0	687.4	6,572.7	1,711.3	8,284.0
1965	157.3	96.7	254.0	4,019.3	1,712.5	334.1	434.0	2,480.6	0.0	0.0	992.9	7,746.8	2,372.0	10,118.8
1970	96.4	56.9	153.4	4,952.6	1,877.9	298.4	578.9	2,755.2	0.0	0.0	1,591.0	9,452.1	3,857.9	13,310.0
1975	56.3	28.4	84.7	5,024.1	1,806.6	160.5	527.8	2,494.9	0.0	0.0	2,006.7	9,610.5	4,843.2	14,453.6
1980	39.5	20.8	60.4	4,855.4	1,316.1	106.6	325.1	1,747.9	0.0	0.0	2,448.1	9,111.7	5,957.6	15,069.3
1981	42.0	28.2	70.3	4,652.1	1,147.1	85.3	310.9	1,543.4	0.0	0.0	2,464.4	8,730.1	5,876.1	14,606.2
1982	51.4	24.2	75.7	4,750.7	1,049.8	95.1	296.1	1,441.0	0.0	0.0	2,489.1	8,756.5	5,980.3	14,736.8
1983	55.8	20.0	75.8	4,514.5	924.4	85.4	352.4	1,362.2	0.0	0.0	2,562.2	8,514.8	6,139.8	14,654.6
1984	60.2	22.1	82.3	4,685.0	959.5	88.0	289.6	1,337.1	0.0	0.0	2,661.7	8,766.1	6,197.8	14,963.9
1985	51.2	18.1	69.3	4,566.1	998.1	158.5	326.8	1,483.4	0.0	0.0	2,708.9	8,827.7	6,365.7	15,193.4
1986	51.1	18.1	69.2	4,432.3	1,012.0	121.3	323.3	1,456.7	0.0	0.0	2,794.7	8,752.9	6,430.0	15,182.9
1987	46.8	18.9	65.6	4,435.7	1,030.0	118.7	359.8	1,508.5	0.0	0.0	2,901.6	8,911.5	6,630.0	15,541.5
1988	49.1	16.8	65.9	4,757.4	1,062.9	143.5	356.4	1,562.8	0.0	0.0	3,046.5	9,432.6	6,887.9	16,320.5
1989	41.0	17.2	58.3	4,925.4	1,040.5	117.3	401.8	1,559.6	0.0	0.0	3,089.7	9,632.9	R 6,941.3	R 16,574.2
1990	43.4	18.5	61.9	4,518.7	837.4	63.9	365.0	1,266.3	e 581.9	e 48.1	3,152.8	e 9,629.6	R 6,897.0	R f 16,526.7
1991	39.5	16.8	56.3	4,685.0	831.5	72.3	389.5	1,293.3	613.0	49.8	3,259.9	9,957.3	R 7,093.0	R 17,050.3
1992	40.2	16.5	56.7	4,820.8	864.9	65.0	382.5	1,312.4	645.0	51.7	3,193.4	10,080.1	R 6,816.2	R 16,896.2
1993	40.2	16.4	56.6	5,096.7	912.9	75.6	398.6	1,387.0	R 547.8	53.3	3,394.2	R 10,535.6	R 7,165.7	R 17,701.3
1994	R 38.6	16.4	55.1	4,980.3	880.0	64.9	395.4	1,340.3	R 537.0	55.2	3,440.9	R 10,408.9	R 7,172.9	R 17,581.8
1995	R 37.7	15.7	R 53.3	4,984.4	882.6	74.3	404.2	1,361.1	R 596.0	57.1	3,557.0	R 10,608.9	R 7,402.7	R 18,011.7
1996	38.3	16.2	54.5	5,390.2	929.8	88.8	438.7	1,457.3	595.0	59.2	3,693.5	11,249.7	7,680.3	18,930.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 13. Commercial Energy Consumption Estimates, Selected Years 1960-1996, United States**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum						Wood <sup>c</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>e</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Total					
	Million Short Tons				Million Barrels										
1960	20	4	24	1,020	85	8	15	13	89	210	0	159	-	396	-
1965	12	3	15	1,444	92	9	19	15	103	238	0	231	-	552	-
1970	8	2	9	2,399	101	11	27	16	114	269	0	353	-	855	-
1975	5	1	6	2,508	101	9	25	17	78	230	0	468	-	1,130	-
1980	3	1	4	2,611	89	7	16	20	90	222	0	559	-	1,360	-
1981	4	1	4	2,520	78	12	15	17	66	190	0	596	-	1,420	-
1982	4	1	5	2,606	75	5	14	17	63	175	0	609	-	1,462	-
1983	5	1	5	2,433	112	20	17	19	33	201	0	621	-	1,487	-
1984	5	1	6	2,524	117	16	14	20	42	210	0	664	-	1,547	-
1985	4	1	5	2,432	107	6	16	18	36	184	0	689	-	1,620	-
1986	4	(s)	5	2,318	102	9	16	20	46	193	0	715	-	1,646	-
1987	4	(s)	4	2,430	102	9	17	21	42	191	0	745	-	1,702	-
1988	4	(s)	4	2,670	98	5	17	21	42	183	0	785	-	1,774	-
1989	3	(s)	4	2,718	92	5	19	19	37	172	0	812	-	1,824	-
1990	4	(s)	4	2,623	84	2	18	21	37	162	f NA	839	-	1,835	-
1991	3	(s)	4	2,729	83	2	19	16	34	154	NA	856	-	1,862	-
1992	3	(s)	4	2,803	80	2	19	15	30	146	NA	851	-	1,816	-
1993	3	(s)	4	2,862	80	2	20	6	28	135	2	886	-	1,870	-
1994	3	(s)	4	2,895	80	3	19	5	28	135	2	914	-	1,906	-
1995	3	(s)	4	3,031	79	4	20	3	23	129	2	954	-	1,986	-
1996	3	(s)	4	3,158	82	4	21	5	22	134	2	981	-	2,040	-

Trillion Btu															
Year	Coal	Natural Gas	Petroleum	Wood	Electricity	Net Energy	Electrical System Energy Losses	Total							
1960	467.9	104.3	572.1	1,055.9	493.6	48.0	60.5	66.9	558.5	1,227.5	0.0	542.7	3,398.3	1,350.9	4,749.2
1965	292.0	64.5	356.5	1,483.3	534.5	53.7	76.6	76.8	644.9	1,386.5	0.0	789.0	4,015.3	1,885.1	5,900.4
1970	179.1	38.0	217.1	2,454.6	587.5	61.1	102.2	86.4	714.0	1,551.1	0.0	1,203.2	5,426.1	2,918.1	8,344.2
1975	104.5	19.0	123.4	2,556.2	586.6	49.3	93.1	89.0	491.7	1,309.7	0.0	1,597.7	5,587.0	3,855.9	9,442.9
1980	73.4	13.9	87.3	2,665.7	517.7	40.6	57.4	107.1	564.7	1,287.5	0.0	1,906.5	5,947.1	4,639.0	10,586.1
1981	78.0	18.8	96.9	2,577.5	457.1	69.3	54.9	91.6	417.3	1,090.2	0.0	2,033.1	5,797.6	4,846.5	10,644.2
1982	95.5	16.1	111.7	2,670.8	439.7	30.3	52.3	87.6	398.6	1,008.4	0.0	2,077.1	5,868.0	4,989.4	10,857.4
1983	103.6	13.3	117.0	2,504.6	651.5	111.3	62.2	102.3	208.4	1,135.7	0.0	2,118.2	5,875.5	5,075.1	10,950.6
1984	111.8	14.7	126.5	2,593.9	681.0	93.3	51.1	107.1	265.5	1,198.1	0.0	2,266.7	6,185.3	5,279.0	11,464.3
1985	95.1	12.1	107.2	2,503.3	624.6	32.8	57.7	96.1	227.7	1,038.9	0.0	2,352.4	6,001.9	5,528.9	11,530.8
1986	94.9	12.0	107.0	2,382.6	595.6	49.9	57.1	106.3	289.7	1,098.6	0.0	2,440.4	6,028.7	5,615.8	11,644.4
1987	86.9	12.6	99.4	2,499.1	593.5	48.7	63.5	R 110.8	R 262.5	R 1,078.9	0.0	R 2,541.5	R 6,219.0	5,807.7	R 12,026.7
1988	91.1	11.2	102.3	2,743.7	573.6	26.1	62.9	R 110.3	R 263.8	R 1,036.8	0.0	R 2,677.4	R 6,560.2	6,053.9	R 12,614.2
1989	76.2	11.5	87.7	2,799.5	535.3	27.6	70.9	R 101.9	R 230.1	R 965.8	0.0	R 2,769.3	R 6,222.2	R 6,222.3	R 12,844.5
1990	80.6	12.3	92.9	2,697.8	487.0	11.8	64.4	R 111.2	R 233.1	R 907.5	f NA	R 2,862.3	R 6,560.5	R 6,262.5	R 12,823.0
1991	73.3	11.2	84.5	2,807.3	481.6	12.1	68.7	R 85.1	R 213.2	R 860.7	NA	R 2,920.4	R 6,672.9	R 6,354.7	R 13,027.6
1992	74.6	11.0	85.7	2,883.5	464.0	11.1	67.5	R 79.6	R 191.2	R 813.5	NA	R 2,902.6	R 6,685.2	R 6,195.2	R 12,880.4
1993	74.6	10.9	85.5	2,943.7	463.9	14.0	70.3	29.6	175.0	752.8	44.0	3,021.9	R 6,847.9	R 6,379.8	R 13,227.7
1994	71.7	11.0	82.7	2,977.6	464.3	19.5	69.8	25.3	174.6	753.5	45.0	3,119.0	R 6,977.8	R 6,501.7	R 13,479.5
1995	R 69.9	R 10.4	R 80.4	3,116.9	459.8	22.1	71.3	18.2	143.7	715.2	45.0	3,255.9	R 7,213.3	R 6,775.6	R 13,988.9
1996	71.2	10.8	81.9	3,250.4	476.0	21.0	77.4	26.7	139.5	740.7	49.0	3,347.3	7,469.2	6,960.0	14,429.2

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>c</sup> Estimated to be 2 percent of total wood consumption.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
--=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 14. Industrial Energy Consumption Estimates, Selected Years 1960-1996, United States**

Year	Coal	Net Imports of Coal Coke	Natural Gas <sup>a</sup>	Petroleum								Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total	
				Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kero-sene <sup>b</sup>	LPG <sup>b</sup>	Lubri-cants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>c</sup>								Total
				Million Short Tons	Billion Cubic Feet	Million Barrels													Billion Kilowatthours
1960	177	(s)	5,771	111	174	28	122	18	73	252	214	991	4	0	0	324	-	807	-
1965	201	-1	7,112	134	197	29	172	23	65	252	313	1,185	3	0	0	429	-	1,024	-
1970	187	-2	9,249	163	211	33	255	26	55	258	390	1,390	3	0	0	571	-	1,383	-
1975	147	1	8,365	153	230	21	308	25	43	240	455	1,474	3	0	0	688	-	1,659	-
1980	127	-1	8,198	145	227	32	429	30	30	215	664	1,772	3	0	0	815	-	1,983	-
1981	128	-1	8,055	125	238	19	426	29	30	172	521	1,560	3	0	0	826	-	1,968	-
1982	105	-1	6,941	125	225	25	442	26	26	166	445	1,481	3	0	0	745	-	1,789	-
1983	103	-1	6,621	136	196	12	425	27	21	126	463	1,407	3	0	0	776	-	1,859	-
1984	118	(s)	7,231	150	205	10	470	29	30	141	499	1,535	3	0	0	838	-	1,950	-
1985	116	-1	6,867	155	204	8	469	27	41	119	472	1,495	3	0	0	837	-	1,965	-
1986	111	-1	6,502	164	206	6	440	27	39	117	500	1,499	3	0	0	831	-	1,910	-
1987	112	(s)	7,103	170	211	5	467	30	39	93	537	1,551	3	0	0	858	-	1,960	-
1988	118	2	7,479	171	210	5	485	29	37	87	583	1,607	3	0	0	896	-	2,026	-
1989	117	1	7,886	165	197	5	475	30	38	66	578	1,554	3	0	0	926	-	R 2,079	-
1990	115	(s)	8,255	176	203	2	R 444	31	35	66	621	1,578	f NA	f NA	f NA	946	-	R 2,068	-
1991	109	(s)	8,360	162	196	2	484	27	37	53	591	1,552	NA	NA	NA	947	-	R 2,059	-
1992	106	1	8,698	166	196	2	513	28	37	62	660	1,664	NA	NA	NA	973	-	R 2,075	-
1993	106	1	9,153	173	189	2	498	29	34	72	629	1,625	NA	NA	NA	977	-	2,061	-
1994	107	1	9,291	177	190	3	549	30	37	68	658	R 1,711	NA	NA	NA	1,008	-	R 2,100	-
1995	106	1	9,800	178	184	3	557	29	38	54	633	1,677	NA	NA	NA	1,013	-	2,106	-
1996	103	(s)	10,120	177	193	3	589	28	38	54	691	1,775	NA	NA	NA	1,030	-	2,141	-

**Trillion Btu**

1960	4,547.9	-5.6	5,973.3	733.8	1,015.7	161.1	488.6	107.0	381.4	1,584.4	1,275.7	5,747.6	38.8	0.0	0.0	1,106.9	17,408.8	2,754.2	20,162.9
1965	5,134.4	-18.5	7,350.5	890.3	1,150.1	165.5	688.2	137.3	342.4	1,582.0	1,833.2	6,789.0	32.8	0.0	0.0	1,462.8	20,751.0	3,492.6	24,243.6
1970	4,663.5	-57.7	9,497.5	1,082.5	1,226.2	184.7	963.9	154.7	288.1	1,623.9	2,264.2	7,788.1	34.0	0.0	0.0	1,947.8	23,873.3	4,720.2	28,593.4
1975	3,657.6	13.5	8,570.6	1,014.2	1,339.0	119.0	1,144.5	149.5	223.3	1,509.1	2,649.4	8,148.0	32.3	0.0	0.0	2,346.4	22,768.4	5,660.2	28,428.6
1980	3,155.4	-35.0	8,409.4	962.2	1,323.7	181.5	1,576.6	182.0	158.1	1,349.2	3,793.7	9,527.0	32.8	0.0	0.0	2,781.0	23,870.5	6,764.5	30,635.0
1981	3,147.7	-15.9	8,280.5	827.8	1,388.6	107.9	1,550.9	174.5	159.8	1,081.2	2,995.3	8,286.0	33.0	0.0	0.0	2,817.4	22,548.7	6,715.3	29,264.0
1982	2,544.0	-21.7	7,144.8	829.4	1,312.8	140.9	1,598.0	159.2	138.2	1,046.6	2,570.3	7,795.3	33.0	0.0	0.0	2,541.8	20,037.2	6,103.9	26,141.1
1983	2,489.3	-15.6	6,831.3	904.1	1,142.3	66.1	1,537.5	166.6	112.3	791.4	2,697.4	7,417.7	33.3	0.0	0.0	2,647.7	19,403.7	6,342.3	25,745.9
1984	2,843.1	-11.5	7,464.2	992.1	1,192.0	57.9	R 1,690.6	177.7	159.9	888.6	2,856.7	R 8,015.4	33.0	0.0	0.0	2,858.7	R 21,202.9	6,652.6	R 27,855.5
1985	2,777.2	-13.5	7,096.0	1,029.5	1,186.3	44.3	1,690.5	165.6	217.9	747.5	2,726.2	7,807.8	33.0	0.0	0.0	2,855.1	20,555.6	6,705.7	R 27,261.4
1986	2,646.3	R -16.8	6,713.9	1,085.7	1,200.6	32.1	1,603.2	161.9	206.2	736.4	2,896.0	7,922.1	33.0	0.0	0.0	2,833.8	20,132.3	6,516.4	26,648.8
1987	2,670.0	8.6	7,343.2	1,130.0	1,227.3	28.3	1,708.7	183.1	R 205.7	581.6	3,085.1	R 8,149.7	32.9	0.0	0.0	2,928.3	R 21,132.7	6,689.1	R 27,821.8
1988	2,831.3	39.6	7,720.4	1,136.3	1,220.6	29.9	1,771.9	176.5	R 193.0	545.7	3,356.9	R 8,431.0	32.6	0.0	0.0	3,058.9	R 22,113.7	6,914.1	R 29,027.8
1989	2,773.9	30.4	8,148.8	1,096.0	1,147.7	29.5	R 1,748.1	181.1	R 198.8	413.1	3,316.1	R 8,130.5	32.6	f 0.0	0.0	3,158.3	R 22,274.6	R 7,093.7	R 29,368.3
1990	2,753.9	4.8	8,519.7	1,170.2	1,180.9	12.3	R 1,607.8	186.3	R 185.2	417.2	3,559.2	R 8,319.2	f 84.3	f 1,947.6	f 182.8	3,226.1	R 25,038.3	R 7,054.8	R 32,093.1
1991	2,600.4	8.9	8,637.2	1,076.5	1,139.2	11.4	1,749.3	166.7	R 193.3	335.9	3,385.5	R 8,057.9	84.7	1,942.8	203.3	3,229.7	R 24,764.9	R 7,024.2	R 31,789.2
1992	2,511.8	27.2	8,996.3	1,102.2	1,144.5	9.8	1,859.8	170.0	R 194.2	391.3	3,764.1	8,635.9	R 97.0	2,042.4	R 217.0	3,318.9	R 25,846.6	R 7,081.1	R 32,927.7
1993	2,499.6	17.3	9,419.6	1,149.0	1,099.7	13.1	1,794.4	173.1	R 179.5	451.8	3,589.1	8,449.6	R 118.2	2,083.5	244.5	3,334.1	R 26,166.5	R 7,033.6	R 33,200.1
1994	2,506.7	23.6	9,590.2	1,172.9	1,108.8	16.9	1,996.5	180.9	R 193.3	425.3	3,754.8	R 8,849.4	135.9	R 2,138.2	255.9	3,439.2	R 26,939.2	R 7,164.0	R 34,103.3
1995	R 2,500.1	26.4	10,108.6	1,178.2	1,074.2	15.4	2,019.4	177.8	201.6	342.0	3,615.9	8,624.4	R 151.8	R 2,083.5	R 248.5	3,455.3	R 27,198.6	R 7,185.7	R 34,384.3
1996	2,422.5	-0.3	10,446.2	1,175.9	1,127.1	18.3	2,129.5	172.5	201.3	340.9	3,937.1	9,102.8	170.1	2,200.5	257.9	3,515.6	28,115.3	7,305.0	35,420.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 15. Transportation Energy Consumption Estimates, Selected Years 1960-1996, United States**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>b</sup>	Distillate Fuel <sup>b</sup>	Jet Fuel <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Total					
	Million Short Tons	Billion Cubic Feet	Million Barrels								Million Gallons	Billion Kilowatthours		Total <sup>c</sup>	
1960	3	347	59	153	136	5	25	1,367	134	1,880	0	3	-	8	-
1965	1	501	44	188	220	8	24	1,596	123	2,203	0	3	-	7	-
1970	(s)	722	20	269	353	12	24	2,040	121	2,839	0	3	-	6	-
1975	(s)	583	14	364	362	11	26	2,377	113	3,267	0	3	-	7	-
1980	0	635	13	480	389	5	28	2,357	222	3,494	0	3	-	8	-
1981	0	642	11	498	367	9	27	2,357	194	3,463	0	3	-	8	-
1982	0	596	9	479	369	9	25	2,344	162	3,397	0	3	-	8	-
1983	0	490	9	499	382	11	26	2,376	131	3,433	0	3	-	8	-
1984	0	529	9	540	430	11	28	2,399	128	3,544	0	4	-	8	-
1985	0	504	10	550	445	8	26	2,434	125	3,597	0	4	-	9	-
1986	0	485	12	567	477	7	25	2,508	138	3,735	0	4	-	9	-
1987	0	519	9	582	506	6	29	2,570	143	3,843	0	4	-	9	-
1988	0	614	10	633	530	6	27	2,627	146	3,980	0	4	-	9	-
1989	0	629	9	659	544	6	28	2,617	156	4,020	0	4	-	9	-
1990	0	660	9	658	556	6	29	2,584	164	4,005	e 1,073	4	-	9	-
1991	0	602	8	631	537	6	26	2,570	164	3,943	851	4	-	9	-
1992	0	588	8	654	532	5	26	2,608	172	4,006	1,034	4	-	9	-
1993	0	625	8	672	536	5	27	2,689	145	4,082	1,154	4	-	8	-
1994	0	687	8	717	557	9	28	2,733	143	4,194	1,280	4	-	8	-
1995	0	703	8	740	553	5	28	2,801	147	4,281	1,355	4	-	8	-
1996	0	714	7	780	578	4	27	2,845	138	4,378	974	4	-	8	-

**Trillion Btu**

1960	75.6	359.2	297.9	891.9	738.5	19.6	151.9	7,182.5	843.9	10,126.3	0.0	10.7	10,571.8	26.7	10,598.5
1965	16.1	517.9	221.6	1,093.3	1,214.5	33.1	148.5	8,386.4	770.3	11,867.6	0.0	9.6	12,411.2	22.8	12,434.0
1970	6.9	740.4	100.5	1,568.9	1,972.7	43.6	146.7	10,716.5	760.9	15,309.8	0.0	8.6	16,065.7	20.7	16,086.5
1975	0.5	594.6	71.0	2,121.0	2,029.1	41.7	154.8	12,485.3	711.1	17,614.0	0.0	10.3	18,219.4	24.8	18,244.2
1980	0.0	649.9	64.3	2,794.8	2,179.4	16.9	171.9	12,382.7	1,398.5	19,008.5	0.0	10.6	19,669.1	25.9	19,694.9
1981	0.0	659.6	56.3	2,901.3	2,058.2	32.2	164.8	12,379.1	1,219.0	18,811.0	0.0	11.0	19,481.6	26.3	19,508.0
1982	0.0	613.9	47.0	2,789.5	2,069.0	32.1	150.3	12,312.2	1,019.8	18,420.0	0.0	10.9	19,044.8	26.2	19,071.0
1983	0.0	505.2	47.7	2,905.4	2,140.9	R 38.1	157.4	12,482.3	821.0	18,592.8	0.0	10.9	19,108.9	26.1	19,135.0
1984	0.0	544.7	43.9	3,144.1	2,413.7	R 39.9	167.8	12,600.0	806.9	R 19,216.3	0.0	12.0	R 19,773.1	28.0	R 19,801.1
1985	0.0	520.7	50.3	3,203.5	2,496.9	27.7	156.4	R 12,783.6	785.5	R 19,504.0	0.0	13.0	R 20,037.7	30.5	R 20,068.2
1986	0.0	501.1	58.9	3,304.7	2,682.4	25.9	152.9	13,174.2	869.8	20,268.7	0.0	13.2	20,783.0	30.5	20,813.5
1987	0.0	538.0	45.6	3,388.0	2,842.8	R 20.6	172.9	R 13,499.4	900.5	R 20,869.9	0.0	12.8	R 21,420.7	29.3	R 21,450.0
1988	0.0	633.5	49.0	3,688.6	2,981.8	22.2	166.7	R 13,801.8	919.1	R 21,629.1	0.0	13.6	R 22,276.2	30.8	R 22,307.0
1989	0.0	649.7	47.6	3,839.7	3,058.9	21.8	171.0	R 13,749.3	979.5	R 21,867.9	0.0	13.6	R 22,531.2	30.6	R 22,561.9
1990	0.0	682.6	45.0	3,830.5	3,129.5	R 21.6	176.0	R 13,575.4	1,030.2	R 21,808.2	e 82.0	14.1	R e 22,504.9	30.8	R e 22,535.7
1991	0.0	621.9	41.7	3,677.6	3,025.0	19.9	157.5	13,502.6	1,031.9	R 21,456.2	65.0	13.9	R 22,092.0	30.3	22,122.3
1992	0.0	609.0	41.1	3,810.2	3,001.3	R 18.3	160.5	R 13,698.7	1,082.0	R 21,812.1	79.0	13.7	R 22,434.8	29.2	R 22,463.9
1993	0.0	644.1	38.4	3,912.9	3,028.0	R 19.0	163.5	14,125.6	913.4	22,200.7	88.2	13.2	22,857.9	27.8	22,885.7
1994	0.0	708.0	38.1	4,175.0	3,154.5	32.2	170.8	R 14,355.8	896.0	R 22,822.5	97.8	13.5	R 23,544.1	28.2	R 23,572.3
1995	0.0	725.8	39.6	4,310.5	3,132.2	16.7	167.9	14,713.7	924.7	23,305.3	103.5	13.1	24,044.3	27.4	24,071.6
1996	0.0	737.1	37.4	4,543.2	3,274.2	14.7	163.0	14,942.4	865.7	23,840.6	74.4	13.4	24,591.1	28.0	24,619.0

<sup>a</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 16. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, United States**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy <sup>f</sup>	Other <sup>b,g</sup>	Total <sup>h</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Million Short Tons			Billion Cubic Feet	Million Barrels				Billion Kilowatthours					
1960	174	3	177	1,725	84	4	0	88	1	150	(s)	(s)	0	-
1965	243	2	245	2,321	110	5	0	115	4	194	(s)	(s)	0	-
1970	318	2	320	3,932	311	24	3	339	22	250	(s)	1	0	-
1975	404	1	406	3,158	467	39	(s)	506	173	306	(s)	3	0	-
1980	568	1	569	3,682	391	29	1	421	251	297	(s)	5	0	-
1981	596	1	597	3,640	330	21	1	352	273	294	(s)	6	0	-
1982	593	1	594	3,226	234	15	1	251	283	339	(s)	5	0	-
1983	624	1	625	2,911	229	17	1	247	294	367	(s)	6	(s)	-
1984	663	1	664	3,111	189	15	1	206	328	361	1	8	(s)	-
1985	693	1	694	3,044	159	15	1	175	384	322	1	9	(s)	-
1986	684	1	685	2,602	216	14	2	232	414	327	1	10	(s)	-
1987	717	1	718	2,844	184	15	2	201	455	296	1	11	(s)	-
1988	757	1	758	2,636	229	19	2	250	527	255	2	10	(s)	-
1989	766	1	767	2,787	242	25	3	270	529	276	2	9	(s)	-
1990	773	1	774	2,787	181	15	4	200	577	292	2	9	(s)	-
1991	771	1	772	2,789	171	14	4	188	613	295	2	9	(s)	-
1992	779	1	780	2,766	136	12	5	152	619	263	2	9	(s)	-
1993	813	1	814	2,682	149	13	6	169	610	290	2	8	(s)	-
1994	816	1	817	2,987	135	16	4	155	640	271	2	8	(s)	-
1995	828	1	829	3,197	87	16	4	106	673	319	2	6	(s)	-
1996	874	1	875	2,732	96	17	3	117	675	359	2	6	(s)	-

  

Trillion Btu														
1960	4,178.4	48.2	4,226.6	1,785.1	530.4	22.3	0.0	552.7	6.0	1,618.0	1.5	0.8	0.0	8,190.7
1965	5,783.6	37.8	5,821.4	2,408.5	693.3	28.7	0.0	722.0	43.2	2,024.8	2.8	4.2	0.0	11,026.9
1970	7,194.8	33.2	7,228.0	4,047.6	1,957.6	140.5	19.2	2,117.3	239.3	2,620.1	3.7	11.3	0.0	16,267.5
1975	8,764.0	25.2	8,789.3	3,231.6	2,937.4	226.1	2.1	3,165.7	1,899.8	3,186.6	2.0	70.2	0.0	20,345.1
1980	12,141.1	16.8	12,157.9	3,803.6	2,459.2	168.9	5.4	2,633.6	2,739.2	3,084.7	4.5	109.8	0.0	24,533.2
1981	12,600.7	22.2	12,622.9	3,758.7	2,073.4	124.0	4.2	2,201.7	3,007.6	3,072.4	3.8	123.0	0.0	24,790.1
1982	12,518.2	19.5	12,537.8	3,335.1	1,473.9	89.3	4.5	1,567.7	3,131.1	3,539.0	3.4	104.7	0.0	24,218.7
1983	13,167.9	17.1	13,185.0	2,992.1	1,439.6	96.2	7.9	1,543.7	3,202.5	3,865.7	4.0	129.3	(s)	24,922.3
1984	13,943.4	18.2	13,961.6	3,215.0	1,190.1	88.5	7.6	1,286.1	3,552.5	3,766.9	9.2	164.9	0.1	25,956.4
1985	14,569.1	17.3	14,586.4	3,156.9	998.2	85.2	7.0	1,090.5	4,148.8	3,364.8	14.4	198.3	0.2	26,560.3
1986	14,405.5	12.9	14,418.4	2,688.5	1,359.0	83.4	9.4	1,451.8	4,471.2	3,413.1	12.3	219.2	0.2	26,674.8
1987	15,099.3	15.5	15,114.8	2,933.7	1,156.9	89.5	10.5	1,256.9	4,906.0	3,084.4	15.4	229.1	0.1	27,540.4
1988	15,867.7	18.4	15,886.2	2,707.9	1,441.8	109.3	12.3	1,563.4	5,661.3	2,629.6	17.3	217.3	0.1	28,683.0
1989	15,979.6	17.1	15,996.8	2,862.8	1,521.2	148.5	15.6	1,685.3	5,676.8	R 2,879.6	R 20.5	197.1	(s)	R 29,318.9
1990	16,071.2	16.6	16,087.8	2,861.4	1,139.4	86.3	24.7	1,250.4	6,160.9	R 3,039.5	R 21.5	192.4	(s)	R 29,500.4
1991	15,996.6	15.8	16,012.4	2,853.6	1,076.1	80.0	21.7	1,177.8	6,578.9	R 3,072.2	R 21.3	185.3	(s)	R 29,926.2
1992	16,175.3	16.7	16,192.0	2,829.1	853.6	67.3	30.1	951.0	6,607.3	R 2,722.1	R 21.6	188.1	(s)	R 29,550.2
1993	16,825.4	15.7	16,841.1	2,744.1	938.6	76.7	36.8	1,052.0	6,519.1	R 2,986.3	R 20.5	176.7	(s)	R 30,370.2
1994	16,850.1	16.5	16,866.6	3,057.0	846.6	95.2	26.3	968.2	6,837.3	R 2,797.5	R 20.5	169.7	(s)	R 30,879.6
1995	17,030.8	14.3	17,045.1	3,253.4	544.4	90.7	22.9	658.0	7,177.1	R 3,291.3	R 17.0	117.7	(s)	R 31,672.7
1996	17,946.2	14.5	17,960.7	2,774.3	606.0	98.4	20.5	724.9	7,167.6	3,711.3	20.3	123.3	0.1	32,543.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> Through 1989, includes all net imports of electricity. From 1990, includes only the portion of net imports of electricity that is derived from hydroelectric power.

<sup>f</sup> From 1990, includes net imports of electricity generated from geothermal energy.

<sup>g</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>h</sup> From 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## **State Summaries**

**Table 17. Energy Consumption Estimates by Source, Selected Years 1960-1996, Alabama**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	15,579	184	2,160	280	5,393	1,126	1,046	3,211	661	24,578	4,292	752	43,498	0	6,239	0	0	-19,803	-
1965	21,473	229	2,749	446	5,251	1,156	908	4,207	741	28,919	2,553	2,142	49,072	0	7,103	0	0	-32,017	-
1970	27,653	298	3,176	349	8,512	1,799	1,310	7,583	812	37,003	3,290	2,877	66,710	0	7,632	0	0	-21,654	-
1975	26,609	264	2,706	249	14,697	1,707	673	6,540	1,049	45,174	12,953	3,910	89,656	2,722	12,213	0	0	-28,518	-
1980	27,042	269	3,132	248	15,190	2,048	1,253	4,949	992	44,296	7,296	4,532	83,937	23,497	9,408	0	0	-68,842	-
1981	25,779	271	3,747	226	17,944	1,754	526	4,573	952	43,028	4,640	8,497	85,887	23,643	6,038	0	0	-64,039	-
1982	20,956	241	3,584	173	15,422	1,581	1,730	4,424	868	42,946	6,120	7,019	83,867	27,701	10,731	0	0	-79,805	-
1983	21,978	222	3,719	177	15,386	1,643	1,008	4,450	909	43,379	3,468	5,128	79,266	25,145	11,165	0	0	-82,598	-
1984	23,936	232	3,625	172	16,160	3,695	1,189	3,382	969	44,188	2,708	6,414	82,502	24,211	10,798	0	0	-69,687	-
1985	27,145	219	3,757	172	16,278	3,516	108	3,648	903	43,476	2,249	6,215	80,323	14,313	6,886	0	0	-51,090	-
1986	26,831	203	3,486	204	16,457	3,745	130	4,024	883	46,448	2,464	6,243	84,084	11,561	5,251	0	0	-35,739	-
1987	26,683	208	4,564	143	18,741	3,872	137	4,653	998	48,533	2,436	7,253	91,331	11,248	7,472	0	0	-27,763	-
1988	26,441	236	4,132	157	20,427	1,872	163	4,438	963	48,748	3,443	7,343	91,685	12,981	5,383	0	0	-16,101	-
1989	27,611	245	4,484	133	24,711	2,046	113	4,768	987	49,488	3,669	6,381	96,780	11,524	13,177	0	0	-42,672	-
1990	27,640	244	4,321	116	25,436	1,899	64	4,160	1,016	49,199	3,970	6,693	96,874	12,052	NA	NA	NA	-35,823	-
1991	29,349	254	5,286	109	23,909	2,292	96	3,807	909	49,527	3,554	5,895	95,385	15,875	NA	NA	NA	-58,038	-
1992	31,510	279	4,943	106	24,432	2,108	83	3,968	927	50,605	3,907	5,996	97,074	19,397	NA	NA	NA	-74,757	-
1993	33,047	292	4,984	103	22,990	1,973	80	5,033	944	51,956	4,059	6,045	98,167	17,823	NA	NA	NA	-77,336	-
1994	31,473	289	5,059	110	25,410	3,472	72	5,132	986	53,226	3,432	6,313	103,212	20,480	NA	NA	NA	-74,456	-
1995	34,309	322	4,994	97	23,087	3,843	121	5,115	969	55,472	3,158	6,017	102,873	20,752	NA	NA	NA	-80,137	-
1996	37,052	326	5,704	93	23,107	3,508	121	4,972	941	54,999	3,207	6,556	103,207	29,708	NA	NA	NA	-118,968	-
Trillion Btu																			
1960	395.4	190.7	14.3	1.4	31.4	6.1	5.9	12.9	4.0	129.1	27.0	4.5	236.6	0.0	67.1	0.0	0.0	-67.6	822.3
1965	533.1	236.9	18.2	2.3	30.6	6.2	5.2	16.9	4.5	151.9	16.0	12.7	264.4	0.0	74.2	0.0	0.0	-109.2	999.5
1970	675.6	307.8	21.1	1.8	49.6	9.9	7.4	28.7	4.9	194.4	20.7	16.9	355.3	0.0	80.1	0.0	0.0	-73.9	1,344.8
1975	640.1	271.7	18.0	1.3	85.6	9.4	3.8	24.3	6.4	237.3	81.4	23.1	490.6	30.0	127.1	0.0	0.0	-97.3	1,462.1
1980	661.0	278.4	20.8	1.3	88.5	11.3	7.1	18.2	6.0	232.7	45.9	26.2	457.9	256.3	97.7	0.0	0.0	-234.9	1,516.5
1981	630.0	281.0	24.9	1.1	104.5	9.7	3.0	16.7	5.8	226.0	29.2	48.5	469.3	260.8	63.1	0.0	0.0	-218.5	1,485.7
1982	511.1	253.5	23.8	0.9	89.8	8.7	9.8	16.0	5.3	225.6	38.5	40.3	458.6	306.7	112.2	0.0	0.0	-272.3	1,369.8
1983	532.6	230.0	24.7	0.9	89.6	9.1	5.7	16.1	5.5	227.9	17.8	29.4	430.6	274.2	117.5	0.0	0.0	-281.8	1,303.1
1984	584.6	239.7	24.1	0.9	94.1	20.7	6.7	12.2	5.9	232.1	21.0	36.2	449.9	262.5	112.7	0.0	0.0	-237.8	1,411.6
1985	662.9	227.8	24.9	0.9	94.8	19.7	0.6	13.1	5.5	228.4	14.1	35.3	437.4	154.8	71.9	0.0	0.0	-174.3	1,380.5
1986	660.5	210.2	23.1	1.0	95.9	21.0	0.7	14.6	5.4	244.0	15.5	35.4	456.6	124.9	54.8	0.0	0.0	-121.9	1,385.1
1987	660.7	214.6	30.3	0.7	109.2	21.7	0.8	17.0	6.1	254.9	15.3	41.1	497.1	121.2	77.9	0.0	0.0	-94.7	1,476.7
1988	652.7	243.2	27.4	0.8	119.0	10.4	0.9	16.2	5.8	256.1	21.6	41.6	499.8	139.5	55.6	0.0	0.0	-54.9	1,535.8
1989	673.9	252.4	29.8	0.7	143.9	11.4	0.6	17.6	6.0	260.0	23.1	35.6	528.6	123.6	137.5	0.0	0.0	-145.6	1,570.3
1990	678.3	251.0	28.7	0.6	148.2	10.6	0.4	15.1	6.2	258.4	25.0	37.2	530.2	128.7	107.8	NA	NA	-122.2	1,717.8
1991	719.8	260.7	35.1	0.6	139.3	12.6	0.5	13.8	5.5	260.2	22.3	33.0	522.9	170.5	112.1	NA	NA	-198.0	1,729.9
1992	770.5	286.6	32.8	0.5	142.3	11.7	0.5	14.4	5.6	265.8	24.6	33.2	531.4	207.1	106.1	NA	NA	-255.1	1,794.6
1993	808.4	301.1	33.1	0.5	133.9	11.0	0.5	18.1	5.7	272.9	25.5	33.6	534.8	190.4	93.1	NA	NA	-263.9	1,818.8
1994	770.6	297.5	33.6	0.6	148.0	19.6	0.4	18.7	6.0	279.6	21.6	35.1	563.0	218.6	117.8	NA	NA	-254.0	1,870.3
1995	826.5	330.9	33.1	0.5	134.5	21.8	0.7	18.5	5.9	291.4	19.9	33.4	559.6	221.2	97.9	NA	NA	-273.4	1,917.2
1996	887.5	336.3	37.9	0.5	134.6	19.9	0.7	18.0	5.7	288.9	20.2	36.3	562.5	315.6	114.6	NA	NA	-405.9	1,975.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 18. Residential Energy Consumption Estimates, Selected Years 1960-1996, Alabama

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	96	0	96	41	36	163	2,101	2,300	0	0	4,129	-	10,271	-
1965	35	0	35	48	24	169	2,672	2,865	0	0	6,150	-	14,684	-
1970	44	0	44	56	36	236	4,920	5,192	0	0	11,527	-	27,935	-
1975	7	0	7	52	74	134	3,916	4,124	0	0	13,409	-	32,345	-
1980	80	0	80	52	13	198	2,589	2,800	0	0	16,469	-	40,047	-
1981	31	0	31	50	17	185	2,683	2,885	0	0	15,912	-	37,922	-
1982	42	1	43	47	55	534	2,293	2,882	0	0	15,782	-	37,905	-
1983	47	0	47	48	45	601	2,727	3,373	0	0	15,814	-	37,888	-
1984	50	0	50	51	44	763	2,014	2,821	0	0	17,012	-	39,598	-
1985	43	0	43	44	34	73	2,088	2,194	0	0	17,182	-	40,368	-
1986	45	0	45	45	39	64	2,389	2,491	0	0	18,259	-	42,001	-
1987	46	1	47	49	30	60	2,834	2,924	0	0	19,294	-	44,086	-
1988	52	(s)	52	49	42	129	2,774	2,945	0	0	19,641	-	44,404	-
1989	24	1	25	48	34	81	3,037	3,152	0	0	19,842	-	44,570	-
1990	37	0	37	45	25	38	2,688	2,752	<sup>e</sup> 756	<sup>e</sup> 36	20,719	-	45,315	-
1991	6	(s)	6	46	18	61	2,312	2,391	797	38	21,293	-	46,346	-
1992	31	(s)	31	50	11	30	2,213	2,254	839	39	21,137	-	45,147	-
1993	14	(s)	14	51	14	43	2,861	2,919	634	39	22,628	-	47,808	-
1994	4	(s)	4	50	13	29	2,798	2,840	622	40	23,159	-	48,321	-
1995	R 3	R 0	3	50	9	66	2,849	2,924	690	40	24,314	-	50,647	-
1996	15	0	15	57	9	64	2,922	2,995	689	41	25,634	-	53,353	-

  

Trillion Btu														
1960	2.4	0.0	2.4	42.3	0.2	0.9	8.4	9.6	0.0	0.0	14.1	68.3	35.0	103.3
1965	0.9	0.0	0.9	49.7	0.1	1.0	10.7	11.8	0.0	0.0	21.0	83.4	50.1	133.5
1970	1.1	0.0	1.1	57.5	0.2	1.3	18.6	20.1	0.0	0.0	39.3	118.0	95.3	213.4
1975	0.2	0.0	0.2	53.8	0.4	0.8	14.5	15.7	0.0	0.0	45.8	115.5	110.4	225.8
1980	1.9	0.0	1.9	54.1	0.1	1.1	9.5	10.7	0.0	0.0	56.2	122.9	136.6	259.5
1981	0.7	0.0	0.7	52.0	0.1	1.0	9.8	10.9	0.0	0.0	54.3	117.9	129.4	247.3
1982	1.0	(s)	1.0	49.4	0.3	3.0	8.3	11.6	0.0	0.0	53.8	115.9	129.3	245.2
1983	1.1	0.0	1.1	50.1	0.3	3.4	9.9	13.5	0.0	0.0	54.0	118.7	129.3	248.0
1984	1.2	0.0	1.2	52.2	0.3	4.3	7.2	11.8	0.0	0.0	58.0	123.3	135.1	258.4
1985	1.1	0.0	1.1	45.4	0.2	0.4	7.5	8.1	0.0	0.0	58.6	113.2	137.7	250.9
1986	1.1	0.0	1.1	46.3	0.2	0.4	8.7	9.3	0.0	0.0	62.3	119.0	143.3	262.3
1987	1.2	(s)	1.2	50.7	0.2	0.3	10.4	10.9	0.0	0.0	65.8	128.6	150.4	279.0
1988	1.3	(s)	1.3	50.3	0.2	0.7	10.1	11.1	0.0	0.0	67.0	129.8	151.5	281.3
1989	0.6	(s)	0.6	49.6	0.2	0.5	11.2	11.8	0.0	0.0	67.7	129.7	152.1	281.8
1990	0.9	0.0	0.9	46.7	0.1	0.2	9.7	10.1	<sup>e</sup> 15.1	<sup>e</sup> 0.1	70.7	<sup>e</sup> 143.7	154.6	298.3
1991	0.1	(s)	0.1	47.4	0.1	0.3	8.4	8.8	15.9	0.1	72.7	145.1	158.1	303.2
1992	0.7	(s)	0.8	51.0	0.1	0.2	8.0	8.3	16.8	0.1	72.1	149.1	154.0	303.1
1993	0.3	(s)	0.3	52.9	0.1	0.2	10.3	10.6	12.7	0.1	77.2	153.9	163.1	317.1
1994	0.1	(s)	0.1	51.3	0.1	0.2	10.2	10.4	12.4	0.1	79.0	153.4	164.9	318.2
1995	0.1	R 0.0	0.1	51.0	0.1	0.4	10.3	10.7	13.8	0.1	83.0	158.7	172.8	331.5
1996	0.4	0.0	0.4	58.4	0.1	0.4	10.6	11.0	13.8	0.1	87.5	171.1	182.0	353.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 19. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Alabama**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	178	0	178	17	264	294	371	327	(s)	1,257	0	2,390	-	5,944	-
1965	64	0	64	32	175	306	472	327	(s)	1,280	0	3,443	-	8,221	-
1970	83	0	83	36	264	426	868	391	(s)	1,950	0	5,144	-	12,467	-
1975	13	0	13	33	547	242	691	453	1	1,934	0	6,493	-	15,662	-
1980	148	0	148	29	641	176	457	258	3	1,535	0	7,190	-	17,484	-
1981	57	0	57	27	996	57	474	268	0	1,794	0	9,131	-	21,762	-
1982	79	(s)	79	26	237	331	405	268	160	1,401	0	9,307	-	22,354	-
1983	87	0	87	27	954	94	481	253	23	1,805	0	9,440	-	22,616	-
1984	93	0	93	28	937	130	355	229	15	1,666	0	8,454	-	19,678	-
1985	80	0	80	26	1,290	16	368	251	514	2,439	0	8,805	-	20,688	-
1986	84	0	84	25	971	29	422	253	558	2,231	0	9,292	-	21,375	-
1987	85	(s)	86	22	1,149	49	500	R 260	383	R 2,341	0	9,930	-	22,690	-
1988	96	(s)	96	26	1,125	13	489	R 243	707	R 2,577	0	10,239	-	23,148	-
1989	45	(s)	46	26	1,228	14	536	223	501	2,503	0	11,113	-	24,962	-
1990	68	0	68	24	1,088	11	474	R 258	614	R 2,445	e NA	11,589	-	25,347	-
1991	11	(s)	11	24	982	15	408	160	244	1,809	NA	11,948	-	26,006	-
1992	57	(s)	58	25	1,030	17	391	138	0	1,576	NA	11,554	-	24,678	-
1993	26	(s)	26	26	918	13	505	41	0	1,477	25	11,906	-	25,156	-
1994	7	(s)	7	26	1,071	11	494	41	1	1,617	30	12,503	-	26,088	-
1995	R 5	R 0	5	26	532	10	503	42	3	1,089	15	12,845	-	26,758	-
1996	29	0	29	29	488	9	516	42	1	1,055	15	13,948	-	29,030	-

  

Trillion Btu															
1960	4.4	0.0	4.4	18.1	1.5	1.7	1.5	1.7	(s)	6.4	0.0	8.2	37.1	20.3	57.4
1965	1.6	0.0	1.6	33.0	1.0	1.7	1.9	1.7	(s)	6.4	0.0	11.7	52.8	28.0	80.8
1970	2.0	0.0	2.0	37.4	1.5	2.4	3.3	2.1	(s)	9.3	0.0	17.6	66.2	42.5	108.7
1975	0.3	0.0	0.3	34.4	3.2	1.4	2.6	2.4	(s)	9.5	0.0	22.2	66.4	53.4	119.8
1980	3.6	0.0	3.6	29.5	3.7	1.0	1.7	1.4	(s)	7.8	0.0	24.5	65.4	59.7	125.0
1981	1.4	0.0	1.4	27.8	5.8	0.3	1.7	1.4	0.0	9.3	0.0	31.2	69.6	74.3	143.9
1982	1.9	(s)	1.9	27.2	1.4	1.9	1.5	1.4	1.0	7.1	0.0	31.8	68.0	76.3	144.3
1983	2.1	0.0	2.1	27.7	5.6	0.5	1.7	1.3	0.1	9.3	0.0	32.2	71.3	77.2	148.4
1984	2.3	0.0	2.3	28.5	5.5	0.7	1.3	1.2	0.1	8.8	0.0	28.8	68.3	67.1	135.5
1985	2.0	0.0	2.0	26.8	7.5	0.1	1.3	1.3	3.2	13.5	0.0	30.0	72.3	70.6	142.9
1986	2.1	0.0	2.1	26.0	5.7	0.2	1.5	1.3	3.5	12.2	0.0	31.7	72.0	72.9	144.9
1987	2.1	(s)	2.2	23.1	6.7	0.3	1.8	1.4	2.4	12.6	0.0	33.9	71.7	77.4	149.1
1988	2.5	(s)	2.5	26.3	6.6	0.1	1.8	1.3	4.4	14.1	0.0	34.9	77.8	79.0	156.8
1989	1.1	(s)	1.1	27.3	7.2	0.1	2.0	1.2	3.2	13.5	0.0	37.9	79.8	R 85.2	R 165.0
1990	1.7	0.0	1.7	25.0	6.3	0.1	1.7	R 1.4	3.9	13.3	e NA	39.5	79.5	R 86.5	R 166.0
1991	0.3	(s)	0.3	24.4	5.7	0.1	1.5	0.8	1.5	9.7	NA	40.8	75.0	R 88.7	R 163.8
1992	1.4	(s)	1.4	25.9	6.0	0.1	1.4	0.7	0.0	8.2	NA	39.4	75.0	84.2	159.2
1993	0.6	(s)	0.6	26.5	5.3	0.1	1.8	0.2	0.0	7.5	0.5	40.6	R 75.7	85.8	R 161.6
1994	0.2	(s)	0.2	26.3	6.2	0.1	1.8	0.2	(s)	8.3	0.6	42.7	R 78.0	89.0	R 167.1
1995	0.1	R 0.0	0.1	27.0	3.1	0.1	1.8	0.2	(s)	5.2	0.3	43.8	R 76.5	91.3	R 167.8
1996	0.7	0.0	0.7	30.0	2.8	0.1	1.9	0.2	(s)	5.0	0.3	47.6	83.5	99.0	182.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 20. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Alabama

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	7,904	109	2,160	2,511	589	708	265	382	2,014	752	9,380	26	0	0	8,966	-	22,301	-
1965	8,774	132	2,749	1,962	434	1,020	311	372	945	2,142	9,935	25	0	0	13,636	-	32,559	-
1970	11,177	171	3,176	2,833	648	1,696	391	204	1,611	2,428	12,987	25	0	0	18,041	-	43,720	-
1975	9,288	156	2,706	4,475	297	1,846	440	198	5,814	3,910	19,686	25	0	0	20,473	-	49,384	-
1980	7,221	171	3,132	3,356	879	1,857	506	104	3,787	4,532	18,154	24	0	0	26,708	-	64,945	-
1981	6,187	174	3,747	4,544	284	1,284	486	164	2,454	8,497	21,460	24	0	0	24,835	-	59,189	-
1982	5,250	151	3,584	3,865	865	1,563	443	70	3,647	7,019	21,055	24	0	0	19,962	-	47,946	-
1983	4,682	133	3,719	4,284	312	1,048	464	68	1,404	5,128	16,425	24	0	0	19,832	-	47,514	-
1984	6,007	140	3,625	4,207	295	R 793	495	353	938	6,414	R 17,120	24	0	0	24,383	-	56,754	-
1985	5,476	138	3,757	3,671	19	1,031	461	507	96	6,215	15,758	24	0	0	24,179	-	56,806	-
1986	5,265	122	3,486	4,088	37	1,068	451	432	556	6,243	16,360	24	0	0	24,046	-	55,312	-
1987	5,804	123	4,564	4,467	28	R 1,218	509	R 439	564	7,253	R 19,044	24	0	0	25,478	-	58,216	-
1988	6,291	147	4,132	4,390	21	1,084	491	R 384	699	7,343	18,545	24	0	0	26,758	-	60,493	-
1989	5,656	155	4,484	5,178	17	1,107	504	R 497	345	6,381	18,512	f 24	f 0	f 0	27,232	-	R 61,168	-
1990	5,525	156	4,321	6,740	15	R 901	519	R 443	451	6,693	R 20,083	f NA	f NA	f NA	27,618	-	R 60,404	-
1991	5,633	163	5,286	5,423	21	994	464	408	85	5,895	18,575	NA	NA	NA	27,985	-	R 60,911	-
1992	6,433	182	4,943	5,396	35	1,279	473	R 435	371	5,996	18,928	NA	NA	NA	29,476	-	R 62,959	-
1993	5,474	195	4,984	4,587	23	1,551	482	R 583	775	6,045	19,029	NA	NA	NA	30,524	-	R 64,490	-
1994	5,646	195	5,059	5,115	32	1,646	503	634	1,080	6,313	20,382	NA	NA	NA	31,919	-	R 66,600	-
1995	R 5,543	218	4,994	3,635	45	1,670	495	674	512	6,017	18,041	NA	NA	NA	32,847	-	R 68,423	-
1996	5,792	215	5,704	4,465	48	1,451	480	678	717	6,556	20,099	NA	NA	NA	33,523	-	69,771	-

  

Trillion Btu																		
1960	209.9	112.8	14.3	14.6	3.3	2.8	1.6	2.0	12.7	4.5	55.9	0.3	0.0	0.0	30.6	409.4	76.1	485.5
1965	232.0	136.0	18.2	11.4	2.5	4.1	1.9	2.0	5.9	12.7	58.7	0.3	0.0	0.0	46.5	473.4	111.1	584.5
1970	291.4	176.5	21.1	16.5	3.7	6.4	2.4	1.1	10.1	14.2	75.4	0.3	0.0	0.0	61.6	605.1	149.2	754.3
1975	238.8	160.0	18.0	26.1	1.7	6.9	2.7	1.0	36.6	23.1	115.9	0.3	0.0	0.0	69.9	584.9	168.5	753.4
1980	187.0	176.3	20.8	19.6	5.0	6.8	3.1	0.5	23.8	26.2	105.8	0.2	0.0	0.0	91.1	560.5	221.6	782.1
1981	159.8	180.4	24.9	26.5	1.6	4.7	2.9	0.9	15.4	48.5	125.3	0.2	0.0	0.0	84.7	550.5	202.0	752.5
1982	133.4	158.7	23.8	22.5	4.9	5.6	2.7	0.4	22.9	40.3	123.1	0.2	0.0	0.0	68.1	483.7	163.6	647.2
1983	117.9	138.0	24.7	25.0	1.8	3.8	2.8	0.4	8.8	29.4	96.5	0.2	0.0	0.0	67.7	420.4	162.1	582.5
1984	153.2	145.0	24.1	24.5	1.7	2.9	3.0	1.9	5.9	36.2	100.0	0.2	0.0	0.0	83.2	481.7	193.6	675.3
1985	140.4	143.0	24.9	21.4	0.1	3.7	2.8	2.7	0.6	35.3	91.5	0.2	0.0	0.0	82.5	457.6	193.8	651.4
1986	135.4	126.6	23.1	23.8	0.2	3.9	2.7	2.3	3.5	35.4	94.9	0.2	0.0	0.0	82.0	439.2	188.7	627.9
1987	150.2	127.1	30.3	26.0	0.2	4.5	3.1	2.3	3.5	41.1	111.0	0.2	0.0	0.0	86.9	475.5	198.6	674.1
1988	162.3	151.4	27.4	25.6	0.1	4.0	3.0	2.0	4.4	41.6	108.0	0.2	0.0	0.0	91.3	513.3	206.4	719.7
1989	145.9	159.9	29.8	30.2	0.1	4.1	3.1	2.6	2.2	35.6	107.5	0.2	0.0	0.0	92.9	506.5	R 208.7	R 715.2
1990	143.3	160.0	28.7	39.3	0.1	3.3	3.1	2.3	2.8	37.2	116.8	f 0.0	f 128.7	f 0.0	94.2	f 643.1	R 206.1	R f 849.2
1991	145.5	167.9	35.1	31.6	0.1	3.6	2.8	2.1	0.5	33.0	108.9	0.0	125.8	0.0	95.5	643.6	R 207.8	R 851.4
1992	165.6	187.0	32.8	31.4	0.2	4.6	2.9	2.3	2.3	33.2	109.8	0.0	131.1	0.0	100.6	694.0	R 214.8	R 908.8
1993	141.6	201.0	33.1	26.7	0.1	5.6	2.9	3.1	4.9	33.6	110.0	0.0	141.5	0.0	104.1	R 698.1	220.0	R 918.2
1994	146.2	200.7	33.6	29.8	0.2	6.0	3.1	3.3	6.8	35.1	117.8	0.0	R 143.6	0.0	108.9	R 717.2	R 227.2	R 944.4
1995	R 144.1	224.7	33.1	21.2	0.3	6.1	3.0	3.5	3.2	33.4	103.8	0.0	R 140.3	0.0	112.1	R 725.0	R 233.5	R 958.4
1996	150.1	221.9	37.9	26.0	0.3	5.2	2.9	3.6	4.5	36.3	116.7	0.0	150.2	0.0	114.4	753.2	238.1	991.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 21. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Alabama**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup> Million Kilowatthours	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	137	8	280	2,582	1,126	31	396	23,869	2,278	30,562	0	0	-	0	-
1965	29	12	446	3,090	1,156	43	430	28,220	1,608	34,993	0	0	-	0	-
1970	18	20	349	5,353	1,799	98	421	36,408	1,679	46,107	0	0	-	0	-
1975	2	17	249	9,087	1,707	87	609	44,523	7,039	63,300	0	0	-	0	-
1980	0	16	248	11,049	2,048	46	486	43,934	3,506	61,318	0	0	-	0	-
1981	0	18	226	12,291	1,754	132	466	42,596	2,186	59,651	0	0	-	0	-
1982	0	16	173	11,201	1,581	164	425	42,608	2,313	58,466	0	0	-	0	-
1983	0	13	177	9,974	1,643	195	445	43,059	2,041	57,534	0	0	-	0	-
1984	0	13	172	10,900	3,695	220	474	43,606	1,754	R 60,822	0	0	-	0	-
1985	0	11	172	11,195	3,516	161	442	R 42,718	1,640	R 59,844	0	0	-	0	-
1986	0	10	204	11,293	3,745	146	432	R 45,763	1,351	62,935	0	0	-	0	-
1987	0	12	143	13,036	3,872	100	489	R 47,835	1,489	R 66,965	0	0	-	0	-
1988	0	12	157	14,697	1,872	90	471	R 48,120	2,036	R 67,443	0	0	-	0	-
1989	0	14	133	18,055	2,046	89	483	R 48,768	2,823	R 72,397	0	0	-	0	-
1990	0	15	116	17,450	1,899	R 96	497	R 48,498	2,905	R 71,462	R e 15,436	0	-	0	-
1991	0	16	109	17,323	2,292	94	445	R 48,959	3,225	R 72,448	R 12,236	0	-	0	-
1992	0	19	106	17,854	2,108	85	454	R 50,031	3,536	R 74,174	R 14,871	0	-	0	-
1993	0	16	103	17,341	1,973	R 117	462	R 51,332	3,283	R 74,612	R 16,596	0	-	0	-
1994	0	15	110	18,992	3,472	193	483	R 52,551	2,352	R 78,152	R 17,676	0	-	0	-
1995	0	20	97	18,730	3,843	93	475	R 54,756	2,644	80,638	R 23,911	(s)	-	(s)	-
1996	0	19	93	17,845	3,508	82	461	54,279	2,490	78,759	4,149	(s)	-	(s)	-

**Trillion Btu**

1960	3.4	7.9	1.4	15.0	6.1	0.1	2.4	125.4	14.3	164.7	0.0	0.0	176.0	0.0	176.0
1965	0.7	12.4	2.3	18.0	6.2	0.2	2.6	148.2	10.1	187.6	0.0	0.0	200.7	0.0	200.7
1970	0.4	20.5	1.8	31.2	9.9	0.4	2.6	191.3	10.6	247.6	0.0	0.0	268.5	0.0	268.5
1975	(s)	17.3	1.3	52.9	9.4	0.3	3.7	233.9	44.3	345.8	0.0	0.0	363.1	0.0	363.1
1980	0.0	17.0	1.3	64.4	11.3	0.2	2.9	230.8	22.0	332.9	0.0	0.0	349.9	0.0	349.9
1981	0.0	18.8	1.1	71.6	9.7	0.5	2.8	223.8	13.7	323.3	0.0	0.0	342.1	0.0	342.1
1982	0.0	16.6	0.9	65.2	8.7	0.6	2.6	223.8	14.5	316.4	0.0	0.0	333.0	0.0	333.0
1983	0.0	13.7	0.9	58.1	9.1	0.7	2.7	226.2	12.8	310.5	0.0	0.0	324.2	0.0	324.2
1984	0.0	13.6	0.9	63.5	20.7	0.8	2.9	229.1	11.0	328.8	0.0	0.0	342.4	0.0	342.4
1985	0.0	11.5	0.9	65.2	19.7	0.6	2.7	R 224.4	10.3	323.7	0.0	0.0	335.2	0.0	335.2
1986	0.0	10.2	1.0	65.8	21.0	0.5	2.6	240.4	8.5	339.9	0.0	0.0	350.0	0.0	350.0
1987	0.0	12.2	0.7	75.9	21.7	0.4	3.0	R 251.3	9.4	R 362.3	0.0	0.0	R 374.5	0.0	R 374.5
1988	0.0	12.5	0.8	85.6	10.4	0.3	2.9	R 252.8	12.8	R 365.5	0.0	0.0	R 378.0	0.0	R 378.0
1989	0.0	13.9	0.7	105.2	11.4	R 0.3	2.9	R 256.2	17.8	R 394.4	0.0	0.0	R 408.3	0.0	R 408.3
1990	0.0	15.1	0.6	101.6	10.6	R 0.3	3.0	R 254.8	18.3	R 389.2	R e 1.2	0.0	R e 404.2	0.0	R e 404.2
1991	0.0	16.9	0.6	100.9	12.6	0.3	2.7	R 257.2	20.3	R 394.6	R 0.9	0.0	R 411.5	0.0	R 411.5
1992	0.0	19.2	0.5	104.0	11.7	0.3	2.8	R 262.8	22.2	R 404.3	R 1.1	0.0	R 423.5	0.0	R 423.5
1993	0.0	16.0	0.5	101.0	11.0	0.4	2.8	269.6	20.6	R 406.0	R 1.3	0.0	R 422.1	0.0	R 422.1
1994	0.0	15.4	0.6	110.6	19.6	0.7	2.9	R 276.0	14.8	R 425.3	R 1.4	0.0	R 440.6	0.0	R 440.6
1995	0.0	20.7	0.5	109.1	21.8	0.3	2.9	287.6	16.6	438.8	R 1.8	(s)	459.5	(s)	459.5
1996	0.0	19.8	0.5	103.9	19.9	0.3	2.8	285.1	15.7	428.2	0.3	(s)	448.0	(s)	448.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 22. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Alabama

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	7,264	0	7,264	9	0	(s)	0	(s)	0	6,213	0	0	0	--
1965	12,572	0	12,572	6	0	0	0	0	0	7,078	0	0	0	--
1970	16,331	0	16,331	15	0	26	448	474	0	7,607	0	0	0	--
1975	17,301	0	17,301	6	99	514	0	613	2,722	12,188	0	0	0	--
1980	19,593	0	19,593	1	0	131	0	131	23,497	9,385	0	0	0	--
1981	19,504	0	19,504	2	0	96	0	96	23,643	6,014	0	0	0	--
1982	15,584	0	15,584	1	0	64	0	64	27,701	10,707	0	0	0	--
1983	17,164	0	17,164	1	0	128	0	128	25,145	11,141	0	0	0	--
1984	17,786	0	17,786	(s)	0	72	0	72	24,211	10,774	0	0	0	--
1985	21,545	0	21,545	1	0	88	0	88	14,313	6,862	0	0	0	--
1986	21,436	0	21,436	1	0	67	0	67	11,561	5,227	0	0	0	--
1987	20,746	0	20,746	1	0	58	0	58	11,248	7,449	0	0	0	--
1988	20,002	0	20,002	3	0	174	0	174	12,981	5,359	0	0	0	--
1989	21,884	0	21,884	2	0	216	0	216	11,524	13,153	0	0	0	--
1990	22,010	0	22,010	4	0	133	0	133	12,052	10,367	0	0	0	--
1991	23,700	0	23,700	4	0	163	0	163	15,875	10,758	0	0	0	--
1992	24,988	0	24,988	3	0	141	0	141	19,397	10,260	0	0	0	--
1993	27,533	0	27,533	5	0	130	0	130	17,823	9,034	0	0	0	--
1994	25,817	0	25,817	4	0	220	0	220	20,480	11,429	0	0	0	--
1995	28,759	0	28,759	7	0	181	0	181	20,752	9,502	0	0	0	--
1996	31,216	0	31,216	6	0	299	0	299	29,708	11,082	0	0	0	--

Trillion Btu

1960	175.3	0.0	175.3	9.7	0.0	(s)	0.0	(s)	0.0	66.9	0.0	0.0	0.0	251.8
1965	298.0	0.0	298.0	5.8	0.0	0.0	0.0	0.0	0.0	74.0	0.0	0.0	0.0	377.7
1970	380.7	0.0	380.7	15.9	0.0	0.2	2.7	2.9	0.0	79.8	0.0	0.0	0.0	479.3
1975	400.7	0.0	400.7	6.2	0.6	3.0	0.0	3.6	30.0	126.8	0.0	0.0	0.0	567.4
1980	468.5	0.0	468.5	1.6	0.0	0.8	0.0	0.8	256.3	97.5	0.0	0.0	0.0	824.6
1981	468.1	0.0	468.1	2.0	0.0	0.6	0.0	0.6	260.8	62.9	0.0	0.0	0.0	794.3
1982	374.6	0.0	374.6	1.5	0.0	0.4	0.0	0.4	306.7	111.9	0.0	0.0	0.0	795.2
1983	411.4	0.0	411.4	0.6	0.0	0.7	0.0	0.7	274.2	117.2	0.0	0.0	0.0	804.2
1984	427.9	0.0	427.9	0.4	0.0	0.4	0.0	0.4	262.5	112.5	0.0	0.0	0.0	803.7
1985	519.5	0.0	519.5	1.2	0.0	0.5	0.0	0.5	154.8	71.7	0.0	0.0	0.0	747.6
1986	522.0	0.0	522.0	1.2	0.0	0.4	0.0	0.4	124.9	54.6	0.0	0.0	0.0	703.0
1987	507.1	0.0	507.1	1.6	0.0	0.3	0.0	0.3	121.2	77.6	0.0	0.0	0.0	707.8
1988	486.6	0.0	486.6	2.7	0.0	1.0	0.0	1.0	139.5	55.3	0.0	0.0	0.0	685.1
1989	526.2	0.0	526.2	1.8	0.0	1.3	0.0	1.3	123.6	R 137.2	0.0	0.0	0.0	R 790.1
1990	532.4	0.0	532.4	4.2	0.0	0.8	0.0	0.8	128.7	R 107.8	0.0	0.0	0.0	R 773.9
1991	573.9	0.0	573.9	4.2	0.0	0.9	0.0	0.9	170.5	R 112.1	0.0	0.0	0.0	R 861.6
1992	602.8	0.0	602.8	3.4	0.0	0.8	0.0	0.8	207.1	R 106.1	0.0	0.0	0.0	R 920.2
1993	665.9	0.0	665.9	4.7	0.0	0.8	0.0	0.8	190.4	R 93.1	0.0	0.0	0.0	R 954.8
1994	624.1	0.0	624.1	3.9	0.0	1.3	0.0	1.3	218.6	R 117.8	0.0	0.0	0.0	R 965.8
1995	682.2	0.0	682.2	7.5	0.0	1.1	0.0	1.1	221.2	97.9	0.0	0.0	0.0	R 1,009.9
1996	736.3	0.0	736.3	6.3	0.0	1.7	0.0	1.7	315.6	114.6	0.0	0.0	0.0	1,174.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 23. Energy Consumption Estimates by Source, Selected Years 1960-1996, Alaska**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>							Total
			Thousand Barrels																Million Kilowatthours
1960	376	2	47	1,032	2,636	1,972	90	46	7	1,657	711	0	8,197	0	290	0	0	0	-
1965	525	8	132	293	3,788	3,005	10	91	41	2,450	881	284	10,975	0	350	0	0	0	-
1970	740	64	274	462	5,100	6,735	33	151	60	2,621	1,020	523	16,979	0	363	0	0	0	-
1975	868	85	319	466	7,090	7,420	123	211	145	4,179	1,075	771	21,800	0	357	0	0	0	-
1980	273	153	309	498	6,677	9,618	19	191	115	3,676	371	1,446	22,919	0	539	0	0	0	-
1981	792	122	266	504	6,546	10,877	36	152	110	4,468	245	874	24,077	0	590	0	0	0	-
1982	834	238	368	369	6,312	11,530	1,262	212	100	5,089	302	966	26,511	0	561	0	0	0	-
1983	785	239	344	375	7,305	12,252	17	212	105	4,752	392	5,360	31,115	0	593	0	0	0	-
1984	815	258	438	392	7,950	15,178	16	272	112	5,324	508	5,243	35,433	0	693	0	(s)	0	-
1985	733	213	485	490	10,356	15,231	7	331	104	R 5,638	3,072	5,761	R 41,475	0	748	0	(s)	0	-
1986	769	206	373	617	7,549	16,187	4,985	268	102	R 5,425	7,081	4,828	47,417	0	809	0	0	0	-
1987	274	249	257	208	8,006	14,850	4,792	271	115	R 5,205	3,406	4,329	R 41,438	0	872	0	0	0	-
1988	276	288	698	407	8,582	16,899	192	277	111	R 5,319	713	5,181	R 38,380	0	935	0	0	0	-
1989	299	322	274	491	11,055	18,586	2	278	114	R 5,079	348	4,683	R 40,911	0	873	0	0	0	-
1990	784	343	269	491	11,592	17,367	3	384	117	R 5,854	429	4,582	R 41,088	0	i NA	i NA	i NA	i NA	-
1991	802	367	259	618	9,805	17,116	8	402	105	R 5,108	593	2,312	R 36,326	0	NA	NA	NA	NA	-
1992	792	383	264	459	10,408	14,720	1	393	107	R 5,881	765	3,377	R 36,376	0	NA	NA	NA	NA	-
1993	863	378	43	410	9,354	14,693	5	238	109	R 5,976	728	3,028	R 34,584	0	NA	NA	NA	NA	-
1994	796	367	66	171	8,027	16,080	11	252	114	R 6,542	728	3,375	R 35,366	0	NA	NA	NA	NA	-
1995	815	430	83	389	10,378	16,921	1	272	112	7,148	754	3,195	39,253	0	NA	NA	NA	NA	-
1996	706	448	26	142	8,552	18,652	1	247	109	6,735	912	4,138	39,515	0	NA	NA	NA	NA	-
Trillion Btu																			
1960	7.2	2.0	0.3	5.2	15.4	10.6	0.5	0.2	(s)	8.7	4.5	0.0	45.4	0.0	3.1	0.0	0.0	0.0	57.8
1965	9.9	7.7	0.9	1.5	22.1	16.5	0.1	0.4	0.3	12.9	5.5	1.7	61.7	0.0	3.7	0.0	0.0	0.0	82.9
1970	13.2	64.0	1.8	2.3	29.7	37.7	0.2	0.6	0.4	13.8	6.4	3.1	96.0	0.0	3.8	0.0	0.0	0.0	177.0
1975	15.3	85.2	2.1	2.4	41.3	41.7	0.7	0.8	0.9	22.0	6.8	4.6	123.1	0.0	3.7	0.0	0.0	0.0	227.3
1980	4.3	153.8	2.1	2.5	38.9	54.0	0.1	0.7	0.7	19.3	2.3	8.7	129.3	0.0	5.6	0.0	0.0	0.0	293.0
1981	12.5	122.2	1.8	2.5	38.1	61.2	0.2	0.6	0.7	23.5	1.5	5.6	135.7	0.0	6.2	0.0	0.0	0.0	276.6
1982	13.2	237.9	2.4	1.9	36.8	64.9	7.2	0.8	0.6	26.7	1.9	6.1	149.3	0.0	5.9	0.0	0.0	0.0	406.2
1983	12.4	239.7	2.3	1.9	42.6	68.7	0.1	0.8	0.6	25.0	2.5	31.6	175.9	0.0	6.2	0.0	0.0	0.0	434.3
1984	12.9	258.0	2.9	2.0	46.3	85.5	0.1	1.0	0.7	28.0	3.2	30.9	200.4	0.0	7.2	0.0	(s)	0.0	478.6
1985	11.6	214.0	3.2	2.5	60.3	85.8	(s)	1.2	0.6	29.6	19.3	34.3	236.9	0.0	7.8	0.0	(s)	0.0	R 470.4
1986	12.1	208.3	2.5	3.1	44.0	91.2	28.3	1.0	0.6	28.5	44.5	29.1	272.8	0.0	8.4	0.0	0.0	0.0	R 501.7
1987	4.3	251.5	1.7	1.0	46.6	83.6	27.2	1.0	0.7	27.3	21.4	26.0	R 236.6	0.0	9.1	0.0	0.0	0.0	R 501.5
1988	4.4	288.8	4.6	2.1	50.0	95.2	1.1	1.0	0.7	R 27.9	4.5	30.8	217.9	0.0	9.7	0.0	0.0	0.0	R 520.7
1989	4.7	321.2	1.8	2.5	64.4	104.7	(s)	1.0	0.7	26.7	2.2	27.8	231.8	0.0	R 9.1	0.0	0.0	0.0	R 566.8
1990	12.4	326.8	1.8	2.5	67.5	97.9	(s)	1.4	0.7	R 30.8	2.7	27.2	R 232.5	0.0	i 10.1	i 4.5	i (s)	0.0	R i 586.4
1991	12.7	368.0	1.7	3.1	57.1	96.1	(s)	1.5	0.6	R 26.8	3.7	14.1	R 204.9	0.0	9.3	4.6	(s)	0.0	R 599.4
1992	12.5	383.9	1.8	2.3	60.6	82.9	(s)	1.4	0.6	30.9	4.8	20.3	205.7	0.0	9.5	4.8	(s)	0.0	616.3
1993	13.6	376.0	0.3	2.1	54.5	83.2	(s)	0.9	0.7	31.4	4.6	18.4	196.0	0.0	13.4	R 4.6	(s)	0.0	R 603.6
1994	12.6	367.6	0.4	0.9	46.8	91.2	0.1	0.9	0.7	34.4	4.6	20.4	200.2	0.0	R 13.9	R 4.1	(s)	0.0	R 598.4
1995	12.9	432.8	0.5	2.0	60.5	95.9	(s)	1.0	0.7	37.5	4.7	19.3	222.2	0.0	14.1	R 5.5	(s)	0.0	R 686.9
1996	11.2	443.6	0.2	0.7	49.8	105.8	(s)	0.9	0.7	35.4	5.7	24.9	224.0	0.0	13.1	5.6	(s)	0.0	696.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 24. Residential Energy Consumption Estimates, Selected Years 1960-1996, Alaska

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	22	0	22	(s)	866	0	36	902	0	0	151	—	539	—
1965	12	0	12	1	1,110	10	77	1,197	0	0	292	—	1,139	—
1970	8	0	8	6	1,362	19	77	1,458	0	0	527	—	2,073	—
1975	6	0	6	10	1,621	91	69	1,781	0	0	898	—	3,227	—
1980	0	0	0	8	1,172	0	58	1,231	0	0	1,092	—	4,397	—
1981	165	0	165	8	910	0	41	951	0	0	1,228	—	4,335	—
1982	174	0	174	11	1,125	0	68	1,193	0	0	1,408	—	4,623	—
1983	162	0	162	10	1,194	2	107	1,304	0	0	1,453	—	4,474	—
1984	175	0	175	12	1,349	3	154	1,507	0	0	1,597	—	4,797	—
1985	153	0	153	13	1,310	1	192	1,503	0	0	1,674	—	4,834	—
1986	174	0	174	12	1,065	1	152	1,217	0	0	1,625	—	4,638	—
1987	0	0	0	12	1,614	1	157	1,772	0	0	1,548	—	4,006	—
1988	0	0	0	13	1,285	3	167	1,456	0	0	1,590	—	4,075	—
1989	0	0	0	14	1,518	1	198	1,717	0	0	1,643	—	R 4,306	—
1990	173	0	173	14	1,745	3	300	2,048	<sup>e</sup> 109	<sup>e</sup> (s)	1,661	—	R 4,428	—
1991	176	0	176	14	1,597	8	323	1,928	115	(s)	1,603	—	R 3,917	—
1992	180	0	180	14	1,606	1	319	1,925	121	(s)	1,640	—	R 3,599	—
1993	197	0	197	14	1,277	1	192	1,470	100	(s)	1,629	—	R 3,958	—
1994	182	0	182	15	1,254	10	151	1,416	98	(s)	1,688	—	R 4,018	—
1995	183	0	183	15	1,494	(s)	157	1,650	109	(s)	1,713	—	4,106	—
1996	166	0	166	16	1,312	(s)	195	1,507	109	(s)	1,766	—	4,186	—

  

Trillion Btu														
1960	0.4	0.0	0.4	0.2	5.0	0.0	0.1	5.2	0.0	0.0	0.5	6.3	1.8	8.1
1965	0.2	0.0	0.2	1.5	6.5	0.1	0.3	6.8	0.0	0.0	1.0	9.5	3.9	13.4
1970	0.1	0.0	0.1	6.2	7.9	0.1	0.3	8.3	0.0	0.0	1.8	16.5	7.1	23.6
1975	0.1	0.0	0.1	10.4	9.4	0.5	0.3	10.2	0.0	0.0	3.1	23.8	11.0	34.8
1980	0.0	0.0	0.0	7.9	6.8	0.0	0.2	7.0	0.0	0.0	3.7	18.7	15.0	33.7
1981	2.6	0.0	2.6	7.9	5.3	0.0	0.1	5.4	0.0	0.0	4.2	20.2	14.8	35.0
1982	2.8	0.0	2.8	10.5	6.6	0.0	0.2	6.8	0.0	0.0	4.8	24.9	15.8	40.7
1983	2.6	0.0	2.6	10.4	7.0	(s)	0.4	7.4	0.0	0.0	5.0	25.3	15.3	40.6
1984	2.8	0.0	2.8	11.9	7.9	(s)	0.6	8.4	0.0	0.0	5.5	28.5	16.4	44.9
1985	2.4	0.0	2.4	13.3	7.6	(s)	0.7	8.3	0.0	0.0	5.7	29.8	16.5	46.3
1986	2.7	0.0	2.7	12.2	6.2	(s)	0.6	6.8	0.0	0.0	5.5	27.3	15.8	43.1
1987	0.0	0.0	0.0	12.4	9.4	(s)	0.6	10.0	0.0	0.0	5.3	27.6	13.7	41.3
1988	0.0	0.0	0.0	12.6	7.5	(s)	0.6	8.1	0.0	0.0	5.4	26.1	13.9	40.0
1989	0.0	0.0	0.0	13.6	8.8	(s)	0.7	9.6	0.0	0.0	5.6	28.7	14.7	43.4
1990	2.7	0.0	2.7	13.4	10.2	(s)	1.1	11.3	<sup>e</sup> 2.2	<sup>e</sup> (s)	5.7	<sup>e</sup> 35.3	15.1	<sup>e</sup> 50.4
1991	2.8	0.0	2.8	13.6	9.3	(s)	1.2	10.5	2.3	(s)	5.5	34.7	R 13.4	48.0
1992	2.8	0.0	2.8	14.4	9.4	(s)	1.2	10.5	2.4	(s)	5.6	35.7	12.3	48.0
1993	3.1	0.0	3.1	13.8	7.4	(s)	0.7	8.1	2.0	(s)	5.6	32.6	13.5	46.1
1994	2.9	0.0	2.9	14.9	7.3	0.1	0.5	7.9	2.0	(s)	5.8	33.4	13.7	47.1
1995	2.9	0.0	2.9	15.3	8.7	(s)	0.6	9.3	2.2	(s)	5.8	35.5	14.0	49.5
1996	2.6	0.0	2.6	16.0	7.6	(s)	0.7	8.3	2.2	(s)	6.0	35.2	14.3	49.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 25. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Alaska**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	42	0	42	0	268	0	6	130	464	868	0	99	-	354	-
1965	22	0	22	2	344	0	14	253	751	1,361	0	267	-	1,043	-
1970	15	0	15	13	422	0	14	246	807	1,488	0	478	-	1,882	-
1975	11	0	11	14	502	0	12	415	558	1,487	0	657	-	2,362	-
1980	0	0	0	17	577	0	10	258	4	849	0	728	-	2,932	-
1981	307	0	307	16	532	0	7	250	0	789	0	691	-	2,439	-
1982	324	0	324	24	481	24	12	349	3	869	0	772	-	2,533	-
1983	302	0	302	25	1,041	5	19	261	(s)	1,326	0	844	-	2,597	-
1984	326	0	326	25	1,176	6	27	221	1	1,431	0	1,728	-	5,189	-
1985	284	0	284	20	926	3	34	268	0	1,231	0	1,898	-	5,480	-
1986	323	0	323	21	837	4,981	27	200	1,650	7,695	0	1,957	-	5,587	-
1987	0	0	0	20	1,055	4,791	28	52	1,962	R 7,887	0	1,894	-	4,901	-
1988	0	0	0	21	875	189	30	50	310	1,454	0	1,913	-	4,903	-
1989	0	0	0	22	825	1	35	52	0	912	0	2,048	-	R 5,366	-
1990	321	0	321	22	1,176	(s)	53	52	0	1,281	e NA	2,133	-	R 5,686	-
1991	328	0	328	21	974	(s)	57	88	0	1,119	NA	2,187	-	R 5,345	-
1992	334	0	334	21	1,376	(s)	56	57	0	1,490	NA	2,195	-	R 4,816	-
1993	366	0	366	20	1,211	(s)	34	8	0	1,253	34	2,245	-	R 5,454	-
1994	338	0	338	21	1,184	(s)	27	10	0	1,221	34	2,334	-	R 5,554	-
1995	340	0	340	25	763	(s)	28	21	0	812	22	2,372	-	R 5,688	-
1996	309	0	309	27	804	(s)	34	294	0	1,132	24	2,429	-	5,758	-

  

Trillion Btu															
1960	0.8	0.0	0.8	0.0	1.6	0.0	(s)	0.7	2.9	5.2	0.0	0.3	6.3	1.2	7.5
1965	0.4	0.0	0.4	2.3	2.0	0.0	0.1	1.3	4.7	8.1	0.0	0.9	11.7	3.6	15.3
1970	0.3	0.0	0.3	12.6	2.5	0.0	0.1	1.3	5.1	8.9	0.0	1.6	23.4	6.4	29.8
1975	0.2	0.0	0.2	14.5	2.9	0.0	(s)	2.2	3.5	8.7	0.0	2.2	25.6	8.1	33.6
1980	0.0	0.0	0.0	16.6	3.4	0.0	(s)	1.4	(s)	4.8	0.0	2.5	23.8	10.0	33.8
1981	4.8	0.0	4.8	16.2	3.1	0.0	(s)	1.3	0.0	4.4	0.0	2.4	27.9	8.3	36.2
1982	5.1	0.0	5.1	24.2	2.8	0.1	(s)	1.8	(s)	4.8	0.0	2.6	36.8	8.6	45.4
1983	4.8	0.0	4.8	24.7	6.1	(s)	0.1	1.4	(s)	7.5	0.0	2.9	39.9	8.9	48.8
1984	5.1	0.0	5.1	24.7	6.9	(s)	0.1	1.2	(s)	8.1	0.0	5.9	43.9	17.7	61.6
1985	4.5	0.0	4.5	20.5	5.4	(s)	0.1	1.4	0.0	6.9	0.0	6.5	38.4	18.7	57.1
1986	5.1	0.0	5.1	21.1	4.9	28.2	0.1	1.1	10.4	44.6	0.0	6.7	77.5	19.1	96.6
1987	0.0	0.0	0.0	20.4	6.1	27.2	0.1	0.3	12.3	46.0	0.0	6.5	72.9	16.7	89.6
1988	0.0	0.0	0.0	20.9	5.1	1.1	0.1	0.3	1.9	8.5	0.0	6.5	35.9	16.7	52.7
1989	0.0	0.0	0.0	21.7	4.8	(s)	0.1	0.3	0.0	5.2	0.0	7.0	33.9	18.3	52.2
1990	5.1	0.0	5.1	20.5	6.8	(s)	0.2	0.3	0.0	7.3	e NA	7.3	40.2	19.4	R 59.6
1991	5.2	0.0	5.2	20.9	5.7	(s)	0.2	0.5	0.0	6.3	NA	7.5	39.9	18.2	R 58.2
1992	5.3	0.0	5.3	21.3	8.0	(s)	0.2	0.3	0.0	8.5	NA	7.5	42.6	16.4	59.1
1993	5.8	0.0	5.8	19.9	7.1	(s)	0.1	(s)	0.0	7.2	0.7	7.7	R 41.2	18.6	R 59.8
1994	5.3	0.0	5.3	20.7	6.9	(s)	0.1	0.1	0.0	7.0	0.7	8.0	R 41.7	19.0	R 60.7
1995	5.4	0.0	5.4	25.1	4.4	(s)	0.1	0.1	0.0	4.7	0.4	8.1	R 43.7	19.4	R 63.1
1996	4.9	0.0	4.9	27.0	4.7	(s)	0.1	1.5	0.0	6.4	0.5	8.3	47.0	19.6	66.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 26. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Alaska

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	256	2	47	878	90	4	4	0	229	0	1,252	0	0	0	45	-	162	-
1965	339	2	132	1,238	0	(s)	1	83	60	284	1,798	0	0	0	59	-	229	-
1970	467	19	274	1,923	14	60	1	107	73	523	2,975	0	0	0	101	-	398	-
1975	594	40	319	2,117	32	130	24	106	31	771	3,530	0	0	0	485	-	1,743	-
1980	0	100	309	1,784	19	119	21	111	14	1,446	3,823	0	0	0	757	-	3,048	-
1981	0	68	266	2,059	36	104	20	12	20	874	3,390	0	0	0	997	-	3,520	-
1982	0	172	368	2,420	1,238	128	18	14	0	966	5,152	0	0	0	1,081	-	3,548	-
1983	0	172	344	923	9	80	19	14	0	5,360	6,749	0	0	0	1,185	-	3,647	-
1984	0	184	438	1,043	6	72	20	5	0	5,243	6,828	0	0	0	340	-	1,020	-
1985	0	140	485	1,762	4	91	19	406	2,577	5,761	11,105	0	0	0	417	-	1,203	-
1986	0	133	373	1,145	4	81	18	386	4,789	4,828	11,624	0	0	0	466	-	1,330	-
1987	0	184	257	1,005	(s)	79	21	R 402	1,020	4,329	R 7,113	0	0	0	520	-	1,344	-
1988	0	221	698	2,016	(s)	72	20	64	0	5,181	8,051	0	0	0	542	-	1,388	-
1989	0	252	274	1,835	(s)	38	21	64	0	4,683	6,914	0	0	0	450	-	R 1,180	-
1990	0	271	269	1,584	(s)	25	21	55	118	4,582	R 6,654	f NA	f NA	f NA	459	-	R 1,224	-
1991	0	299	259	1,954	(s)	17	19	57	280	2,312	4,898	NA	NA	NA	466	-	R 1,139	-
1992	0	316	264	1,973	(s)	14	19	58	302	3,377	6,006	NA	NA	NA	504	-	R 1,107	-
1993	2	313	43	1,573	4	10	20	40	303	3,028	5,021	NA	NA	NA	501	-	R 1,218	-
1994	5	300	66	1,506	(s)	70	20	57	346	3,375	5,441	NA	NA	NA	511	-	R 1,217	-
1995	0	358	83	2,287	(s)	85	20	62	381	3,195	6,113	NA	NA	NA	546	-	1,310	-
1996	2	371	26	2,541	(s)	15	20	64	394	4,138	7,198	NA	NA	NA	584	-	1,385	-

Trillion Btu

1960	5.0	1.9	0.3	5.1	0.5	(s)	(s)	0.0	1.4	0.0	7.4	0.0	0.0	0.0	0.2	14.4	0.6	15.0
1965	6.5	1.8	0.9	7.2	0.0	(s)	(s)	0.4	0.4	1.7	10.6	0.0	0.0	0.0	0.2	19.1	0.8	19.9
1970	8.5	19.6	1.8	11.2	0.1	0.2	(s)	0.6	0.5	3.1	17.5	0.0	0.0	0.0	0.3	45.9	1.4	47.3
1975	10.5	40.4	2.1	12.3	0.2	0.5	0.1	0.6	0.2	4.6	20.6	0.0	0.0	0.0	1.7	73.2	5.9	79.2
1980	0.0	100.3	2.1	10.4	0.1	0.4	0.1	0.6	0.1	8.7	22.5	0.0	0.0	0.0	2.6	125.3	10.4	135.7
1981	0.0	68.6	1.8	12.0	0.2	0.4	0.1	0.1	0.1	5.6	20.2	0.0	0.0	0.0	3.4	92.2	12.0	104.2
1982	0.0	171.7	2.4	14.1	7.0	0.5	0.1	0.1	0.0	6.1	30.3	0.0	0.0	0.0	3.7	205.7	12.1	217.8
1983	0.0	172.7	2.3	5.4	0.1	0.3	0.1	0.1	0.0	31.6	39.8	0.0	0.0	0.0	4.0	216.5	12.4	229.0
1984	0.0	183.8	2.9	6.1	(s)	0.3	0.1	(s)	0.0	30.9	40.3	0.0	0.0	0.0	1.2	225.2	3.5	228.7
1985	0.0	140.7	3.2	10.3	(s)	0.3	0.1	2.1	16.2	34.3	66.6	0.0	0.0	0.0	1.4	208.7	4.1	212.8
1986	0.0	134.4	2.5	6.7	(s)	0.3	0.1	2.0	30.1	29.1	70.8	0.0	0.0	0.0	1.6	206.8	4.5	211.4
1987	0.0	185.9	1.7	5.9	(s)	0.3	0.1	2.1	6.4	26.0	42.5	0.0	0.0	0.0	1.8	230.1	4.6	234.7
1988	0.0	222.3	4.6	11.7	(s)	0.3	0.1	0.3	0.0	30.8	47.9	0.0	0.0	0.0	1.8	272.1	4.7	276.8
1989	0.0	251.1	1.8	10.7	(s)	0.1	0.1	0.3	0.0	27.8	40.9	0.0	0.0	0.0	1.5	293.6	4.0	297.6
1990	0.0	256.7	1.8	9.2	(s)	0.1	0.1	0.3	0.7	27.2	39.5	f 0.0	f 2.3	f 0.0	1.6	f 300.1	4.2	f 304.2
1991	0.0	299.5	1.7	11.4	(s)	0.1	0.1	0.3	1.8	14.1	29.5	0.0	2.3	0.0	1.6	332.8	3.9	336.7
1992	0.0	316.3	1.8	11.5	(s)	0.1	0.1	0.3	1.9	20.3	35.9	0.0	2.4	0.0	1.7	356.3	3.8	360.1
1993	(s)	311.5	0.3	9.2	(s)	(s)	0.1	0.2	1.9	18.4	30.1	0.0	1.9	0.0	1.7	345.2	R 4.2	R 349.4
1994	0.1	299.9	0.4	8.8	(s)	0.3	0.1	0.3	2.2	20.4	32.4	0.0	R 1.5	0.0	1.7	R 335.7	R 4.2	R 339.8
1995	0.0	360.0	0.5	13.3	(s)	0.3	0.1	0.3	2.4	19.3	36.3	0.0	R 2.3	0.0	1.9	R 400.5	4.5	R 405.0
1996	(s)	367.4	0.2	14.8	(s)	0.1	0.1	0.3	2.5	24.9	42.8	0.0	2.2	0.0	2.0	414.5	4.7	419.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 27. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Alaska**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	5	(s)	1,032	528	1,972	0	3	1,527	15	5,077	0	0	-	0	-
1965	1	0	293	789	3,005	(s)	40	2,113	66	6,307	0	0	-	0	-
1970	1	17	462	1,000	6,735	1	59	2,267	135	10,659	0	0	-	0	-
1975	(s)	(s)	466	2,157	7,420	0	121	3,658	484	14,305	0	0	-	0	-
1980	0	(s)	498	2,605	9,618	4	94	3,306	0	16,125	0	0	-	0	-
1981	0	(s)	504	2,489	10,877	0	90	4,205	7	18,172	0	0	-	0	-
1982	0	(s)	369	1,701	11,530	4	82	4,726	0	18,412	0	0	-	0	-
1983	0	(s)	375	3,550	12,252	6	86	4,478	55	20,802	0	0	-	0	-
1984	0	6	392	3,825	15,178	19	92	5,099	56	24,659	0	0	-	0	-
1985	0	5	490	5,840	15,231	14	86	R 4,964	19	R 26,643	0	0	-	0	-
1986	0	6	617	4,065	16,187	9	84	4,839	113	25,914	0	0	-	0	-
1987	0	2	208	3,912	14,850	6	95	R 4,751	118	R 23,940	0	0	-	0	-
1988	0	2	407	3,981	16,899	8	91	R 5,205	140	R 26,732	0	0	-	0	-
1989	0	2	491	6,372	18,586	7	94	R 4,963	118	R 30,632	0	0	-	0	-
1990	0	2	491	6,601	17,367	6	96	R 5,747	140	R 30,448	R e 0	0	-	0	-
1991	0	3	618	4,750	17,116	4	86	R 4,963	73	R 27,611	R 0	0	-	0	-
1992	0	3	459	4,845	14,720	4	88	R 5,766	316	R 26,199	R 0	0	-	0	-
1993	0	3	410	4,754	14,693	2	90	R 5,928	119	R 25,995	R 0	0	-	0	-
1994	0	3	171	3,510	16,080	4	94	R 6,475	102	R 26,435	R 32	0	-	0	-
1995	0	2	389	5,243	16,921	2	92	7,065	116	29,828	R 7,553	0	-	0	-
1996	0	2	142	3,239	18,652	4	89	6,377	4	28,507	8,659	0	-	0	-

  

Trillion Btu															
1960	0.1	(s)	5.2	3.1	10.6	0.0	(s)	8.0	0.1	27.1	0.0	0.0	27.1	0.0	27.1
1965	(s)	0.0	1.5	4.6	16.5	(s)	0.2	11.1	0.4	34.4	0.0	0.0	34.4	0.0	34.4
1970	(s)	17.4	2.3	5.8	37.7	(s)	0.4	11.9	0.9	59.0	0.0	0.0	76.4	0.0	76.4
1975	(s)	0.1	2.4	12.6	41.7	0.0	0.7	19.2	3.0	79.6	0.0	0.0	79.7	0.0	79.7
1980	0.0	0.1	2.5	15.2	54.0	(s)	0.6	17.4	0.0	89.7	0.0	0.0	89.8	0.0	89.8
1981	0.0	0.3	2.5	14.5	61.2	0.0	0.5	22.1	(s)	101.0	0.0	0.0	101.2	0.0	101.2
1982	0.0	0.3	1.9	9.9	64.9	(s)	0.5	24.8	0.0	102.0	0.0	0.0	102.2	0.0	102.2
1983	0.0	0.3	1.9	20.7	68.7	(s)	0.5	23.5	0.3	115.7	0.0	0.0	115.9	0.0	115.9
1984	0.0	5.9	2.0	22.3	85.5	0.1	0.6	26.8	0.4	137.5	0.0	0.0	143.4	0.0	143.4
1985	0.0	5.2	2.5	34.0	85.8	0.1	0.5	26.1	0.1	149.0	0.0	0.0	154.2	0.0	154.2
1986	0.0	6.0	3.1	23.7	91.2	(s)	0.5	25.4	0.7	144.7	0.0	0.0	150.7	0.0	150.7
1987	0.0	2.1	1.0	22.8	83.6	(s)	0.6	R 25.0	0.7	133.7	0.0	0.0	R 135.9	0.0	R 135.9
1988	0.0	2.0	2.1	23.2	95.2	(s)	0.6	R 27.3	0.9	149.2	0.0	0.0	151.2	0.0	151.2
1989	0.0	1.9	2.5	37.1	104.7	(s)	0.6	26.1	0.7	171.7	0.0	0.0	173.6	0.0	173.6
1990	0.0	1.6	2.5	38.4	97.9	(s)	0.6	R 30.2	0.9	R 170.5	R e 0.0	0.0	R e 172.2	0.0	R e 172.2
1991	0.0	2.6	3.1	27.7	96.1	(s)	0.5	R 26.1	0.5	R 154.0	R 0.0	0.0	R 156.6	0.0	R 156.6
1992	0.0	2.9	2.3	28.2	82.9	(s)	0.5	30.3	2.0	146.3	R 0.0	0.0	149.2	0.0	149.2
1993	0.0	2.8	2.1	27.7	83.2	(s)	0.5	31.1	0.7	145.4	R 0.0	0.0	148.3	0.0	148.3
1994	0.0	3.0	0.9	20.4	91.2	(s)	0.6	34.0	0.6	147.7	(s)	0.0	150.7	0.0	150.7
1995	0.0	2.4	2.0	30.5	95.9	(s)	0.6	37.1	0.7	166.8	R 0.6	0.0	169.3	0.0	169.3
1996	0.0	2.0	0.7	18.9	105.8	(s)	0.5	33.5	(s)	159.4	0.7	0.0	161.4	0.0	161.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 28. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Alaska

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	52	0	52	0	3	95	0	99	0	290	0	0	0	--
1965	151	0	151	2	4	308	0	312	0	350	0	0	0	--
1970	249	0	249	8	5	394	0	399	0	363	0	0	0	--
1975	257	0	257	20	1	694	0	696	0	357	0	0	0	--
1980	273	0	273	29	353	538	0	891	0	539	0	0	0	--
1981	321	0	321	29	219	557	0	775	0	590	0	0	0	--
1982	336	0	336	31	299	585	0	884	0	561	0	0	0	--
1983	321	0	321	31	337	598	0	934	0	593	0	0	0	--
1984	314	0	314	32	451	557	0	1,008	0	693	0	0	(s)	--
1985	296	0	296	34	476	518	0	994	0	748	0	0	(s)	--
1986	272	0	272	34	529	437	0	966	0	809	0	0	0	--
1987	274	0	274	31	306	421	0	727	0	872	0	0	0	--
1988	276	0	276	31	264	424	0	688	0	935	0	0	0	--
1989	299	0	299	33	230	506	0	736	0	873	0	0	0	--
1990	290	0	290	34	171	486	0	658	0	975	0	0	0	--
1991	298	0	298	31	240	530	0	769	0	896	0	0	0	--
1992	277	0	277	29	147	608	0	755	0	918	0	0	0	--
1993	298	0	298	28	306	538	0	845	0	1,303	0	0	0	--
1994	271	0	271	29	281	573	0	854	0	1,345	0	0	0	--
1995	293	0	293	30	257	592	0	849	0	1,372	0	0	0	--
1996	229	0	229	31	515	655	0	1,171	0	1,267	0	0	0	--

## Trillion Btu

1960	0.9	0.0	0.9	0.0	(s)	0.6	0.0	0.6	0.0	3.1	0.0	0.0	0.0	4.6
1965	2.7	0.0	2.7	2.2	(s)	1.8	0.0	1.8	0.0	3.7	0.0	0.0	0.0	10.3
1970	4.3	0.0	4.3	8.2	(s)	2.3	0.0	2.3	0.0	3.8	0.0	0.0	0.0	18.6
1975	4.5	0.0	4.5	19.7	(s)	4.0	0.0	4.1	0.0	3.7	0.0	0.0	0.0	32.0
1980	4.3	0.0	4.3	28.9	2.2	3.1	0.0	5.4	0.0	5.6	0.0	0.0	0.0	44.2
1981	5.1	0.0	5.1	29.2	1.4	3.2	0.0	4.6	0.0	6.2	0.0	0.0	0.0	45.1
1982	5.3	0.0	5.3	31.2	1.9	3.4	0.0	5.3	0.0	5.9	0.0	0.0	0.0	47.6
1983	5.1	0.0	5.1	31.5	2.1	3.5	0.0	5.6	0.0	6.2	0.0	0.0	0.0	48.4
1984	5.0	0.0	5.0	31.8	2.8	3.2	0.0	6.1	0.0	7.2	0.0	0.0	(s)	50.1
1985	4.7	0.0	4.7	34.4	3.0	3.0	0.0	6.0	0.0	7.8	0.0	0.0	(s)	52.9
1986	4.3	0.0	4.3	34.6	3.3	2.5	0.0	5.9	0.0	8.4	0.0	0.0	0.0	53.2
1987	4.3	0.0	4.3	30.7	1.9	2.4	0.0	4.4	0.0	9.1	0.0	0.0	0.0	48.5
1988	4.4	0.0	4.4	31.0	1.7	2.5	0.0	4.1	0.0	9.7	0.0	0.0	0.0	49.2
1989	4.7	0.0	4.7	32.9	1.4	2.9	0.0	4.4	0.0	R 9.1	0.0	0.0	0.0	R 51.2
1990	4.6	0.0	4.6	34.6	1.1	2.8	0.0	3.9	0.0	10.1	0.0	0.0	0.0	R 53.2
1991	4.7	0.0	4.7	31.4	1.5	3.1	0.0	4.6	0.0	9.3	0.0	0.0	0.0	R 50.0
1992	4.4	0.0	4.4	29.0	0.9	3.5	0.0	4.5	0.0	9.5	0.0	0.0	0.0	47.3
1993	4.7	0.0	4.7	28.0	1.9	3.1	0.0	5.1	0.0	13.4	0.0	0.0	0.0	51.2
1994	4.3	0.0	4.3	29.0	1.8	3.3	0.0	5.1	0.0	R 13.9	0.0	0.0	0.0	R 52.3
1995	4.6	0.0	4.6	29.9	1.6	3.4	0.0	5.1	0.0	14.1	0.0	0.0	0.0	53.7
1996	3.6	0.0	3.6	31.2	3.2	3.8	0.0	7.1	0.0	13.1	0.0	0.0	0.0	55.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 29. Energy Consumption Estimates by Source, Selected Years 1960-1996, Arizona**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>							Total
			Thousand Barrels																Million Kilowatthours
1960	10	136	863	699	2,787	4,721	64	724	275	12,363	125	0	22,622	0	2,975	18	0	-4,266	-
1965	337	154	1,110	478	3,528	5,545	31	1,056	299	14,997	82	0	27,125	0	4,410	0	0	1,933	-
1970	406	193	3,679	427	4,899	6,644	165	1,304	344	21,542	105	0	39,108	0	6,103	0	0	7,594	-
1975	4,392	156	2,331	358	10,143	7,075	213	1,119	472	27,704	5,942	39	55,395	0	7,240	0	0	4,887	-
1980	11,559	166	2,061	281	10,769	7,967	73	1,589	611	30,589	1,339	71	55,350	0	9,795	0	0	-24,227	-
1981	15,240	183	1,637	225	9,990	7,523	107	1,278	556	30,825	259	27	52,458	0	6,793	0	0	-28,299	-
1982	16,001	135	1,522	157	8,259	7,714	18	1,655	535	31,440	318	43	51,661	0	7,008	0	0	-29,894	-
1983	13,968	115	1,647	156	8,937	7,089	7	1,654	560	32,995	535	0	53,500	0	14,481	0	0	-34,827	-
1984	15,406	121	2,485	190	10,035	8,022	7	1,511	597	34,592	544	0	57,982	0	15,678	0	0	-42,507	-
1985	16,364	131	2,563	184	10,179	7,154	16	1,722	556	R 36,148	176	0	R 58,699	1,130	13,987	0	0	-38,272	-
1986	14,150	101	2,530	226	11,306	7,697	56	1,704	544	R 37,844	41	0	61,947	9,976	14,460	0	0	-46,574	-
1987	13,375	117	2,492	207	10,648	8,374	50	1,943	615	R 39,271	122	0	R 63,721	13,458	10,133	0	0	-40,889	-
1988	14,525	124	2,683	186	10,461	8,478	56	1,721	593	R 40,216	55	0	R 64,448	22,940	7,784	0	0	-63,865	-
1989	16,871	146	2,386	210	11,419	8,157	50	1,608	608	R 40,648	153	123	R 65,361	7,850	7,890	0	0	R -33,032	-
1990	16,419	127	2,367	194	12,048	8,501	20	1,508	626	R 39,326	28	129	R 64,746	20,598	i NA	i NA	i NA	R -60,203	-
1991	16,805	125	2,181	188	10,370	9,642	36	1,700	560	R 40,593	201	216	R 65,687	25,096	NA	NA	NA	R -73,183	-
1992	17,915	130	2,984	158	11,301	8,310	3	2,095	571	R 41,556	106	259	R 67,342	25,609	NA	NA	NA	R -78,133	-
1993	18,991	115	3,328	128	13,549	7,892	3	1,843	581	R 43,026	192	131	R 69,673	22,049	NA	NA	NA	R -68,638	-
1994	19,580	133	2,574	142	13,135	7,401	3	1,867	608	R 45,193	201	114	R 71,238	23,171	NA	NA	NA	R -70,856	-
1995	16,682	120	3,138	139	14,607	7,588	4	1,938	597	47,159	82	107	75,359	26,985	NA	NA	NA	R -63,440	-
1996	16,793	120	2,460	155	16,292	7,922	7	1,667	580	49,417	109	121	78,728	28,840	NA	NA	NA	-60,627	-
Trillion Btu																			
1960	0.2	140.3	5.7	3.5	16.2	25.3	0.4	2.9	1.7	64.9	0.8	0.0	121.5	0.0	32.0	0.2	0.0	-14.6	279.6
1965	7.0	166.1	7.4	2.4	20.6	30.1	0.2	4.2	1.8	78.8	0.5	0.0	145.9	0.0	46.1	0.0	0.0	6.6	371.7
1970	8.6	204.4	24.4	2.2	28.5	36.4	0.9	4.9	2.1	113.2	0.7	0.0	213.3	0.0	64.0	0.0	0.0	25.9	516.2
1975	92.4	164.3	15.5	1.8	59.1	39.0	1.2	4.2	2.9	145.5	37.4	0.2	306.7	0.0	75.3	0.0	0.0	16.7	655.5
1980	245.0	174.0	13.7	1.4	62.7	43.9	0.4	5.8	3.7	160.7	8.4	0.4	301.2	0.0	101.8	0.0	0.0	-82.7	739.3
1981	319.4	192.2	10.9	1.1	58.2	41.6	0.6	4.7	3.6	161.9	1.6	0.2	284.3	0.0	71.0	0.0	0.0	-96.6	770.4
1982	336.2	142.3	10.1	0.8	48.1	42.6	0.1	6.0	3.2	165.2	2.0	0.3	278.3	0.0	73.3	0.0	0.0	-102.0	728.2
1983	295.4	120.4	10.9	0.8	52.1	39.1	(s)	6.0	3.4	173.3	3.4	0.0	289.0	0.0	152.3	0.0	0.0	-118.8	738.4
1984	324.9	126.8	16.5	1.0	58.5	44.2	(s)	5.4	3.6	181.7	3.4	0.0	314.3	0.0	163.7	0.0	0.0	-145.0	784.7
1985	342.0	137.3	17.0	0.9	59.3	39.4	0.1	6.2	3.4	R 189.9	1.1	0.0	317.3	12.2	146.1	0.0	0.0	-130.6	824.4
1986	295.9	105.2	16.8	1.1	65.9	42.6	0.3	6.2	3.3	198.8	0.3	0.0	335.2	107.7	151.0	0.0	0.0	-158.9	836.2
1987	282.9	121.4	16.5	1.0	62.0	46.4	0.3	7.1	3.7	R 206.3	0.8	0.0	R 344.2	145.0	105.6	0.0	0.0	-139.5	R 856.6
1988	309.0	128.6	17.8	0.9	60.9	47.0	0.3	6.3	3.6	R 211.3	0.3	0.0	R 348.5	246.4	80.4	0.0	0.0	-217.9	R 895.0
1989	357.2	151.5	15.8	1.1	66.5	45.3	0.3	5.9	3.7	R 213.5	1.0	0.7	R 353.8	84.2	R 82.3	0.0	0.0	R -112.7	R 916.3
1990	343.6	130.8	15.7	1.0	70.2	47.3	0.1	5.5	3.8	R 206.6	0.2	0.8	R 351.1	220.0	R i 79.7	R i 19.6	R i 3.2	R -205.4	R i 942.3
1991	347.5	128.2	14.5	1.0	60.4	53.7	0.2	6.1	3.4	213.2	1.3	1.2	355.0	269.5	R 74.0	R 19.5	3.2	R -249.7	R 948.3
1992	369.0	133.7	19.8	0.8	65.8	46.4	(s)	7.6	3.5	218.3	0.7	1.5	364.4	273.4	R 71.5	R 20.6	3.3	R -266.6	R 969.0
1993	389.8	118.0	15.4	0.6	78.9	44.2	(s)	6.6	3.5	R 226.0	1.2	0.7	R 377.4	235.5	R 72.4	R 20.1	3.4	R -234.2	R 982.0
1994	402.3	137.1	17.1	0.7	76.5	41.9	(s)	6.8	3.7	R 237.4	1.3	0.6	R 386.0	247.4	R 79.1	R 21.1	3.4	R -241.8	R 1,033.9
1995	342.4	124.3	20.8	0.7	85.1	43.0	(s)	7.0	3.6	247.7	0.5	0.6	409.1	287.6	R 87.4	22.8	3.5	R -216.5	R 1,062.1
1996	343.2	121.7	16.3	0.8	94.9	44.9	(s)	6.0	3.5	259.6	0.7	0.7	427.4	306.4	98.0	23.1	3.6	-206.9	1,114.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 30. Residential Energy Consumption Estimates, Selected Years 1960-1996, Arizona**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	0	0	27	47	0	397	445	0	0	1,355	—	3,369	—
1965	0	0	0	25	59	9	727	794	0	0	2,230	—	5,326	—
1970	0	0	0	30	98	68	840	1,006	0	0	4,327	—	10,486	—
1975	0	0	0	38	216	77	542	836	0	0	7,138	—	17,217	—
1980	0	0	0	30	2	0	657	659	0	0	9,637	—	23,434	—
1981	0	0	0	26	1	0	634	635	0	0	9,530	—	22,713	—
1982	(s)	0	(s)	29	0	0	801	801	0	0	9,503	—	22,826	—
1983	0	0	0	29	1	2	920	923	0	0	10,427	—	24,980	—
1984	(s)	0	(s)	28	1	2	728	731	0	0	11,110	—	25,860	—
1985	(s)	0	(s)	29	12	3	956	971	0	0	12,249	—	28,778	—
1986	0	0	0	25	11	3	917	931	0	0	12,540	—	28,845	—
1987	(s)	0	(s)	28	19	3	1,102	1,124	0	0	13,821	—	31,579	—
1988	(s)	0	(s)	28	6	3	857	866	0	0	14,731	—	33,303	—
1989	0	0	0	27	7	(s)	823	830	0	0	15,248	—	34,249	—
1990	(s)	0	(s)	30	11	(s)	772	783	<sup>e</sup> 411	<sup>e</sup> 934	15,378	—	33,633	—
1991	(s)	(s)	(s)	31	5	1	872	878	433	948	15,641	—	34,044	—
1992	1	(s)	1	28	5	2	938	946	456	967	16,230	—	34,667	—
1993	(s)	0	(s)	28	5	1	827	833	434	987	16,705	—	35,295	—
1994	0	(s)	(s)	30	4	2	844	849	426	1,008	18,212	—	38,001	—
1995	2	<sup>R</sup> 0	2	27	4	2	971	977	472	1,032	18,036	—	37,569	—
1996	(s)	0	(s)	28	7	3	784	794	472	1,068	19,746	—	41,099	—

  

Trillion Btu														
1960	0.0	0.0	0.0	28.4	0.3	0.0	1.6	1.9	0.0	0.0	4.6	34.9	11.5	46.4
1965	0.0	0.0	0.0	27.1	0.3	(s)	2.9	3.3	0.0	0.0	7.6	38.0	18.2	56.2
1970	0.0	0.0	0.0	31.4	0.6	0.4	3.2	4.1	0.0	0.0	14.8	50.3	35.8	86.1
1975	0.0	0.0	0.0	39.8	1.3	0.4	2.0	3.7	0.0	0.0	24.4	67.9	58.7	126.6
1980	0.0	0.0	0.0	30.9	(s)	0.0	2.4	2.4	0.0	0.0	32.9	66.2	80.0	146.1
1981	0.0	0.0	0.0	27.7	(s)	0.0	2.3	2.3	0.0	0.0	32.5	62.6	77.5	140.1
1982	(s)	0.0	(s)	31.1	0.0	0.0	2.9	2.9	0.0	0.0	32.4	66.4	77.9	144.3
1983	0.0	0.0	0.0	30.6	(s)	(s)	3.3	3.3	0.0	0.0	35.6	69.5	85.2	154.7
1984	(s)	0.0	(s)	28.9	(s)	(s)	2.6	2.6	0.0	0.0	37.9	69.4	88.2	157.7
1985	(s)	0.0	(s)	29.9	0.1	(s)	3.4	3.5	0.0	0.0	41.8	75.3	98.2	173.5
1986	0.0	0.0	0.0	26.3	0.1	(s)	3.3	3.4	0.0	0.0	42.8	72.6	98.4	171.0
1987	(s)	0.0	(s)	29.5	0.1	(s)	4.0	4.2	0.0	0.0	47.2	80.8	107.7	188.5
1988	(s)	0.0	(s)	29.2	(s)	(s)	3.1	3.2	0.0	0.0	50.3	82.6	113.6	196.2
1989	0.0	0.0	0.0	28.2	(s)	(s)	3.0	3.1	0.0	0.0	52.0	83.3	<sup>R</sup> 116.9	<sup>R</sup> 200.2
1990	(s)	0.0	(s)	31.3	0.1	(s)	2.8	2.9	<sup>e</sup> 8.2	<sup>e</sup> 3.2	52.5	<sup>e</sup> 98.0	<sup>R</sup> 114.8	<sup>R</sup> 212.8
1991	(s)	(s)	(s)	32.1	(s)	(s)	3.2	3.2	8.7	3.2	53.4	100.6	<sup>R</sup> 116.2	<sup>R</sup> 216.7
1992	(s)	(s)	(s)	29.3	(s)	(s)	3.4	3.4	9.1	3.3	55.4	100.5	<sup>R</sup> 118.3	218.8
1993	(s)	0.0	(s)	29.0	(s)	(s)	3.0	3.0	8.7	3.4	57.0	101.0	<sup>R</sup> 120.4	<sup>R</sup> 221.5
1994	0.0	(s)	(s)	30.5	(s)	(s)	3.1	3.1	8.5	3.4	62.1	107.7	<sup>R</sup> 129.7	<sup>R</sup> 237.4
1995	(s)	<sup>R</sup> 0.0	(s)	27.9	(s)	(s)	3.5	3.6	9.4	3.5	61.5	106.0	128.2	234.2
1996	(s)	0.0	(s)	28.0	(s)	(s)	2.8	2.9	9.4	3.6	67.4	111.3	140.2	251.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 31. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Arizona**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	0	0	25	106	0	70	89	39	305	0	3,302	-	8,214	-
1965	0	0	0	19	131	2	128	137	17	416	0	3,044	-	7,268	-
1970	0	0	0	23	220	12	148	146	31	557	0	4,690	-	11,366	-
1975	0	0	0	33	485	14	96	177	83	855	0	7,162	-	17,277	-
1980	0	0	0	27	280	0	116	179	0	576	0	9,122	-	22,182	-
1981	0	0	0	27	60	18	112	185	36	410	0	9,263	-	22,077	-
1982	1	0	1	26	23	12	141	304	158	638	0	9,289	-	22,310	-
1983	0	0	0	25	216	2	162	167	1	548	0	9,544	-	22,866	-
1984	1	0	1	25	244	3	128	152	2	528	0	11,169	-	25,998	-
1985	1	0	1	25	476	2	169	140	(s)	787	0	12,295	-	28,885	-
1986	0	0	0	24	381	19	162	165	0	727	0	13,088	-	30,105	-
1987	(s)	0	(s)	28	530	21	194	R 357	0	R 1,102	0	14,324	-	32,730	-
1988	(s)	0	(s)	28	486	1	151	138	1	776	0	14,924	-	33,739	-
1989	0	0	0	29	374	3	145	128	0	R 651	0	15,778	-	R 35,441	-
1990	(s)	0	(s)	28	511	2	136	R 257	0	R 907	e NA	16,058	-	R 35,121	-
1991	(s)	(s)	(s)	28	303	2	154	372	11	842	NA	15,802	-	R 34,393	-
1992	2	(s)	2	27	226	1	166	308	0	700	NA	16,366	-	R 34,956	-
1993	1	0	1	28	167	1	146	191	0	506	5	16,714	-	R 35,313	-
1994	0	(s)	(s)	29	253	1	149	34	0	437	7	17,766	-	R 37,070	-
1995	3	R 0	3	28	261	1	171	35	0	469	7	18,562	-	R 38,665	-
1996	(s)	0	(s)	29	403	2	138	35	5	584	12	19,555	-	40,700	-

**Trillion Btu**

1960	0.0	0.0	0.0	26.2	0.6	0.0	0.3	0.5	0.2	1.6	0.0	11.3	39.1	28.0	67.1
1965	0.0	0.0	0.0	20.7	0.8	(s)	0.5	0.7	0.1	2.1	0.0	10.4	33.2	24.8	58.0
1970	0.0	0.0	0.0	24.0	1.3	0.1	0.6	0.8	0.2	2.9	0.0	16.0	42.9	38.8	81.7
1975	0.0	0.0	0.0	34.3	2.8	0.1	0.4	0.9	0.5	4.7	0.0	24.4	63.4	58.9	122.4
1980	0.0	0.0	0.0	28.7	1.6	0.0	0.4	0.9	0.0	3.0	0.0	31.1	62.9	75.7	138.5
1981	0.0	0.0	0.0	28.2	0.3	0.1	0.4	1.0	0.2	2.1	0.0	31.6	61.9	75.3	137.2
1982	(s)	0.0	(s)	27.5	0.1	0.1	0.5	1.6	1.0	3.3	0.0	31.7	62.5	76.1	138.6
1983	0.0	0.0	0.0	25.7	1.3	(s)	0.6	0.9	(s)	2.7	0.0	32.6	61.0	78.0	139.1
1984	(s)	0.0	(s)	26.5	1.4	(s)	0.5	0.8	(s)	2.7	0.0	38.1	67.3	88.7	156.0
1985	(s)	0.0	(s)	26.5	2.8	(s)	0.6	0.7	(s)	4.1	0.0	41.9	72.6	98.6	171.2
1986	0.0	0.0	0.0	25.0	2.2	0.1	0.6	0.9	0.0	3.8	0.0	44.7	73.4	102.7	176.1
1987	(s)	0.0	(s)	28.7	3.1	0.1	0.7	1.9	0.0	5.8	0.0	48.9	83.3	111.7	195.0
1988	(s)	0.0	(s)	29.3	2.8	(s)	0.6	0.7	(s)	4.1	0.0	50.9	84.3	115.1	199.4
1989	0.0	0.0	0.0	29.8	2.2	(s)	0.5	0.7	0.0	3.4	0.0	53.8	87.1	R 120.9	R 208.0
1990	(s)	0.0	(s)	29.3	3.0	(s)	0.5	1.3	0.0	4.8	e NA	54.8	88.9	R 119.8	R 208.8
1991	(s)	(s)	(s)	28.3	1.8	(s)	0.6	2.0	0.1	4.4	NA	53.9	86.5	R 117.4	R 203.9
1992	(s)	(s)	0.1	27.9	1.3	(s)	0.6	1.6	0.0	3.5	NA	55.8	87.4	R 119.3	206.6
1993	(s)	0.0	(s)	28.3	1.0	(s)	0.5	1.0	0.0	2.5	0.1	57.0	R 88.0	R 120.5	R 208.5
1994	0.0	(s)	(s)	30.0	1.5	(s)	0.5	0.2	0.0	2.2	0.1	60.6	R 93.0	R 126.5	R 219.4
1995	0.1	R 0.0	0.1	29.3	1.5	(s)	0.6	0.2	0.0	2.3	0.1	63.3	R 95.2	R 131.9	R 227.1
1996	(s)	0.0	(s)	29.3	2.3	(s)	0.5	0.2	(s)	3.1	0.2	66.7	99.3	138.9	238.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 32. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Arizona**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	10	14	863	1,227	64	222	81	515	27	0	3,000	0	0	0	1,481	--	3,683	--
1965	4	55	1,110	1,545	21	161	93	437	20	0	3,387	0	0	0	3,331	--	7,952	--
1970	5	58	3,679	1,387	85	253	115	456	55	0	6,031	13	0	0	4,751	--	11,514	--
1975	133	51	2,331	3,113	122	430	205	440	102	39	6,781	14	0	0	6,868	--	16,566	--
1980	643	38	2,061	3,570	73	739	264	309	154	71	7,241	15	0	0	8,003	--	19,461	--
1981	1,214	47	1,637	2,994	89	387	254	270	21	27	5,678	15	0	0	10,033	--	23,910	--
1982	1,516	30	1,522	2,174	6	599	231	214	15	43	4,804	15	0	0	8,071	--	19,385	--
1983	1,504	30	1,647	2,221	2	438	242	186	5	0	4,741	15	0	0	7,912	--	18,957	--
1984	1,804	29	2,485	2,510	2	R 525	258	250	13	0	6,042	15	0	0	7,467	--	17,381	--
1985	1,915	17	2,563	1,850	11	505	241	404	31	0	5,605	15	0	0	8,457	--	19,869	--
1986	2,289	8	2,530	2,782	33	541	235	R 419	38	0	R 6,579	15	0	0	8,358	--	19,225	--
1987	669	18	2,492	2,440	26	586	266	R 406	17	0	R 6,233	15	0	0	8,494	--	19,408	--
1988	593	24	2,683	2,031	52	648	257	405	31	0	6,107	15	0	0	9,261	--	20,938	--
1989	689	21	2,386	3,078	47	576	263	R 420	6	123	R 6,898	15	0	0	9,722	--	R 21,838	--
1990	660	18	2,367	3,103	17	R 545	271	R 503	18	129	R 6,952	f NA	f NA	f NA	10,034	--	R 21,945	--
1991	689	19	2,181	2,617	34	617	242	368	176	216	6,452	NA	NA	NA	10,405	--	R 22,647	--
1992	632	20	2,984	2,401	1	934	247	346	94	259	7,265	NA	NA	NA	11,055	--	R 23,613	--
1993	674	21	2,328	1,707	1	R 812	251	338	176	131	5,745	NA	NA	NA	10,989	--	R 23,218	--
1994	727	26	2,574	1,784	(s)	789	263	366	45	114	5,937	NA	NA	NA	11,303	--	R 23,585	--
1995	657	28	3,138	2,649	1	745	258	410	70	107	7,377	NA	NA	NA	11,992	--	R 24,979	--
1996	675	27	2,460	2,768	2	707	251	437	81	121	6,826	NA	NA	NA	12,783	--	26,605	--

**Trillion Btu**

1960	0.2	14.2	5.7	7.1	0.4	0.9	0.5	2.7	0.2	0.0	17.5	0.0	0.0	0.0	5.1	36.9	12.6	49.5
1965	0.1	59.4	7.4	9.0	0.1	0.6	0.6	2.3	0.1	0.0	20.1	0.0	0.0	0.0	11.4	90.9	27.1	118.1
1970	0.1	61.2	24.4	8.1	0.5	1.0	0.7	2.4	0.3	0.0	37.4	0.1	0.0	0.0	16.2	115.0	39.3	154.3
1975	2.6	53.4	15.5	18.1	0.7	1.6	1.2	2.3	0.6	0.2	40.3	0.1	0.0	0.0	23.4	119.9	56.5	176.4
1980	13.1	39.5	13.7	20.8	0.4	2.7	1.6	1.6	1.0	0.4	42.2	0.2	0.0	0.0	27.3	122.3	66.4	188.7
1981	24.7	49.9	10.9	17.4	0.5	1.4	1.5	1.4	0.1	0.2	33.5	0.2	0.0	0.0	34.2	142.4	81.6	224.0
1982	30.8	31.4	10.1	12.7	(s)	2.2	1.4	1.1	0.1	0.3	27.9	0.2	0.0	0.0	27.5	117.7	66.1	183.9
1983	30.3	31.1	10.9	12.9	(s)	1.6	1.5	1.0	(s)	0.0	27.9	0.2	0.0	0.0	27.0	116.5	64.7	181.2
1984	36.6	30.5	16.5	14.6	(s)	1.9	1.6	1.3	0.1	0.0	36.0	0.2	0.0	0.0	25.5	128.7	59.3	188.0
1985	38.8	17.3	17.0	10.8	0.1	1.8	1.5	2.1	0.2	0.0	33.4	0.2	0.0	0.0	28.9	118.5	67.8	186.3
1986	46.3	8.8	16.8	16.2	0.2	2.0	1.4	2.2	0.2	0.0	39.0	0.2	0.0	0.0	28.5	122.8	65.6	188.4
1987	13.3	18.4	16.5	14.2	0.1	2.1	1.6	2.1	0.1	0.0	36.9	0.2	0.0	0.0	29.0	97.7	66.2	164.0
1988	12.3	25.0	17.8	11.8	0.3	2.4	1.6	2.1	0.2	0.0	36.2	0.2	0.0	0.0	31.6	105.2	71.4	176.7
1989	14.3	21.6	15.8	17.9	0.3	2.1	1.6	2.2	(s)	0.7	40.7	0.2	0.0	0.0	33.2	109.9	R 74.5	R 184.4
1990	13.3	19.0	15.7	18.1	0.1	2.0	1.6	2.6	0.1	0.8	41.0	f 0.0	f 11.1	f 0.0	34.2	f 118.6	R 74.9	R 193.5
1991	13.7	19.7	14.5	15.2	0.2	2.2	1.5	1.9	1.1	1.2	37.9	0.0	10.7	0.0	35.5	117.5	R 77.3	R 194.8
1992	12.8	20.4	19.8	14.0	(s)	3.4	1.5	1.8	0.6	1.5	42.6	0.0	11.3	0.0	37.7	124.8	R 80.6	205.4
1993	13.5	21.8	15.4	9.9	(s)	2.9	1.5	1.8	1.1	0.7	33.4	0.0	11.0	0.0	37.5	117.3	79.2	196.5
1994	14.7	26.7	17.1	10.4	(s)	2.9	1.6	1.9	0.3	0.6	34.8	0.0	R 11.8	0.0	38.6	R 126.4	R 80.5	R 206.9
1995	13.1	28.8	20.8	15.4	(s)	2.7	1.6	2.2	0.4	0.6	43.7	0.0	R 11.2	0.0	40.9	R 137.7	85.2	R 222.9
1996	13.4	27.3	16.3	16.1	(s)	2.6	1.5	2.3	0.5	0.7	40.0	0.0	11.7	0.0	43.6	136.0	90.8	226.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

--=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 33. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Arizona**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	(s)	16	699	1,404	4,721	34	193	11,759	17	18,829	0	0	-	0	-
1965	(s)	18	478	1,790	5,545	40	206	14,423	0	22,482	0	0	-	0	-
1970	(s)	24	427	3,192	6,644	63	229	20,940	0	31,494	0	0	-	0	-
1975	(s)	17	358	4,756	6,995	51	267	27,087	0	39,514	0	0	-	0	-
1980	0	21	281	6,480	7,967	78	347	30,100	0	45,253	0	0	-	0	-
1981	0	24	225	6,639	7,523	146	333	30,369	0	45,236	0	0	-	0	-
1982	0	18	157	5,807	7,714	114	303	30,923	0	45,017	0	0	-	0	-
1983	0	12	156	6,282	7,089	134	318	32,642	0	46,621	0	0	-	0	-
1984	0	14	190	7,100	8,022	130	339	34,190	0	R 49,970	0	0	-	0	-
1985	0	19	184	7,630	7,154	92	316	R 35,604	0	R 50,979	0	0	-	0	-
1986	0	13	226	7,892	7,697	85	309	R 37,260	0	R 53,468	0	0	-	0	-
1987	0	17	207	7,331	8,374	60	349	R 38,508	0	R 54,830	0	0	-	0	-
1988	0	18	186	7,742	8,478	65	337	R 39,673	0	R 56,480	0	0	-	0	-
1989	0	18	210	7,746	8,157	63	345	R 40,100	0	R 56,621	0	0	-	0	-
1990	0	25	194	8,223	8,501	55	355	R 38,566	0	R 55,895	R e 3,119	0	-	0	-
1991	0	24	188	7,300	9,642	57	318	R 39,853	0	R 57,357	R 2,472	0	-	0	-
1992	0	23	158	8,546	8,310	57	324	R 40,902	0	R 58,297	R 3,004	0	-	0	-
1993	0	17	128	11,575	7,892	58	330	R 42,497	0	R 62,479	R 3,353	0	-	0	-
1994	0	25	142	11,026	7,401	84	345	R 44,793	0	R 63,791	R 8,691	0	-	0	-
1995	0	18	139	11,586	7,588	51	339	46,714	0	R 66,417	R 26,962	0	-	0	-
1996	0	17	155	13,013	7,922	38	329	48,944	0	70,400	22,783	0	-	0	-

  

Trillion Btu															
1960	(s)	16.5	3.5	8.2	25.3	0.1	1.2	61.8	0.1	100.2	0.0	0.0	116.7	0.0	116.7
1965	(s)	19.4	2.4	10.4	30.1	0.2	1.2	75.8	0.0	120.1	0.0	0.0	139.4	0.0	139.4
1970	(s)	25.4	2.2	18.6	36.4	0.2	1.4	110.0	0.0	168.8	0.0	0.0	194.1	0.0	194.1
1975	(s)	17.9	1.8	27.7	38.6	0.2	1.6	142.3	0.0	212.2	0.0	0.0	230.1	0.0	230.1
1980	0.0	22.3	1.4	37.7	43.9	0.3	2.1	158.1	0.0	243.6	0.0	0.0	265.9	0.0	265.9
1981	0.0	25.7	1.1	38.7	41.6	0.5	2.0	159.5	0.0	243.5	0.0	0.0	269.1	0.0	269.1
1982	0.0	19.5	0.8	33.8	42.6	0.4	1.8	162.4	0.0	241.9	0.0	0.0	261.4	0.0	261.4
1983	0.0	13.0	0.8	36.6	39.1	0.5	1.9	171.5	0.0	R 250.4	0.0	0.0	263.4	0.0	263.4
1984	0.0	14.3	1.0	41.4	44.2	0.5	2.1	179.6	0.0	R 268.6	0.0	0.0	283.0	0.0	283.0
1985	0.0	19.4	0.9	44.4	39.4	0.3	1.9	187.0	0.0	R 274.1	0.0	0.0	R 293.5	0.0	R 293.5
1986	0.0	13.1	1.1	46.0	42.6	0.3	1.9	195.7	0.0	287.6	0.0	0.0	300.7	0.0	300.7
1987	0.0	17.3	1.0	42.7	46.4	0.2	2.1	R 202.3	0.0	R 294.8	0.0	0.0	R 312.0	0.0	R 312.0
1988	0.0	19.0	0.9	45.1	47.0	0.2	2.0	R 208.4	0.0	R 303.7	0.0	0.0	R 322.7	0.0	R 322.7
1989	0.0	19.2	1.1	45.1	45.3	0.2	2.1	R 210.6	0.0	R 304.4	0.0	0.0	R 323.7	0.0	R 323.7
1990	0.0	26.1	1.0	47.9	47.3	0.2	2.2	R 202.6	0.0	R 301.1	R e 0.2	0.0	R e 327.2	0.0	R e 327.2
1991	0.0	24.1	1.0	42.5	53.7	0.2	1.9	209.3	0.0	R 308.7	R 0.2	0.0	332.8	0.0	332.8
1992	0.0	24.1	0.8	49.8	46.4	0.2	2.0	214.9	0.0	R 314.0	R 0.2	0.0	338.2	0.0	338.2
1993	0.0	17.9	0.6	67.4	44.2	0.2	2.0	223.2	0.0	337.7	R 0.3	0.0	355.6	0.0	355.6
1994	0.0	25.7	0.7	64.2	41.9	0.3	2.1	R 235.3	0.0	R 344.6	R 0.7	0.0	R 370.2	0.0	R 370.2
1995	0.0	19.1	0.7	67.5	43.0	0.2	2.1	245.4	0.0	358.8	R 2.1	0.0	378.0	0.0	378.0
1996	0.0	17.5	0.8	75.8	44.9	0.1	2.0	257.1	0.0	380.7	1.7	0.0	398.3	0.0	398.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 34. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Arizona**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	53	41	3	0	44	0	2,975	18	0	0	--
1965	333	0	333	37	44	3	0	47	0	4,410	0	0	0	--
1970	401	0	401	59	19	1	0	20	0	6,089	0	0	0	--
1975	4,259	0	4,259	18	5,756	1,653	0	7,410	0	7,226	0	0	0	--
1980	10,916	0	10,916	50	1,185	436	0	1,622	0	9,780	0	0	0	--
1981	14,026	0	14,026	58	203	296	0	499	0	6,777	0	0	0	--
1982	14,484	0	14,484	31	145	256	0	400	0	6,993	0	0	0	--
1983	12,464	0	12,464	19	529	218	0	747	0	14,466	0	0	0	--
1984	13,601	0	13,601	25	530	180	0	710	0	15,663	0	0	0	--
1985	14,448	0	14,448	42	145	211	0	357	1,130	13,972	0	0	0	--
1986	11,861	0	11,861	31	2	240	0	242	9,976	14,444	0	0	0	--
1987	12,706	0	12,706	27	104	328	0	432	13,458	10,118	0	0	0	--
1988	13,932	0	13,932	25	22	197	0	219	22,940	7,769	0	0	0	--
1989	16,182	0	16,182	51	147	214	0	361	7,850	7,875	0	0	0	--
1990	15,758	0	15,758	24	10	200	0	210	20,598	7,667	0	0	0	--
1991	16,116	0	16,116	23	14	145	0	159	25,096	7,098	0	0	0	--
1992	17,280	0	17,280	31	11	123	0	135	25,609	6,911	0	0	0	--
1993	18,316	0	18,316	20	16	95	0	110	22,049	7,023	0	0	0	--
1994	18,853	0	18,853	24	155	68	0	224	23,171	7,670	0	0	0	--
1995	16,021	0	16,021	19	12	107	0	119	26,985	8,478	0	0	0	--
1996	16,118	0	16,118	19	23	101	0	124	28,840	9,480	0	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	55.1	0.3	(s)	0.0	0.3	0.0	32.0	0.2	0.0	0.0	87.6
1965	6.9	0.0	6.9	39.5	0.3	(s)	0.0	0.3	0.0	46.1	0.0	0.0	0.0	92.9
1970	8.5	0.0	8.5	62.4	0.1	(s)	0.0	0.1	0.0	63.9	0.0	0.0	0.0	134.9
1975	89.8	0.0	89.8	18.9	36.2	9.6	0.0	45.8	0.0	75.2	0.0	0.0	0.0	229.8
1980	231.9	0.0	231.9	52.5	7.5	2.5	0.0	10.0	0.0	101.6	0.0	0.0	0.0	396.0
1981	294.7	0.0	294.7	60.7	1.3	1.7	0.0	3.0	0.0	70.8	0.0	0.0	0.0	429.3
1982	305.4	0.0	305.4	32.9	0.9	1.5	0.0	2.4	0.0	73.1	0.0	0.0	0.0	413.8
1983	265.1	0.0	265.1	20.0	3.3	1.3	0.0	4.6	0.0	152.2	0.0	0.0	0.0	441.9
1984	288.2	0.0	288.2	26.7	3.3	1.1	0.0	4.4	0.0	163.5	0.0	0.0	0.0	482.8
1985	303.2	0.0	303.2	44.2	0.9	1.2	0.0	2.1	12.2	146.0	0.0	0.0	0.0	507.7
1986	249.6	0.0	249.6	32.0	(s)	1.4	0.0	1.4	107.7	150.9	0.0	0.0	0.0	541.6
1987	269.6	0.0	269.6	27.6	0.7	1.9	0.0	2.6	145.0	105.4	0.0	0.0	0.0	550.2
1988	296.7	0.0	296.7	26.2	0.1	1.1	0.0	1.3	246.4	80.2	0.0	0.0	0.0	650.9
1989	342.9	0.0	342.9	52.6	0.9	1.2	0.0	2.2	84.2	R 82.1	0.0	0.0	0.0	R 564.0
1990	330.3	0.0	330.3	25.1	0.1	1.2	0.0	1.2	220.0	R 79.7	0.0	0.0	0.0	R 656.4
1991	333.8	0.0	333.8	23.9	0.1	0.8	0.0	0.9	269.5	R 74.0	0.0	0.0	0.0	R 703.3
1992	356.1	0.0	356.1	31.9	0.1	0.7	0.0	0.8	273.4	R 71.5	0.0	0.0	0.0	R 733.7
1993	376.3	0.0	376.3	21.0	0.1	0.6	0.0	0.7	235.5	R 72.4	0.0	0.0	0.0	R 705.8
1994	387.6	0.0	387.6	24.3	1.0	0.4	0.0	1.4	247.4	R 79.1	0.0	0.0	0.0	R 739.7
1995	329.2	0.0	329.2	19.3	0.1	0.6	0.0	0.7	287.6	R 87.4	0.0	0.0	0.0	727.6
1996	329.8	0.0	329.8	19.5	0.1	0.6	0.0	0.7	306.4	98.0	0.0	0.0	0.0	754.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 35. Energy Consumption Estimates by Source, Selected Years 1960-1996, Arkansas**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	14	215	1,003	177	2,021	2,237	565	4,823	543	14,675	539	1,981	28,564	0	992	0	0	2,208	-
1965	6	277	1,295	482	2,828	2,094	386	5,599	468	17,922	453	2,836	34,362	0	1,080	0	0	7,475	-
1970	0	382	2,104	293	5,462	2,204	821	10,198	531	22,457	935	2,832	47,837	0	2,160	0	0	6,464	-
1975	40	258	2,276	254	9,566	1,995	688	9,467	616	27,611	9,086	3,224	64,784	4,874	3,433	0	0	18,078	-
1980	2,076	274	2,770	275	10,686	2,035	571	4,847	700	26,490	4,981	4,159	57,515	7,833	1,695	0	0	28,164	-
1981	5,914	265	2,110	249	13,103	1,747	355	3,763	671	26,306	2,611	4,160	55,075	9,075	1,235	0	0	225	-
1982	7,254	227	1,915	193	13,111	2,011	509	4,082	612	25,946	1,749	3,387	53,515	7,482	2,106	0	0	188	-
1983	10,065	207	1,832	200	13,134	1,604	2,873	4,106	641	25,993	763	2,811	53,958	7,646	3,315	0	0	-15,421	-
1984	9,435	210	757	113	13,930	2,016	2,897	3,172	684	27,334	480	3,284	54,666	10,808	2,723	0	0	-13,972	-
1985	12,682	196	1,263	86	14,911	2,030	156	3,673	637	R 26,607	735	2,448	R 52,547	9,889	4,434	0	0	-30,696	-
1986	12,849	199	982	111	13,270	1,919	52	3,803	623	R 27,900	926	1,596	R 51,181	8,876	2,813	0	0	-33,455	-
1987	12,066	170	1,018	92	13,453	2,063	44	3,503	704	R 28,575	265	1,691	R 51,409	11,369	2,407	0	0	-33,346	-
1988	12,555	217	1,373	100	14,181	2,221	51	3,552	679	R 29,540	355	1,776	R 53,829	8,895	2,785	0	0	-23,597	-
1989	11,547	250	778	103	14,522	1,938	47	3,786	697	R 29,409	372	1,765	R 53,417	8,844	3,084	0	0	-19,483	-
1990	12,092	232	495	125	14,258	1,693	38	3,463	717	R 28,997	231	1,863	R 51,880	11,282	i NA	i NA	i NA	-29,844	-
1991	12,261	209	533	144	13,478	1,792	36	3,309	641	R 28,995	146	1,640	R 50,715	12,662	NA	NA	NA	-30,280	-
1992	12,538	225	1,174	152	15,340	1,134	22	3,012	654	R 29,401	31	1,876	R 52,795	11,326	NA	NA	NA	-27,343	-
1993	11,447	231	1,453	134	15,659	1,031	28	3,478	666	R 30,472	224	1,805	R 54,951	13,522	NA	NA	NA	-20,463	-
1994	12,596	244	1,066	157	17,162	1,634	28	3,378	696	R 30,874	323	1,893	R 57,210	13,924	NA	NA	NA	-23,669	-
1995	13,540	257	1,246	143	16,551	1,179	39	3,229	684	R 32,121	223	1,817	R 57,231	11,658	NA	NA	NA	-16,541	-
1996	14,816	271	975	121	16,587	1,534	26	3,197	664	32,081	199	2,052	57,436	13,357	NA	NA	NA	-23,030	-
Trillion Btu																			
1960	0.4	222.2	6.7	0.9	11.8	12.0	3.2	19.3	3.3	77.1	3.4	11.8	149.5	0.0	10.7	0.0	0.0	7.5	390.2
1965	0.2	277.7	8.6	2.4	16.5	11.2	2.2	22.5	2.8	94.1	2.8	17.0	180.2	0.0	11.3	0.0	0.0	25.5	494.8
1970	0.0	383.5	14.0	1.5	31.8	11.9	4.7	38.5	3.2	118.0	5.9	17.0	246.4	0.0	22.7	0.0	0.0	22.1	674.6
1975	0.9	257.4	15.1	1.3	55.7	10.8	3.9	35.2	3.7	145.0	57.1	18.8	346.7	53.7	35.7	0.0	0.0	61.7	756.1
1980	36.6	274.0	18.4	1.4	62.2	11.0	3.2	17.8	4.2	139.1	31.3	23.6	312.5	85.4	17.6	0.0	0.0	96.1	822.2
1981	101.9	265.1	14.0	1.3	76.3	9.5	2.0	13.7	4.1	138.2	16.4	23.9	299.3	100.1	12.9	0.0	0.0	0.8	780.1
1982	125.2	227.4	12.7	1.0	76.4	10.9	2.9	14.8	3.7	136.3	11.0	19.5	289.1	82.9	22.0	0.0	0.0	0.6	747.2
1983	177.5	211.7	12.2	1.0	76.5	8.7	16.3	14.8	3.9	136.5	4.8	16.3	291.0	83.4	34.9	0.0	0.0	-52.6	745.8
1984	163.9	214.4	5.0	0.6	81.1	10.9	16.4	11.4	4.1	143.6	3.0	18.7	295.0	117.2	28.4	0.0	0.0	-47.7	771.3
1985	219.8	199.3	8.4	0.4	86.9	11.0	0.9	13.2	3.9	R 139.8	4.6	13.8	R 282.9	106.9	46.3	0.0	0.0	-104.7	R 750.6
1986	224.5	203.0	6.5	0.6	77.3	10.4	0.3	13.8	3.8	146.6	5.8	9.2	274.3	95.9	29.4	0.0	0.0	-114.1	R 713.0
1987	211.0	172.3	6.8	0.5	78.4	11.3	0.2	12.8	4.3	R 150.1	1.7	9.7	R 275.6	122.5	25.1	0.0	0.0	-113.8	R 692.8
1988	218.8	218.8	9.1	0.5	82.6	12.2	0.3	13.0	4.1	R 155.2	2.2	10.2	R 289.4	95.6	28.8	0.0	0.0	-80.5	R 770.8
1989	202.7	251.1	5.2	0.5	84.6	10.6	0.3	13.9	4.2	R 154.5	2.3	10.1	R 286.2	94.8	R 32.2	0.0	0.0	-66.5	R 800.6
1990	212.7	234.5	3.3	0.6	83.1	9.2	0.2	12.6	4.3	R 152.3	1.5	10.7	R 277.8	120.5	R i 38.5	R i 68.0	i 1.1	-101.8	R i 851.0
1991	216.1	212.7	3.5	0.7	78.5	9.7	0.2	12.0	3.9	152.3	0.9	9.5	271.3	136.0	R 37.1	R 66.3	1.1	-103.3	R 837.2
1992	220.7	226.6	7.8	0.8	89.4	6.2	0.1	10.9	4.0	R 154.4	0.2	10.8	284.6	120.9	R 34.9	R 68.7	1.1	-93.3	R 864.2
1993	200.4	234.4	9.6	0.7	91.2	5.7	0.2	12.5	4.0	R 160.1	1.4	10.4	295.8	144.4	R 46.5	R 70.3	1.1	-69.8	R 923.1
1994	221.9	249.8	7.1	0.8	100.0	9.1	0.2	12.3	4.2	162.2	2.0	10.9	R 308.7	148.6	R 35.7	R 68.8	1.1	-80.8	R 953.9
1995	237.4	276.6	8.3	0.7	96.4	6.7	0.2	11.7	4.1	168.7	1.4	10.5	308.8	124.2	R 33.2	R 68.5	1.1	-56.4	R 993.3
1996	260.2	277.7	6.5	0.6	96.6	8.7	0.1	11.6	4.0	168.5	1.3	11.8	309.7	141.9	28.9	71.9	1.1	-78.6	1,012.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 36. Residential Energy Consumption Estimates, Selected Years 1960-1996, Arkansas**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	33	24	62	2,831	2,918	0	0	1,339	—	3,331	—
1965	0	0	0	37	43	63	3,420	3,527	0	0	2,333	—	5,571	—
1970	0	0	0	60	70	147	6,552	6,769	0	0	4,321	—	10,472	—
1975	0	0	0	49	161	128	5,162	5,451	0	0	7,751	—	18,697	—
1980	2	0	2	47	152	0	2,142	2,294	0	0	10,227	—	24,869	—
1981	(s)	0	(s)	43	20	42	1,739	1,801	0	0	8,426	—	20,082	—
1982	1	0	1	45	14	51	1,653	1,718	0	0	8,617	—	20,696	—
1983	(s)	0	(s)	43	1	883	1,966	2,850	0	0	8,798	—	21,077	—
1984	1	0	1	46	1	777	1,811	2,589	0	0	8,764	—	20,398	—
1985	(s)	0	(s)	40	1	31	2,083	2,114	0	0	8,936	—	20,994	—
1986	0	0	0	39	1	25	2,299	2,325	0	0	9,254	—	21,286	—
1987	(s)	0	(s)	40	2	21	1,918	1,941	0	0	9,708	—	22,181	—
1988	(s)	0	(s)	43	1	25	1,877	1,904	0	0	9,946	—	22,485	—
1989	1	0	1	42	1	29	2,042	2,072	0	0	9,957	—	22,366	—
1990	(s)	0	(s)	39	(s)	20	1,851	1,871	<sup>e</sup> 246	<sup>e</sup> 331	10,558	—	23,092	—
1991	(s)	0	(s)	41	1	14	1,674	1,688	259	331	11,001	—	23,943	—
1992	(s)	1	1	39	13	7	1,498	1,518	272	332	10,440	—	22,299	—
1993	(s)	(s)	(s)	46	1	10	1,708	1,718	241	331	11,762	—	24,850	—
1994	(s)	(s)	(s)	42	1	6	1,669	1,676	237	332	11,642	—	24,292	—
1995	0	0	0	41	2	14	1,497	1,513	263	332	12,417	—	25,865	—
1996	0	0	0	46	1	12	1,490	1,503	262	333	12,934	—	26,920	—

  

Trillion Btu														
1960	0.0	0.0	0.0	34.4	0.1	0.4	11.4	11.9	0.0	0.0	4.6	50.8	11.4	62.2
1965	0.0	0.0	0.0	36.5	0.3	0.4	13.7	14.3	0.0	0.0	8.0	58.8	19.0	77.8
1970	0.0	0.0	0.0	60.0	0.4	0.8	24.8	26.0	0.0	0.0	14.7	100.8	35.7	136.5
1975	0.0	0.0	0.0	48.3	0.9	0.7	19.2	20.8	0.0	0.0	26.4	95.6	63.8	159.4
1980	0.1	0.0	0.1	46.6	0.9	0.0	7.9	8.8	0.0	0.0	34.9	90.3	84.9	175.1
1981	(s)	0.0	(s)	42.6	0.1	0.2	6.3	6.7	0.0	0.0	28.8	78.0	68.5	146.6
1982	(s)	0.0	(s)	44.7	0.1	0.3	6.0	6.3	0.0	0.0	29.4	80.5	70.6	151.1
1983	(s)	0.0	(s)	43.7	(s)	5.0	7.1	12.1	0.0	0.0	30.0	85.8	71.9	157.7
1984	(s)	0.0	(s)	46.8	(s)	4.4	6.5	10.9	0.0	0.0	29.9	87.6	69.6	157.2
1985	(s)	0.0	(s)	40.9	(s)	0.2	7.5	7.7	0.0	0.0	30.5	79.0	71.6	150.7
1986	0.0	0.0	0.0	39.0	(s)	0.1	8.4	8.5	0.0	0.0	31.6	79.1	72.6	151.8
1987	(s)	0.0	(s)	40.6	(s)	0.1	7.0	7.1	0.0	0.0	33.1	80.8	75.7	156.5
1988	(s)	0.0	(s)	43.2	(s)	0.1	6.9	7.0	0.0	0.0	33.9	84.1	76.7	160.8
1989	(s)	0.0	(s)	42.5	(s)	0.2	7.5	7.7	0.0	0.0	34.0	84.2	76.3	160.5
1990	(s)	0.0	(s)	39.5	(s)	0.1	6.7	6.8	<sup>e</sup> 4.9	<sup>e</sup> 1.1	36.0	<sup>e</sup> 88.4	<sup>R</sup> 78.8	<sup>R</sup> 167.2
1991	(s)	0.0	(s)	41.3	(s)	0.1	6.0	6.1	5.2	1.1	37.5	91.3	<sup>R</sup> 81.7	<sup>R</sup> 173.0
1992	(s)	(s)	(s)	39.7	0.1	(s)	5.4	5.5	5.4	1.1	35.6	87.5	<sup>R</sup> 76.1	163.6
1993	(s)	(s)	(s)	46.1	(s)	0.1	6.2	6.2	4.8	1.1	40.1	98.4	84.8	183.2
1994	(s)	(s)	(s)	42.4	(s)	(s)	6.1	6.1	4.7	1.1	39.7	94.1	<sup>R</sup> 82.9	177.0
1995	0.0	0.0	0.0	44.5	(s)	0.1	5.4	5.5	5.3	1.1	42.4	98.8	<sup>R</sup> 88.3	187.1
1996	0.0	0.0	0.0	47.5	(s)	0.1	5.4	5.5	5.2	1.1	44.1	103.5	91.9	195.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 37. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Arkansas**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	0	0	17	14	38	500	151	103	806	0	1,161	-	2,888	-
1965	0	0	0	28	24	39	604	127	88	883	0	1,834	-	4,379	-
1970	0	0	0	39	40	90	1,156	181	41	1,508	0	2,789	-	6,760	-
1975	0	0	0	33	92	79	911	143	1,077	2,302	0	4,382	-	10,570	-
1980	4	0	4	31	112	132	378	162	437	1,221	0	5,326	-	12,951	-
1981	(s)	0	(s)	28	176	57	307	172	149	860	0	4,814	-	11,473	-
1982	1	0	1	29	139	76	292	167	141	814	0	5,034	-	12,091	-
1983	(s)	0	(s)	28	1,516	1,719	347	132	113	3,827	0	5,099	-	12,216	-
1984	3	0	3	29	1,489	1,886	320	91	76	3,861	0	5,592	-	13,015	-
1985	1	0	1	27	1,172	84	368	119	0	1,743	0	5,848	-	13,739	-
1986	0	0	0	25	186	7	406	117	3	719	0	5,915	-	13,607	-
1987	(s)	0	(s)	25	359	5	339	130	0	833	0	6,131	-	14,008	-
1988	(s)	0	(s)	27	254	10	331	124	0	719	0	6,396	-	14,459	-
1989	2	0	2	27	440	2	360	108	0	910	0	6,566	-	R 14,749	-
1990	(s)	0	(s)	25	439	1	327	R 142	0	909	e NA	6,681	-	R 14,613	-
1991	(s)	0	(s)	26	342	2	295	81	0	720	NA	6,922	-	R 15,066	-
1992	(s)	1	1	25	378	5	264	71	4	722	NA	6,760	-	R 14,438	-
1993	(s)	(s)	(s)	29	426	5	301	28	1	762	12	7,292	-	R 15,407	-
1994	(s)	(s)	(s)	27	435	4	294	29	0	763	12	7,451	-	R 15,547	-
1995	0	0	0	27	249	5	264	29	0	547	7	7,771	-	16,188	-
1996	0	0	0	31	255	5	263	29	(s)	552	8	8,063	-	16,782	-

**Trillion Btu**

1960	0.0	0.0	0.0	17.8	0.1	0.2	2.0	0.8	0.6	3.7	0.0	4.0	25.5	9.9	35.3
1965	0.0	0.0	0.0	28.0	0.1	0.2	2.4	0.7	0.6	4.0	0.0	6.3	38.2	14.9	53.2
1970	0.0	0.0	0.0	39.3	0.2	0.5	4.4	0.9	0.3	6.3	0.0	9.5	55.2	23.1	78.2
1975	0.0	0.0	0.0	33.1	0.5	0.4	3.4	0.8	6.8	11.9	0.0	15.0	60.0	36.1	96.0
1980	0.1	0.0	0.1	30.5	0.6	0.7	1.4	0.9	2.7	6.4	0.0	18.2	55.2	44.2	99.4
1981	(s)	0.0	(s)	28.1	1.0	0.3	1.1	0.9	0.9	4.3	0.0	16.4	48.9	39.1	88.0
1982	(s)	0.0	(s)	29.3	0.8	0.4	1.1	0.9	0.9	4.1	0.0	17.2	50.6	41.3	91.9
1983	(s)	0.0	(s)	28.3	8.8	9.7	1.3	0.7	0.7	21.2	0.0	17.4	67.0	41.7	108.6
1984	0.1	0.0	0.1	29.5	8.7	10.7	1.2	0.5	0.5	21.5	0.0	19.1	70.1	44.4	114.6
1985	(s)	0.0	(s)	27.2	6.8	0.5	1.3	0.6	0.0	9.3	0.0	20.0	56.4	46.9	103.3
1986	0.0	0.0	0.0	25.3	1.1	(s)	1.5	0.6	(s)	3.2	0.0	20.2	48.7	46.4	95.1
1987	(s)	0.0	(s)	24.9	2.1	(s)	1.2	0.7	0.0	4.0	0.0	20.9	49.9	47.8	97.7
1988	(s)	0.0	(s)	27.6	1.5	0.1	1.2	R 0.6	0.0	3.4	0.0	21.8	52.9	49.3	102.2
1989	0.1	0.0	0.1	27.4	2.6	(s)	1.3	0.6	0.0	4.5	0.0	22.4	54.3	R 50.3	104.6
1990	(s)	0.0	(s)	25.3	2.6	(s)	1.2	0.7	0.0	4.5	e NA	22.8	52.6	R 49.9	R 102.5
1991	(s)	0.0	(s)	26.4	2.0	(s)	1.1	0.4	0.0	3.5	NA	23.6	53.5	51.4	104.9
1992	(s)	(s)	(s)	25.5	2.2	(s)	1.0	0.4	(s)	3.6	NA	23.1	52.2	R 49.3	101.4
1993	(s)	(s)	(s)	29.4	2.5	(s)	1.1	0.1	(s)	3.8	0.2	24.9	R 58.2	R 52.6	R 110.8
1994	(s)	(s)	(s)	28.0	2.5	(s)	1.1	0.1	0.0	3.8	0.2	25.4	R 57.5	53.0	R 110.5
1995	0.0	0.0	0.0	29.7	1.4	(s)	1.0	0.2	0.0	2.6	0.1	26.5	R 58.9	55.2	R 114.2
1996	0.0	0.0	0.0	31.8	1.5	(s)	1.0	0.2	(s)	2.6	0.2	27.5	62.1	57.3	119.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 38. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Arkansas**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	14	108	1,003	1,055	465	1,183	269	431	315	1,981	6,703	0	0	0	3,161	-	7,864	-
1965	6	134	1,295	1,057	283	1,141	163	485	291	2,836	7,551	0	0	0	4,883	-	11,660	-
1970	0	162	2,104	1,962	584	1,798	231	291	191	2,832	9,993	0	0	0	6,333	-	15,346	-
1975	40	132	2,276	2,841	480	2,715	308	169	3,634	3,224	15,646	0	0	0	5,994	-	14,459	-
1980	296	126	2,770	3,544	439	2,122	268	51	1,438	4,159	14,793	0	0	0	10,946	-	26,617	-
1981	358	129	2,110	4,612	256	1,500	257	39	1,742	4,160	14,675	0	0	0	10,055	-	23,963	-
1982	350	111	1,915	4,538	382	1,810	234	25	1,493	3,387	13,784	0	0	0	8,627	-	20,720	-
1983	436	96	1,832	4,993	271	1,405	245	16	600	2,811	12,174	0	0	0	9,301	-	22,284	-
1984	396	100	757	4,903	235	R 851	262	485	401	3,284	11,179	0	0	0	10,235	-	23,824	-
1985	379	109	1,263	6,041	41	1,076	244	630	726	2,448	12,470	0	0	0	9,049	-	21,260	-
1986	344	101	982	5,257	20	1,006	238	R 482	875	1,596	10,456	0	0	0	7,763	-	17,857	-
1987	302	67	1,018	4,662	18	1,171	270	R 470	265	1,691	R 9,564	0	0	0	8,358	-	19,097	-
1988	260	117	1,373	4,970	16	1,269	260	R 451	220	1,776	10,336	0	0	0	8,931	-	20,191	-
1989	267	141	778	3,623	16	1,313	267	R 358	238	1,765	8,357	0	0	0	9,562	-	R 21,477	-
1990	256	127	495	3,567	17	1,202	274	R 416	217	1,863	R 8,053	f NA	f NA	f NA	10,126	-	R 22,147	-
1991	283	106	533	2,675	20	1,262	246	453	145	1,640	6,974	NA	NA	NA	10,518	-	R 22,892	-
1992	295	125	1,174	4,390	9	R 1,188	250	439	27	1,876	9,353	NA	NA	NA	11,251	-	R 24,032	-
1993	330	126	1,453	3,800	13	1,400	255	NA	393	1,805	R 9,337	NA	NA	NA	12,609	-	R 26,640	-
1994	346	139	1,066	3,596	17	R 1,290	266	425	269	1,893	8,823	NA	NA	NA	13,526	-	R 28,222	-
1995	325	144	1,246	3,341	20	1,416	262	449	207	1,817	8,759	NA	NA	NA	14,483	-	R 30,169	-
1996	348	147	975	2,979	9	1,396	254	454	118	2,052	8,236	NA	NA	NA	15,139	-	31,510	-

**Trillion Btu**

1960	0.4	112.1	6.7	6.1	2.6	4.7	1.6	2.3	2.0	11.8	37.9	0.0	0.0	0.0	10.8	161.2	26.8	188.0
1965	0.2	134.2	8.6	6.2	1.6	4.6	1.0	2.5	1.8	17.0	43.3	0.0	0.0	0.0	16.7	194.3	39.8	234.1
1970	0.0	162.8	14.0	11.4	3.3	6.8	1.4	1.5	1.2	17.0	56.6	0.0	0.0	0.0	21.6	241.0	52.4	293.3
1975	0.9	131.7	15.1	16.5	2.7	10.1	1.9	0.9	22.8	18.8	88.8	0.0	0.0	0.0	20.5	241.9	49.3	291.2
1980	6.3	125.1	18.4	20.6	2.5	7.8	1.6	0.3	9.0	23.6	83.9	0.0	0.0	0.0	37.3	252.7	90.8	343.5
1981	7.7	128.5	14.0	26.9	1.5	5.5	1.6	0.2	10.9	23.9	84.4	0.0	0.0	0.0	34.3	254.9	81.8	336.6
1982	7.5	110.2	12.7	26.4	2.2	6.5	1.4	0.1	9.4	19.5	78.3	0.0	0.0	0.0	29.4	225.4	70.7	296.1
1983	9.3	97.6	12.2	29.1	1.5	5.1	1.5	0.1	3.8	16.3	69.5	0.0	0.0	0.0	31.7	208.2	76.0	284.2
1984	8.5	101.6	5.0	28.6	1.3	3.1	1.6	2.6	2.5	18.7	63.4	0.0	0.0	0.0	34.9	208.5	81.3	289.7
1985	8.1	110.9	8.4	35.2	0.2	3.9	1.5	3.3	4.6	13.8	70.9	0.0	0.0	0.0	30.9	220.8	72.5	293.3
1986	7.7	102.7	6.5	30.6	0.1	3.7	1.4	2.5	5.5	9.2	59.6	0.0	0.0	0.0	26.5	196.5	60.9	257.4
1987	6.7	68.0	6.8	27.2	0.1	4.3	1.6	2.5	1.7	9.7	53.7	0.0	0.0	0.0	28.5	156.9	65.2	222.1
1988	5.8	117.7	9.1	29.0	0.1	4.6	1.6	2.4	1.4	10.2	58.3	0.0	0.0	0.0	30.5	212.3	68.9	281.2
1989	6.0	141.5	5.2	21.1	0.1	4.8	1.6	1.9	1.5	10.1	46.3	0.0	0.0	0.0	32.6	226.4	R 73.3	R 299.7
1990	5.8	128.3	3.3	20.8	0.1	4.4	1.7	2.2	1.4	10.7	44.4	f 0.0	f 62.9	f 0.0	34.6	f 276.0	R 75.6	f 351.5
1991	6.8	108.0	3.5	15.6	0.1	4.6	1.5	2.4	0.9	9.5	38.1	0.0	61.0	0.0	35.9	249.8	R 78.1	327.9
1992	7.1	125.5	7.8	25.6	0.1	4.3	1.5	2.3	0.2	10.8	52.5	(s)	63.1	0.0	38.4	286.7	82.0	R 368.7
1993	7.7	127.4	9.6	22.1	0.1	5.0	1.5	2.1	1.4	10.4	52.3	(s)	65.1	0.0	43.0	295.6	90.9	386.5
1994	8.6	141.7	7.1	20.9	0.1	4.7	1.6	2.2	1.7	10.9	49.3	(s)	R 63.8	0.0	46.2	R 309.5	R 96.3	R 405.8
1995	7.8	156.4	8.3	19.5	0.1	5.1	1.6	2.4	1.3	10.5	48.7	0.0	R 63.0	0.0	49.4	R 325.4	102.9	R 428.3
1996	8.4	150.7	6.5	17.3	0.1	5.0	1.5	2.4	0.7	11.8	45.4	(s)	66.5	0.0	51.7	322.7	107.5	430.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 39. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Arkansas**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	(s)	9	177	926	2,237	309	274	14,093	3	18,019	0	0	-	0	-
1965	(s)	11	482	1,703	2,094	434	305	17,310	36	22,364	0	0	-	0	-
1970	0	13	293	3,383	2,204	692	300	21,985	5	28,862	0	0	-	0	-
1975	(s)	12	254	6,410	1,995	679	308	27,299	11	36,957	0	0	-	0	-
1980	0	11	275	6,699	2,035	205	432	26,276	0	35,922	0	0	-	0	-
1981	0	10	249	8,262	1,747	217	414	26,096	0	36,985	0	0	-	0	-
1982	0	9	193	8,390	2,011	326	378	25,754	0	37,052	0	0	-	0	-
1983	0	8	200	6,578	1,604	387	396	25,846	0	35,011	0	0	-	0	-
1984	0	10	113	7,522	2,016	R 190	422	26,757	0	R 37,019	0	0	-	0	-
1985	0	8	86	7,685	2,030	147	393	R 25,857	0	R 36,199	0	0	-	0	-
1986	0	6	111	7,812	1,919	92	384	27,302	0	37,620	0	0	-	0	-
1987	0	6	92	8,420	2,063	75	435	R 27,975	0	R 39,060	0	0	-	0	-
1988	0	8	100	8,825	2,221	74	419	R 28,965	0	R 40,605	0	0	-	0	-
1989	0	10	103	10,315	1,938	71	430	R 28,943	0	R 41,800	0	0	-	0	-
1990	0	9	125	10,111	1,693	R 83	442	R 28,438	0	R 40,892	R e 1,771	0	-	0	-
1991	0	8	144	10,333	1,792	78	396	R 28,461	0	R 41,204	R 1,404	0	-	0	-
1992	0	8	152	10,464	1,134	62	404	R 28,891	0	R 41,106	R 1,706	0	-	0	-
1993	0	10	134	11,307	1,031	68	411	R 30,051	0	R 43,003	R 1,904	0	-	0	-
1994	0	12	157	13,007	1,634	R 125	429	R 30,421	0	R 45,772	R 342	0	-	0	-
1995	0	11	143	12,865	1,179	51	422	R 31,644	0	R 46,304	R 375	0	-	0	-
1996	0	13	121	13,255	1,534	48	410	31,599	0	46,966	22	0	-	0	-

**Trillion Btu**

1960	(s)	9.5	0.9	5.4	12.0	1.2	1.7	74.0	(s)	95.2	0.0	0.0	104.7	0.0	104.7
1965	(s)	11.4	2.4	9.9	11.2	1.7	1.8	90.9	0.2	118.3	0.0	0.0	129.7	0.0	129.7
1970	0.0	13.5	1.5	19.7	11.9	2.6	1.8	115.5	(s)	153.0	0.0	0.0	166.5	0.0	166.5
1975	(s)	12.2	1.3	37.3	10.8	2.5	1.9	143.4	0.1	197.3	0.0	0.0	209.4	0.0	209.4
1980	0.0	11.4	1.4	39.0	11.0	0.8	2.6	138.0	0.0	192.9	0.0	0.0	204.2	0.0	204.2
1981	0.0	9.6	1.3	48.1	9.5	0.8	2.5	137.1	0.0	199.2	0.0	0.0	208.9	0.0	208.9
1982	0.0	8.6	1.0	48.9	10.9	1.2	2.3	135.3	0.0	199.6	0.0	0.0	208.2	0.0	208.2
1983	0.0	7.7	1.0	38.3	8.7	1.4	2.4	135.8	0.0	187.6	0.0	0.0	195.2	0.0	195.2
1984	0.0	10.6	0.6	43.8	10.9	0.7	2.6	140.6	0.0	R 199.1	0.0	0.0	R 209.7	0.0	R 209.7
1985	0.0	8.3	0.4	44.8	11.0	0.5	2.4	R 135.8	0.0	R 195.0	0.0	0.0	R 203.3	0.0	R 203.3
1986	0.0	6.1	0.6	45.5	10.4	0.3	2.3	143.4	0.0	202.6	0.0	0.0	208.7	0.0	208.7
1987	0.0	5.9	0.5	49.0	11.3	0.3	2.6	R 147.0	0.0	R 210.6	0.0	0.0	R 216.5	0.0	R 216.5
1988	0.0	7.6	0.5	51.4	12.2	0.3	2.5	R 152.2	0.0	R 219.0	0.0	0.0	R 226.6	0.0	R 226.6
1989	0.0	9.7	0.5	60.1	10.6	0.3	2.6	152.0	0.0	R 226.1	0.0	0.0	R 235.8	0.0	R 235.8
1990	0.0	8.7	0.6	58.9	9.2	0.3	2.7	R 149.4	0.0	R 221.1	R e 0.1	0.0	R e 229.9	0.0	R e 229.9
1991	0.0	8.5	0.7	60.2	9.7	0.3	2.4	149.5	0.0	222.8	R 0.1	0.0	231.3	0.0	231.3
1992	0.0	8.1	0.8	61.0	6.2	0.2	2.4	151.8	0.0	222.4	R 0.1	0.0	R 230.5	0.0	R 230.5
1993	0.0	9.8	0.7	65.9	5.7	0.2	2.5	R 157.9	0.0	R 232.8	R 0.1	0.0	R 242.6	0.0	R 242.6
1994	0.0	12.1	0.8	75.8	9.1	0.5	2.6	R 159.8	0.0	248.5	(s)	0.0	260.6	0.0	260.6
1995	0.0	12.4	0.7	74.9	6.7	0.2	2.6	166.2	0.0	251.3	(s)	0.0	263.7	0.0	263.7
1996	0.0	12.8	0.6	77.2	8.7	0.2	2.5	166.0	0.0	255.2	(s)	0.0	268.0	0.0	268.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 40. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Arkansas**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	47	118	1	0	119	0	992	0	0	0	-
1965	0	0	0	68	38	(s)	0	38	0	1,080	0	0	0	-
1970	0	0	0	107	698	8	0	705	0	2,160	0	0	0	-
1975	0	0	0	32	4,365	62	0	4,427	4,874	3,433	0	0	0	-
1980	1,774	0	1,774	59	3,106	180	0	3,285	7,833	1,695	0	0	0	-
1981	5,555	0	5,555	55	721	33	0	754	9,075	1,235	0	0	0	-
1982	6,902	0	6,902	33	116	31	0	146	7,482	2,106	0	0	0	-
1983	9,628	0	9,628	33	50	47	0	97	7,646	3,315	0	0	0	-
1984	9,036	0	9,036	25	3	15	0	18	10,808	2,723	0	0	0	-
1985	12,302	0	12,302	11	8	12	0	21	9,889	4,434	0	0	0	-
1986	12,505	0	12,505	28	48	13	0	61	8,876	2,813	0	0	0	-
1987	11,764	0	11,764	32	(s)	10	0	10	11,369	2,407	0	0	0	-
1988	12,295	0	12,295	22	136	130	0	265	8,895	2,785	0	0	0	-
1989	11,278	0	11,278	29	135	143	0	278	8,844	3,084	0	0	0	-
1990	11,836	0	11,836	32	15	140	0	155	11,282	3,698	0	0	0	-
1991	11,978	0	11,978	28	1	127	0	129	12,662	3,561	0	0	0	-
1992	12,241	0	12,241	27	(s)	95	0	95	11,326	3,380	0	0	0	-
1993	11,116	0	11,116	21	5	126	0	131	13,522	4,508	0	0	0	-
1994	12,250	0	12,250	25	54	122	0	176	13,924	3,462	0	0	0	-
1995	13,216	0	13,216	33	15	94	0	109	11,658	3,218	0	0	0	-
1996	14,467	0	14,467	34	81	97	0	179	13,357	2,797	0	0	0	-

**Trillion Btu**

1960	0.0	0.0	0.0	48.4	0.7	(s)	0.0	0.7	0.0	10.7	0.0	0.0	0.0	59.8
1965	0.0	0.0	0.0	67.6	0.2	(s)	0.0	0.2	0.0	11.3	0.0	0.0	0.0	79.1
1970	0.0	0.0	0.0	107.9	4.4	(s)	0.0	4.4	0.0	22.7	0.0	0.0	0.0	135.0
1975	0.0	0.0	0.0	32.2	27.4	0.4	0.0	27.8	53.7	35.7	0.0	0.0	0.0	149.4
1980	30.2	0.0	30.2	60.4	19.5	1.0	0.0	20.6	85.4	17.6	0.0	0.0	0.0	214.2
1981	94.2	0.0	94.2	56.2	4.5	0.2	0.0	4.7	100.1	12.9	0.0	0.0	0.0	268.1
1982	117.6	0.0	117.6	34.5	0.7	0.2	0.0	0.9	82.9	22.0	0.0	0.0	0.0	257.9
1983	168.1	0.0	168.1	34.4	0.3	0.3	0.0	0.6	83.4	34.9	0.0	0.0	0.0	321.4
1984	155.3	0.0	155.3	25.9	(s)	0.1	0.0	0.1	117.2	28.4	0.0	0.0	0.0	326.9
1985	211.7	0.0	211.7	12.0	0.1	0.1	0.0	0.1	106.9	46.3	0.0	0.0	0.0	377.1
1986	216.8	0.0	216.8	29.9	0.3	0.1	0.0	0.4	95.9	29.4	0.0	0.0	0.0	372.4
1987	204.3	0.0	204.3	33.1	(s)	0.1	0.0	0.1	122.5	25.1	0.0	0.0	0.0	385.0
1988	213.0	0.0	213.0	22.7	0.9	0.8	0.0	1.6	95.6	28.8	0.0	0.0	0.0	361.7
1989	196.7	0.0	196.7	30.0	0.8	0.8	0.0	1.7	94.8	R 32.2	0.0	0.0	0.0	R 355.4
1990	206.9	0.0	206.9	32.7	0.1	0.8	0.0	0.9	120.5	R 38.5	0.0	0.0	0.0	R 399.4
1991	209.2	0.0	209.2	28.5	(s)	0.7	0.0	0.7	136.0	R 37.1	0.0	0.0	0.0	R 411.6
1992	213.6	0.0	213.6	27.7	(s)	0.6	0.0	0.6	120.9	R 34.9	0.0	0.0	0.0	R 397.7
1993	192.6	0.0	192.6	21.8	(s)	0.7	0.0	0.8	144.4	R 46.5	0.0	0.0	0.0	R 406.1
1994	213.3	0.0	213.3	25.6	0.3	0.7	0.0	1.0	148.6	R 35.7	0.0	0.0	0.0	R 424.3
1995	229.6	0.0	229.6	33.5	0.1	0.5	0.0	0.6	124.2	R 33.2	0.0	0.0	0.0	421.2
1996	251.8	0.0	251.8	34.8	0.5	0.6	0.0	1.1	141.9	28.9	0.0	0.0	0.0	458.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 41. Energy Consumption Estimates by Source, Selected Years 1960-1996, California**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	1,343	1,258	10,665	5,383	26,683	25,818	1,017	8,888	3,781	137,025	80,575	26,994	326,829	(s)	17,045	(s)	33	3,463	-	
1965	2,380	1,690	11,892	3,342	35,105	40,150	817	11,029	4,482	169,900	69,745	29,401	375,863	270	30,520	64	189	-1,406	-	
1970	2,327	2,126	12,084	2,184	39,221	59,614	1,004	15,532	3,967	214,064	70,324	36,713	454,707	3,132	38,071	48	525	39,011	-	
1975	2,151	1,833	13,146	1,640	42,335	62,607	2,027	19,264	3,632	241,508	111,086	38,045	535,291	6,071	40,103	20	3,246	113,596	-	
1980	2,669	1,808	18,431	285	62,277	63,201	2,117	19,197	4,907	253,593	148,701	47,941	620,652	4,920	40,868	20	5,073	122,895	-	
1981	3,231	1,858	9,831	132	67,523	59,089	1,086	17,123	4,706	252,914	130,662	31,996	575,061	3,206	29,772	23	5,686	151,531	-	
1982	2,864	1,683	9,818	1,145	67,264	56,541	534	16,270	4,291	249,912	81,658	32,188	519,622	3,735	50,232	13	4,843	172,957	-	
1983	1,456	1,535	11,117	1,167	68,093	57,359	286	16,259	4,493	256,139	68,521	57,261	540,696	5,613	56,912	5	6,077	166,213	-	
1984	1,669	1,670	15,262	1,047	76,341	66,640	906	20,667	4,791	265,187	76,540	56,943	584,325	14,144	43,222	(s)	7,690	186,931	-	
1985	1,942	1,846	13,848	1,354	72,431	67,028	916	20,497	4,465	R 267,368	66,724	52,908	R 567,539	19,729	35,772	4	9,210	173,717	-	
1986	1,865	1,531	15,373	1,338	75,115	75,176	491	20,119	4,366	R 279,569	58,047	50,263	R 579,857	26,215	45,239	30	10,135	180,788	-	
1987	1,934	1,935	16,458	1,084	74,102	79,857	685	22,328	4,936	R 292,909	66,638	50,750	R 609,747	30,387	32,308	24	10,613	170,101	-	
1988	2,209	1,804	15,343	1,312	84,492	82,620	225	22,798	4,760	R 303,621	68,917	57,870	R 641,957	30,863	30,760	11	10,119	210,270	-	
1989	2,551	1,838	14,996	1,303	81,819	90,291	192	24,697	4,882	R 310,918	67,675	54,107	R 650,881	32,519	33,752	4	9,157	R 214,573	-	
1990	2,899	1,864	14,862	1,106	82,559	94,907	145	19,992	5,024	R 305,983	64,890	52,963	R 642,431	32,693	NA	NA	NA	R 278,176	-	
1991	2,816	1,971	14,251	1,091	75,409	90,064	139	18,596	4,495	R 298,698	45,571	41,871	R 590,185	31,542	NA	NA	NA	R 291,880	-	
1992	2,821	2,031	13,558	1,059	67,259	86,688	75	21,088	4,583	R 315,643	34,696	46,017	R 590,665	35,244	NA	NA	NA	R 263,931	-	
1993	2,453	1,976	12,433	819	59,089	89,244	131	16,655	4,666	R 308,726	37,615	42,961	R 572,340	31,581	NA	NA	NA	R 235,131	-	
1994	2,498	2,123	12,237	793	64,921	88,793	120	18,099	4,877	R 307,653	42,525	44,366	R 594,386	33,752	NA	NA	NA	R 241,860	-	
1995	2,618	1,925	12,212	807	68,710	95,305	164	14,798	4,793	R 313,464	46,957	41,048	R 598,257	30,246	NA	NA	NA	R 257,441	-	
1996	2,317	1,807	12,399	769	67,412	103,773	294	11,198	4,652	318,257	40,949	46,620	606,323	34,097	NA	NA	NA	297,828	-	
Trillion Btu																				
1960	35.9	1,301.8	70.8	27.2	155.4	140.7	5.8	35.7	22.9	719.8	506.6	161.8	1,846.5	(s)	183.4	(s)	0.8	11.8	3,380.3	
1965	63.7	1,813.2	78.9	16.9	204.5	222.2	4.6	44.2	27.2	892.5	438.5	173.2	2,102.7	3.2	319.0	0.7	4.2	-4.8	4,301.9	
1970	61.8	2,241.3	80.2	11.0	228.5	332.9	5.7	58.7	24.1	1,124.5	442.1	215.9	2,523.6	34.4	399.5	0.5	11.3	133.1	5,405.6	
1975	56.4	1,937.3	87.2	8.3	246.6	350.7	11.5	71.6	22.0	1,268.6	698.4	223.7	2,988.6	66.9	417.3	0.2	70.2	387.6	5,924.5	
1980	66.2	1,890.9	122.3	1.4	362.8	354.2	12.0	70.5	29.8	1,332.1	934.9	280.4	3,500.5	53.7	424.5	0.2	109.8	419.3	6,465.0	
1981	78.4	1,947.4	65.2	0.7	393.3	331.3	6.2	62.4	28.5	1,328.6	821.5	191.4	3,229.1	35.4	311.2	0.2	123.0	517.0	6,241.8	
1982	69.4	1,765.2	65.2	5.8	391.8	316.7	3.0	58.8	26.0	1,312.8	513.4	193.5	2,887.0	41.4	525.1	0.1	104.7	590.1	5,983.1	
1983	32.0	1,601.0	73.8	5.9	396.6	321.5	1.6	58.8	27.3	1,345.5	430.8	338.6	3,000.3	61.2	598.7	0.1	129.4	567.1	5,989.8	
1984	37.2	1,739.8	101.3	5.3	444.7	373.5	5.1	74.4	29.1	1,393.0	481.2	333.4	3,241.0	153.4	451.2	(s)	163.7	637.8	6,424.2	
1985	45.3	1,925.5	91.9	6.8	421.9	375.8	5.2	73.8	27.1	R 1,404.5	419.5	313.6	R 3,140.2	213.3	373.7	(s)	195.7	592.7	R 6,486.4	
1986	42.5	1,591.0	102.0	6.8	437.5	422.1	2.8	73.2	26.5	1,468.6	364.9	300.8	R 3,205.2	283.1	472.6	0.3	215.3	616.8	6,427.0	
1987	45.0	1,993.0	109.2	5.5	431.6	448.8	3.9	81.7	29.9	R 1,538.6	419.0	300.9	R 3,369.1	327.4	336.6	0.3	225.5	580.4	R 6,877.3	
1988	50.8	1,860.4	101.8	6.6	492.2	464.2	1.3	83.3	28.9	R 1,594.9	433.3	342.0	R 3,548.4	331.6	317.6	0.1	213.4	717.4	R 7,039.6	
1989	57.9	1,905.8	99.5	6.6	476.6	507.8	1.1	91.0	29.6	R 1,633.3	425.5	318.2	R 3,589.1	348.7	R 352.1	(s)	193.1	R 732.1	R 7,179.0	
1990	65.3	1,923.7	98.6	5.6	480.9	534.7	0.8	72.5	30.5	R 1,607.3	408.0	311.3	R 3,550.1	349.2	R i 281.5	R i 196.8	i 369.8	R 949.1	R i 7,700.1	
1991	64.0	2,023.9	94.6	5.5	439.3	508.1	0.8	67.2	27.3	R 1,569.1	286.5	248.1	R 3,246.3	338.8	R 264.1	204.3	378.4	R 995.9	R 7,536.2	
1992	64.8	2,089.5	90.0	5.3	391.8	489.5	0.4	76.4	27.8	R 1,658.1	218.1	270.6	R 3,228.1	376.3	R 228.3	213.8	R 392.5	R 900.5	R 7,509.7	
1993	56.9	2,047.5	82.5	4.1	344.2	504.7	0.7	60.1	28.3	R 1,621.7	236.5	254.0	R 3,136.9	337.3	R 432.8	R 203.0	398.7	R 802.3	R 7,428.3	
1994	58.0	2,172.1	81.2	4.0	378.2	560.1	0.7	65.8	29.6	R 1,616.1	267.4	262.2	R 3,265.2	360.3	R 258.3	R 221.0	400.4	R 825.2	R 7,573.0	
1995	61.0	1,955.9	81.0	4.1	400.2	540.4	0.9	53.6	29.1	1,646.6	295.2	242.8	3,293.9	322.4	R 529.7	R 215.2	R 341.0	R 878.4	R 7,602.4	
1996	53.9	1,865.1	82.3	3.9	392.7	588.4	1.7	40.5	28.2	1,671.8	257.4	275.0	3,341.9	362.2	487.6	218.6	354.2	1,016.2	7,697.1	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. From 1990, includes net imports of electricity generated from geothermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. - =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 42. Residential Energy Consumption Estimates, Selected Years 1960-1996, California

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours			Total	
1960	2	0	2	365	485	15	3,778	4,277	0	0	14,975	-	37,248	-
1965	4	0	4	489	427	31	5,095	5,553	0	0	23,800	-	56,824	-
1970	38	0	38	553	500	166	5,167	5,833	0	0	35,777	-	86,700	-
1975	0	0	0	631	493	211	2,708	3,412	0	0	44,257	-	106,754	-
1980	1	0	1	529	94	18	4,919	5,032	0	0	52,011	-	126,473	-
1981	1	0	1	488	72	71	4,392	4,535	0	0	52,798	-	125,831	-
1982	1	0	1	537	72	18	4,437	4,527	0	0	51,872	-	124,589	-
1983	1	0	1	499	127	54	5,242	5,424	0	0	53,873	-	129,067	-
1984	12	0	12	472	144	105	4,413	4,662	0	0	56,532	-	131,583	-
1985	19	0	19	527	148	73	5,350	5,571	0	0	57,501	-	135,093	-
1986	0	0	0	464	240	183	4,115	4,538	0	0	57,542	-	132,363	-
1987	(s)	0	(s)	503	285	82	5,252	5,619	0	0	60,368	-	137,936	-
1988	2	(s)	2	497	228	101	5,799	6,128	0	0	64,639	-	146,134	-
1989	4	0	4	514	241	108	6,269	6,618	0	0	64,347	-	144,536	-
1990	9	0	9	515	226	88	5,750	6,064	e 3,174	e 4,638	66,575	-	145,608	-
1991	16	0	16	509	199	80	6,952	7,231	3,344	4,813	66,017	-	143,687	-
1992	(s)	0	(s)	480	201	33	4,802	5,036	3,519	4,969	68,121	-	145,503	-
1993	50	0	50	501	155	67	5,035	5,257	2,983	5,078	67,359	-	142,315	-
1994	58	(s)	58	521	148	67	4,953	5,168	2,924	5,186	68,866	-	143,692	-
1995	46	0	46	477	129	81	4,884	5,094	3,246	5,299	68,783	-	143,278	-
1996	62	0	62	473	101	103	4,079	4,283	3,240	5,432	71,396	-	148,598	-

  

Trillion Btu														
1960	0.1	0.0	0.1	377.6	2.8	0.1	15.2	18.1	0.0	0.0	51.1	446.8	127.1	573.9
1965	0.1	0.0	0.1	524.9	2.5	0.2	20.4	23.1	0.0	0.0	81.2	629.2	193.9	823.1
1970	0.8	0.0	0.8	582.4	2.9	0.9	19.5	23.4	0.0	0.0	122.1	728.7	295.8	1,024.5
1975	0.0	0.0	0.0	666.7	2.9	1.2	10.1	14.1	0.0	0.0	151.0	831.9	364.2	1,196.1
1980	(s)	0.0	(s)	552.4	0.6	0.1	18.1	18.7	0.0	0.0	177.5	748.6	431.5	1,180.2
1981	(s)	0.0	(s)	509.9	0.4	0.4	16.0	16.8	0.0	0.0	180.1	706.9	429.3	1,136.3
1982	(s)	0.0	(s)	562.5	0.4	0.1	16.0	16.6	0.0	0.0	177.0	756.1	425.1	1,181.2
1983	(s)	0.0	(s)	519.0	0.7	0.3	18.9	20.0	0.0	0.0	183.8	722.8	440.4	1,163.2
1984	0.3	0.0	0.3	490.0	0.8	0.6	15.9	17.3	0.0	0.0	192.9	700.5	449.0	1,149.4
1985	0.4	0.0	0.4	547.8	0.9	0.4	19.3	20.6	0.0	0.0	196.2	765.0	460.9	1,225.9
1986	0.0	0.0	0.0	481.3	1.4	1.0	15.0	17.4	0.0	0.0	196.3	695.0	451.6	1,146.7
1987	(s)	0.0	(s)	516.6	1.7	0.5	19.2	21.3	0.0	0.0	206.0	743.9	470.6	1,214.5
1988	(s)	(s)	0.1	511.5	1.3	0.6	21.2	23.1	0.0	0.0	220.5	755.1	498.6	1,253.7
1989	0.1	0.0	0.1	532.7	1.4	0.6	23.1	25.1	0.0	0.0	219.6	777.4	493.2	1,270.6
1990	0.2	0.0	0.2	530.8	1.3	0.5	20.8	22.7	e 63.5	e 15.8	227.2	e 860.1	496.8	1,357.0
1991	0.4	0.0	0.4	522.3	1.2	0.5	25.1	26.7	66.9	16.4	225.2	857.9	490.3	1,348.2
1992	(s)	0.0	(s)	492.7	1.2	0.2	17.4	18.8	70.4	17.0	232.4	831.2	496.5	1,327.7
1993	1.2	0.0	1.2	519.9	0.9	0.4	18.2	19.4	59.7	17.3	229.8	847.3	485.6	1,332.9
1994	1.3	(s)	1.4	531.7	0.9	0.4	18.0	19.2	58.5	17.7	235.0	863.5	490.3	1,353.7
1995	1.1	0.0	1.1	483.8	0.8	0.5	17.7	18.9	64.9	18.1	234.7	821.5	488.9	1,310.3
1996	1.4	0.0	1.4	489.1	0.6	0.6	14.7	15.9	64.8	18.5	243.6	833.4	507.0	1,340.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 43. Commercial Energy Consumption Estimates, Selected Years 1960-1996, California**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	4	0	4	109	637	46	667	1,406	7,284	10,040	0	22,038	-	54,815	-
1965	7	0	7	164	560	95	899	1,309	6,200	9,064	0	29,919	-	71,436	-
1970	71	0	71	210	657	510	912	1,482	8,631	12,192	0	40,647	-	98,501	-
1975	0	0	0	240	647	650	478	1,622	4,377	7,774	0	57,843	-	139,525	-
1980	3	0	3	258	3,225	222	868	1,795	6,811	12,921	0	63,473	-	154,346	-
1981	1	0	1	237	3,733	552	775	1,560	11,415	18,035	0	67,827	-	161,651	-
1982	1	0	1	236	4,397	324	783	1,449	5,491	12,444	0	66,417	-	159,523	-
1983	1	0	1	216	6,850	114	925	1,733	537	10,158	0	62,959	-	150,836	-
1984	22	0	22	192	7,741	266	779	1,511	1,354	11,651	0	71,418	-	166,233	-
1985	34	0	34	205	3,513	353	944	R 1,759	35	6,604	0	73,614	-	172,949	-
1986	0	0	0	183	5,651	112	726	R 1,755	962	9,207	0	74,759	-	171,967	-
1987	(s)	(s)	(s)	213	6,882	168	927	R 2,522	948	R 11,446	0	77,830	-	177,835	-
1988	4	(s)	4	248	6,317	88	1,023	R 1,773	823	R 10,024	0	80,777	-	182,618	-
1989	7	0	7	259	4,614	41	1,106	R 1,783	751	R 8,296	0	83,965	-	R 188,602	-
1990	16	0	16	285	4,588	19	1,015	R 1,928	895	R 8,444	e NA	88,353	-	R 193,240	-
1991	29	0	29	288	4,449	23	1,227	R 1,647	764	R 8,110	NA	86,147	-	R 187,501	-
1992	(s)	0	(s)	285	1,994	20	847	R 1,485	43	4,390	NA	87,907	-	R 187,764	-
1993	92	0	92	250	1,591	19	889	R 262	18	R 2,779	44	86,622	-	R 183,016	-
1994	108	(s)	108	262	1,505	12	874	226	8	2,625	43	84,617	-	R 176,555	-
1995	86	0	86	279	2,334	27	862	236	4	3,463	67	86,127	-	R 179,407	-
1996	115	0	115	235	1,743	69	720	231	12	2,775	52	88,691	-	184,594	-

  

Trillion Btu															
1960	0.1	0.0	0.1	112.7	3.7	0.3	2.7	7.4	45.8	59.8	0.0	75.2	247.8	187.0	434.8
1965	0.2	0.0	0.2	175.5	3.3	0.5	3.6	6.9	39.0	53.3	0.0	102.1	331.0	243.7	574.7
1970	1.6	0.0	1.6	221.3	3.8	2.9	3.4	7.8	54.3	72.2	0.0	138.7	433.7	336.1	769.8
1975	0.0	0.0	0.0	253.7	3.8	3.7	1.8	8.5	27.5	45.3	0.0	197.4	496.3	476.1	972.4
1980	0.1	0.0	0.1	269.4	18.8	1.3	3.2	9.4	42.8	75.5	0.0	216.6	561.5	526.6	1,088.1
1981	(s)	0.0	(s)	247.4	21.7	3.1	2.8	8.2	71.8	107.7	0.0	231.4	586.5	551.6	1,138.0
1982	(s)	0.0	(s)	247.3	25.6	1.8	2.8	7.6	34.5	72.4	0.0	226.6	546.4	544.3	1,090.7
1983	(s)	0.0	(s)	224.7	39.9	0.6	3.3	9.1	3.4	56.4	0.0	214.8	495.9	514.7	1,010.6
1984	0.5	0.0	0.5	199.1	45.1	1.5	2.8	7.9	8.5	65.9	0.0	243.7	509.1	567.2	1,076.3
1985	0.8	0.0	0.8	212.9	20.5	2.0	3.4	9.2	0.2	35.3	0.0	251.2	500.2	590.1	1,090.3
1986	0.0	0.0	0.0	189.5	32.9	0.6	2.6	9.2	6.0	51.5	0.0	255.1	496.0	586.8	1,082.8
1987	(s)	0.0	(s)	218.4	40.1	1.0	3.4	13.2	6.0	63.6	0.0	265.6	547.6	606.8	1,154.4
1988	0.1	(s)	0.1	255.5	36.8	0.5	3.7	9.3	5.2	55.5	0.0	275.6	586.8	623.1	1,209.9
1989	0.2	0.0	0.2	268.4	26.9	0.2	4.1	9.4	4.7	45.3	0.0	286.5	600.3	R 643.5	R 1,243.8
1990	0.4	0.0	0.4	294.1	26.7	0.1	3.7	R 10.1	5.6	R 46.3	e NA	301.5	642.2	R 659.3	R 1,301.6
1991	0.7	0.0	0.7	295.3	25.9	0.1	4.4	R 8.7	4.8	43.9	NA	293.9	633.8	R 639.8	R 1,273.6
1992	(s)	0.0	(s)	292.8	11.6	0.1	3.1	7.8	0.3	22.9	NA	299.9	615.6	R 640.7	R 1,256.3
1993	2.1	0.0	2.1	259.8	9.3	0.1	3.2	1.4	0.1	14.1	0.9	295.6	R 572.4	R 624.4	R 1,196.9
1994	2.5	(s)	2.5	267.4	8.8	0.1	3.2	1.2	(s)	R 13.2	0.9	288.7	R 572.7	R 602.4	R 1,175.1
1995	2.0	0.0	2.0	282.4	13.6	0.2	3.1	1.2	(s)	18.1	1.3	293.9	R 597.8	612.1	R 1,209.9
1996	2.7	0.0	2.7	242.9	10.2	0.4	2.6	1.2	0.1	14.4	1.0	302.6	563.7	629.8	1,193.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 44. Industrial Energy Consumption Estimates, Selected Years 1960-1996, California

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	1,313	451	10,665	10,127	956	4,231	1,454	2,851	10,750	26,994	68,029	(s)	0	0	20,190	-	50,221	-
1965	2,361	529	11,892	13,002	692	4,826	1,709	2,245	11,846	29,401	75,613	(s)	0	0	28,904	-	69,012	-
1970	2,215	711	12,084	8,510	328	9,147	1,510	1,942	12,121	36,713	82,356	(s)	0	0	42,169	-	102,190	-
1975	2,151	666	13,146	10,519	1,166	15,688	1,246	1,338	8,308	38,045	89,457	0	0	0	46,053	-	111,086	-
1980	2,665	486	18,431	15,576	1,877	12,887	2,103	1,698	12,554	47,941	113,068	0	0	0	51,888	-	126,174	-
1981	3,229	463	9,831	17,735	463	10,874	2,017	1,402	10,825	31,996	85,143	0	0	0	49,551	-	118,094	-
1982	2,862	363	9,818	20,695	192	10,067	1,839	1,260	8,236	32,188	84,297	0	0	0	47,300	-	113,607	-
1983	1,454	345	11,117	17,101	119	8,933	1,926	1,080	8,760	57,261	106,295	0	0	0	48,153	-	115,365	-
1984	1,635	421	15,262	19,327	535	R 13,758	2,053	1,873	22,086	56,943	R 131,837	0	0	0	51,294	-	119,393	-
1985	1,889	433	13,848	18,285	491	12,977	1,914	R 3,065	18,732	52,908	R 122,220	0	0	0	52,972	-	124,454	-
1986	1,865	428	15,373	15,010	195	14,347	1,871	R 3,176	15,045	50,263	115,281	0	0	0	52,884	-	121,648	-
1987	1,933	556	16,458	18,283	435	R 15,310	2,115	R 3,256	14,576	50,750	R 121,185	0	0	0	54,387	-	124,269	-
1988	2,203	487	15,343	17,138	37	15,073	2,040	R 2,978	8,772	57,870	R 119,251	0	0	0	54,988	-	124,316	-
1989	2,540	528	14,996	16,266	43	R 16,435	2,092	R 3,232	2,711	54,107	109,883	0	0	0	55,596	-	R 124,879	-
1990	2,874	588	14,862	19,138	38	R 12,304	2,153	R 3,163	1,864	52,963	R 106,485	f NA	f NA	f NA	55,892	-	R 122,243	-
1991	2,771	707	14,251	14,329	36	9,658	1,926	R 3,271	1,762	41,871	R 87,104	NA	NA	NA	56,191	-	R 122,301	-
1992	2,821	687	13,558	11,101	23	14,788	1,964	3,297	1,889	46,017	R 92,637	NA	NA	NA	57,090	-	R 121,940	-
1993	2,311	747	12,433	8,779	44	10,073	2,000	2,664	1,539	42,961	R 80,494	NA	NA	NA	56,189	-	R 118,717	-
1994	2,332	726	12,237	9,028	40	R 11,266	2,090	R 2,758	1,353	44,366	R 83,138	NA	NA	NA	59,864	-	R 124,907	-
1995	2,485	754	12,212	8,607	56	8,489	2,054	2,849	1,489	41,048	NA	NA	NA	NA	57,367	-	R 119,499	-
1996	2,140	761	12,399	8,078	122	5,889	1,994	2,741	309	46,620	78,154	NA	NA	NA	57,683	-	120,056	-

Trillion Btu

1960	35.2	466.3	70.8	59.0	5.4	17.0	8.8	15.0	67.6	161.8	405.3	(s)	0.0	0.0	68.9	975.7	171.4	1,147.0
1965	63.2	567.4	78.9	75.7	3.9	19.4	10.4	11.8	74.5	173.2	447.7	(s)	0.0	0.0	98.6	1,177.0	235.5	1,412.5
1970	59.3	749.1	80.2	49.6	1.9	34.6	9.2	10.2	76.2	215.9	477.7	(s)	0.0	0.0	143.9	1,430.0	348.7	1,778.7
1975	56.4	703.6	87.2	61.3	6.6	58.3	7.6	7.0	52.2	223.7	503.9	0.0	0.0	0.0	157.1	1,421.1	379.0	1,800.1
1980	66.1	507.4	122.3	90.7	10.6	47.3	12.8	8.9	78.9	280.4	652.0	0.0	0.0	0.0	177.0	1,402.5	430.5	1,833.0
1981	78.4	482.9	65.2	103.3	2.6	39.6	12.2	7.4	68.1	191.4	489.9	0.0	0.0	0.0	169.1	1,220.2	402.9	1,623.2
1982	69.4	379.7	65.2	120.5	1.1	36.4	11.2	6.6	51.8	193.5	486.2	0.0	0.0	0.0	161.4	1,096.7	387.6	1,484.3
1983	32.0	359.3	73.8	99.6	0.7	32.3	11.7	5.7	55.1	338.6	R 617.3	0.0	0.0	0.0	164.3	1,172.9	393.6	1,566.5
1984	36.5	437.3	101.3	112.6	3.0	49.5	12.5	9.8	138.9	333.4	R 761.0	0.0	0.0	0.0	175.0	1,409.7	407.4	1,817.1
1985	44.0	449.5	91.9	106.5	2.8	46.8	11.6	16.1	117.8	313.6	707.0	0.0	0.0	0.0	180.7	1,381.3	424.6	1,805.9
1986	42.5	443.3	102.0	87.4	1.1	52.2	11.3	16.7	94.6	300.8	666.2	0.0	0.0	0.0	180.4	1,332.4	415.1	1,747.5
1987	44.9	570.7	109.2	106.5	2.5	56.0	12.8	17.1	91.6	300.9	696.7	0.0	0.0	0.0	185.6	1,497.9	424.0	1,921.9
1988	50.7	500.8	101.8	99.8	0.2	55.0	12.4	R 15.6	55.1	342.0	682.1	0.0	0.0	0.0	187.6	1,421.2	424.2	1,845.3
1989	57.7	546.4	99.5	94.7	0.2	60.5	12.7	17.0	17.0	318.2	620.0	0.0	0.0	0.0	189.7	R 1,413.8	R 426.1	R 1,839.9
1990	64.0	606.5	98.6	111.5	0.2	44.6	13.1	R 16.6	11.7	311.3	R 607.6	f 7.4	f 131.6	f 164.8	190.7	R f 1,773.4	R 417.1	R f 2,190.4
1991	63.0	725.7	94.6	83.5	0.2	34.9	11.7	17.2	11.1	248.1	501.1	8.8	135.9	180.6	191.7	1,806.9	R 417.3	R 2,224.2
1992	64.8	705.7	90.0	64.7	0.1	53.6	11.9	17.3	11.9	270.6	520.0	R 9.9	141.7	R 191.3	194.8	R 1,828.3	R 416.1	R 2,244.3
1993	53.6	775.3	82.5	51.1	0.3	36.3	12.1	14.0	9.7	254.0	460.0	26.1	140.6	R 207.7	191.7	R 1,855.0	R 405.1	R 2,260.1
1994	54.2	741.4	81.2	52.6	0.2	41.0	12.7	14.5	8.5	262.2	472.8	11.4	R 159.1	217.1	204.3	R 1,860.1	R 426.2	R 2,286.3
1995	57.9	764.3	81.0	50.1	0.3	30.8	12.5	15.0	9.4	242.8	441.8	R 32.4	R 141.0	R 207.9	195.7	R 1,841.0	407.7	R 2,248.8
1996	49.8	786.7	82.3	47.1	0.7	21.3	12.1	14.4	1.9	275.0	454.8	30.2	145.5	216.2	196.8	1,880.0	409.6	2,289.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 45. Transportation Energy Consumption Estimates, Selected Years 1960-1996, California**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	23	11	5,383	15,313	25,818	214	2,327	132,768	38,610	220,432	0	67	-	168	-
1965	8	16	3,342	21,032	40,150	208	2,772	166,346	35,109	268,960	0	64	-	152	-
1970	4	17	2,184	29,448	59,614	305	2,457	210,641	27,982	332,632	0	52	-	127	-
1975	(s)	20	1,640	30,528	62,509	390	2,386	238,548	20,056	356,057	0	268	-	646	-
1980	0	15	285	41,801	62,224	522	2,804	250,100	66,673	424,409	0	195	-	473	-
1981	0	15	132	44,931	59,074	1,082	2,689	249,951	63,449	421,308	0	238	-	567	-
1982	0	13	1,145	41,786	56,541	983	2,452	247,203	52,103	402,214	0	253	-	609	-
1983	0	10	1,167	43,786	57,359	R 1,159	2,567	253,326	48,269	407,634	0	214	-	514	-
1984	0	11	1,047	48,866	66,640	R 1,717	2,738	261,804	48,625	R 431,437	0	208	-	485	-
1985	0	14	1,354	50,177	67,028	1,225	2,552	R 262,544	43,340	R 428,219	0	244	-	574	-
1986	0	12	1,338	53,866	75,176	931	2,495	R 274,637	36,709	R 445,152	0	233	-	537	-
1987	0	19	1,084	48,300	79,857	R 839	2,821	R 287,131	47,791	R 467,822	0	216	-	493	-
1988	0	19	1,312	60,642	82,620	902	2,720	R 298,870	46,857	R 493,923	0	233	-	526	-
1989	0	19	1,303	60,400	90,291	R 887	2,790	R 305,903	49,141	R 510,713	0	230	-	R 517	-
1990	0	20	1,106	58,418	94,907	R 923	2,871	R 300,893	54,963	R 514,080	R e 22,507	274	-	599	-
1991	0	19	1,091	56,328	90,064	760	2,568	R 293,780	42,113	R 486,703	R 17,841	296	-	R 644	-
1992	0	15	1,059	53,839	86,688	R 650	2,619	R 310,861	32,282	R 487,997	R 21,684	330	-	R 704	-
1993	0	12	819	48,455	89,244	R 658	2,666	R 305,800	32,831	R 480,474	R 24,199	330	-	R 697	-
1994	0	13	793	54,137	98,793	R 1,006	2,787	R 304,669	38,310	R 500,495	R 33,788	337	-	704	-
1995	0	20	807	57,540	95,305	564	2,739	R 310,379	44,729	R 512,062	R 103,851	328	-	683	-
1996	0	20	769	57,352	103,773	509	2,658	315,285	39,644	519,989	87,752	343	-	714	-

**Trillion Btu**

1960	0.6	11.0	27.2	89.2	140.7	0.9	14.1	697.4	242.7	1,212.2	0.0	0.2	1,223.9	0.6	1,224.5
1965	0.2	16.8	16.9	122.5	222.2	0.8	16.8	873.8	220.7	1,473.8	0.0	0.2	1,491.0	0.5	1,491.5
1970	0.1	17.9	11.0	171.5	332.9	1.2	14.9	1,106.5	175.9	1,814.0	0.0	0.2	1,832.1	0.4	1,832.5
1975	(s)	21.4	8.3	177.8	350.2	1.5	14.5	1,253.1	126.1	1,931.4	0.0	0.9	1,953.7	2.2	1,955.9
1980	0.0	15.9	1.4	243.5	348.7	1.9	17.0	1,313.8	419.2	2,345.5	0.0	0.7	2,362.1	1.6	2,363.7
1981	0.0	15.7	0.7	261.7	331.3	3.9	16.3	1,313.0	398.9	2,325.8	0.0	0.8	2,342.4	1.9	2,344.3
1982	0.0	13.5	5.8	243.4	316.7	3.6	14.9	1,298.6	327.6	2,210.4	0.0	0.9	2,224.8	2.1	2,226.9
1983	0.0	10.6	5.9	255.1	321.5	4.2	15.6	1,330.7	303.5	2,236.4	0.0	0.7	2,247.7	1.8	2,249.5
1984	0.0	11.8	5.3	284.6	373.5	6.2	16.6	R 1,375.3	305.7	R 2,367.2	0.0	0.7	R 2,379.7	1.7	R 2,381.3
1985	0.0	15.0	6.8	292.3	375.8	4.4	15.5	R 1,379.1	272.5	R 2,346.5	0.0	0.8	R 2,362.3	2.0	R 2,364.2
1986	0.0	12.8	6.8	313.8	422.1	3.4	15.1	1,442.7	230.8	2,434.6	0.0	0.8	2,448.2	1.8	R 2,450.0
1987	0.0	19.4	5.5	281.3	448.8	3.1	17.1	R 1,508.3	300.5	R 2,564.5	0.0	0.7	R 2,584.7	1.7	R 2,586.4
1988	0.0	19.7	6.6	353.2	464.2	3.3	16.5	R 1,570.0	294.6	R 2,708.4	0.0	0.8	R 2,728.9	1.8	R 2,730.7
1989	0.0	19.9	6.6	351.8	507.8	3.3	16.9	R 1,606.9	308.9	R 2,802.2	0.0	0.8	R 2,822.9	1.8	R 2,824.6
1990	0.0	20.8	5.6	340.3	534.7	R 3.3	17.4	R 1,580.6	345.6	R 2,827.4	R e 1.7	0.9	R e 2,849.1	2.0	R e 2,851.2
1991	0.0	19.0	5.5	328.1	508.1	2.7	15.6	R 1,543.2	264.8	R 2,668.0	1.4	1.0	R 2,688.1	2.2	R 2,690.3
1992	0.0	15.2	5.3	313.6	489.5	2.4	15.9	R 1,633.0	203.0	R 2,662.7	R 1.7	1.1	R 2,679.0	2.4	R 2,681.4
1993	0.0	12.5	4.1	282.3	504.7	2.4	16.2	R 1,606.4	206.4	R 2,622.4	R 1.8	1.1	R 2,636.1	2.4	R 2,638.5
1994	0.0	12.9	4.0	315.3	560.1	3.7	16.9	R 1,600.4	240.9	R 2,741.3	R 2.6	1.2	R 2,755.4	2.4	R 2,757.8
1995	0.0	20.0	4.1	335.2	540.4	2.0	16.6	1,630.4	281.2	2,809.9	R 7.9	1.1	R 2,831.0	2.3	2,833.4
1996	0.0	20.2	3.9	334.1	588.4	1.8	16.1	1,656.2	249.2	2,849.7	6.7	1.2	2,871.1	2.4	2,873.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 46. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, California

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy <sup>f</sup>	Other <sup>b,g</sup>	Total <sup>h</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	0	0	0	323	23,931	120	0	24,051	(s)	17,045	(s)	33	0	-
1965	0	0	0	493	16,590	83	0	16,673	270	30,520	64	189	0	-
1970	0	0	0	636	21,589	107	0	21,696	3,132	38,071	48	525	0	-
1975	0	0	0	275	78,345	247	0	78,592	6,071	40,103	20	3,246	0	-
1980	0	0	0	519	62,663	2,559	0	65,222	4,920	40,868	20	5,073	0	-
1981	0	0	0	655	44,972	1,067	0	46,039	3,206	29,772	23	5,686	0	-
1982	0	0	0	534	15,827	313	0	16,140	3,735	50,232	13	4,843	0	-
1983	0	0	0	465	10,956	230	0	11,185	5,613	56,912	5	6,075	1	-
1984	0	0	0	573	4,475	263	0	4,738	14,144	43,222	(s)	7,682	3	-
1985	0	0	0	666	4,617	308	0	4,925	19,729	35,772	4	9,197	13	-
1986	0	0	0	444	5,332	348	0	5,680	26,215	45,239	30	10,119	17	-
1987	0	0	0	643	3,324	350	0	3,674	30,387	32,308	24	10,599	14	-
1988	0	0	0	553	12,464	167	0	12,631	30,863	30,760	11	10,110	10	-
1989	0	0	0	518	15,072	299	0	15,370	32,519	33,752	4	9,154	2	-
1990	0	0	0	456	7,169	189	0	7,358	32,693	26,365	2	R 8,968	2	-
1991	0	0	0	449	933	104	0	1,037	31,542	24,487	8	R 8,638	3	-
1992	0	0	0	564	482	124	0	605	35,244	21,121	5	R 8,807	3	-
1993	0	0	0	466	3,227	109	0	3,336	31,581	39,456	4	R 8,300	3	-
1994	0	0	0	601	2,854	104	0	2,959	33,752	23,951	3	R 7,918	3	-
1995	0	0	0	395	734	101	0	835	30,246	48,257	2	R 5,490	R 15	-
1996	0	0	0	318	983	138	0	1,122	34,097	44,244	55	5,692	13	-

  

Trillion Btu														
1960	0.0	0.0	0.0	334.3	150.5	0.7	0.0	151.2	(s)	183.4	(s)	0.8	0.0	669.6
1965	0.0	0.0	0.0	528.7	104.3	0.5	0.0	104.8	3.2	319.0	0.7	4.2	0.0	960.5
1970	0.0	0.0	0.0	670.6	135.7	0.6	0.0	136.4	34.4	399.5	0.5	11.3	0.0	1,252.7
1975	0.0	0.0	0.0	291.9	492.6	1.4	0.0	494.0	66.9	417.3	0.2	70.2	0.0	1,340.4
1980	0.0	0.0	0.0	545.8	394.0	14.8	0.0	408.7	53.7	424.5	0.2	109.8	0.0	1,542.7
1981	0.0	0.0	0.0	691.4	282.7	6.2	0.0	289.0	35.4	311.2	0.2	123.0	0.0	1,450.2
1982	0.0	0.0	0.0	562.1	99.5	1.8	0.0	101.3	41.4	525.1	0.1	104.7	0.0	1,334.8
1983	0.0	0.0	0.0	487.4	68.9	1.3	0.0	70.2	61.2	598.7	0.1	129.3	(s)	1,346.9
1984	0.0	0.0	0.0	601.7	28.1	1.5	0.0	29.7	153.4	451.2	(s)	163.6	0.1	1,399.7
1985	0.0	0.0	0.0	700.3	29.0	1.8	0.0	30.8	213.3	373.7	(s)	195.6	0.1	1,513.8
1986	0.0	0.0	0.0	464.2	33.5	2.0	0.0	35.5	283.1	472.6	0.3	215.2	0.2	1,471.1
1987	0.0	0.0	0.0	667.8	20.9	2.0	0.0	22.9	327.4	336.6	0.3	225.4	0.1	1,580.5
1988	0.0	0.0	0.0	572.8	78.4	1.0	0.0	79.3	331.6	317.6	0.1	213.3	0.1	1,514.8
1989	0.0	0.0	0.0	538.4	94.8	1.7	0.0	96.5	348.7	R 352.1	(s)	193.1	(s)	R 1,528.9
1990	0.0	0.0	0.0	471.5	45.1	1.1	0.0	46.2	349.2	R 274.2	(s)	R 189.2	(s)	R 1,346.4
1991	0.0	0.0	0.0	461.6	5.9	0.6	0.0	6.5	338.8	R 255.3	0.1	R 181.4	(s)	R 1,265.5
1992	0.0	0.0	0.0	583.1	3.0	0.7	0.0	3.7	376.3	R 218.4	R 0.1	R 184.2	(s)	R 1,383.3
1993	0.0	0.0	0.0	480.0	20.3	0.6	0.0	20.9	337.3	R 406.8	(s)	R 173.6	(s)	R 1,433.4
1994	0.0	0.0	0.0	618.7	17.9	0.6	0.0	18.6	360.3	R 246.9	(s)	R 165.6	(s)	R 1,425.1
1995	0.0	0.0	0.0	405.4	4.6	0.6	0.0	5.2	322.4	R 497.2	(s)	R 114.8	R 0.2	R 1,358.1
1996	0.0	0.0	0.0	326.3	6.2	0.8	0.0	7.0	362.2	457.4	0.6	119.3	0.1	1,276.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> Includes net imports of electricity generated from geothermal energy.

<sup>g</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>h</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 47. Energy Consumption Estimates by Source, Selected Years 1960-1996, Colorado**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	2,941	188	1,617	1,125	4,194	480	277	3,153	378	16,461	1,883	790	30,357	0	970	0	0	-4,980	-	
1965	4,204	224	1,423	1,111	3,925	3,426	1,108	3,339	416	19,321	2,056	941	37,065	0	938	0	0	-2,572	-	
1970	5,101	282	3,220	337	5,212	7,476	822	4,710	423	26,103	1,507	1,146	50,956	0	1,236	0	0	-2,230	-	
1975	7,603	308	2,231	267	8,846	7,151	278	5,053	458	31,916	3,388	1,351	60,938	0	1,507	0	0	-1,877	-	
1980	11,981	256	2,284	265	11,228	4,725	413	3,870	641	34,282	1,814	1,646	61,167	667	1,717	0	0	-5,019	-	
1981	13,501	212	1,829	257	8,725	5,494	215	3,715	615	34,625	136	1,088	56,698	749	1,399	0	0	54	-	
1982	13,875	225	1,620	188	9,228	5,556	262	4,618	561	35,099	15	1,143	58,289	569	1,650	1	0	-1,044	-	
1983	13,004	214	1,880	179	10,934	6,134	269	4,782	587	33,608	330	1,317	60,021	748	1,871	1	0	2,687	-	
1984	14,740	230	3,089	143	11,340	8,505	186	2,298	626	33,612	177	1,509	61,486	55	2,169	2	0	-690	-	
1985	15,241	219	3,103	142	9,552	7,861	92	2,324	583	R 35,742	194	1,242	R 60,835	-32	2,357	3	0	-1,099	-	
1986	15,029	198	3,091	176	10,119	8,065	62	2,161	570	R 36,504	246	972	R 61,966	52	2,264	4	0	-23	-	
1987	15,007	210	3,110	153	9,864	8,372	85	2,336	645	R 36,195	34	1,176	R 61,969	174	1,818	2	0	1,889	-	
1988	15,860	228	3,552	167	11,190	6,460	85	2,705	622	R 36,389	32	1,319	R 62,519	660	1,745	2	0	-722	-	
1989	16,393	242	2,928	181	10,204	5,337	226	3,744	638	R 35,420	22	1,414	R 60,115	529	1,706	1	0	R -2,116	-	
1990	16,710	239	3,257	167	10,373	6,109	50	3,045	656	R 35,562	13	1,444	R 60,676	0	i NA	i NA	i NA	R 1,039	-	
1991	16,218	261	3,107	155	11,805	6,503	51	3,520	587	R 35,676	80	1,298	R 62,783	0	NA	NA	NA	R 3,684	-	
1992	16,696	253	3,190	136	12,425	7,363	51	3,184	599	R 35,790	41	1,675	R 64,455	0	NA	NA	NA	R 1,148	-	
1993	17,070	284	3,413	124	12,922	8,959	53	3,448	610	R 37,913	11	1,564	R 69,017	0	NA	NA	NA	R 1,294	-	
1994	17,475	276	4,188	128	13,261	7,930	48	3,390	637	R 39,385	3	1,636	R 70,606	0	NA	NA	NA	R 3,552	-	
1995	16,971	284	3,720	124	13,426	7,428	29	3,936	626	41,357	8	1,570	72,225	0	NA	NA	NA	R 7,272	-	
1996	17,222	307	3,904	124	14,839	7,765	33	3,999	608	43,028	20	1,803	76,122	0	NA	NA	NA	10,419	-	
Trillion Btu																				
1960	68.2	195.0	10.7	5.7	24.4	2.6	1.6	12.6	2.3	86.5	11.8	4.7	163.0	0.0	10.4	0.0	0.0	-17.0	419.6	
1965	98.1	204.5	9.4	5.6	22.9	19.3	6.3	13.4	2.5	101.5	12.9	5.6	199.4	0.0	9.8	0.0	0.0	-8.8	503.0	
1970	115.7	275.0	21.4	1.7	30.4	42.3	4.7	17.8	2.6	137.1	9.5	6.7	274.0	0.0	13.0	0.0	0.0	-7.6	670.0	
1975	159.3	281.0	14.8	1.3	51.5	40.4	1.6	18.8	2.8	167.7	21.3	8.0	328.2	0.0	15.7	0.0	0.0	-6.4	777.8	
1980	247.6	254.6	15.2	1.3	65.4	26.7	2.3	14.2	3.9	180.1	11.4	9.4	329.9	7.3	17.8	0.0	0.0	-17.1	840.1	
1981	278.7	210.5	12.1	1.3	50.8	31.0	1.2	13.5	3.7	181.9	0.9	6.5	303.0	8.3	14.6	0.0	0.0	0.2	815.3	
1982	276.4	225.0	10.8	0.9	53.8	31.4	1.5	16.7	3.4	184.4	0.1	6.8	309.7	6.3	17.2	(s)	0.0	-3.6	831.1	
1983	254.7	215.1	12.5	0.9	63.7	34.7	1.5	17.3	3.6	176.5	2.1	7.8	320.6	8.2	19.7	(s)	0.0	9.2	827.4	
1984	286.9	230.1	20.5	0.7	66.1	48.1	1.1	8.3	3.8	176.6	1.1	8.9	335.1	0.6	22.6	(s)	0.0	-2.4	873.0	
1985	299.1	218.7	20.6	0.7	55.6	44.5	0.5	8.4	3.5	R 187.8	1.2	7.4	330.2	-0.3	24.6	(s)	0.0	-3.7	R 868.6	
1986	295.4	198.4	20.5	0.9	58.9	45.6	0.4	7.9	3.5	191.8	1.5	6.0	337.0	0.6	23.6	(s)	0.0	-0.1	855.0	
1987	296.5	210.1	20.6	0.8	57.5	47.4	0.5	8.5	3.9	R 190.1	0.2	7.1	R 336.7	1.9	18.9	(s)	0.0	6.4	R 870.6	
1988	311.4	229.0	23.6	0.8	65.2	36.5	0.5	9.9	3.8	R 191.2	0.2	7.9	R 339.5	7.1	18.0	(s)	0.0	-2.5	R 902.5	
1989	323.7	244.9	19.4	0.9	59.4	30.2	1.3	13.8	3.9	R 186.1	0.1	8.5	323.5	5.7	R 17.8	(s)	0.0	R -7.2	R 908.4	
1990	329.0	240.3	21.6	0.8	60.4	34.6	0.3	11.0	4.0	R 186.8	0.1	8.6	R 328.3	0.0	R i 13.7	R i 11.6	i 0.1	R 3.5	R i 924.7	
1991	321.8	268.1	20.6	0.8	68.8	36.8	0.3	12.7	3.6	R 187.4	0.5	7.8	R 339.3	0.0	R 17.9	R 11.9	0.1	R 12.6	R 970.2	
1992	331.5	258.9	21.2	0.7	72.4	41.6	0.3	11.5	3.6	188.0	0.3	10.0	349.6	0.0	R 16.9	R 12.6	0.2	3.9	R 971.7	
1993	338.5	287.3	22.6	0.6	75.3	50.7	0.3	12.4	3.7	R 199.2	0.1	9.4	R 374.3	0.0	R 20.5	R 12.8	0.2	4.4	R 1,036.0	
1994	349.1	277.1	27.8	0.6	77.2	44.9	0.3	12.3	3.9	R 206.9	(s)	9.8	R 383.7	0.0	R 17.1	R 14.3	0.2	12.1	R 1,051.8	
1995	337.3	288.7	24.7	0.6	78.2	42.0	0.2	14.3	3.8	217.2	0.1	9.4	390.5	0.0	22.9	R 15.4	0.2	24.8	R 1,077.0	
1996	340.3	314.7	25.9	0.6	86.4	44.0	0.2	14.4	3.7	226.0	0.1	10.8	412.2	0.0	17.6	17.9	0.2	35.6	1,133.5	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 48. Residential Energy Consumption Estimates, Selected Years 1960-1996, Colorado**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	90	0	90	52	148	50	2,097	2,294	0	0	1,776	—	4,418	—
1965	112	0	112	65	90	285	2,224	2,599	0	0	2,521	—	6,018	—
1970	80	0	80	83	168	112	3,080	3,361	0	0	3,859	—	9,351	—
1975	7	0	7	100	283	36	2,862	3,181	0	0	5,142	—	12,403	—
1980	35	0	35	90	78	23	1,670	1,772	0	0	6,693	—	16,275	—
1981	33	1	33	75	54	60	2,063	2,177	0	0	8,498	—	20,253	—
1982	44	0	44	85	58	170	2,265	2,493	0	0	9,064	—	21,769	—
1983	28	0	28	84	136	225	2,773	3,135	0	0	9,513	—	22,791	—
1984	44	0	44	93	139	157	1,293	1,589	0	0	8,669	—	20,178	—
1985	55	0	55	90	106	49	1,390	1,545	0	0	8,861	—	20,819	—
1986	37	0	37	81	63	30	1,355	1,448	0	0	8,863	—	20,387	—
1987	28	0	28	86	59	28	1,470	1,558	0	0	9,218	—	21,062	—
1988	33	(s)	33	93	53	32	1,403	1,488	0	0	9,551	—	21,592	—
1989	22	0	22	92	42	41	1,596	1,680	0	0	9,595	—	R 21,553	—
1990	20	0	20	92	27	22	1,697	1,746	e 366	e 39	9,787	—	R 21,406	—
1991	23	0	23	97	27	24	1,899	1,950	385	43	10,099	—	R 21,982	—
1992	20	(s)	21	95	22	37	1,692	1,751	406	46	10,216	—	R 21,820	—
1993	13	(s)	13	106	33	35	1,768	1,836	379	48	10,656	—	R 22,513	—
1994	8	0	8	100	26	40	1,757	1,822	372	54	10,939	—	R 22,824	—
1995	7	0	7	104	40	20	2,188	2,248	413	57	11,307	—	R 23,552	—
1996	5	0	5	111	60	21	2,100	2,180	412	60	11,871	—	24,706	—

**Trillion Btu**

1960	2.1	0.0	2.1	54.1	0.9	0.3	8.4	9.6	0.0	0.0	6.1	71.8	15.1	86.9
1965	2.6	0.0	2.6	59.6	0.5	1.6	8.9	11.1	0.0	0.0	8.6	81.8	20.5	102.4
1970	1.8	0.0	1.8	80.4	1.0	0.6	11.6	13.3	0.0	0.0	13.2	108.6	31.9	140.5
1975	0.2	0.0	0.2	89.5	1.6	0.2	10.6	12.5	0.0	0.0	17.5	119.7	42.3	162.0
1980	0.8	0.0	0.8	89.2	0.5	0.1	6.1	6.7	0.0	0.0	22.8	119.5	55.5	175.1
1981	0.7	(s)	0.7	74.7	0.3	0.3	7.5	8.2	0.0	0.0	29.0	112.5	69.1	181.6
1982	1.0	0.0	1.0	84.8	0.3	1.0	8.2	9.5	0.0	0.0	30.9	126.1	74.3	200.4
1983	0.6	0.0	0.6	84.7	0.8	1.3	10.0	12.1	0.0	0.0	32.5	129.9	77.8	207.6
1984	1.0	0.0	1.0	93.7	0.8	0.9	4.7	6.4	0.0	0.0	29.6	130.5	68.8	199.4
1985	1.2	0.0	1.2	90.1	0.6	0.3	5.0	5.9	0.0	0.0	30.2	127.4	71.0	198.4
1986	0.8	0.0	0.8	81.4	0.4	0.2	4.9	5.5	0.0	0.0	30.2	117.9	69.6	187.5
1987	0.6	0.0	0.6	86.3	0.3	0.2	5.4	5.9	0.0	0.0	31.5	124.2	71.9	196.1
1988	0.7	(s)	0.7	93.5	0.3	0.2	5.1	5.6	0.0	0.0	32.6	132.4	73.7	206.1
1989	0.5	0.0	0.5	92.7	0.2	0.2	5.9	6.4	0.0	0.0	32.7	132.3	R 73.5	R 205.8
1990	0.4	0.0	0.4	92.4	0.2	0.1	6.2	6.4	e 7.3	e 0.1	33.4	e 140.1	R 73.0	R e 213.2
1991	0.5	0.0	0.5	100.3	0.2	0.1	6.9	7.2	7.7	0.1	34.5	150.3	R 75.0	R 225.3
1992	0.4	(s)	0.4	96.8	0.1	0.2	6.1	6.5	8.1	0.2	34.9	146.9	R 74.5	R 221.3
1993	0.3	(s)	0.3	107.4	0.2	0.2	6.4	6.8	7.6	0.2	36.4	158.5	R 76.8	R 235.3
1994	0.2	0.0	0.2	99.9	0.1	0.2	6.4	6.8	7.4	0.2	37.3	151.8	R 77.9	R 229.7
1995	0.2	0.0	0.2	106.2	0.2	0.1	7.9	8.3	8.3	0.2	38.6	161.6	80.4	242.0
1996	0.1	0.0	0.1	113.6	0.4	0.1	7.6	8.1	8.2	0.2	40.5	170.7	84.3	255.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 49. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Colorado**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	167	0	167	28	123	66	370	135	56	750	0	1,772	-	4,408	-
1965	207	0	207	39	75	376	393	186	49	1,078	0	2,842	-	6,785	-
1970	149	0	149	59	140	148	544	124	38	993	0	4,594	-	11,134	-
1975	14	0	14	76	235	48	505	109	75	972	0	6,276	-	15,139	-
1980	65	0	65	67	339	6	295	312	3	955	0	7,277	-	17,695	-
1981	61	(s)	61	59	311	9	364	288	3	975	0	8,360	-	19,924	-
1982	83	0	83	67	151	23	400	315	5	893	0	9,949	-	23,895	-
1983	53	0	53	65	817	27	489	282	6	1,621	0	10,609	-	25,417	-
1984	82	0	82	72	835	18	228	357	4	1,442	0	11,668	-	27,159	-
1985	101	0	101	69	681	15	245	176	1	1,118	0	12,344	-	29,001	-
1986	68	0	68	62	406	13	239	191	72	922	0	12,450	-	28,639	-
1987	53	0	53	64	958	27	259	191	0	1,436	0	12,638	-	28,876	-
1988	61	(s)	61	69	1,019	14	248	R 176	0	1,457	0	13,489	-	30,496	-
1989	42	0	42	67	539	157	282	164	6	1,147	0	14,116	-	R 31,708	-
1990	38	0	38	66	437	10	299	R 265	0	R 1,011	e NA	14,420	-	R 31,540	-
1991	42	0	42	69	591	11	335	R 336	0	1,272	NA	14,609	-	R 31,797	-
1992	38	(s)	38	66	834	7	299	161	(s)	1,301	NA	14,757	-	R 31,521	-
1993	24	(s)	24	72	759	7	312	35	(s)	1,113	21	15,278	-	R 32,279	-
1994	15	0	15	66	1,219	5	310	51	0	1,585	35	13,943	-	R 29,092	-
1995	13	0	13	67	814	5	386	R 58	0	1,263	23	14,301	-	R 29,789	-
1996	9	0	9	69	987	6	371	265	0	1,628	30	15,252	-	31,744	-

  

Trillion Btu															
1960	3.8	0.0	3.8	29.5	0.7	0.4	1.5	0.7	0.4	3.6	0.0	6.0	43.0	15.0	58.0
1965	4.7	0.0	4.7	35.8	0.4	2.1	1.6	1.0	0.3	5.4	0.0	9.7	55.7	23.1	78.8
1970	3.3	0.0	3.3	57.5	0.8	0.8	2.1	0.7	0.2	4.6	0.0	15.7	81.1	38.0	119.1
1975	0.3	0.0	0.3	68.3	1.4	0.3	1.9	0.6	0.5	4.6	0.0	21.4	94.6	51.7	146.3
1980	1.4	0.0	1.4	66.6	2.0	(s)	1.1	1.6	(s)	4.7	0.0	24.8	97.6	60.4	157.9
1981	1.3	(s)	1.3	58.6	1.8	0.1	1.3	1.5	(s)	4.7	0.0	28.5	93.2	68.0	161.2
1982	1.8	0.0	1.8	67.1	0.9	0.1	1.4	1.7	(s)	4.1	0.0	33.9	106.9	81.5	188.4
1983	1.1	0.0	1.1	65.0	4.8	0.2	1.8	1.5	(s)	8.2	0.0	36.2	110.5	86.7	197.3
1984	1.8	0.0	1.8	72.1	4.9	0.1	0.8	1.9	(s)	7.7	0.0	39.8	121.3	92.7	214.0
1985	2.2	0.0	2.2	68.9	4.0	0.1	0.9	0.9	(s)	5.9	0.0	42.1	119.1	98.9	218.0
1986	1.5	0.0	1.5	61.8	2.4	0.1	0.9	1.0	0.5	4.8	0.0	42.5	110.5	97.7	208.3
1987	1.1	0.0	1.1	64.4	5.6	0.2	0.9	1.0	0.0	7.7	0.0	43.1	116.3	98.5	214.8
1988	1.3	(s)	1.3	69.0	5.9	0.1	0.9	0.9	0.0	7.8	0.0	46.0	124.2	104.1	228.2
1989	0.9	0.0	0.9	68.3	3.1	0.9	1.0	0.9	(s)	6.0	0.0	48.2	123.3	R 108.2	R 231.5
1990	0.8	0.0	0.8	66.6	2.5	0.1	1.1	1.4	0.0	5.1	e NA	49.2	121.7	R 107.6	R 229.3
1991	0.9	0.0	0.9	71.0	3.4	0.1	1.2	1.8	0.0	6.5	NA	49.8	128.2	R 108.5	R 236.7
1992	0.8	(s)	0.8	68.0	4.9	(s)	1.1	0.8	(s)	6.8	NA	50.4	126.0	107.5	R 233.5
1993	0.5	(s)	0.5	72.4	4.4	(s)	1.1	0.2	(s)	5.8	0.4	52.1	R 131.3	110.1	R 241.4
1994	0.3	0.0	0.3	66.2	7.1	(s)	1.1	0.3	0.0	8.5	0.7	47.6	R 123.3	R 99.3	R 222.5
1995	0.3	0.0	0.3	67.8	4.7	(s)	1.4	0.3	0.0	6.5	0.5	48.8	R 123.9	101.6	R 225.5
1996	0.2	0.0	0.2	70.6	5.7	(s)	1.3	1.4	0.0	8.5	0.6	52.0	131.9	108.3	240.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
- =Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 50. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Colorado**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	1,438	69	1,617	1,768	161	593	98	1,303	1,583	790	7,913	1	0	0	1,289	-	3,206	-
1965	1,698	82	1,423	1,994	447	641	130	1,039	1,254	941	7,869	1	0	0	1,576	-	3,763	-
1970	1,657	88	3,220	2,228	561	953	137	1,036	1,128	1,146	10,409	1	0	0	2,334	-	5,656	-
1975	1,871	73	2,231	3,419	193	1,498	156	860	2,327	1,351	12,035	1	0	0	4,407	-	10,630	-
1980	1,757	60	2,284	3,983	384	1,860	238	695	1,640	1,646	12,729	1	0	0	6,900	-	16,778	-
1981	1,624	58	1,829	2,970	146	1,184	229	594	129	1,088	8,168	1	0	0	6,921	-	16,495	-
1982	1,109	58	1,620	2,704	69	1,881	209	583	9	1,143	8,217	1	0	0	4,680	-	11,240	-
1983	730	52	1,880	3,615	17	1,431	218	502	259	1,317	9,240	1	0	0	4,045	-	9,692	-
1984	856	52	3,089	3,693	11	674	233	504	158	1,509	R 9,872	1	0	0	5,376	-	12,513	-
1985	791	48	3,103	2,293	28	621	217	580	40	1,242	R 8,124	1	0	0	5,468	-	12,848	-
1986	773	44	3,091	3,448	19	507	212	R 555	174	972	R 8,978	1	0	0	5,848	-	13,452	-
1987	748	43	3,110	2,659	29	567	240	R 532	34	1,176	R 8,348	1	0	0	6,216	-	14,202	-
1988	679	50	3,552	3,690	39	1,000	231	477	5	1,319	R 10,313	1	0	0	6,295	-	14,233	-
1989	643	64	2,928	2,825	28	R 1,807	237	R 505	14	1,414	R 9,760	1	0	0	6,427	-	R 14,437	-
1990	729	66	3,257	2,683	18	R 975	244	R 408	13	1,444	R 9,042	f NA	f NA	f NA	6,587	-	R 14,406	-
1991	738	80	3,107	3,531	17	1,203	218	503	34	1,298	9,911	NA	NA	NA	6,748	-	R 14,688	-
1992	735	79	3,190	4,350	7	1,125	223	494	4	1,675	11,069	NA	NA	NA	6,849	-	R 14,629	-
1993	780	94	3,413	3,626	12	1,284	227	504	11	1,564	10,640	NA	NA	NA	7,024	-	R 14,840	-
1994	857	95	4,188	3,126	4	1,184	237	583	1	1,636	R 10,960	NA	NA	NA	9,620	-	R 20,073	-
1995	729	98	3,720	3,184	5	1,294	233	541	(s)	1,570	10,547	NA	NA	NA	9,706	-	R 20,219	-
1996	367	111	3,904	4,119	6	1,455	226	631	4	1,803	12,149	NA	NA	NA	9,947	-	20,703	-

**Trillion Btu**

1960	36.6	71.8	10.7	10.3	0.9	2.4	0.6	6.8	10.0	4.7	46.4	(s)	0.0	0.0	4.4	159.2	10.9	170.2
1965	44.2	74.9	9.4	11.6	2.5	2.6	0.8	5.5	7.9	5.6	45.8	(s)	0.0	0.0	5.4	170.3	12.8	183.2
1970	41.4	85.3	21.4	13.0	3.2	3.6	0.8	5.4	7.1	6.7	61.2	(s)	0.0	0.0	8.0	195.9	19.3	215.2
1975	45.8	65.6	14.8	19.9	1.1	5.6	0.9	4.5	14.6	8.0	69.4	(s)	0.0	0.0	15.0	195.9	36.3	232.2
1980	43.1	59.9	15.2	23.2	2.2	6.8	1.4	3.6	10.3	9.4	72.2	(s)	0.0	0.0	23.5	198.7	57.2	256.0
1981	39.7	57.3	12.1	17.3	0.8	4.3	1.4	3.1	0.8	6.5	46.4	(s)	0.0	0.0	23.6	167.0	56.3	223.3
1982	25.6	58.5	10.8	15.8	0.4	6.8	1.3	3.1	0.1	6.8	44.9	(s)	0.0	0.0	16.0	145.0	38.4	183.4
1983	15.6	52.7	12.5	21.1	0.1	5.2	1.3	2.6	1.6	7.8	52.2	(s)	0.0	0.0	13.8	134.4	33.1	167.4
1984	18.5	52.2	20.5	21.5	0.1	2.4	1.4	2.6	1.0	8.9	58.4	(s)	0.0	0.0	18.3	147.5	42.7	190.2
1985	17.1	47.7	20.6	13.4	0.2	2.2	1.3	3.0	0.2	7.4	48.3	(s)	0.0	0.0	18.7	131.8	43.8	175.6
1986	16.6	43.9	20.5	20.1	0.1	1.8	1.3	2.9	1.1	6.0	53.9	(s)	0.0	0.0	20.0	134.3	45.9	180.2
1987	15.7	43.0	20.6	15.5	0.2	2.1	1.5	2.8	0.2	7.1	50.0	(s)	0.0	0.0	21.2	129.9	48.5	178.4
1988	14.5	50.2	23.6	21.5	0.2	3.7	1.4	2.5	(s)	7.9	60.8	(s)	0.0	0.0	21.5	146.9	48.6	195.5
1989	13.4	64.3	19.4	16.5	0.2	6.7	1.4	2.7	0.1	8.5	55.3	(s)	0.0	0.0	21.9	155.0	R 49.3	R 204.3
1990	15.4	66.7	21.6	15.6	0.1	3.5	1.5	2.1	0.1	8.6	53.2	f 0.4	f 2.5	f 0.0	22.5	f 160.6	R 49.2	R f 209.8
1991	15.6	82.4	20.6	20.6	0.1	4.3	1.3	2.6	0.2	7.8	57.6	0.5	2.7	0.0	23.0	181.9	50.1	R 232.0
1992	14.8	80.6	21.2	25.3	(s)	4.1	1.4	2.6	(s)	10.0	64.6	1.3	2.7	0.0	23.4	187.3	49.9	237.2
1993	16.3	94.9	22.6	21.1	0.1	4.6	1.4	2.6	0.1	9.4	61.9	1.3	2.8	0.0	24.0	201.2	50.6	R 251.9
1994	18.5	95.9	27.8	18.2	(s)	4.3	1.4	3.1	(s)	9.8	64.6	1.2	R 4.3	0.0	32.8	R 217.3	68.5	R 285.8
1995	15.8	99.3	24.7	18.5	(s)	4.7	1.4	2.8	(s)	9.4	61.6	1.3	R 3.9	0.0	33.1	R 215.0	69.0	R 284.0
1996	7.9	113.9	25.9	24.0	(s)	5.3	1.4	3.3	(s)	10.8	70.7	1.2	4.1	0.0	33.9	231.8	70.6	302.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 51. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Colorado**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	25	1	1,125	2,146	480	93	280	15,023	137	19,284	0	0	-	0	-
1965	6	2	1,111	1,763	3,426	81	286	18,097	713	25,476	0	0	-	0	-
1970	3	2	337	2,655	7,476	133	286	24,943	99	35,929	0	0	-	0	-
1975	(s)	5	267	4,290	7,151	188	302	30,948	104	43,250	0	0	-	0	-
1980	0	8	265	6,554	4,725	45	402	33,275	0	45,267	0	0	-	0	-
1981	0	7	257	5,196	5,494	104	386	33,743	0	45,179	0	0	-	0	-
1982	0	9	188	6,125	5,556	73	352	34,201	0	46,495	0	0	-	0	-
1983	0	8	179	6,220	6,134	89	369	32,824	16	45,831	0	0	-	0	-
1984	0	7	143	6,590	8,505	103	393	32,750	10	48,494	0	0	-	0	-
1985	0	7	142	6,358	7,861	68	366	R 34,986	146	R 49,927	0	0	-	0	-
1986	0	7	176	6,106	8,065	59	358	35,759	(s)	R 50,523	0	0	-	0	-
1987	0	9	153	6,096	8,372	39	405	R 35,471	0	R 50,536	0	0	-	0	-
1988	0	8	167	6,371	6,460	54	390	R 35,736	0	R 49,177	0	0	-	0	-
1989	0	11	181	6,728	5,337	59	400	R 34,751	0	R 47,458	0	0	-	0	-
1990	0	9	167	7,175	6,109	75	412	R 34,889	0	R 48,826	R e 23,990	0	-	0	-
1991	0	8	155	7,622	6,503	83	369	R 34,837	0	R 49,568	R 19,016	0	-	0	-
1992	0	8	136	7,173	7,363	68	376	R 35,135	0	R 50,251	R 23,112	0	-	0	-
1993	0	8	124	8,476	8,959	R 84	383	R 37,374	0	R 55,400	R 25,793	0	-	0	-
1994	0	10	128	8,864	7,930	138	400	R 38,751	1	R 56,212	R 24,573	1	-	1	-
1995	0	11	124	9,366	7,428	69	393	R 40,757	0	R 58,136	R 36,910	3	-	6	-
1996	0	11	124	9,638	7,765	74	382	(s)	60,114	63,802	3	-	7	-	

  

Trillion Btu															
1960	0.6	1.3	5.7	12.5	2.6	0.4	1.7	78.9	0.9	102.6	0.0	0.0	104.5	0.0	104.5
1965	0.1	1.7	5.6	10.3	19.3	0.3	1.7	95.1	4.5	136.8	0.0	0.0	138.6	0.0	138.6
1970	0.1	1.8	1.7	15.5	42.3	0.5	1.7	131.0	0.6	193.3	0.0	0.0	195.2	0.0	195.2
1975	(s)	4.8	1.3	25.0	40.4	0.7	1.8	162.6	0.7	232.5	0.0	0.0	237.3	0.0	237.3
1980	0.0	7.5	1.3	38.2	26.7	0.2	2.4	174.8	0.0	243.6	0.0	0.0	251.1	0.0	251.1
1981	0.0	6.7	1.3	30.3	31.0	0.4	2.3	177.2	0.0	242.6	0.0	0.0	249.2	0.0	249.2
1982	0.0	8.8	0.9	35.7	31.4	0.3	2.1	179.7	0.0	250.1	0.0	0.0	258.9	0.0	258.9
1983	0.0	8.2	0.9	36.2	34.7	0.3	2.2	172.4	0.1	246.9	0.0	0.0	255.1	0.0	255.1
1984	0.0	7.4	0.7	38.4	48.1	0.4	2.4	172.0	0.1	262.1	0.0	0.0	269.4	0.0	269.4
1985	0.0	7.1	0.7	37.0	44.5	0.2	2.2	R 183.8	0.9	R 269.4	0.0	0.0	276.5	0.0	276.5
1986	0.0	6.7	0.9	35.6	45.6	0.2	2.2	187.8	(s)	272.3	0.0	0.0	279.0	0.0	279.0
1987	0.0	8.7	0.8	35.5	47.4	0.1	2.5	R 186.3	0.0	R 272.6	0.0	0.0	R 281.3	0.0	R 281.3
1988	0.0	7.9	0.8	37.1	36.5	0.2	2.4	R 187.7	0.0	R 264.8	0.0	0.0	R 272.7	0.0	R 272.7
1989	0.0	11.4	0.9	39.2	30.2	0.2	2.4	182.5	0.0	R 255.5	0.0	0.0	R 266.8	0.0	R 266.8
1990	0.0	9.2	0.8	41.8	34.6	0.3	2.5	R 183.3	0.0	R 263.2	R e 1.8	0.0	R e 272.4	0.0	R e 272.4
1991	0.0	8.6	0.8	44.4	36.8	0.3	2.2	R 183.0	0.0	267.5	R 1.5	0.0	R 276.2	0.0	R 276.2
1992	0.0	8.5	0.7	41.8	41.6	0.2	2.3	184.6	0.0	271.2	R 1.8	0.0	279.7	0.0	279.7
1993	0.0	7.7	0.6	49.4	50.7	0.3	2.3	196.3	0.0	299.6	R 2.0	0.0	R 307.4	0.0	R 307.4
1994	0.0	10.1	0.6	51.6	44.9	0.5	2.4	203.6	(s)	R 303.6	R 1.9	(s)	313.8	(s)	313.8
1995	0.0	11.5	0.6	54.6	42.0	0.2	2.4	214.1	0.0	313.9	R 2.8	(s)	325.4	(s)	325.4
1996	0.0	11.2	0.6	56.1	44.0	0.3	2.3	221.3	(s)	324.7	4.9	(s)	335.8	(s)	335.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 52. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Colorado**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	1,221	0	1,221	37	106	10	0	116	0	969	0	0	0	--
1965	2,181	0	2,181	36	40	4	0	43	0	937	0	0	0	--
1970	3,212	0	3,212	51	242	22	0	264	0	1,234	0	0	0	--
1975	5,710	0	5,710	53	882	619	0	1,501	0	1,506	0	0	0	--
1980	10,124	0	10,124	32	171	273	0	444	667	1,716	0	0	0	--
1981	11,781	0	11,781	14	4	194	0	198	749	1,398	0	0	0	--
1982	12,638	0	12,638	6	2	191	0	192	569	1,649	1	0	0	--
1983	12,193	0	12,193	5	50	144	0	194	748	1,870	1	0	0	--
1984	13,758	0	13,758	5	6	84	0	89	55	2,168	2	0	0	--
1985	14,295	0	14,295	5	8	113	0	121	-32	2,357	3	0	0	--
1986	14,150	0	14,150	5	0	96	0	96	52	2,263	4	0	0	--
1987	14,178	0	14,178	8	(s)	90	0	90	174	1,818	2	0	0	--
1988	15,087	0	15,087	8	26	57	0	84	660	1,744	2	0	0	--
1989	15,686	0	15,686	8	1	70	0	71	529	1,705	1	0	0	--
1990	15,924	0	15,924	5	(s)	50	0	50	0	1,276	(s)	0	0	--
1991	15,416	0	15,416	6	46	35	0	82	0	1,663	(s)	0	0	--
1992	15,902	0	15,902	5	37	47	0	84	0	1,505	0	0	0	--
1993	16,252	0	16,252	5	0	28	0	28	0	1,858	0	0	0	--
1994	16,596	0	16,596	5	(s)	26	0	26	0	1,540	0	0	0	--
1995	16,222	0	16,222	4	8	22	0	30	0	2,101	0	0	0	--
1996	16,841	0	16,841	5	16	35	0	51	0	1,585	0	0	0	--

**Trillion Btu**

1960	25.1	0.0	25.1	38.3	0.7	0.1	0.0	0.7	0.0	10.4	0.0	0.0	0.0	74.6
1965	46.5	0.0	46.5	32.4	0.3	(s)	0.0	0.3	0.0	9.8	0.0	0.0	0.0	89.0
1970	69.1	0.0	69.1	49.9	1.5	0.1	0.0	1.6	0.0	13.0	0.0	0.0	0.0	133.6
1975	113.1	0.0	113.1	52.7	5.5	3.6	0.0	9.2	0.0	15.7	0.0	0.0	0.0	190.6
1980	202.4	0.0	202.4	31.3	1.1	1.6	0.0	2.7	7.3	17.8	0.0	0.0	0.0	261.5
1981	237.0	0.0	237.0	13.3	(s)	1.1	0.0	1.2	8.3	14.6	0.0	0.0	0.0	274.3
1982	248.1	0.0	248.1	5.8	(s)	1.1	0.0	1.1	6.3	17.2	(s)	0.0	0.0	278.6
1983	237.4	0.0	237.4	4.5	0.3	0.8	0.0	1.2	8.2	19.7	(s)	0.0	0.0	270.8
1984	265.7	0.0	265.7	4.8	(s)	0.5	0.0	0.5	0.6	22.6	(s)	0.0	0.0	294.3
1985	278.7	0.0	278.7	4.9	(s)	0.7	0.0	0.7	-0.3	24.6	(s)	0.0	0.0	308.6
1986	276.5	0.0	276.5	4.6	0.0	0.6	0.0	0.6	0.6	23.6	(s)	0.0	0.0	305.9
1987	279.1	0.0	279.1	7.7	(s)	0.5	0.0	0.5	1.9	18.9	(s)	0.0	0.0	308.2
1988	294.9	0.0	294.9	8.4	0.2	0.3	0.0	0.5	7.1	18.0	(s)	0.0	0.0	328.8
1989	309.0	0.0	309.0	8.2	(s)	0.4	0.0	0.4	5.7	R 17.8	(s)	0.0	0.0	R 341.0
1990	312.4	0.0	312.4	5.4	(s)	0.3	0.0	0.3	0.0	R 13.3	(s)	0.0	0.0	R 331.3
1991	304.8	0.0	304.8	5.7	0.3	0.2	0.0	0.5	0.0	R 17.3	(s)	0.0	0.0	R 328.4
1992	315.5	0.0	315.5	5.0	0.2	0.3	0.0	0.5	0.0	R 15.6	0.0	0.0	0.0	R 336.6
1993	321.4	0.0	321.4	4.9	0.0	0.2	0.0	0.2	0.0	R 19.2	0.0	0.0	0.0	345.6
1994	330.1	0.0	330.1	5.1	(s)	0.1	0.0	0.2	0.0	R 15.9	0.0	0.0	0.0	351.2
1995	321.0	0.0	321.0	3.8	(s)	0.1	0.0	0.2	0.0	21.6	0.0	0.0	0.0	346.7
1996	332.1	0.0	332.1	5.5	0.1	0.2	0.0	0.3	0.0	16.4	0.0	0.0	0.0	354.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 53. Energy Consumption Estimates by Source, Selected Years 1960-1996, Connecticut**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum												Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>				
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total											
			Thousand Barrels																		Million Kilowatthours			Total <sup>h</sup>
			Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels							Thousand Barrels	Thousand Barrels	Thousand Barrels	Thousand Barrels
1960	3,851	28	1,088	104	23,369	1,129	1,914	1,092	350	19,349	14,622	222	63,238	0	424	0	0	-708	-					
1965	4,957	41	1,326	172	21,186	1,411	1,308	1,383	563	22,933	17,159	660	68,100	0	187	0	0	-946	-					
1970	2,060	61	1,019	124	24,117	2,897	778	1,854	569	28,638	35,595	6,190	101,782	3,604	329	0	0	-9,907	-					
1975	55	64	1,262	90	21,613	2,124	588	2,209	396	31,822	32,512	617	93,233	8,135	493	0	0	-5,957	-					
1980	16	73	630	89	22,304	1,973	491	1,501	455	30,205	29,334	2,544	88,994	11,835	256	0	0	-5,609	-					
1981	38	77	784	77	19,724	1,580	415	1,336	437	30,252	21,540	2,012	78,689	12,673	260	0	0	503	-					
1982	31	78	785	60	20,505	1,076	381	1,418	398	30,055	21,291	1,960	77,930	13,625	371	0	0	-2,290	-					
1983	29	74	737	66	16,904	957	296	1,426	417	30,534	23,325	1,687	76,350	11,588	378	0	0	3,584	-					
1984	59	81	934	63	18,669	1,005	236	1,401	445	30,855	25,087	1,944	80,639	14,292	377	0	0	-8,356	-					
1985	815	78	2,095	71	18,909	1,085	712	1,283	414	R 30,999	21,040	1,857	R 78,464	12,721	307	0	0	-501	-					
1986	809	79	2,124	72	20,609	1,255	561	1,134	405	R 31,860	22,279	1,177	R 81,477	18,667	804	0	0	-20,645	-					
1987	815	92	2,139	55	21,201	1,784	579	1,558	458	R 32,428	18,951	1,198	R 80,350	20,540	918	0	0	-20,413	-					
1988	881	88	1,853	48	22,980	2,156	724	1,518	442	R 32,838	21,861	1,185	R 85,605	22,251	1,008	242	0	-27,044	-					
1989	890	95	1,797	40	25,627	2,242	671	1,586	453	R 32,273	22,185	1,162	R 88,036	19,563	624	317	0	-18,470	-					
1990	971	98	1,585	94	20,398	2,344	315	1,592	466	R 31,140	16,590	1,305	R 75,829	19,776	i NA	i NA	i NA	R -13,463	-					
1991	856	102	1,976	28	19,837	2,246	379	1,485	417	R 31,870	14,536	1,515	R 74,289	12,243	NA	NA	NA	R 12,740	-					
1992	849	111	1,678	28	22,236	2,293	249	1,885	425	R 32,596	10,889	1,583	R 73,862	16,771	NA	NA	NA	R 4,337	-					
1993	788	112	1,577	30	22,099	2,312	279	1,684	433	R 33,103	8,845	1,595	R 71,957	21,802	NA	NA	NA	R -7,841	-					
1994	862	120	1,676	28	20,347	2,452	260	1,487	453	R 32,668	7,597	1,624	R 68,592	20,160	NA	NA	NA	R -1,376	-					
1995	906	132	1,911	41	20,982	2,489	244	1,410	445	R 30,591	6,822	1,553	R 66,486	18,749	NA	NA	NA	R -2,176	-					
1996	931	128	1,572	37	22,545	2,718	221	1,484	432	R 32,663	10,432	1,624	73,728	6,225	NA	NA	NA	34,721	-					
Trillion Btu																								
1960	101.7	29.4	7.2	0.5	136.1	6.4	10.9	4.4	2.1	101.6	91.9	1.3	362.4	0.0	4.6	0.0	0.0	-2.4	495.7					
1965	128.6	41.7	8.8	0.9	123.4	8.0	7.4	5.5	3.4	120.5	107.9	3.7	389.4	0.0	2.0	0.0	0.0	-3.2	558.5					
1970	48.6	61.5	6.8	0.6	140.5	16.4	4.4	7.0	3.5	150.4	223.8	34.0	587.4	39.6	3.5	0.0	0.0	-33.8	706.7					
1975	1.3	64.3	8.4	0.5	125.9	12.0	3.3	8.2	2.4	167.2	204.4	3.4	535.7	89.6	5.1	0.0	0.0	-20.3	675.7					
1980	0.4	74.2	4.2	0.4	129.9	11.2	2.8	5.5	2.8	158.7	184.4	11.0	510.9	129.1	2.7	0.0	0.0	-19.1	698.0					
1981	0.9	78.7	5.2	0.4	114.9	8.9	2.4	4.9	2.6	158.9	135.4	13.9	447.5	139.8	2.7	0.0	0.0	1.7	671.4					
1982	0.8	80.4	5.2	0.3	119.4	6.1	2.2	5.1	2.4	157.9	133.9	10.7	443.1	150.9	3.9	0.0	0.0	-7.8	671.2					
1983	0.7	76.6	4.9	0.3	98.5	5.4	1.7	5.2	2.5	160.4	146.6	9.3	434.8	126.4	4.0	0.0	0.0	12.2	654.7					
1984	1.5	83.5	6.2	0.3	108.7	5.7	1.3	5.0	2.7	162.1	157.7	10.5	460.3	155.0	3.9	0.0	0.0	-28.5	675.6					
1985	21.3	80.6	13.9	0.4	110.1	6.1	4.0	4.6	2.5	162.8	132.3	10.0	R 446.9	137.6	3.2	0.0	0.0	-1.7	R 687.8					
1986	21.2	81.3	14.1	0.4	120.0	7.1	3.2	4.1	2.5	167.4	140.1	6.4	465.2	201.6	8.4	0.0	0.0	-70.4	707.2					
1987	21.4	94.7	14.2	0.3	123.5	10.1	3.3	5.7	2.8	R 170.3	119.1	6.4	R 455.7	221.3	9.6	0.0	0.0	-69.6	R 733.1					
1988	23.1	90.9	12.3	0.2	133.9	12.2	4.1	5.5	2.7	R 172.5	137.4	6.4	R 487.3	239.0	10.4	2.5	0.0	-92.3	R 761.0					
1989	23.7	98.3	11.9	0.2	149.3	12.7	3.8	5.8	2.7	169.5	139.5	6.3	R 501.8	209.8	R 6.5	3.3	0.0	R -63.0	R 780.3					
1990	25.7	100.9	10.5	0.5	118.8	13.3	1.8	5.8	2.8	R 163.6	104.3	7.1	R 428.4	211.2	i 7.3	R i 37.8	i 0.1	R -45.9	R i 765.3					
1991	22.6	105.1	13.1	0.1	115.5	12.7	2.1	5.4	2.5	167.4	91.4	8.2	R 418.6	131.5	R 6.1	R 38.3	0.1	R 43.5	R 765.8					
1992	22.3	114.4	11.1	0.1	129.5	13.0	1.4	6.8	2.6	R 171.2	68.5	8.5	R 412.8	179.1	R 12.0	R 41.5	0.1	14.8	R 798.8					
1993	20.6	114.5	10.5	0.2	128.7	13.1	1.6	6.1	2.6	R 173.9	55.6	8.6	400.8	232.9	R 12.8	R 44.1	0.1	-26.8	R 801.1					
1994	22.5	123.6	11.1	0.1	118.5	13.9	1.5	5.4	2.7	R 171.6	47.8	8.8	R 381.4	215.2	11.3	R 44.0	0.1	-4.7	R 797.4					
1995	23.7	136.0	12.7	0.2	122.2	14.1	1.4	5.1	2.7	160.7	42.9	8.4	370.4	199.8	14.0	R 49.6	0.1	-7.4	R 791.7					
1996	24.4	131.5	10.4	0.2	131.3	15.4	1.3	5.4	2.6	171.6	65.6	8.7	412.5	66.1	15.7	52.7	0.2	118.5	824.5					

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 54. Residential Energy Consumption Estimates, Selected Years 1960-1996, Connecticut**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	29	66	95	16	15,480	1,507	624	17,611	0	0	2,724	—	6,776	—
1965	4	42	46	22	13,649	1,101	692	15,442	0	0	3,812	—	9,101	—
1970	0	25	25	31	14,239	526	802	15,568	0	0	6,396	—	15,501	—
1975	0	13	13	32	12,950	291	768	14,009	0	0	7,449	—	17,969	—
1980	0	10	10	32	13,468	233	595	14,296	0	0	8,218	—	19,983	—
1981	1	20	21	33	12,948	195	591	13,734	0	0	8,614	—	20,530	—
1982	0	17	17	33	12,241	263	577	13,081	0	0	8,505	—	20,428	—
1983	0	13	13	31	9,293	195	686	10,173	0	0	8,767	—	21,004	—
1984	0	25	25	33	9,530	191	554	10,276	0	0	8,584	—	19,981	—
1985	0	22	22	33	9,758	605	639	11,001	0	0	8,638	—	20,295	—
1986	(s)	22	22	35	11,578	423	562	12,563	0	0	9,080	—	20,887	—
1987	(s)	14	15	36	11,613	406	795	12,814	0	0	9,670	—	22,095	—
1988	(s)	7	7	39	13,136	403	742	14,281	0	0	10,300	—	23,287	—
1989	(s)	7	7	41	14,228	287	840	15,355	0	0	10,485	—	R 23,552	—
1990	0	7	7	37	11,426	196	857	12,479	e 483	e 17	10,376	—	R 22,694	—
1991	0	8	8	37	11,236	175	950	12,360	509	18	10,441	—	R 22,724	—
1992	3	7	10	42	13,434	196	1,220	14,850	535	19	10,496	—	R 22,419	—
1993	0	8	8	42	13,812	211	1,051	15,073	551	20	10,597	—	R 22,389	—
1994	(s)	7	7	42	12,564	162	941	13,667	540	35	10,898	—	R 22,740	—
1995	6	5	11	41	12,129	122	875	13,126	599	40	10,760	—	R 22,413	—
1996	0	3	3	44	13,392	124	1,012	14,528	598	49	10,943	—	22,776	—

  

Trillion Btu														
1960	0.7	1.6	2.4	16.6	90.2	8.5	2.5	101.2	0.0	0.0	9.3	129.4	23.1	152.6
1965	0.1	1.0	1.1	22.7	79.5	6.2	2.8	88.5	0.0	0.0	13.0	125.4	31.1	156.4
1970	0.0	0.6	0.6	31.7	82.9	3.0	3.0	89.0	0.0	0.0	21.8	143.1	52.9	196.0
1975	0.0	0.3	0.3	32.3	75.4	1.7	2.9	79.9	0.0	0.0	25.4	138.0	61.3	199.3
1980	0.0	0.2	0.2	32.7	78.5	1.3	2.2	82.0	0.0	0.0	28.0	143.0	68.2	211.1
1981	(s)	0.5	0.5	34.2	75.4	1.1	2.2	78.7	0.0	0.0	29.4	142.8	70.0	212.8
1982	0.0	0.4	0.4	33.9	71.3	1.5	2.1	74.9	0.0	0.0	29.0	138.3	69.7	208.0
1983	0.0	0.3	0.3	31.8	54.1	1.1	2.5	57.7	0.0	0.0	29.9	119.7	71.7	191.4
1984	0.0	0.6	0.6	34.0	55.5	1.1	2.0	58.6	0.0	0.0	29.3	122.5	68.2	190.7
1985	0.0	0.5	0.5	33.8	56.8	3.4	2.3	62.6	0.0	0.0	29.5	126.3	69.2	195.6
1986	(s)	0.5	0.5	36.2	67.4	2.4	2.0	71.9	0.0	0.0	31.0	139.6	71.3	210.8
1987	(s)	0.4	0.4	37.3	67.6	2.3	2.9	72.9	0.0	0.0	33.0	143.5	75.4	218.9
1988	(s)	0.2	0.2	40.7	76.5	2.3	2.7	81.5	0.0	0.0	35.1	157.6	79.5	237.0
1989	(s)	0.2	0.2	42.1	82.9	1.6	3.1	87.6	0.0	0.0	35.8	165.6	R 80.4	R 246.0
1990	0.0	0.2	0.2	38.7	66.6	1.1	3.1	70.8	e 9.7	e 0.1	35.4	e 154.8	77.4	R e 232.2
1991	0.0	0.2	0.2	38.3	65.4	1.0	3.4	69.9	10.2	0.1	35.6	154.3	77.5	R 231.8
1992	0.1	0.2	0.2	43.6	78.3	1.1	4.4	83.8	10.7	0.1	35.8	174.2	76.5	R 250.7
1993	0.0	0.2	0.2	43.4	80.5	1.2	3.8	85.4	11.0	0.1	36.2	176.2	76.4	R 252.6
1994	(s)	0.2	0.2	42.9	73.2	0.9	3.4	77.5	10.8	0.1	37.2	168.7	R 77.6	R 246.3
1995	0.1	0.1	0.3	42.0	70.7	0.7	3.2	74.5	12.0	0.1	36.7	R 165.7	76.5	242.1
1996	0.0	0.1	0.1	45.0	78.0	0.7	3.7	82.4	12.0	0.2	37.3	176.9	77.7	254.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 55. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Connecticut**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	54	44	98	3	5,029	52	110	63	871	6,125	0	1,825	-	4,539	-
1965	7	28	35	6	4,434	38	122	76	958	5,629	0	2,873	-	6,861	-
1970	0	17	17	15	4,626	18	142	97	995	5,877	0	4,649	-	11,265	-
1975	0	9	9	16	4,207	10	136	239	656	5,248	0	6,000	-	14,472	-
1980	0	6	6	20	2,905	7	105	275	1,171	4,463	0	7,039	-	17,116	-
1981	2	14	16	23	2,933	11	104	282	788	4,118	0	7,525	-	17,934	-
1982	0	11	11	23	2,974	1	102	294	761	4,133	0	7,717	-	18,534	-
1983	0	8	8	22	3,236	68	121	190	1,445	5,060	0	8,172	-	19,578	-
1984	0	16	16	25	3,318	31	98	144	1,972	5,563	0	8,275	-	19,262	-
1985	0	15	15	25	3,547	64	113	142	1,679	5,546	0	8,731	-	20,514	-
1986	1	14	15	25	3,525	67	99	146	1,604	5,441	0	9,267	-	21,317	-
1987	1	10	10	28	3,137	112	140	172	1,302	R 4,864	0	9,801	-	22,394	-
1988	(s)	4	4	27	3,023	66	131	165	1,364	R 4,749	0	10,317	-	23,325	-
1989	(s)	4	4	31	3,427	145	148	190	1,548	R 5,459	0	10,644	-	R 23,909	-
1990	0	5	5	29	2,929	51	151	R 204	1,049	R 4,385	e NA	10,711	-	R 23,427	-
1991	0	5	5	27	2,984	167	168	R 656	529	4,504	NA	10,908	-	R 23,743	-
1992	5	5	10	30	2,944	45	215	1,576	893	5,673	NA	10,851	-	R 23,178	-
1993	0	5	5	31	2,564	44	185	1,588	413	4,795	71	11,044	-	R 23,335	-
1994	R 1	4	5	39	2,469	51	166	1,041	656	R 4,382	70	11,210	-	R 23,391	-
1995	R 11	3	14	38	2,921	27	154	250	454	3,807	84	11,297	-	R 23,532	-
1996	0	2	2	40	3,001	72	179	823	462	4,537	90	11,546	-	24,031	-

  

Trillion Btu															
1960	1.4	1.1	2.4	3.3	29.3	0.3	0.4	0.3	5.5	35.8	0.0	6.2	47.8	15.5	63.3
1965	0.2	0.7	0.9	5.9	25.8	0.2	0.5	0.4	6.0	33.0	0.0	9.8	49.5	23.4	72.9
1970	0.0	0.4	0.4	14.7	26.9	0.1	0.5	0.5	6.3	34.3	0.0	15.9	65.3	38.4	103.8
1975	0.0	0.2	0.2	16.0	24.5	0.1	0.5	1.3	4.1	30.4	0.0	20.5	67.1	49.4	116.5
1980	0.0	0.1	0.1	20.6	16.9	(s)	0.4	1.4	7.4	26.2	0.0	24.0	70.9	58.4	129.3
1981	(s)	0.3	0.4	23.3	17.1	0.1	0.4	1.5	5.0	24.0	0.0	25.7	73.3	61.2	134.5
1982	0.0	0.3	0.3	23.7	17.3	(s)	0.4	1.5	4.8	24.0	0.0	26.3	74.4	63.2	137.6
1983	0.0	0.2	0.2	22.9	18.8	0.4	0.4	1.0	9.1	29.8	0.0	27.9	80.7	66.8	147.5
1984	0.0	0.4	0.4	25.5	19.3	0.2	0.4	0.8	12.4	33.0	0.0	28.2	87.2	65.7	152.9
1985	0.0	0.3	0.3	25.3	20.7	0.4	0.4	0.7	10.6	32.7	0.0	29.8	88.2	70.0	158.2
1986	(s)	0.4	0.4	25.5	20.5	0.4	0.4	0.8	10.1	32.1	0.0	31.6	89.6	72.7	162.3
1987	(s)	0.3	0.3	28.4	18.3	0.6	0.5	0.9	8.2	28.5	0.0	33.4	90.7	76.4	167.1
1988	(s)	0.1	0.1	28.3	17.6	0.4	0.5	0.9	8.6	27.9	0.0	35.2	91.5	79.6	171.1
1989	(s)	0.1	0.1	31.8	20.0	0.8	0.5	1.0	9.7	32.1	0.0	36.3	100.3	R 81.6	R 181.9
1990	0.0	0.1	0.1	30.4	17.1	0.3	0.5	1.1	6.6	25.6	e NA	36.5	92.6	R 79.9	R 172.6
1991	0.0	0.1	0.1	27.7	17.4	0.9	0.6	3.4	3.3	25.7	NA	37.2	90.7	R 81.0	R 171.7
1992	0.1	0.1	0.3	30.7	17.1	0.3	0.8	8.3	5.6	32.1	NA	37.0	100.0	R 79.1	R 179.1
1993	0.0	0.1	0.1	32.3	14.9	0.3	0.7	8.3	2.6	26.8	1.4	37.7	R 98.3	79.6	R 177.9
1994	(s)	0.1	0.1	40.3	14.4	0.3	0.6	5.5	4.1	24.9	1.4	38.2	R 104.9	79.8	R 184.7
1995	0.2	0.1	0.3	39.0	17.0	0.2	0.6	1.3	2.9	21.9	1.7	38.5	R 101.5	80.3	R 181.7
1996	0.0	0.1	0.1	40.9	17.5	0.4	0.6	4.3	2.9	25.8	1.8	39.4	107.9	82.0	189.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 56. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Connecticut**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	866	7	1,088	1,665	354	355	93	243	11,950	222	15,968	26	0	0	2,837	-	7,056	-
1965	776	12	1,326	1,561	169	564	308	248	13,180	660	18,016	9	0	0	3,862	-	9,220	-
1970	142	15	1,019	1,968	234	890	331	269	13,710	6,190	24,611	3	0	0	5,094	-	12,344	-
1975	29	16	1,262	1,944	287	1,280	200	36	9,124	617	14,750	7	0	0	5,050	-	12,181	-
1980	0	20	630	3,235	251	785	208	66	6,683	2,012	13,870	6	0	0	5,944	-	14,454	-
1981	1	21	784	1,497	209	614	199	52	2,528	2,544	8,428	6	0	0	6,318	-	15,058	-
1982	3	21	785	1,525	117	716	182	53	3,152	1,960	8,490	6	0	0	5,878	-	14,117	-
1983	8	21	737	1,230	33	592	190	43	1,766	1,687	6,279	6	0	0	6,067	-	14,536	-
1984	5	21	934	1,262	14	R 707	203	75	2,411	1,944	7,551	6	0	0	6,244	-	14,533	-
1985	4	19	2,095	1,072	44	499	189	225	2,202	1,857	8,183	6	0	0	6,113	-	14,362	-
1986	8	18	2,124	1,055	71	451	185	238	2,322	1,177	7,623	6	0	0	6,178	-	14,211	-
1987	3	20	2,139	1,697	61	601	209	R 236	1,981	1,198	8,122	6	0	0	6,251	-	14,282	-
1988	16	19	1,853	1,333	255	614	202	R 267	2,095	1,185	7,804	6	0	0	6,305	-	14,255	-
1989	2	20	1,797	1,454	239	565	207	R 277	1,695	1,162	7,397	6	0	0	6,235	-	R 14,005	-
1990	1	25	1,585	1,018	68	548	213	R 263	1,434	1,305	R 6,434	f NA	f NA	f NA	6,100	-	R 13,341	-
1991	3	33	1,976	1,080	37	327	191	239	996	1,515	6,360	NA	NA	NA	5,822	-	R 12,673	-
1992	12	36	1,678	932	8	417	194	240	1,229	1,583	6,282	NA	NA	NA	5,780	-	R 12,345	-
1993	30	37	1,577	822	24	415	198	196	1,442	1,595	6,269	NA	NA	NA	5,597	-	R 11,826	-
1994	R 29	31	1,676	761	46	R 330	207	195	1,313	1,624	6,153	NA	NA	NA	5,917	-	R 12,346	-
1995	R 0	33	1,911	825	95	355	203	195	767	1,553	5,903	NA	NA	NA	5,913	-	R 12,318	-
1996	0	32	1,572	822	25	272	197	223	980	1,624	5,715	NA	NA	NA	5,928	-	12,339	-

**Trillion Btu**

1960	22.8	7.5	7.2	9.7	2.0	1.4	0.6	1.3	75.1	1.3	98.6	0.3	0.0	0.0	9.7	138.9	24.1	163.0
1965	20.4	12.7	8.8	9.1	1.0	2.3	1.9	1.3	82.9	3.7	110.8	0.1	0.0	0.0	13.2	157.2	31.5	188.6
1970	3.4	14.9	6.8	11.5	1.3	3.4	2.0	1.4	86.2	34.0	146.6	(s)	0.0	0.0	17.4	182.3	42.1	224.4
1975	0.7	15.6	8.4	11.3	1.6	4.8	1.2	0.2	57.4	3.4	88.3	0.1	0.0	0.0	17.2	121.9	41.6	163.4
1980	0.0	20.8	4.2	18.8	1.4	2.9	1.3	0.3	42.0	11.0	82.0	0.1	0.0	0.0	20.3	123.1	49.3	172.4
1981	(s)	21.1	5.2	8.7	1.2	2.2	1.2	0.3	15.9	13.9	48.6	0.1	0.0	0.0	21.6	91.4	51.4	142.8
1982	0.1	22.0	5.2	8.9	0.7	2.6	1.1	0.3	19.8	10.7	49.2	0.1	0.0	0.0	20.1	91.4	48.2	139.6
1983	0.2	21.6	4.9	7.2	0.2	2.1	1.2	0.2	11.1	9.3	36.2	0.1	0.0	0.0	20.7	78.8	49.6	128.4
1984	0.1	21.5	6.2	7.3	0.1	2.5	1.2	0.4	15.2	10.5	43.4	0.1	0.0	0.0	21.3	86.4	49.6	136.0
1985	0.1	19.5	13.9	6.2	0.2	1.8	1.1	1.2	13.8	10.0	48.4	0.1	0.0	0.0	20.9	88.9	49.0	137.9
1986	0.2	18.2	14.1	6.1	0.4	1.6	1.1	1.2	14.6	6.4	45.6	0.1	0.0	0.0	21.1	85.2	48.5	133.7
1987	0.1	20.4	14.2	9.9	0.3	2.2	1.3	1.2	12.5	6.4	48.0	0.1	0.0	0.0	21.3	89.9	48.7	138.6
1988	0.4	20.1	12.3	7.8	1.4	2.2	1.2	1.4	13.2	6.4	46.0	0.1	0.0	0.0	21.5	88.0	48.6	136.6
1989	(s)	20.4	11.9	8.5	1.4	2.1	1.3	1.5	10.7	6.3	43.5	0.1	0.0	0.0	21.3	85.3	R 47.8	R 133.1
1990	(s)	26.3	10.5	5.9	0.4	2.0	1.3	1.4	9.0	7.1	37.6	f 0.6	f 23.3	f 0.0	20.8	f 108.6	45.5	f 154.1
1991	0.1	33.7	13.1	6.3	0.2	1.2	1.2	1.3	6.3	8.2	37.7	0.5	23.2	0.0	19.9	115.0	43.2	R 158.3
1992	0.3	37.4	11.1	5.4	(s)	1.5	1.2	1.3	7.7	8.5	36.8	0.7	26.4	0.0	19.7	121.4	42.1	163.5
1993	0.7	37.8	10.5	4.8	0.1	1.5	1.2	1.0	9.1	8.6	36.8	0.7	26.9	0.0	19.1	122.1	R 40.4	162.4
1994	0.7	31.6	11.1	4.4	0.3	1.2	1.3	1.0	8.3	8.8	36.3	0.7	R 26.9	0.0	20.2	R 116.5	42.1	R 158.6
1995	R 0.0	34.1	12.7	4.8	0.5	1.3	1.2	1.0	4.8	8.4	34.8	0.6	R 31.7	0.0	20.2	R 121.3	42.0	R 163.3
1996	0.0	33.4	10.4	4.8	0.1	1.0	1.2	1.2	6.2	8.7	33.6	1.0	34.1	0.0	20.2	122.3	42.1	164.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 57. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Connecticut**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	15	(s)	104	1,117	1,129	2	258	19,044	204	21,857	0	0	-	0	-
1965	3	(s)	172	1,415	1,411	5	255	22,609	471	26,338	0	0	-	0	-
1970	(s)	(s)	124	2,266	2,897	21	238	28,273	359	34,177	0	0	-	0	-
1975	(s)	(s)	90	2,391	2,013	26	196	31,547	581	36,844	0	0	-	0	-
1980	0	(s)	89	2,580	1,921	15	247	29,864	53	34,768	0	0	-	0	-
1981	0	(s)	77	2,289	1,544	26	237	29,918	4	34,096	0	0	-	0	-
1982	0	1	60	3,692	1,075	23	216	29,708	6	34,781	0	0	-	0	-
1983	0	(s)	66	3,075	957	27	227	30,301	449	35,102	0	0	-	0	-
1984	0	(s)	63	4,434	1,005	43	242	30,635	245	36,665	0	0	-	0	-
1985	0	(s)	71	4,448	1,085	32	225	R 30,631	152	R 36,645	0	0	-	0	-
1986	0	1	72	4,338	1,255	22	220	R 31,477	35	R 37,420	0	0	-	0	-
1987	0	1	55	4,617	1,784	21	249	R 32,020	72	R 38,818	0	0	-	0	-
1988	0	1	48	5,257	2,156	30	240	R 32,406	131	R 40,270	0	0	-	0	-
1989	0	1	40	6,319	2,242	32	246	R 31,806	65	R 40,750	0	0	-	0	-
1990	0	(s)	94	4,955	2,344	36	253	R 30,673	86	R 38,441	R e 6,399	0	-	0	-
1991	0	1	28	4,428	2,246	40	227	R 30,976	92	R 38,036	R 5,073	0	-	0	-
1992	0	1	28	4,861	2,293	32	231	R 30,780	44	R 38,269	R 6,165	0	-	0	-
1993	0	(s)	30	4,828	2,312	33	235	R 31,319	31	R 38,788	R 6,880	0	-	0	-
1994	0	1	28	4,470	2,452	50	246	R 31,433	23	R 38,701	R 4,582	0	-	0	-
1995	0	1	41	4,976	2,489	26	242	R 30,146	12	R 37,930	R 980	0	-	0	-
1996	0	1	37	5,255	2,718	22	235	31,617	36	39,920	3,316	0	-	0	-

**Trillion Btu**

1960	0.4	0.2	0.5	6.5	6.4	(s)	1.6	100.0	1.3	116.3	0.0	0.0	116.9	0.0	116.9
1965	0.1	0.1	0.9	8.2	8.0	(s)	1.5	118.8	3.0	140.4	0.0	0.0	140.5	0.0	140.5
1970	(s)	0.1	0.6	13.2	16.4	0.1	1.4	148.5	2.3	182.5	0.0	0.0	182.6	0.0	182.6
1975	(s)	(s)	0.5	13.9	11.4	0.1	1.2	165.7	3.7	196.4	0.0	0.0	196.5	0.0	196.5
1980	0.0	0.1	0.4	15.0	10.9	0.1	1.5	156.9	0.3	185.1	0.0	0.0	185.2	0.0	185.2
1981	0.0	0.1	0.4	13.3	8.7	0.1	1.4	157.2	(s)	181.2	0.0	0.0	181.3	0.0	181.3
1982	0.0	0.7	0.3	21.5	6.1	0.1	1.3	156.1	(s)	185.4	0.0	0.0	186.0	0.0	186.0
1983	0.0	0.2	0.3	17.9	5.4	0.1	1.4	159.2	2.8	187.1	0.0	0.0	187.3	0.0	187.3
1984	0.0	0.2	0.3	25.8	5.7	0.2	1.5	160.9	1.5	195.9	0.0	0.0	196.1	0.0	196.1
1985	0.0	0.4	0.4	25.9	6.1	0.1	1.4	160.9	1.0	195.7	0.0	0.0	196.1	0.0	196.1
1986	0.0	0.7	0.4	25.3	7.1	0.1	1.3	165.4	0.2	199.7	0.0	0.0	200.4	0.0	200.4
1987	0.0	1.0	0.3	26.9	10.1	0.1	1.5	R 168.2	0.5	R 207.5	0.0	0.0	R 208.5	0.0	R 208.5
1988	0.0	0.6	0.2	30.6	12.2	0.1	1.5	R 170.2	0.8	R 215.7	0.0	0.0	R 216.2	0.0	R 216.2
1989	0.0	0.6	0.2	36.8	12.7	0.1	1.5	R 167.1	0.4	R 218.8	0.0	0.0	R 219.4	0.0	R 219.4
1990	0.0	0.5	0.5	28.9	13.3	0.1	1.5	R 161.1	0.5	R 205.9	R e 0.5	0.0	R e 206.4	0.0	R e 206.4
1991	0.0	0.5	0.1	25.8	12.7	0.1	1.4	162.7	0.6	203.4	R 0.4	0.0	R 204.0	0.0	R 204.0
1992	0.0	0.6	0.1	28.3	13.0	0.1	1.4	161.7	0.3	204.9	R 0.5	0.0	205.5	0.0	205.5
1993	0.0	0.5	0.2	28.1	13.1	0.1	1.4	164.5	0.2	207.6	R 0.5	0.0	R 208.1	0.0	R 208.1
1994	0.0	0.7	0.1	26.0	13.9	0.2	1.5	R 165.1	0.1	R 207.0	R 0.4	0.0	R 207.7	0.0	R 207.7
1995	0.0	1.2	0.2	29.0	14.1	0.1	1.5	158.4	0.1	203.3	0.1	0.0	204.5	0.0	204.5
1996	0.0	1.5	0.2	30.6	15.4	0.1	1.4	166.1	0.2	214.0	0.3	0.0	215.5	0.0	215.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 58. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Connecticut**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	2,776	0	2,776	2	1,597	79	0	1,676	0	398	0	0	0	--
1965	4,097	0	4,097	(s)	2,550	126	0	2,676	0	179	0	0	0	--
1970	1,875	0	1,875	(s)	20,531	1,018	0	21,550	3,604	327	0	0	0	--
1975	4	0	4	(s)	22,150	232	0	22,382	8,135	487	0	0	0	--
1980	0	0	0	0	21,428	168	0	21,596	11,835	250	0	0	0	--
1981	0	0	0	0	18,220	93	0	18,313	12,673	254	0	0	0	--
1982	0	0	0	0	17,371	74	0	17,445	13,625	365	0	0	0	--
1983	0	0	0	0	19,666	70	0	19,736	11,588	372	0	0	0	--
1984	13	0	13	2	20,459	124	0	20,583	14,292	371	0	0	0	--
1985	774	0	774	2	17,006	83	0	17,089	12,721	300	0	0	0	--
1986	763	0	763	1	18,318	112	0	18,430	18,667	797	0	0	0	--
1987	787	0	787	7	15,596	136	0	15,732	20,540	912	0	0	0	--
1988	854	0	854	1	18,271	230	0	18,500	22,251	1,002	242	0	0	--
1989	877	0	877	3	18,876	198	0	19,074	19,563	618	317	0	0	--
1990	958	0	958	5	14,021	69	0	14,090	19,776	645	422	0	0	--
1991	840	0	840	5	12,919	109	0	13,029	12,243	535	439	0	0	--
1992	817	0	817	2	8,723	65	0	8,788	16,771	1,092	374	0	0	--
1993	745	0	745	1	6,958	73	0	7,032	21,802	1,174	406	0	0	--
1994	821	0	821	8	5,605	83	0	5,689	20,160	1,028	439	0	0	--
1995	881	0	881	19	5,589	131	0	5,720	18,749	1,299	404	0	0	--
1996	925	0	925	10	8,953	75	0	9,028	6,225	1,424	437	0	0	--

**Trillion Btu**

1960	73.7	0.0	73.7	1.8	10.0	0.5	0.0	10.5	0.0	4.3	0.0	0.0	0.0	90.3
1965	106.2	0.0	106.2	0.3	16.0	0.7	0.0	16.8	0.0	1.9	0.0	0.0	0.0	125.1
1970	44.2	0.0	44.2	0.1	129.1	5.9	0.0	135.0	39.6	3.4	0.0	0.0	0.0	222.3
1975	0.1	0.0	0.1	0.3	139.3	1.3	0.0	140.6	89.6	5.1	0.0	0.0	0.0	235.7
1980	0.0	0.0	0.0	0.0	134.7	1.0	0.0	135.7	129.1	2.6	0.0	0.0	0.0	267.4
1981	0.0	0.0	0.0	0.0	114.6	0.5	0.0	115.1	139.8	2.7	0.0	0.0	0.0	257.5
1982	0.0	0.0	0.0	0.0	109.2	0.4	0.0	109.6	150.9	3.8	0.0	0.0	0.0	264.3
1983	0.0	0.0	0.0	0.0	123.6	0.4	0.0	124.0	126.4	3.9	0.0	0.0	0.0	254.3
1984	0.3	0.0	0.3	2.3	128.6	0.7	0.0	129.3	155.0	3.9	0.0	0.0	0.0	290.8
1985	20.4	0.0	20.4	1.6	106.9	0.5	0.0	107.4	137.6	3.1	0.0	0.0	0.0	270.1
1986	20.1	0.0	20.1	0.8	115.2	0.7	0.0	115.8	201.6	8.3	0.0	0.0	0.0	346.6
1987	20.7	0.0	20.7	7.6	98.1	0.8	0.0	98.8	221.3	9.5	0.0	0.0	0.0	357.9
1988	22.4	0.0	22.4	1.3	114.9	1.3	0.0	116.2	239.0	10.3	2.5	0.0	0.0	391.8
1989	23.3	0.0	23.3	3.4	118.7	1.2	0.0	119.8	209.8	6.4	3.3	0.0	0.0	R 366.1
1990	25.3	0.0	25.3	5.0	88.1	0.4	0.0	88.6	211.2	6.7	4.4	0.0	0.0	R 341.6
1991	22.2	0.0	22.2	4.9	81.2	0.6	0.0	81.9	131.5	R 5.6	R 4.6	0.0	0.0	R 251.0
1992	21.5	0.0	21.5	2.2	54.8	0.4	0.0	55.2	179.1	R 11.3	3.9	0.0	0.0	R 275.5
1993	19.6	0.0	19.6	0.6	43.7	0.4	0.0	44.2	232.9	12.1	4.2	0.0	0.0	R 316.1
1994	21.5	0.0	21.5	8.1	35.2	0.5	0.0	35.7	215.2	10.6	4.5	0.0	0.0	299.8
1995	23.1	0.0	23.1	19.6	35.1	0.8	0.0	35.9	199.8	13.4	4.2	0.0	0.0	R 301.7
1996	24.2	0.0	24.2	10.7	56.3	0.4	0.0	56.7	66.1	14.7	4.5	0.0	0.0	180.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 59. Energy Consumption Estimates by Source, Selected Years 1960-1996, Delaware**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum													Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total	Thousand Barrels	Million Kilowatthours						
1960	791	9	239	19	2,712	2,144	966	1,007	111	4,314	6,246	2,813	20,571	0	0	0	0	-668	-		
1965	1,103	18	571	150	3,275	2,086	825	1,507	112	5,076	5,538	2,864	22,005	0	0	0	0	-817	-		
1970	1,541	26	518	20	4,308	2,062	437	2,255	108	6,247	6,588	3,897	26,441	0	0	0	0	-1,583	-		
1975	937	19	653	15	4,309	1,654	277	2,654	82	7,069	10,218	3,269	30,200	0	0	0	0	-1,500	-		
1980	1,130	30	350	10	3,716	1,573	301	3,199	139	6,614	12,717	4,945	33,564	0	0	0	0	-941	-		
1981	2,033	31	419	9	3,125	1,482	267	873	133	6,882	8,777	3,172	25,139	0	0	0	0	-7,882	-		
1982	1,907	28	442	14	2,755	1,484	340	884	122	6,620	6,391	2,973	22,025	0	0	0	0	-4,262	-		
1983	2,859	35	208	16	3,382	1,374	270	889	127	7,216	5,056	3,283	21,821	0	0	0	0	-10,225	-		
1984	2,813	43	238	13	3,542	1,586	191	1,316	136	7,440	5,012	3,394	22,868	0	0	0	0	-7,971	-		
1985	2,766	38	827	16	3,425	1,569	705	994	126	R 7,556	3,602	3,279	R 22,099	0	0	0	0	-6,056	-		
1986	2,565	33	609	20	3,312	1,341	338	878	124	7,719	5,101	3,298	22,739	0	0	0	0	-3,632	-		
1987	2,710	37	573	16	3,824	1,287	368	1,006	140	R 7,885	4,766	3,419	R 23,284	0	0	0	0	-3,522	-		
1988	2,686	29	410	18	3,851	1,362	342	1,017	135	R 8,184	6,365	3,818	R 25,502	0	0	0	0	-3,186	-		
1989	2,357	35	522	18	4,216	1,255	284	950	138	R 8,155	5,776	3,832	R 25,146	0	0	0	0	R -298	-		
1990	2,293	39	537	78	3,220	1,306	159	1,043	142	R 8,012	3,830	5,067	R 23,393	0	i NA	i NA	i NA	R 1,018	-		
1991	2,186	42	142	17	3,427	2,397	187	1,098	127	R 7,797	5,005	5,129	R 25,326	0	NA	NA	NA	R 227	-		
1992	1,770	40	78	18	3,242	1,451	148	925	130	R 8,153	4,947	6,065	R 25,157	0	NA	NA	NA	R 3,785	-		
1993	2,446	42	112	51	3,562	1,440	143	1,015	132	R 8,312	6,414	4,207	R 25,388	0	NA	NA	NA	R 2,551	-		
1994	2,226	49	163	57	3,566	566	253	1,264	138	R 8,304	5,720	4,358	R 24,390	0	NA	NA	NA	R 3,187	-		
1995	2,011	61	176	53	3,401	73	127	1,361	136	8,471	4,109	4,196	22,102	0	NA	NA	NA	R 4,701	-		
1996	1,956	54	298	52	3,833	62	235	1,683	132	8,453	5,487	4,639	24,874	0	NA	NA	NA	5,386	-		
<b>Trillion Btu</b>																					
1960	20.5	9.4	1.6	0.1	15.8	11.5	5.5	4.0	0.7	22.7	39.3	16.9	118.0	0.0	0.0	0.0	0.0	-2.3	145.5		
1965	29.0	18.7	3.8	0.8	19.1	11.2	4.7	6.0	0.7	26.7	34.8	17.2	124.9	0.0	0.0	0.0	0.0	-2.8	169.9		
1970	37.2	26.9	3.4	0.1	25.1	11.1	2.5	8.5	0.7	32.8	41.4	23.4	149.1	0.0	0.0	0.0	0.0	-5.4	207.8		
1975	22.9	19.0	4.3	0.1	25.1	8.9	1.6	9.9	0.5	37.1	64.2	19.4	171.1	0.0	0.0	0.0	0.0	-5.1	207.9		
1980	28.1	30.8	2.3	0.1	21.6	8.4	1.7	11.8	0.8	34.7	80.0	28.6	190.1	0.0	0.0	0.0	0.0	-3.2	245.8		
1981	50.6	31.7	2.8	(s)	18.2	8.0	1.5	3.2	0.8	36.1	55.2	18.8	144.6	0.0	0.0	0.0	0.0	-26.9	200.1		
1982	47.9	28.8	2.9	0.1	16.0	8.0	1.9	3.2	0.7	34.8	40.2	17.7	125.6	0.0	0.0	0.0	0.0	-14.5	187.7		
1983	73.0	35.5	1.4	0.1	19.7	7.4	1.5	3.2	0.8	37.9	31.8	19.7	123.4	0.0	0.0	0.0	0.0	-34.9	197.0		
1984	72.8	43.9	1.6	0.1	20.6	8.5	1.1	4.7	0.8	39.1	31.5	20.1	128.1	0.0	0.0	0.0	0.0	-27.2	217.6		
1985	71.4	39.5	5.5	0.1	19.9	8.4	4.0	3.6	0.8	39.7	22.6	19.6	124.2	0.0	0.0	0.0	0.0	-20.7	214.5		
1986	66.4	33.6	4.0	0.1	19.3	7.2	1.9	3.2	0.7	40.5	32.1	19.9	129.0	0.0	0.0	0.0	0.0	-12.4	216.6		
1987	70.5	37.3	3.8	0.1	22.3	6.9	2.1	3.7	0.8	R 41.4	30.0	20.4	R 131.5	0.0	0.0	0.0	0.0	-12.0	R 227.2		
1988	69.0	29.9	2.7	0.1	22.4	7.3	1.9	3.7	0.8	43.0	40.0	22.7	R 144.7	0.0	0.0	0.0	0.0	-10.9	R 232.8		
1989	60.8	35.9	3.5	0.1	24.6	6.8	1.6	3.5	0.8	42.8	36.3	22.6	142.6	0.0	0.0	0.0	0.0	R -1.0	R 238.2		
1990	59.5	40.1	3.6	0.4	18.8	7.0	0.9	3.8	0.9	R 42.1	24.1	30.0	R 131.4	0.0	i 0.0	i 8.9	i (s)	R 3.5	R i 243.5		
1991	56.8	43.4	0.9	0.1	20.0	12.9	1.1	4.0	0.8	R 41.0	31.5	30.2	142.3	0.0	0.0	8.7	(s)	R 0.8	R 252.0		
1992	46.1	41.0	0.5	0.1	18.9	7.8	0.8	3.4	0.8	42.8	31.1	35.6	141.8	0.0	0.0	9.0	(s)	12.9	R 250.9		
1993	63.5	43.1	0.7	0.3	20.7	7.7	0.8	3.7	0.8	R 43.7	40.3	24.5	R 143.3	0.0	0.0	R 9.5	(s)	R 8.7	R 268.0		
1994	57.5	50.4	1.1	0.3	20.8	3.0	1.4	4.6	0.8	43.6	36.0	25.3	137.0	0.0	0.0	R 8.6	(s)	R 10.9	R 264.3		
1995	52.4	62.7	1.2	0.3	19.8	0.4	0.7	4.9	0.8	44.5	25.8	24.4	122.9	0.0	0.0	R 8.6	(s)	16.0	R 262.7		
1996	50.8	55.9	2.0	0.3	22.3	0.4	1.3	6.1	0.8	44.4	34.5	26.9	139.0	0.0	0.0	9.1	(s)	18.4	273.2		

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 60. Residential Energy Consumption Estimates, Selected Years 1960-1996, Delaware**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	12	12	4	1,485	807	176	2,468	0	0	496	—	1,234	—
1965	0	8	8	6	1,651	604	288	2,543	0	0	729	—	1,741	—
1970	0	5	5	8	2,037	365	416	2,818	0	0	1,169	—	2,832	—
1975	0	3	3	7	1,866	215	394	2,474	0	0	1,640	—	3,956	—
1980	(s)	2	2	7	1,316	275	375	1,966	0	0	1,866	—	4,537	—
1981	0	2	2	7	1,029	256	453	1,738	0	0	1,443	—	3,440	—
1982	3	2	5	7	894	324	377	1,595	0	0	1,466	—	3,522	—
1983	1	1	2	6	1,365	238	448	2,051	0	0	1,546	—	3,703	—
1984	0	2	2	7	1,400	174	536	2,110	0	0	1,904	—	4,431	—
1985	1	1	3	6	1,331	649	593	2,572	0	0	1,924	—	4,521	—
1986	2	2	4	7	1,057	319	413	1,789	0	0	2,121	—	4,879	—
1987	13	2	15	7	1,341	337	492	2,170	0	0	2,329	—	5,322	—
1988	6	1	7	8	1,393	303	545	2,241	0	0	2,533	—	5,727	—
1989	7	1	7	8	1,321	269	546	2,137	0	0	2,623	—	R 5,891	—
1990	8	(s)	8	7	967	144	573	1,684	e 79	e 7	2,651	—	R 5,799	—
1991	7	(s)	7	7	1,017	165	631	1,813	84	7	2,824	—	R 6,147	—
1992	(s)	(s)	(s)	8	1,041	144	618	1,803	88	7	2,786	—	R 5,951	—
1993	17	(s)	17	8	1,135	106	672	1,913	96	7	3,044	—	R 6,431	—
1994	10	1	11	9	1,180	96	700	1,976	94	7	3,107	—	R 6,483	—
1995	0	1	1	9	1,078	120	859	2,056	104	7	3,168	—	R 6,600	—
1996	1	1	2	10	1,107	180	871	2,158	104	7	3,271	—	6,808	—
<b>Trillion Btu</b>														
1960	0.0	0.3	0.3	3.9	8.6	4.6	0.7	13.9	0.0	0.0	1.7	19.9	4.2	24.1
1965	0.0	0.2	0.2	5.9	9.6	3.4	1.2	14.2	0.0	0.0	2.5	22.8	5.9	28.8
1970	0.0	0.1	0.1	8.0	11.9	2.1	1.6	15.5	0.0	0.0	4.0	27.6	9.7	37.3
1975	0.0	0.1	0.1	7.1	10.9	1.2	1.5	13.5	0.0	0.0	5.6	26.3	13.5	39.8
1980	(s)	(s)	(s)	7.1	7.7	1.6	1.4	10.6	0.0	0.0	6.4	24.2	15.5	39.6
1981	0.0	(s)	(s)	7.0	6.0	1.5	1.7	9.1	0.0	0.0	4.9	21.1	11.7	32.8
1982	0.1	(s)	0.1	6.9	5.2	1.8	1.4	8.4	0.0	0.0	5.0	20.4	12.0	32.4
1983	(s)	(s)	0.1	6.3	8.0	1.3	1.6	10.9	0.0	0.0	5.3	22.6	12.6	35.2
1984	0.0	(s)	(s)	7.0	8.2	1.0	1.9	11.1	0.0	0.0	6.5	24.6	15.1	39.7
1985	(s)	(s)	0.1	6.3	7.8	3.7	2.1	13.6	0.0	0.0	6.6	26.5	15.4	42.0
1986	0.1	(s)	0.1	7.0	6.2	1.8	1.5	9.5	0.0	0.0	7.2	23.8	16.6	40.4
1987	0.3	(s)	0.4	7.1	7.8	1.9	1.8	11.5	0.0	0.0	7.9	27.0	18.2	45.1
1988	0.1	(s)	0.2	7.7	8.1	1.7	2.0	11.8	0.0	0.0	8.6	28.4	19.5	47.9
1989	0.2	(s)	0.2	7.7	7.7	1.5	2.0	11.2	0.0	0.0	8.9	28.1	20.1	R 48.2
1990	0.2	(s)	0.2	7.4	5.6	0.8	2.1	8.5	e 1.6	e (s)	9.0	e 26.8	19.8	R e 46.6
1991	0.2	(s)	0.2	7.4	5.9	0.9	2.3	9.1	1.7	(s)	9.6	28.0	21.0	49.0
1992	(s)	(s)	(s)	8.5	6.1	0.8	2.2	9.1	1.8	(s)	9.5	28.9	20.3	49.2
1993	0.4	(s)	0.4	8.6	6.6	0.6	2.4	9.6	1.9	(s)	10.4	31.0	21.9	52.9
1994	0.2	(s)	0.3	8.9	6.9	0.5	2.5	10.0	1.9	(s)	10.6	31.6	22.1	53.7
1995	0.0	(s)	(s)	8.8	6.3	0.7	3.1	10.1	2.1	(s)	10.8	31.8	22.5	54.3
1996	(s)	(s)	0.1	10.1	6.4	1.0	3.1	10.6	2.1	(s)	11.2	34.1	23.2	57.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 61. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Delaware**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	8	8	1	572	114	31	13	1,812	2,542	0	361	-	897	-
1965	0	5	5	1	636	85	51	11	2,081	2,864	0	536	-	1,279	-
1970	0	3	3	3	785	51	73	24	1,736	2,670	0	889	-	2,154	-
1975	0	2	2	3	719	30	70	32	1,204	2,054	0	1,333	-	3,214	-
1980	1	1	2	3	634	9	66	45	4,265	5,020	0	1,514	-	3,682	-
1981	0	1	1	4	632	8	80	52	1,960	2,733	0	1,427	-	3,401	-
1982	6	1	7	4	414	12	67	60	1,215	1,767	0	1,461	-	3,510	-
1983	2	1	3	3	302	9	79	40	185	615	0	1,546	-	3,703	-
1984	0	1	1	4	310	6	95	27	252	690	0	1,640	-	3,818	-
1985	3	1	3	3	334	51	105	38	70	599	0	1,698	-	3,988	-
1986	4	1	5	4	245	17	73	39	157	530	0	1,864	-	4,289	-
1987	24	1	25	4	362	17	87	R 42	166	673	0	1,985	-	4,536	-
1988	11	(s)	11	4	390	27	96	40	178	731	0	2,156	-	4,875	-
1989	12	(s)	13	4	298	6	96	39	234	673	0	2,282	-	R 5,127	-
1990	14	(s)	14	4	338	10	101	35	180	664	e NA	2,361	-	R 5,163	-
1991	13	(s)	13	4	440	13	111	34	51	649	NA	2,471	-	R 5,377	-
1992	(s)	(s)	(s)	5	349	1	109	35	89	584	NA	2,498	-	R 5,335	-
1993	32	(s)	32	5	332	7	119	9	220	688	9	2,660	-	R 5,621	-
1994	19	(s)	19	5	259	8	124	8	161	559	7	2,745	-	R 5,727	-
1995	0	(s)	(s)	6	273	2	152	8	133	568	8	2,900	-	6,041	-
1996	2	1	3	7	388	6	154	8	225	781	12	2,970	-	6,182	-

  

Trillion Btu															
1960	0.0	0.2	0.2	0.6	3.3	0.6	0.1	0.1	11.4	15.6	0.0	1.2	17.6	3.1	20.6
1965	0.0	0.1	0.1	1.4	3.7	0.5	0.2	0.1	13.1	17.5	0.0	1.8	20.8	4.4	25.2
1970	0.0	0.1	0.1	2.9	4.6	0.3	0.3	0.1	10.9	16.2	0.0	3.0	22.2	7.3	29.5
1975	0.0	(s)	(s)	3.0	4.2	0.2	0.3	0.2	7.6	12.4	0.0	4.5	19.9	11.0	30.9
1980	(s)	(s)	(s)	3.4	3.7	0.1	0.2	0.2	26.8	31.0	0.0	5.2	39.6	12.6	52.2
1981	0.0	(s)	(s)	3.9	3.7	(s)	0.3	0.3	12.3	16.6	0.0	4.9	25.4	11.6	37.0
1982	0.1	(s)	0.2	3.7	2.4	0.1	0.2	0.3	7.6	10.7	0.0	5.0	19.5	12.0	31.5
1983	(s)	(s)	0.1	3.5	1.8	0.1	0.3	0.2	1.2	3.5	0.0	5.3	12.3	12.6	24.9
1984	0.0	(s)	(s)	3.9	1.8	(s)	0.3	0.1	1.6	3.9	0.0	5.6	13.4	13.0	26.5
1985	0.1	(s)	0.1	3.5	1.9	0.3	0.4	0.2	0.4	3.3	0.0	5.8	12.6	13.6	26.2
1986	0.1	(s)	0.1	3.6	1.4	0.1	0.3	0.2	1.0	3.0	0.0	6.4	13.0	14.6	27.7
1987	0.6	(s)	0.6	3.8	2.1	0.1	0.3	0.2	1.0	3.8	0.0	6.8	15.0	15.5	30.4
1988	0.3	(s)	0.3	4.1	2.3	0.2	0.4	0.2	1.1	4.1	0.0	7.4	15.9	16.6	32.5
1989	0.3	(s)	0.3	4.2	1.7	(s)	0.4	0.2	1.5	3.8	0.0	7.8	16.1	17.5	33.6
1990	0.3	(s)	0.4	4.1	2.0	0.1	0.4	0.2	1.1	3.7	e NA	8.1	16.2	17.6	33.8
1991	0.3	(s)	0.3	4.4	2.6	0.1	0.4	0.2	0.3	3.5	NA	8.4	16.7	18.3	35.0
1992	(s)	(s)	(s)	5.1	2.0	(s)	0.4	0.2	0.6	3.2	NA	8.5	16.8	18.2	35.0
1993	0.8	(s)	0.8	5.4	1.9	(s)	0.4	(s)	1.4	3.8	0.2	9.1	R 19.2	19.2	R 38.4
1994	0.4	(s)	0.5	5.7	1.5	(s)	0.4	(s)	1.0	3.1	0.1	9.4	R 18.7	19.5	R 38.2
1995	0.0	(s)	(s)	5.9	1.6	(s)	0.5	(s)	0.8	3.0	0.2	9.9	R 19.0	20.6	R 39.7
1996	0.1	(s)	0.1	6.9	2.3	(s)	0.6	(s)	1.4	4.3	0.2	10.1	21.7	21.1	42.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
- =Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 62. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Delaware**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	32	1	239	482	45	798	37	205	2,931	2,813	7,549	0	0	0	863	-	2,146	-
1965	35	6	571	715	136	1,165	40	144	2,785	2,864	8,421	0	0	0	1,373	-	3,277	-
1970	35	12	518	794	20	1,753	41	92	2,643	2,657	8,519	0	0	0	2,527	-	6,124	-
1975	27	7	653	1,079	32	2,154	31	63	1,878	3,032	8,923	0	0	0	2,176	-	5,249	-
1980	184	13	350	616	17	2,744	75	35	1,808	4,474	10,120	0	0	0	2,439	-	5,931	-
1981	190	14	419	406	3	332	72	34	1,396	2,855	5,518	0	0	0	2,309	-	5,504	-
1982	175	12	442	413	4	431	66	29	1,404	2,703	5,493	0	0	0	2,135	-	5,129	-
1983	154	20	208	421	23	351	69	25	840	2,935	4,871	0	0	0	2,462	-	5,898	-
1984	192	25	238	431	10	679	74	58	1,146	3,064	5,700	0	0	0	2,685	-	6,251	-
1985	217	22	827	423	4	293	69	54	649	2,928	5,247	0	0	0	2,693	-	6,327	-
1986	206	21	609	420	2	347	67	61	698	2,864	5,068	0	0	0	2,839	-	6,530	-
1987	221	18	573	422	14	424	76	59	935	3,045	5,548	0	0	0	2,701	-	6,172	-
1988	248	15	410	446	12	369	73	56	1,121	3,492	5,979	0	0	0	2,854	-	6,452	-
1989	209	15	522	451	9	300	75	65	972	3,515	5,909	0	0	0	3,160	-	R 7,099	-
1990	215	17	537	434	4	363	77	48	746	3,658	5,867	f NA	f NA	f NA	3,272	-	R 7,155	-
1991	208	16	142	445	8	350	69	51	950	3,815	5,829	NA	NA	NA	3,241	-	R 7,054	-
1992	142	18	78	345	3	192	70	51	1,238	4,374	6,352	NA	NA	NA	3,248	-	R 6,938	-
1993	174	19	112	365	30	219	72	64	1,756	4,207	6,823	NA	NA	NA	3,417	-	R 7,219	-
1994	189	17	163	341	149	434	75	64	1,813	4,358	7,398	NA	NA	NA	3,447	-	R 7,192	-
1995	194	19	176	328	5	346	74	64	1,594	4,196	6,783	NA	NA	NA	3,511	-	R 7,314	-
1996	164	14	298	511	49	655	71	70	1,485	4,639	7,777	NA	NA	NA	3,399	-	7,075	-

**Trillion Btu**

1960	0.8	1.5	1.6	2.8	0.3	3.2	0.2	1.1	18.4	16.9	44.5	0.0	0.0	0.0	2.9	49.7	7.3	57.1
1965	0.9	6.6	3.8	4.2	0.8	4.7	0.2	0.8	17.5	17.2	49.1	0.0	0.0	0.0	4.7	61.3	11.2	72.5
1970	0.8	12.3	3.4	4.6	0.1	6.6	0.3	0.5	16.6	16.0	48.1	0.0	0.0	0.0	8.6	69.8	20.9	90.7
1975	0.6	7.1	4.3	6.3	0.2	8.0	0.2	0.3	11.8	18.0	49.1	0.0	0.0	0.0	7.4	64.3	17.9	82.2
1980	4.5	13.1	2.3	3.6	0.1	10.1	0.5	0.2	11.4	25.8	53.9	0.0	0.0	0.0	8.3	79.8	20.2	100.0
1981	4.6	14.9	2.8	2.4	(s)	1.2	0.4	0.2	8.8	16.9	32.7	0.0	0.0	0.0	7.9	60.0	18.8	78.8
1982	4.3	12.8	2.9	2.4	(s)	1.6	0.4	0.2	8.8	16.1	32.4	0.0	0.0	0.0	7.3	56.7	17.5	74.2
1983	3.8	20.5	1.4	2.5	0.1	1.3	0.4	0.1	5.3	17.6	28.6	0.0	0.0	0.0	8.4	61.3	20.1	81.4
1984	4.7	25.7	1.6	2.5	0.1	2.4	0.4	0.3	7.2	18.1	32.6	0.0	0.0	0.0	9.2	72.2	21.3	93.5
1985	5.4	22.1	5.5	2.5	(s)	1.1	0.4	0.3	4.1	17.5	31.3	0.0	0.0	0.0	9.2	67.9	21.6	89.5
1986	5.1	21.2	4.0	2.4	(s)	1.3	0.4	0.3	4.4	17.3	30.1	0.0	0.0	0.0	9.7	66.1	22.3	88.4
1987	5.5	18.2	3.8	2.5	0.1	1.6	0.5	0.3	5.9	18.1	32.7	0.0	0.0	0.0	9.2	65.6	21.1	86.6
1988	6.1	15.1	2.7	2.6	0.1	1.3	0.4	0.3	7.0	20.7	35.2	0.0	0.0	0.0	9.7	66.2	22.0	88.2
1989	5.2	15.4	3.5	2.6	(s)	1.1	0.5	0.3	6.1	20.7	34.9	0.0	0.0	0.0	10.8	66.2	24.2	R 90.4
1990	5.3	17.3	3.6	2.5	(s)	1.3	0.5	0.3	4.7	21.5	34.4	f 0.0	f 7.4	f 0.0	11.2	f 75.5	24.4	f 99.9
1991	5.2	16.5	0.9	2.6	(s)	1.3	0.4	0.3	6.0	22.3	33.8	0.0	7.1	0.0	11.1	73.7	R 24.1	97.7
1992	3.6	18.7	0.5	2.0	(s)	0.7	0.4	0.3	7.8	25.4	37.1	0.0	7.3	0.0	11.1	77.7	23.7	101.4
1993	4.4	20.1	0.7	2.1	0.2	0.8	0.4	0.3	11.0	24.5	40.1	0.0	7.4	0.0	11.7	83.7	24.6	108.3
1994	4.8	17.8	1.1	2.0	0.8	1.6	0.5	0.3	11.4	25.3	43.0	0.0	R 6.6	0.0	11.8	R 84.0	24.5	R 108.5
1995	4.9	20.1	1.2	1.9	(s)	1.3	0.4	0.3	10.0	24.4	39.6	0.0	R 6.3	0.0	12.0	R 82.9	25.0	R 107.8
1996	4.1	14.7	2.0	3.0	0.3	2.4	0.4	0.4	9.3	26.9	44.7	0.0	6.8	0.0	11.6	81.9	24.1	106.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 63. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Delaware**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	1	0	19	166	2,144	2	74	4,096	1,464	7,965	0	0	-	0	-
1965	(s)	0	150	256	2,086	3	71	4,921	589	8,076	0	0	-	0	-
1970	(s)	0	20	385	2,062	13	67	6,131	671	9,350	0	0	-	0	-
1975	(s)	0	15	510	1,654	36	52	6,973	961	10,201	0	0	-	0	-
1980	0	0	10	963	1,573	14	64	6,533	812	9,970	0	0	-	0	-
1981	0	(s)	9	939	1,482	8	61	6,795	289	9,582	0	0	-	0	-
1982	0	(s)	14	950	1,484	10	56	6,531	201	9,247	0	0	-	0	-
1983	0	(s)	16	1,160	1,374	11	58	7,151	522	10,294	0	0	-	0	-
1984	0	(s)	13	1,263	1,586	7	62	7,355	464	10,750	0	0	-	0	-
1985	0	(s)	16	1,236	1,569	5	58	R 7,464	232	R 10,580	0	0	-	0	-
1986	0	(s)	20	1,479	1,341	45	57	7,619	588	11,148	0	0	-	0	-
1987	0	(s)	16	1,567	1,287	3	64	R 7,785	1,202	R 11,924	0	0	-	0	-
1988	0	(s)	18	1,449	1,362	6	62	R 8,089	874	R 11,859	0	0	-	0	-
1989	0	(s)	18	1,869	1,255	7	63	R 8,052	889	R 12,153	0	0	-	0	-
1990	0	(s)	78	1,371	1,306	6	65	R 7,929	912	R 11,667	e 0	0	-	0	-
1991	0	(s)	17	1,406	2,397	6	58	R 7,712	1,316	R 12,913	0	0	-	0	-
1992	0	(s)	18	1,381	1,451	6	59	R 8,067	1,037	R 12,020	0	0	-	0	-
1993	0	(s)	51	1,627	1,440	5	61	R 8,238	1,144	R 12,566	0	0	-	0	-
1994	0	(s)	57	1,539	566	7	63	R 8,232	1,267	R 11,731	0	0	-	0	-
1995	0	(s)	53	1,562	73	5	62	8,398	1,046	11,200	0	0	-	0	-
1996	0	(s)	52	1,604	62	4	60	8,375	2,031	12,189	0	0	-	0	-

**Trillion Btu**

1960	(s)	0.0	0.1	1.0	11.5	(s)	0.5	21.5	9.2	43.7	0.0	0.0	43.7	0.0	43.7
1965	(s)	0.0	0.8	1.5	11.2	(s)	0.4	25.8	3.7	43.4	0.0	0.0	43.4	0.0	43.4
1970	(s)	0.0	0.1	2.2	11.1	0.1	0.4	32.2	4.2	50.3	0.0	0.0	50.3	0.0	50.3
1975	(s)	0.0	0.1	3.0	8.9	0.1	0.3	36.6	6.0	55.0	0.0	0.0	55.0	0.0	55.0
1980	0.0	0.0	0.1	5.6	8.4	0.1	0.4	34.3	5.1	54.0	0.0	0.0	54.0	0.0	54.0
1981	0.0	(s)	(s)	5.5	8.0	(s)	0.4	35.7	1.8	51.4	0.0	0.0	51.4	0.0	51.4
1982	0.0	(s)	0.1	5.5	8.0	(s)	0.3	34.3	1.3	49.5	0.0	0.0	49.6	0.0	49.6
1983	0.0	(s)	0.1	6.8	7.4	(s)	0.4	37.6	3.3	55.5	0.0	0.0	55.5	0.0	55.5
1984	0.0	(s)	0.1	7.4	8.5	(s)	0.4	38.6	2.9	57.9	0.0	0.0	57.9	0.0	57.9
1985	0.0	(s)	0.1	7.2	8.4	(s)	0.4	39.2	1.5	56.8	0.0	0.0	56.8	0.0	56.8
1986	0.0	(s)	0.1	8.6	7.2	0.2	0.3	40.0	3.7	60.2	0.0	0.0	60.2	0.0	60.2
1987	0.0	(s)	0.1	9.1	6.9	(s)	0.4	R 40.9	7.6	R 65.0	0.0	0.0	R 65.0	0.0	R 65.0
1988	0.0	(s)	0.1	8.4	7.3	(s)	0.4	42.5	5.5	64.3	0.0	0.0	64.3	0.0	64.3
1989	0.0	(s)	0.1	10.9	6.8	(s)	0.4	42.3	5.6	66.0	0.0	0.0	66.0	0.0	66.0
1990	0.0	(s)	0.4	8.0	7.0	(s)	0.4	R 41.6	5.7	R 63.2	e 0.0	0.0	R e 63.2	0.0	R e 63.2
1991	0.0	(s)	0.1	8.2	12.9	(s)	0.4	40.5	8.3	70.3	0.0	0.0	70.3	0.0	70.3
1992	0.0	(s)	0.1	8.0	7.8	(s)	0.4	42.4	6.5	65.2	0.0	0.0	65.2	0.0	65.2
1993	0.0	(s)	0.3	9.5	7.7	(s)	0.4	43.3	7.2	68.3	0.0	0.0	68.3	0.0	68.3
1994	0.0	(s)	0.3	9.0	3.0	(s)	0.4	R 43.2	8.0	63.9	0.0	0.0	63.9	0.0	63.9
1995	0.0	(s)	0.3	9.1	0.4	(s)	0.4	44.1	6.6	60.9	0.0	0.0	60.9	0.0	60.9
1996	0.0	(s)	0.3	9.3	0.4	(s)	0.4	44.0	12.8	67.1	0.0	0.0	67.1	0.0	67.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 64. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Delaware**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	737	0	737	3	40	8	0	48	0	0	0	0	0	--
1965	1,055	0	1,055	5	84	17	0	100	0	0	0	0	0	--
1970	1,497	0	1,497	4	1,537	307	1,240	3,084	0	0	0	0	0	--
1975	905	0	905	2	6,176	135	237	6,547	0	0	0	0	0	--
1980	942	0	942	7	5,831	187	470	6,488	0	0	0	0	0	--
1981	1,840	0	1,840	6	5,131	119	318	5,568	0	0	0	0	0	--
1982	1,720	0	1,720	5	3,570	84	270	3,923	0	0	0	0	0	--
1983	2,700	0	2,700	5	3,509	133	348	3,990	0	0	0	0	0	--
1984	2,618	0	2,618	7	3,150	137	330	3,618	0	0	0	0	0	--
1985	2,543	0	2,543	7	2,650	101	351	3,102	0	0	0	0	0	--
1986	2,350	0	2,350	2	3,658	111	434	4,204	0	0	0	0	0	--
1987	2,449	0	2,449	8	2,463	133	374	2,969	0	0	0	0	0	--
1988	2,420	0	2,420	3	4,193	172	326	4,691	0	0	0	0	0	--
1989	2,128	0	2,128	8	3,681	277	317	4,275	0	0	0	0	0	--
1990	2,056	0	2,056	11	1,991	110	1,410	3,510	0	0	0	0	0	--
1991	1,958	0	1,958	14	2,689	119	1,314	4,122	0	0	0	0	0	--
1992	1,628	0	1,628	8	2,582	126	1,691	4,399	0	0	0	0	0	--
1993	2,223	0	2,223	9	3,294	103	0	3,397	0	0	0	0	0	--
1994	2,007	0	2,007	17	2,479	247	0	2,727	0	0	0	0	0	--
1995	1,816	0	1,816	27	1,335	160	0	1,495	0	0	0	0	0	--
1996	1,787	0	1,787	23	1,747	222	0	1,969	0	0	0	0	0	--

**Trillion Btu**

1960	19.1	0.0	19.1	3.3	0.2	(s)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	22.7
1965	27.8	0.0	27.8	4.8	0.5	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	33.3
1970	36.2	0.0	36.2	3.8	9.7	1.8	7.5	18.9	0.0	0.0	0.0	0.0	0.0	59.0
1975	22.2	0.0	22.2	1.8	38.8	0.8	1.4	41.0	0.0	0.0	0.0	0.0	0.0	65.1
1980	23.5	0.0	23.5	7.3	36.7	1.1	2.8	40.6	0.0	0.0	0.0	0.0	0.0	71.3
1981	45.9	0.0	45.9	5.9	32.3	0.7	1.9	34.9	0.0	0.0	0.0	0.0	0.0	86.7
1982	43.4	0.0	43.4	5.4	22.4	0.5	1.6	24.6	0.0	0.0	0.0	0.0	0.0	73.3
1983	69.1	0.0	69.1	5.2	22.1	0.8	2.1	24.9	0.0	0.0	0.0	0.0	0.0	99.2
1984	68.0	0.0	68.0	7.3	19.8	0.8	2.0	22.6	0.0	0.0	0.0	0.0	0.0	97.9
1985	65.9	0.0	65.9	7.5	16.7	0.6	2.1	19.4	0.0	0.0	0.0	0.0	0.0	92.8
1986	61.1	0.0	61.1	1.9	23.0	0.6	2.6	26.3	0.0	0.0	0.0	0.0	0.0	89.2
1987	64.0	0.0	64.0	8.1	15.5	0.8	2.3	18.5	0.0	0.0	0.0	0.0	0.0	90.6
1988	62.4	0.0	62.4	3.0	26.4	1.0	2.0	29.3	0.0	0.0	0.0	0.0	0.0	94.8
1989	55.1	0.0	55.1	8.6	23.1	1.6	1.9	26.7	0.0	0.0	0.0	0.0	0.0	90.3
1990	53.6	0.0	53.6	11.4	12.5	0.6	8.5	21.6	0.0	0.0	0.0	0.0	0.0	86.6
1991	51.1	0.0	51.1	15.1	16.9	0.7	7.9	25.5	0.0	0.0	0.0	0.0	0.0	91.7
1992	42.5	0.0	42.5	8.7	16.2	0.7	10.2	27.2	0.0	0.0	0.0	0.0	0.0	78.4
1993	57.9	0.0	57.9	9.0	20.7	0.6	0.0	21.3	0.0	0.0	0.0	0.0	0.0	88.2
1994	52.0	0.0	52.0	18.0	15.6	1.4	0.0	17.0	0.0	0.0	0.0	0.0	0.0	87.1
1995	47.5	0.0	47.5	27.9	8.4	0.9	0.0	9.3	0.0	0.0	0.0	0.0	0.0	84.7
1996	46.5	0.0	46.5	24.2	11.0	1.3	0.0	12.3	0.0	0.0	0.0	0.0	0.0	83.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

-- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 65. Energy Consumption Estimates by Source, Selected Years 1960-1996, District of Columbia**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	1,051	13	11	0	2,894	0	161	2	120	4,957	2,428	0	10,573	0	3	0	0	5,633	-
1965	526	17	20	0	3,435	(s)	104	2	71	5,469	6,749	0	15,850	0	3	0	0	10,436	-
1970	1,128	26	17	0	4,934	(s)	46	4	56	5,688	11,144	0	21,889	0	1	0	0	6,335	-
1975	418	26	20	0	3,157	0	110	4	60	5,748	4,174	0	13,273	0	1	0	0	14,942	-
1980	134	28	16	0	2,284	329	268	4	61	3,881	1,612	0	8,455	0	0	0	0	21,154	-
1981	99	29	18	0	1,475	566	73	5	58	3,978	1,074	0	7,247	0	0	0	0	22,207	-
1982	125	29	19	0	1,999	336	6	5	53	4,018	1,687	0	8,123	0	0	0	0	24,186	-
1983	123	29	26	0	2,304	108	14	5	56	3,978	1,310	0	7,801	0	0	0	0	24,826	-
1984	100	29	20	0	2,399	39	5	8	60	4,218	1,466	0	8,214	0	0	0	0	25,067	-
1985	140	29	27	0	2,229	7	68	4	55	R 3,802	740	0	R 6,932	0	0	0	0	26,938	-
1986	54	30	31	0	2,395	501	13	4	54	3,877	1,485	0	8,360	0	0	0	0	27,480	-
1987	70	31	31	0	1,937	(s)	13	4	61	R 4,246	1,355	0	R 7,648	0	0	0	0	28,464	-
1988	31	33	33	0	1,868	5	15	5	59	R 4,358	1,168	0	R 7,511	0	0	0	0	28,579	-
1989	60	33	27	0	1,841	0	59	5	61	R 4,200	1,445	0	R 7,637	0	0	0	0	R 28,618	-
1990	69	29	30	0	1,537	5	11	4	62	R 4,043	1,024	0	R 6,717	0	i NA	i NA	i NA	R 29,794	-
1991	66	31	22	0	1,548	0	8	4	56	R 4,023	666	0	R 6,328	0	NA	NA	NA	R 31,477	-
1992	50	33	21	0	1,553	0	8	7	57	R 4,024	472	0	R 6,142	0	NA	NA	NA	R 31,041	-
1993	51	33	28	2	1,631	101	9	6	58	R 4,185	650	0	R 6,671	0	NA	NA	NA	R 31,420	-
1994	47	31	26	2	1,863	0	10	6	61	R 4,099	737	0	R 6,804	0	NA	NA	NA	R 30,564	-
1995	6	33	26	4	1,822	2	135	R 5	60	4,142	534	0	6,730	0	NA	NA	NA	R 30,935	-
1996	23	34	22	(s)	2,041	0	107	6	58	3,862	339	0	6,435	0	NA	NA	NA	30,706	-
Trillion Btu																			
1960	27.8	13.0	0.1	0.0	16.9	0.0	0.9	(s)	0.7	26.0	15.3	0.0	59.9	0.0	(s)	0.0	0.0	19.2	119.9
1965	13.8	17.3	0.1	0.0	20.0	(s)	0.6	(s)	0.4	28.7	42.4	0.0	92.3	0.0	(s)	0.0	0.0	35.6	159.1
1970	28.4	26.4	0.1	0.0	28.7	(s)	0.3	(s)	0.3	29.9	70.1	0.0	129.4	0.0	(s)	0.0	0.0	21.6	205.9
1975	10.1	26.2	0.1	0.0	18.4	0.0	0.6	(s)	0.4	30.2	26.2	0.0	76.0	0.0	(s)	0.0	0.0	51.0	163.3
1980	3.3	28.0	0.1	0.0	13.3	1.9	1.5	(s)	0.4	20.4	10.1	0.0	47.7	0.0	0.0	0.0	0.0	72.2	151.1
1981	2.4	29.4	0.1	0.0	8.6	3.2	0.4	(s)	0.4	20.9	6.7	0.0	40.4	0.0	0.0	0.0	0.0	75.8	148.0
1982	3.1	29.8	0.1	0.0	11.6	1.9	(s)	(s)	0.3	21.1	10.6	0.0	45.8	0.0	0.0	0.0	0.0	82.5	161.1
1983	3.0	29.6	0.2	0.0	13.4	0.6	0.1	(s)	0.3	20.9	8.2	0.0	43.8	0.0	0.0	0.0	0.0	84.7	161.2
1984	2.5	29.8	0.1	0.0	14.0	0.2	(s)	(s)	0.4	22.2	9.2	0.0	46.1	0.0	0.0	0.0	0.0	85.5	163.9
1985	3.5	29.3	0.2	0.0	13.0	(s)	0.4	(s)	0.3	20.0	4.7	0.0	38.6	0.0	0.0	0.0	0.0	91.9	163.3
1986	1.4	30.0	0.2	0.0	14.0	2.8	0.1	(s)	0.3	20.4	9.3	0.0	47.1	0.0	0.0	0.0	0.0	93.8	172.2
1987	1.7	31.4	0.2	0.0	11.3	(s)	0.1	(s)	0.4	22.3	8.5	0.0	R 42.8	0.0	0.0	0.0	0.0	97.1	R 173.1
1988	0.8	33.1	0.2	0.0	10.9	(s)	0.1	(s)	0.4	22.9	7.3	0.0	R 41.8	0.0	0.0	0.0	0.0	97.5	R 173.2
1989	1.5	33.8	0.2	0.0	10.7	0.0	0.3	(s)	0.4	22.1	9.1	0.0	42.8	0.0	0.0	0.0	0.0	R 97.6	R 175.7
1990	1.7	29.1	0.2	0.0	9.0	(s)	0.1	(s)	0.4	R 21.2	6.4	0.0	R 37.3	0.0	i 0.0	i 1.5	i (s)	R 101.7	R i 171.3
1991	1.7	31.3	0.1	0.0	9.0	0.0	(s)	(s)	0.3	21.1	4.2	0.0	34.9	0.0	0.0	1.6	(s)	R 107.4	R 176.8
1992	1.3	33.2	0.1	0.0	9.0	0.0	(s)	(s)	0.3	21.1	3.0	0.0	33.7	0.0	0.0	1.7	(s)	R 105.9	R 175.8
1993	1.3	33.3	0.2	(s)	9.5	0.6	0.1	(s)	0.4	22.0	4.1	0.0	36.8	0.0	0.0	R 2.2	(s)	R 107.2	R 180.7
1994	1.2	31.2	0.2	(s)	10.9	0.0	0.1	(s)	0.4	21.5	4.6	0.0	37.7	0.0	0.0	R 2.2	(s)	R 104.3	R 176.5
1995	0.1	33.2	0.2	(s)	10.6	(s)	0.8	(s)	0.4	21.8	3.4	0.0	37.1	0.0	0.0	R 2.3	(s)	R 105.6	R 178.3
1996	0.6	34.2	0.1	(s)	11.9	0.0	0.6	(s)	0.4	20.3	2.1	0.0	35.4	0.0	0.0	2.5	(s)	104.8	177.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 66. Residential Energy Consumption Estimates, Selected Years 1960-1996, District of Columbia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	47	0	47	9	1,314	67	1	1,382	0	0	429	—	1,068	—
1965	36	0	36	11	1,241	43	1	1,285	0	0	578	—	1,381	—
1970	14	0	14	14	1,622	21	1	1,644	0	0	830	—	2,012	—
1975	5	0	5	13	1,161	7	1	1,169	0	0	909	—	2,193	—
1980	38	0	38	14	749	5	1	755	0	0	1,085	—	2,638	—
1981	33	0	33	14	281	2	1	284	0	0	1,090	—	2,597	—
1982	43	1	44	13	509	4	1	513	0	0	1,114	—	2,675	—
1983	43	1	43	13	554	(s)	1	555	0	0	1,208	—	2,893	—
1984	35	1	35	17	568	(s)	1	569	0	0	1,227	—	2,857	—
1985	49	0	49	17	495	10	1	507	0	0	1,233	—	2,897	—
1986	19	1	19	17	398	11	1	410	0	0	1,332	—	3,063	—
1987	24	0	24	17	409	11	1	421	0	0	1,410	—	3,223	—
1988	11	0	11	17	295	8	1	304	0	0	1,465	—	3,313	—
1989	21	(s)	21	17	146	11	1	158	0	0	1,466	—	R 3,293	—
1990	24	0	24	15	149	3	1	154	e 76	e (s)	1,480	—	R 3,238	—
1991	23	(s)	23	15	165	4	1	170	80	(s)	1,580	—	R 3,439	—
1992	18	(s)	18	17	170	4	1	175	84	(s)	1,488	—	R 3,178	—
1993	18	(s)	18	17	164	5	1	171	86	(s)	1,635	—	R 3,454	—
1994	16	(s)	16	16	133	4	1	139	85	(s)	1,572	—	R 3,279	—
1995	2	R 0	2	16	275	6	2	283	94	(s)	1,608	—	3,350	—
1996	8	0	8	17	307	6	2	314	94	(s)	1,614	—	3,360	—

  

Trillion Btu														
1960	1.2	0.0	1.2	9.0	7.7	0.4	(s)	8.0	0.0	0.0	1.5	19.7	3.6	23.4
1965	0.9	0.0	0.9	11.1	7.2	0.2	(s)	7.5	0.0	0.0	2.0	21.4	4.7	26.1
1970	0.3	0.0	0.3	14.1	9.4	0.1	(s)	9.6	0.0	0.0	2.8	26.9	6.9	33.7
1975	0.1	0.0	0.1	13.3	6.8	(s)	(s)	6.8	0.0	0.0	3.1	23.4	7.5	30.9
1980	0.9	0.0	0.9	13.8	4.4	(s)	(s)	4.4	0.0	0.0	3.7	22.8	9.0	31.8
1981	0.8	0.0	0.8	13.9	1.6	(s)	(s)	1.7	0.0	0.0	3.7	20.1	8.9	28.9
1982	1.1	(s)	1.1	13.3	3.0	(s)	(s)	3.0	0.0	0.0	3.8	21.1	9.1	30.3
1983	1.1	(s)	1.1	13.1	3.2	(s)	(s)	3.2	0.0	0.0	4.1	21.6	9.9	31.4
1984	0.9	(s)	0.9	17.6	3.3	(s)	(s)	3.3	0.0	0.0	4.2	26.0	9.7	35.7
1985	1.2	0.0	1.2	16.9	2.9	0.1	(s)	2.9	0.0	0.0	4.2	25.2	9.9	35.1
1986	0.5	(s)	0.5	17.5	2.3	0.1	(s)	2.4	0.0	0.0	4.5	24.9	10.5	35.4
1987	0.6	0.0	0.6	17.0	2.4	0.1	(s)	2.4	0.0	0.0	4.8	24.8	11.0	35.8
1988	0.3	0.0	0.3	17.7	1.7	(s)	(s)	1.8	0.0	0.0	5.0	24.7	11.3	36.0
1989	0.5	(s)	0.5	17.6	0.8	0.1	(s)	0.9	0.0	0.0	5.0	24.0	11.2	35.3
1990	0.6	0.0	0.6	15.3	0.9	(s)	(s)	0.9	e 1.5	e (s)	5.1	e 23.3	11.0	e 34.4
1991	0.6	(s)	0.6	15.4	1.0	(s)	(s)	1.0	1.6	(s)	5.4	23.9	11.7	35.7
1992	0.4	(s)	0.4	16.7	1.0	(s)	(s)	1.0	1.7	(s)	5.1	24.9	10.8	35.8
1993	0.4	(s)	0.4	16.7	1.0	(s)	(s)	1.0	1.7	(s)	5.6	25.4	11.8	37.2
1994	R 0.4	(s)	0.4	16.0	0.8	(s)	(s)	0.8	1.7	(s)	5.4	24.3	11.2	35.5
1995	R 0.1	R 0.0	0.1	15.8	1.6	(s)	(s)	1.6	1.9	(s)	5.5	24.8	11.4	36.3
1996	0.2	0.0	0.2	17.4	1.8	(s)	(s)	1.8	1.9	(s)	5.5	26.9	11.5	38.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 67. Commercial Energy Consumption Estimates, Selected Years 1960-1996, District of Columbia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	87	0	87	4	1,060	34	(s)	85	1,443	2,621	0	954	-	2,373	-
1965	67	0	67	6	1,001	22	(s)	78	4,044	5,144	0	1,359	-	3,245	-
1970	26	0	26	12	1,308	10	(s)	65	5,081	6,464	0	1,935	-	4,689	-
1975	10	0	10	12	936	4	(s)	78	1,051	2,068	0	2,355	-	5,680	-
1980	71	0	71	14	647	1	(s)	40	37	725	0	2,461	-	5,984	-
1981	62	0	62	15	280	1	(s)	45	78	404	0	2,423	-	5,775	-
1982	81	(s)	81	16	450	1	(s)	56	110	616	0	2,615	-	6,280	-
1983	79	(s)	79	16	993	6	(s)	43	491	1,533	0	2,750	-	6,588	-
1984	64	(s)	65	12	1,018	2	(s)	160	671	1,851	0	4,159	-	9,680	-
1985	91	0	91	12	749	55	(s)	27	286	1,117	0	4,328	-	10,167	-
1986	35	(s)	35	12	987	(s)	(s)	49	1,000	2,037	0	4,532	-	10,425	-
1987	45	0	45	14	649	1	(s)	22	822	1,494	0	4,777	-	10,914	-
1988	20	0	20	15	547	4	(s)	22	222	795	0	4,985	-	11,270	-
1989	39	(s)	39	16	540	48	(s)	21	129	739	0	5,141	-	R 11,547	-
1990	45	0	45	13	501	8	(s)	71	221	R 802	e NA	5,269	-	R 11,524	-
1991	43	(s)	43	16	587	4	(s)	35	222	848	NA	5,438	-	R 11,837	-
1992	33	(s)	33	16	551	4	(s)	29	269	854	NA	5,438	-	R 11,616	-
1993	33	(s)	33	16	800	4	(s)	32	208	1,045	22	5,635	-	R 11,905	-
1994	30	(s)	30	15	908	6	(s)	66	170	1,150	26	8,325	-	R 17,370	-
1995	R 4	R 0	4	17	803	129	(s)	101	132	1,166	23	8,313	-	R 17,317	-
1996	15	0	15	16	975	101	(s)	20	97	1,194	29	8,141	-	16,943	-

  

Trillion Btu															
1960	2.2	0.0	2.2	3.7	6.2	0.2	(s)	0.4	9.1	15.9	0.0	3.3	25.0	8.1	33.1
1965	1.7	0.0	1.7	6.0	5.8	0.1	(s)	0.4	25.4	31.8	0.0	4.6	44.1	11.1	55.2
1970	0.6	0.0	0.6	11.8	7.6	0.1	(s)	0.3	31.9	40.0	0.0	6.6	59.0	16.0	75.0
1975	0.2	0.0	0.2	12.4	5.5	(s)	(s)	0.4	6.6	12.5	0.0	8.0	33.2	19.4	52.5
1980	1.7	0.0	1.7	13.8	3.8	(s)	(s)	0.2	0.2	4.2	0.0	8.4	28.1	20.4	48.6
1981	1.5	0.0	1.5	15.2	1.6	(s)	(s)	0.2	0.5	2.4	0.0	8.3	27.3	19.7	47.0
1982	2.0	(s)	2.0	16.2	2.6	(s)	(s)	0.3	0.7	3.6	0.0	8.9	30.7	21.4	52.1
1983	2.0	(s)	2.0	16.1	5.8	(s)	(s)	0.2	3.1	9.1	0.0	9.4	36.6	22.5	59.1
1984	1.6	(s)	1.6	11.8	5.9	(s)	(s)	0.8	4.2	11.0	0.0	14.2	38.6	33.0	71.6
1985	2.3	0.0	2.3	12.1	4.4	0.3	(s)	0.1	1.8	6.6	0.0	14.8	35.8	34.7	70.4
1986	0.9	(s)	0.9	12.1	5.8	(s)	(s)	0.3	6.3	12.3	0.0	15.5	40.7	35.6	76.3
1987	1.1	0.0	1.1	14.2	3.8	(s)	(s)	0.1	5.2	9.1	0.0	16.3	40.7	37.2	77.9
1988	0.5	0.0	0.5	15.2	3.2	(s)	(s)	0.1	1.4	4.7	0.0	17.0	37.4	38.5	75.9
1989	1.0	(s)	1.0	15.9	3.1	0.3	(s)	0.1	0.8	4.3	0.0	17.5	37.7	R 39.4	78.1
1990	1.1	0.0	1.1	13.6	2.9	(s)	(s)	0.4	1.4	4.7	e NA	18.0	37.4	39.3	76.7
1991	1.1	(s)	1.1	15.6	3.4	(s)	(s)	0.2	1.4	5.0	NA	18.6	40.3	R 40.4	R 80.7
1992	0.8	(s)	0.8	16.2	3.2	(s)	(s)	0.2	1.7	5.1	NA	18.6	40.7	39.6	80.3
1993	0.8	(s)	0.8	16.3	4.7	(s)	(s)	0.2	1.3	6.2	0.4	19.2	R 43.0	40.6	R 83.6
1994	0.8	(s)	0.8	14.9	5.3	(s)	(s)	0.3	1.1	6.7	0.5	28.4	R 51.3	R 59.3	R 110.6
1995	0.1	R 0.0	0.1	17.1	4.7	0.7	(s)	0.5	0.8	6.8	0.5	28.4	R 52.8	59.1	R 111.9
1996	0.4	0.0	0.4	16.5	5.7	0.6	(s)	0.1	0.6	7.0	0.6	27.8	52.2	57.8	110.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 68. Industrial Energy Consumption Estimates, Selected Years 1960-1996, District of Columbia**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	463	(s)	11	211	61	1	8	0	949	0	1,241	0	0	0	1,237	—	3,076	—
1965	129	(s)	20	316	39	1	11	0	2,689	0	3,076	0	0	0	1,836	—	4,383	—
1970	414	(s)	17	377	15	2	3	0	3,296	0	3,710	0	0	0	2,627	—	6,367	—
1975	292	(s)	20	150	99	2	14	0	686	0	970	0	0	0	2,532	—	6,108	—
1980	25	(s)	16	192	262	3	7	0	54	0	534	0	0	0	3,356	—	8,161	—
1981	4	(s)	18	397	70	3	7	0	18	0	513	0	0	0	3,396	—	8,093	—
1982	0	0	19	187	1	4	6	0	40	0	258	0	0	0	3,399	—	8,164	—
1983	0	0	26	25	9	4	7	0	2	0	72	0	0	0	3,566	—	8,544	—
1984	0	0	20	26	3	5	7	0	3	0	64	0	0	0	2,458	—	5,721	—
1985	0	0	27	36	3	2	7	59	1	0	135	0	0	0	2,534	—	5,954	—
1986	0	0	31	79	2	2	6	64	0	0	184	0	0	0	2,606	—	5,994	—
1987	0	0	31	12	2	3	7	80	0	0	135	0	0	0	2,708	—	6,188	—
1988	0	0	33	3	2	3	7	62	0	0	109	0	0	0	2,809	—	6,351	—
1989	0	0	27	3	0	3	7	75	(s)	0	116	0	0	0	2,930	—	6,581	—
1990	0	0	30	2	0	2	7	R 90	1	0	R 133	f NA	f NA	f NA	2,976	—	R 6,509	—
1991	0	0	22	2	(s)	2	7	58	1	0	93	NA	NA	NA	3,053	—	R 6,645	—
1992	0	0	21	13	0	5	7	59	2	0	106	NA	NA	NA	2,987	—	R 6,380	—
1993	0	0	28	15	0	3	7	36	0	0	90	NA	NA	NA	2,976	—	R 6,289	—
1994	0	0	26	13	0	3	7	R 69	1	0	119	NA	NA	NA	267	—	R 558	—
1995	0	0	26	15	0	3	7	44	(s)	0	95	NA	NA	NA	262	—	546	—
1996	0	0	22	18	(s)	3	7	39	(s)	0	89	NA	NA	NA	252	—	524	—

  

Trillion Btu																		
1960	12.0	0.2	0.1	1.2	0.3	(s)	(s)	0.0	6.0	0.0	7.7	0.0	0.0	0.0	4.2	24.0	10.5	34.5
1965	3.3	0.3	0.1	1.8	0.2	(s)	0.1	0.0	16.9	0.0	19.2	0.0	0.0	0.0	6.3	29.0	15.0	44.0
1970	10.0	0.4	0.1	2.2	0.1	(s)	(s)	0.0	20.7	0.0	23.1	0.0	0.0	0.0	9.0	42.6	21.7	64.3
1975	7.0	0.4	0.1	0.9	0.6	(s)	0.1	0.0	4.3	0.0	6.0	0.0	0.0	0.0	8.6	22.0	20.8	42.8
1980	0.6	0.4	0.1	1.1	1.5	(s)	(s)	0.0	0.3	0.0	3.1	0.0	0.0	0.0	11.5	15.5	27.8	43.4
1981	0.1	0.3	0.1	2.3	0.4	(s)	(s)	0.0	0.1	0.0	3.0	0.0	0.0	0.0	11.6	15.0	27.6	42.6
1982	0.0	0.0	0.1	1.1	(s)	(s)	(s)	0.0	0.3	0.0	1.5	0.0	0.0	0.0	11.6	13.1	27.9	41.0
1983	0.0	0.0	0.2	0.1	(s)	(s)	(s)	0.0	(s)	0.0	0.4	0.0	0.0	0.0	12.2	12.6	29.2	41.8
1984	0.0	0.0	0.1	0.2	(s)	(s)	(s)	0.0	(s)	0.0	0.4	0.0	0.0	0.0	8.4	8.8	19.5	28.3
1985	0.0	0.0	0.2	0.2	(s)	(s)	(s)	0.3	(s)	0.0	0.8	0.0	0.0	0.0	8.6	9.4	20.3	29.7
1986	0.0	0.0	0.2	0.5	(s)	(s)	(s)	0.3	0.0	0.0	1.1	0.0	0.0	0.0	8.9	9.9	20.5	30.4
1987	0.0	0.0	0.2	0.1	(s)	(s)	(s)	0.4	0.0	0.0	0.8	0.0	0.0	0.0	9.2	10.0	21.1	31.1
1988	0.0	0.0	0.2	(s)	(s)	(s)	(s)	0.3	0.0	0.0	0.6	0.0	0.0	0.0	9.6	10.2	21.7	31.9
1989	0.0	0.0	0.2	(s)	0.0	(s)	(s)	0.4	(s)	0.0	0.6	0.0	0.0	0.0	10.0	10.6	R 22.5	33.1
1990	0.0	0.0	0.2	(s)	0.0	(s)	(s)	0.5	(s)	0.0	0.7	f 0.0	f 0.0	f 0.0	10.2	f 10.9	R 22.2	f 33.1
1991	0.0	0.0	0.1	(s)	(s)	(s)	(s)	0.3	(s)	0.0	0.5	0.0	0.0	0.0	10.4	10.9	R 22.7	R 33.6
1992	0.0	0.0	0.1	0.1	0.0	(s)	(s)	0.3	(s)	0.0	0.6	0.0	0.0	0.0	10.2	10.8	R 21.8	R 32.6
1993	0.0	0.0	0.2	0.1	0.0	(s)	(s)	0.2	0.0	0.0	0.5	0.0	0.0	0.0	10.2	10.7	R 21.5	32.1
1994	0.0	0.0	0.2	0.1	0.0	(s)	(s)	0.4	(s)	0.0	0.7	0.0	0.0	0.0	0.9	1.6	1.9	3.5
1995	0.0	0.0	0.2	0.1	0.0	(s)	(s)	0.2	(s)	0.0	0.5	0.0	0.0	0.0	0.9	1.4	1.9	3.3
1996	0.0	0.0	0.1	0.1	(s)	(s)	(s)	0.2	(s)	0.0	0.5	0.0	0.0	0.0	0.9	1.4	1.8	3.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 69. Transportation Energy Consumption Estimates, Selected Years 1960-1996, District of Columbia**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	8	(s)	0	305	0	(s)	112	4,872	28	5,317	0	33	-	82	-
1965	(s)	0	0	874	(s)	(s)	59	5,391	6	6,331	0	0	-	0	-
1970	1	(s)	0	492	(s)	(s)	53	5,623	13	6,182	0	0	-	0	-
1975	(s)	(s)	0	820	0	1	46	5,670	350	6,887	0	0	-	0	-
1980	0	0	0	587	329	(s)	54	3,841	59	4,870	0	102	-	248	-
1981	0	0	0	450	566	1	52	3,934	180	5,182	0	123	-	292	-
1982	0	(s)	0	817	336	1	47	3,962	1,321	6,484	0	117	-	281	-
1983	0	(s)	0	621	108	1	49	3,935	353	5,068	0	94	-	225	-
1984	0	(s)	0	656	39	1	53	4,058	186	4,993	0	92	-	215	-
1985	0	(s)	0	882	7	1	49	R 3,716	202	R 4,857	0	119	-	280	-
1986	0	(s)	0	862	501	(s)	48	3,764	80	5,255	0	119	-	274	-
1987	0	(s)	0	783	(s)	(s)	54	R 4,144	0	R 4,981	0	112	-	257	-
1988	0	(s)	0	858	5	1	52	R 4,275	10	R 5,201	0	120	-	271	-
1989	0	(s)	0	938	0	1	54	R 4,104	40	R 5,135	0	116	-	261	-
1990	0	(s)	0	812	5	1	55	R 3,882	3	R 4,759	e 0	123	-	269	-
1991	0	(s)	0	740	0	(s)	49	R 3,930	0	R 4,720	0	124	-	269	-
1992	0	(s)	0	763	0	1	50	R 3,936	7	R 4,758	0	130	-	277	-
1993	0	(s)	2	617	101	1	51	R 4,117	0	R 4,889	0	129	-	R 272	-
1994	0	(s)	2	712	0	1	53	R 3,963	0	R 4,731	0	131	-	274	-
1995	0	(s)	4	654	2	1	53	3,997	0	4,709	0	132	-	275	-
1996	0	(s)	(s)	693	0	1	51	3,803	0	4,548	0	130	-	271	-

  

Trillion Btu															
1960	0.2	(s)	0.0	1.8	0.0	(s)	0.7	25.6	0.2	28.2	0.0	0.1	28.6	0.3	28.8
1965	(s)	0.0	0.0	5.1	(s)	(s)	0.4	28.3	(s)	33.8	0.0	0.0	33.8	0.0	33.8
1970	(s)	(s)	0.0	2.9	(s)	(s)	0.3	29.5	0.1	32.8	0.0	0.0	32.8	0.0	32.8
1975	(s)	(s)	0.0	4.8	0.0	(s)	0.3	29.8	2.2	37.0	0.0	0.0	37.1	0.0	37.1
1980	0.0	0.0	0.0	3.4	1.9	(s)	0.3	20.2	0.4	26.2	0.0	0.3	26.5	0.8	27.4
1981	0.0	0.0	0.0	2.6	3.2	(s)	0.3	20.7	1.1	27.9	0.0	0.4	28.4	1.0	29.4
1982	0.0	0.4	0.0	4.8	1.9	(s)	0.3	20.8	8.3	36.1	0.0	0.4	36.8	1.0	37.8
1983	0.0	0.4	0.0	3.6	0.6	(s)	0.3	20.7	2.2	27.4	0.0	0.3	28.1	0.8	28.9
1984	0.0	0.4	0.0	3.8	0.2	(s)	0.3	21.3	1.2	26.9	0.0	0.3	27.6	0.7	28.3
1985	0.0	0.4	0.0	5.1	(s)	(s)	0.3	19.5	1.3	26.3	0.0	0.4	27.1	1.0	28.0
1986	0.0	0.4	0.0	5.0	2.8	(s)	0.3	19.8	0.5	28.4	0.0	0.4	29.2	0.9	30.1
1987	0.0	0.3	0.0	4.6	(s)	(s)	0.3	R 21.8	0.0	R 26.7	0.0	0.4	27.3	0.9	R 28.2
1988	0.0	0.2	0.0	5.0	(s)	(s)	0.3	22.5	0.1	27.9	0.0	0.4	28.5	0.9	R 29.4
1989	0.0	0.3	0.0	5.5	0.0	(s)	0.3	R 21.6	0.2	27.6	0.0	0.4	28.2	0.9	29.1
1990	0.0	0.3	0.0	4.7	(s)	(s)	0.3	R 20.4	(s)	R 25.5	e 0.0	0.4	R e 26.2	0.9	R e 27.1
1991	0.0	0.3	0.0	4.3	0.0	(s)	0.3	20.6	0.0	R 25.3	0.0	0.4	25.9	0.9	26.9
1992	0.0	0.3	0.0	4.4	0.0	(s)	0.3	20.7	(s)	25.5	0.0	0.4	26.2	0.9	27.1
1993	0.0	0.3	(s)	3.6	0.6	(s)	0.3	21.6	0.0	26.1	0.0	0.4	26.8	0.9	27.8
1994	0.0	0.2	(s)	4.1	0.0	(s)	0.3	20.8	0.0	25.3	0.0	0.4	26.0	0.9	26.9
1995	0.0	0.3	(s)	3.8	(s)	(s)	0.3	21.0	0.0	25.2	0.0	0.5	25.9	0.9	26.8
1996	0.0	0.2	(s)	4.0	0.0	(s)	0.3	20.0	0.0	24.3	0.0	0.4	25.0	0.9	25.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 70. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, District of Columbia**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	446	0	446	0	9	4	0	12	0	3	0	0	0	--
1965	293	0	293	0	10	4	0	14	0	3	0	0	0	--
1970	673	0	673	0	2,755	1,135	0	3,889	0	1	0	0	0	--
1975	111	0	111	0	2,088	90	0	2,178	0	1	0	0	0	--
1980	0	0	0	0	1,462	109	0	1,572	0	0	0	0	0	--
1981	0	0	0	0	797	66	0	863	0	0	0	0	0	--
1982	0	0	0	0	215	37	0	252	0	0	0	0	0	--
1983	0	0	0	0	464	110	0	574	0	0	0	0	0	--
1984	0	0	0	0	607	130	0	737	0	0	0	0	0	--
1985	0	0	0	0	250	66	0	316	0	0	0	0	0	--
1986	0	0	0	0	405	69	0	474	0	0	0	0	0	--
1987	0	0	0	0	533	84	0	616	0	0	0	0	0	--
1988	0	0	0	0	935	165	0	1,100	0	0	0	0	0	--
1989	0	0	0	0	1,276	214	0	1,490	0	0	0	0	0	--
1990	0	0	0	0	798	72	0	871	0	0	0	0	0	--
1991	0	0	0	0	442	54	0	497	0	0	0	0	0	--
1992	0	0	0	0	194	56	0	250	0	0	0	0	0	--
1993	0	0	0	0	442	35	0	477	0	0	0	0	0	--
1994	0	0	0	0	566	98	0	664	0	0	0	0	0	--
1995	0	0	0	0	402	75	0	477	0	0	0	0	0	--
1996	0	0	0	0	241	49	0	290	0	0	0	0	0	--

  

Trillion Btu														
1960	12.2	0.0	12.2	0.0	0.1	(s)	0.0	0.1	0.0	(s)	0.0	0.0	0.0	12.4
1965	7.9	0.0	7.9	0.0	0.1	(s)	0.0	0.1	0.0	(s)	0.0	0.0	0.0	8.0
1970	17.4	0.0	17.4	0.0	17.3	6.6	0.0	23.9	0.0	(s)	0.0	0.0	0.0	41.4
1975	2.8	0.0	2.8	0.0	13.1	0.5	0.0	13.6	0.0	(s)	0.0	0.0	0.0	16.5
1980	0.0	0.0	0.0	0.0	9.2	0.6	0.0	9.8	0.0	0.0	0.0	0.0	0.0	9.8
1981	0.0	0.0	0.0	0.0	5.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	5.4
1982	0.0	0.0	0.0	0.0	1.4	0.2	0.0	1.6	0.0	0.0	0.0	0.0	0.0	1.6
1983	0.0	0.0	0.0	0.0	2.9	0.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	3.6
1984	0.0	0.0	0.0	0.0	3.8	0.8	0.0	4.6	0.0	0.0	0.0	0.0	0.0	4.6
1985	0.0	0.0	0.0	0.0	1.6	0.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0
1986	0.0	0.0	0.0	0.0	2.5	0.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	2.9
1987	0.0	0.0	0.0	0.0	3.4	0.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	3.8
1988	0.0	0.0	0.0	0.0	5.9	1.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	6.8
1989	0.0	0.0	0.0	0.0	8.0	1.2	0.0	9.3	0.0	0.0	0.0	0.0	0.0	9.3
1990	0.0	0.0	0.0	0.0	5.0	0.4	0.0	5.4	0.0	0.0	0.0	0.0	0.0	5.4
1991	0.0	0.0	0.0	0.0	2.8	0.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	3.1
1992	0.0	0.0	0.0	0.0	1.2	0.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	1.5
1993	0.0	0.0	0.0	0.0	2.8	0.2	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0
1994	0.0	0.0	0.0	0.0	3.6	0.6	0.0	4.1	0.0	0.0	0.0	0.0	0.0	4.1
1995	0.0	0.0	0.0	0.0	2.5	0.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0
1996	0.0	0.0	0.0	0.0	1.5	0.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	1.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

-- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 71. Energy Consumption Estimates by Source, Selected Years 1960-1996, Florida**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	1,104	138	3,304	4,517	8,621	9,482	3,962	4,936	911	43,148	30,199	356	109,435	0	278	0	0	-2,134	-
1965	2,323	185	3,506	4,273	12,279	17,525	4,449	5,663	1,014	53,136	43,344	1,349	146,537	0	298	0	0	606	-
1970	5,131	337	4,076	3,138	15,639	23,840	3,657	7,828	1,089	76,254	53,642	1,380	190,543	0	292	0	0	-1,715	-
1975	5,779	280	3,659	1,921	23,387	24,224	879	7,478	1,189	100,592	79,315	1,651	244,296	8,370	234	0	0	-850	-
1980	9,543	317	4,487	1,339	29,431	35,911	952	10,718	1,409	109,279	96,756	3,036	293,318	16,737	215	0	0	12,500	-
1981	9,969	338	5,014	1,138	29,911	35,598	748	9,924	1,351	111,902	90,409	3,965	289,962	14,448	180	0	0	9,975	-
1982	9,990	325	5,007	881	22,927	33,730	1,026	8,886	1,232	114,113	64,481	3,106	255,391	19,319	261	(s)	0	29,004	-
1983	13,080	306	5,724	882	27,963	30,140	997	8,936	1,290	118,342	58,722	2,766	255,762	14,805	220	(s)	0	46,494	-
1984	15,478	303	6,952	704	29,235	24,240	503	8,715	1,376	121,475	42,438	3,257	238,894	24,078	213	(s)	0	52,302	-
1985	19,305	290	6,666	841	30,444	23,101	2,530	9,932	1,282	125,346	37,777	3,100	241,020	23,461	244	0	0	73,679	-
1986	18,699	289	8,240	1,023	31,822	25,022	1,440	10,568	1,254	131,092	57,612	3,462	271,535	22,036	212	0	0	54,546	-
1987	23,644	300	7,583	778	32,912	26,502	1,138	8,794	1,418	137,775	45,688	3,388	265,976	18,773	217	0	0	64,257	-
1988	24,595	293	7,931	882	34,425	31,960	1,153	8,020	1,367	141,728	53,941	3,335	284,744	26,198	209	0	0	49,779	-
1989	25,447	324	6,481	976	35,349	33,566	852	8,017	1,402	142,220	53,498	3,268	285,630	20,916	234	0	0	72,594	-
1990	25,233	328	6,804	808	34,388	31,958	329	7,744	1,443	142,351	54,500	3,677	284,002	21,780	234	i NA	i NA	84,019	-
1991	26,004	344	7,310	712	31,382	25,048	237	7,959	1,291	141,440	59,727	3,068	278,174	20,508	234	NA	NA	70,614	-
1992	26,368	353	6,933	593	34,689	24,436	313	7,992	1,316	143,176	59,829	3,230	282,506	25,116	234	NA	NA	57,671	-
1993	26,430	336	8,342	527	23,595	26,644	284	8,070	1,340	150,283	70,106	3,254	292,446	25,887	234	NA	NA	60,779	-
1994	26,082	368	7,304	526	33,724	28,640	209	7,430	1,401	152,338	67,062	3,265	301,899	26,682	234	NA	NA	78,076	-
1995	26,526	516	6,630	599	39,920	28,045	313	7,796	1,377	157,657	47,456	3,110	292,904	28,741	234	NA	NA	85,453	-
1996	28,443	486	5,920	519	39,187	29,345	402	7,905	1,336	159,028	47,619	3,567	294,829	25,470	234	NA	NA	103,270	-
Trillion Btu																			
1960	27.2	142.9	21.9	22.8	50.2	51.5	22.5	19.8	5.5	226.7	189.9	2.1	612.8	0.0	3.0	0.0	0.0	-7.3	778.6
1965	55.2	191.7	23.3	21.6	71.5	97.2	25.2	22.7	6.2	279.1	272.5	7.4	826.6	0.0	3.1	0.0	0.0	2.1	1,078.7
1970	116.7	350.6	27.0	15.8	91.1	133.2	20.7	29.6	6.6	400.6	337.2	7.5	1,069.4	0.0	3.1	0.0	0.0	-5.9	1,534.0
1975	133.5	292.1	24.3	9.7	136.2	135.7	5.0	27.8	7.2	528.4	498.7	9.1	1,382.0	92.2	2.4	0.0	0.0	-2.9	1,899.3
1980	225.5	329.6	29.8	6.8	171.4	201.6	5.4	39.4	8.5	574.0	608.3	16.7	1,661.9	182.6	2.2	0.0	0.0	42.6	2,444.3
1981	236.5	357.5	33.3	5.7	174.2	200.0	4.2	36.2	8.2	587.8	568.4	21.6	1,639.6	159.4	1.9	0.0	0.0	34.0	2,428.9
1982	240.2	339.1	33.2	4.4	133.6	189.3	5.8	32.1	7.5	599.4	405.4	16.9	1,427.6	213.9	2.7	(s)	0.0	99.0	2,322.5
1983	318.9	321.0	38.0	4.5	162.9	169.2	5.7	32.3	7.8	621.7	369.2	15.2	1,426.3	161.4	2.3	(s)	0.0	158.6	2,388.7
1984	378.7	318.2	46.1	3.6	170.3	135.6	2.9	31.4	8.3	638.1	266.8	17.5	1,320.5	261.1	2.2	(s)	0.0	178.5	2,459.1
1985	472.4	305.1	44.2	4.2	177.3	129.2	14.3	35.8	7.8	658.4	237.5	16.8	1,325.6	253.7	2.5	0.0	0.0	251.4	2,610.6
1986	459.4	298.9	54.7	5.2	185.4	140.1	8.2	38.5	7.6	688.6	362.2	18.9	1,509.2	238.0	2.2	0.0	0.0	186.1	2,693.9
1987	586.6	313.6	50.3	3.9	191.7	148.4	6.5	32.2	8.6	723.7	287.2	18.2	1,470.8	202.3	2.3	0.0	0.0	219.2	2,794.8
1988	611.5	305.8	52.6	4.5	200.5	179.3	6.5	29.3	8.3	744.5	339.1	18.0	1,582.7	281.4	2.2	0.0	0.0	169.8	2,953.4
1989	630.2	337.2	43.0	4.9	205.9	188.5	4.8	29.5	8.5	747.1	336.3	17.6	1,586.3	224.3	2.4	0.0	0.0	247.7	3,028.1
1990	624.3	342.0	45.1	4.1	200.3	179.6	1.9	28.1	8.8	747.8	342.6	19.9	1,578.1	232.6	2.4	i 1.8	i 22.5	286.7	3,149.1
1991	642.8	361.0	48.5	3.6	182.8	140.8	1.3	28.8	7.8	743.0	375.5	16.6	1,548.8	220.3	2.7	R 68.3	23.3	240.9	3,107.8
1992	652.7	370.3	46.0	3.0	202.1	137.5	1.8	29.0	8.0	752.1	376.1	17.4	1,573.0	268.2	2.4	R 77.8	24.4	196.8	3,165.1
1993	652.2	353.4	55.4	2.7	137.4	150.3	1.6	29.1	8.1	789.4	440.8	17.5	1,632.4	276.5	2.2	R 82.9	25.4	207.4	3,231.8
1994	641.7	392.5	48.5	2.7	196.4	162.1	1.2	27.0	8.5	800.2	421.6	17.6	1,685.9	284.9	2.8	R 86.3	26.3	266.4	3,386.5
1995	653.0	532.6	44.0	3.0	232.5	159.0	1.8	28.2	8.3	828.2	298.4	16.8	1,620.2	306.3	2.4	R 88.0	27.3	291.6	3,521.3
1996	694.5	510.7	39.3	2.6	228.3	166.4	2.3	28.6	8.1	835.4	299.4	19.3	1,629.6	270.6	2.2	91.2	28.4	352.4	3,579.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 72. Residential Energy Consumption Estimates, Selected Years 1960-1996, Florida**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	6	541	3,150	3,458	7,149	0	0	7,258	—	18,052	—
1965	0	0	0	8	976	3,001	4,095	8,073	0	0	12,283	—	29,327	—
1970	0	0	0	15	1,010	2,414	5,698	9,121	0	0	24,610	—	59,638	—
1975	0	0	0	15	1,097	724	5,157	6,977	0	0	34,756	—	83,836	—
1980	4	0	4	15	1,215	774	4,434	6,422	0	0	44,746	—	108,807	—
1981	(s)	0	(s)	16	983	574	4,721	6,278	0	0	46,139	—	109,961	—
1982	1	0	1	14	724	227	3,852	4,802	0	0	45,126	—	108,387	—
1983	5	0	5	15	494	309	4,579	5,383	0	0	47,280	—	113,272	—
1984	24	0	24	15	507	246	5,179	5,932	0	0	50,315	—	117,113	—
1985	38	0	38	14	568	864	5,994	7,426	0	0	54,118	—	127,146	—
1986	33	0	33	14	463	556	6,418	7,436	0	0	57,672	—	132,662	—
1987	17	3	20	15	720	630	5,481	6,831	0	0	60,406	—	138,023	—
1988	1	1	1	15	522	654	4,870	6,046	0	0	63,972	—	144,626	—
1989	(s)	(s)	(s)	13	363	381	4,843	5,587	0	0	68,184	—	153,153	—
1990	1	(s)	2	13	234	154	4,989	5,377	<sup>e</sup> 428	<sup>e</sup> 6,609	71,115	—	155,538	—
1991	0	(s)	(s)	13	237	195	5,162	5,594	451	6,830	72,814	—	158,482	—
1992	5	1	6	14	309	274	5,189	5,772	474	7,155	73,189	—	156,327	—
1993	5	(s)	6	14	319	218	5,053	5,591	513	7,432	76,827	—	162,321	—
1994	7	(s)	7	14	249	125	4,635	5,008	503	7,722	80,595	—	168,164	—
1995	(s)	<sup>R</sup> 0	<sup>R</sup> (s)	15	221	211	3,944	4,375	558	8,009	85,770	—	178,663	—
1996	(s)	0	(s)	16	216	264	3,842	4,322	557	8,314	88,315	—	183,811	—
<b>Trillion Btu</b>														
1960	0.0	0.0	0.0	6.6	3.2	17.9	13.9	34.9	0.0	0.0	24.8	66.2	61.6	127.8
1965	0.0	0.0	0.0	8.4	5.7	17.0	16.4	39.1	0.0	0.0	41.9	89.5	100.1	189.5
1970	0.0	0.0	0.0	15.3	5.9	13.7	21.5	41.1	0.0	0.0	84.0	140.4	203.5	343.9
1975	0.0	0.0	0.0	16.4	6.4	4.1	19.2	29.6	0.0	0.0	118.6	164.6	286.0	450.7
1980	0.1	0.0	0.1	16.2	7.1	4.4	16.3	27.8	0.0	0.0	152.7	196.7	371.2	568.0
1981	(s)	0.0	(s)	18.1	5.7	3.3	17.2	26.2	0.0	0.0	157.4	201.7	375.2	576.9
1982	(s)	0.0	(s)	14.7	4.2	1.3	13.9	19.4	0.0	0.0	154.0	188.2	369.8	558.0
1983	0.1	0.0	0.1	16.9	2.9	1.8	16.5	21.2	0.0	0.0	161.3	199.5	386.5	586.0
1984	0.6	0.0	0.6	16.4	3.0	1.4	18.6	23.0	0.0	0.0	171.7	211.6	399.6	611.2
1985	1.0	0.0	1.0	15.0	3.3	4.9	21.6	29.8	0.0	0.0	184.7	230.4	433.8	664.2
1986	0.8	0.0	0.8	14.9	2.7	3.2	23.4	29.2	0.0	0.0	196.8	241.7	452.6	694.4
1987	0.4	0.1	0.5	15.9	4.2	3.6	20.1	27.8	0.0	0.0	206.1	250.4	470.9	721.3
1988	(s)	(s)	(s)	16.1	3.0	3.7	17.8	24.5	0.0	0.0	218.3	258.9	493.5	752.4
1989	(s)	(s)	(s)	14.2	2.1	2.2	17.8	22.1	0.0	0.0	232.6	269.0	522.6	791.5
1990	(s)	(s)	(s)	14.1	1.4	0.9	18.1	20.3	<sup>e</sup> 8.6	<sup>e</sup> 22.5	242.6	<sup>e</sup> 308.2	530.7	838.9
1991	0.0	(s)	(s)	14.2	1.4	1.1	18.7	21.1	9.0	23.3	248.4	316.1	540.7	856.8
1992	0.1	(s)	0.1	15.8	1.8	1.6	18.8	22.2	9.5	24.4	249.7	321.7	533.4	855.1
1993	0.1	(s)	0.1	15.3	1.9	1.2	18.2	21.3	10.3	25.4	262.1	334.5	553.8	888.4
1994	0.2	(s)	0.2	15.6	1.5	0.7	16.8	19.0	10.1	26.3	275.0	346.1	573.8	919.9
1995	(s)	<sup>R</sup> 0.0	(s)	15.6	1.3	1.2	14.3	16.8	11.2	27.3	292.6	363.5	609.6	973.1
1996	(s)	0.0	(s)	18.1	1.3	1.5	13.9	16.6	11.1	28.4	301.3	375.5	627.2	1,002.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 73. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Florida**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	0	0	7	1,097	175	610	685	2,126	4,693	0	5,586	-	13,894	-
1965	0	0	0	13	1,981	166	723	712	1,608	5,190	0	9,369	-	22,369	-
1970	0	0	0	27	2,049	134	1,005	1,382	1,467	6,038	0	16,244	-	39,364	-
1975	0	0	0	32	2,226	40	910	1,038	1,555	5,769	0	22,904	-	55,248	-
1980	7	0	7	30	1,926	28	782	1,340	1,476	5,552	0	27,422	-	66,681	-
1981	1	0	1	34	2,572	64	833	915	817	5,201	0	30,934	-	73,724	-
1982	3	0	3	30	650	221	680	748	383	2,682	0	32,759	-	78,681	-
1983	10	0	10	29	2,165	647	808	1,283	1,001	5,904	0	34,189	-	81,910	-
1984	45	0	45	30	2,220	224	914	1,327	1,366	6,052	0	36,994	-	86,106	-
1985	71	0	71	31	3,657	1,047	1,058	1,368	2,170	9,300	0	41,292	-	97,011	-
1986	62	0	62	36	3,419	848	1,133	1,427	2,798	9,625	0	43,990	-	101,190	-
1987	31	2	33	37	3,860	467	967	1,370	2,027	8,691	0	46,579	-	106,430	-
1988	1	(s)	1	38	3,312	418	859	1,302	2,105	7,997	0	49,881	-	112,769	-
1989	(s)	(s)	(s)	35	2,778	356	855	1,220	1,985	7,194	0	53,212	-	119,524	-
1990	3	(s)	3	36	3,243	125	880	1,412	2,398	8,059	e NA	55,776	-	121,989	-
1991	0	(s)	(s)	39	3,000	29	911	927	2,146	7,014	NA	56,999	-	124,061	-
1992	10	1	10	42	3,002	30	916	818	1,804	6,569	NA	57,285	-	122,357	-
1993	10	(s)	10	41	3,077	54	892	96	143	4,262	85	59,585	-	125,892	-
1994	13	(s)	13	40	2,190	76	818	97	136	3,318	62	62,398	-	130,195	-
1995	1	R 0	1	40	2,850	95	696	100	140	3,881	82	65,212	-	135,839	-
1996	1	0	1	42	2,151	106	678	100	100	3,135	65	66,265	-	137,918	-

**Trillion Btu**

1960	0.0	0.0	0.0	7.2	6.4	1.0	2.4	3.6	13.4	26.8	0.0	19.1	53.1	47.4	100.5
1965	0.0	0.0	0.0	13.2	11.5	0.9	2.9	3.7	10.1	29.2	0.0	32.0	74.4	76.3	150.7
1970	0.0	0.0	0.0	28.0	11.9	0.8	3.8	7.3	9.2	33.0	0.0	55.4	116.4	134.3	250.7
1975	0.0	0.0	0.0	34.2	13.0	0.2	3.4	5.5	9.8	31.8	0.0	78.1	144.2	188.5	332.7
1980	0.2	0.0	0.2	32.3	11.2	0.2	2.9	7.0	9.3	30.6	0.0	93.6	156.6	227.5	384.1
1981	(s)	0.0	(s)	37.3	15.0	0.4	3.0	4.8	5.1	28.3	0.0	105.5	171.2	251.5	422.7
1982	0.1	0.0	0.1	32.2	3.8	1.3	2.5	3.9	2.4	13.8	0.0	111.8	157.9	268.5	426.4
1983	0.2	0.0	0.2	32.1	12.6	3.7	2.9	6.7	6.3	32.2	0.0	116.7	181.2	279.5	460.7
1984	1.1	0.0	1.1	33.5	12.9	1.3	3.3	7.0	8.6	33.1	0.0	126.2	194.0	293.8	487.7
1985	1.8	0.0	1.8	34.0	21.3	5.9	3.8	7.2	13.6	51.9	0.0	140.9	228.6	331.0	559.6
1986	1.5	0.0	1.5	38.5	19.9	4.8	4.1	7.5	17.6	53.9	0.0	150.1	244.1	345.3	589.4
1987	0.8	0.1	0.8	41.0	22.5	2.6	3.5	7.2	12.7	48.6	0.0	158.9	249.4	363.1	R 612.6
1988	(s)	(s)	(s)	40.9	19.3	2.4	3.1	6.8	13.2	44.9	0.0	170.2	256.0	384.8	R 640.7
1989	(s)	(s)	(s)	38.1	16.2	2.0	3.1	6.4	12.5	40.2	0.0	181.6	259.9	R 407.8	R 667.7
1990	0.1	(s)	0.1	39.5	18.9	0.7	3.2	7.4	15.1	R 45.3	e NA	190.3	275.1	R 416.2	R 691.3
1991	0.0	(s)	(s)	43.1	17.5	0.2	3.3	4.9	13.5	39.3	NA	194.5	276.9	R 423.3	R 700.2
1992	0.2	(s)	0.2	45.9	17.5	0.2	3.3	4.3	11.3	36.6	NA	195.5	278.2	R 417.5	R 695.7
1993	0.3	(s)	0.3	45.2	17.9	0.3	3.2	0.5	0.9	22.8	1.7	203.3	R 273.3	R 429.5	R 702.9
1994	0.3	(s)	0.3	44.9	12.8	0.4	3.0	0.5	0.9	17.5	1.2	212.9	R 276.9	R 444.2	R 721.1
1995	(s)	R 0.0	(s)	43.2	16.6	0.5	2.5	0.5	0.9	21.1	1.6	222.5	R 288.4	463.5	R 751.9
1996	(s)	0.0	(s)	46.4	12.5	0.6	2.4	0.5	0.6	16.7	1.3	226.1	290.5	470.6	761.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 74. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Florida**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	0	35	3,304	2,934	638	785	237	182	10,883	356	19,320	0	0	0	3,963	-	9,858	-
1965	0	74	3,506	4,451	1,281	711	291	180	9,636	1,349	21,404	0	0	0	6,449	-	15,397	-
1970	0	92	4,076	4,494	1,109	928	420	202	8,148	1,380	20,757	0	0	0	9,365	-	22,695	-
1975	21	90	3,659	4,724	115	1,242	567	92	7,369	1,651	19,421	0	0	0	13,294	-	32,067	-
1980	748	102	4,487	7,077	150	5,341	604	86	13,673	3,036	34,453	0	0	0	18,598	-	45,224	-
1981	566	112	5,014	4,804	110	4,056	579	0	7,907	3,965	26,435	0	0	0	16,105	-	38,382	-
1982	441	95	5,007	2,946	578	3,998	528	294	4,442	3,106	20,901	0	0	0	14,654	-	35,197	-
1983	630	83	5,724	4,536	41	3,125	553	284	4,371	2,766	21,400	0	0	0	15,019	-	35,983	-
1984	829	79	6,952	4,652	33	R 2,085	590	415	5,967	3,257	R 23,950	0	0	0	16,215	-	37,742	-
1985	911	76	6,666	4,639	620	2,489	550	1,022	6,283	3,100	25,369	0	0	0	15,742	-	36,983	-
1986	782	65	8,240	5,115	36	2,581	538	1,024	3,825	3,462	24,821	0	0	0	14,976	-	34,448	-
1987	993	68	7,583	5,054	41	2,151	608	R 998	1,785	3,388	R 21,608	0	0	0	15,443	-	35,287	-
1988	1,065	83	7,931	4,193	81	2,073	586	R 940	3,997	3,335	R 23,137	0	0	0	16,356	-	36,976	-
1989	1,154	84	6,481	3,701	115	R 2,106	601	R 1,032	2,882	3,268	20,186	0	0	0	17,040	-	R 38,276	-
1990	1,207	87	6,804	3,491	50	R 1,662	619	R 1,069	3,265	3,677	R 20,636	f NA	f NA	f NA	16,605	-	R 36,317	-
1991	1,133	87	7,310	3,083	13	1,707	553	965	2,613	3,068	R 19,313	NA	NA	NA	16,482	-	R 35,874	-
1992	1,335	90	6,933	3,619	9	R 1,721	564	979	4,127	3,230	21,181	NA	NA	NA	16,497	-	R 35,237	-
1993	1,307	102	8,342	4,162	13	R 1,961	575	969	5,257	3,254	R 24,533	NA	NA	NA	16,298	-	R 34,434	-
1994	1,303	128	7,304	3,776	8	1,698	601	1,031	4,647	3,265	R 22,328	NA	NA	NA	16,513	-	R 34,454	-
1995	1,325	134	6,630	5,608	7	3,008	590	1,148	5,058	3,110	R 25,158	NA	NA	NA	16,473	-	R 34,314	-
1996	1,270	139	5,920	5,730	33	3,261	573	1,139	3,969	3,254	23,879	NA	NA	NA	17,212	-	35,824	-

**Trillion Btu**

1960	0.0	36.4	21.9	17.1	3.6	3.2	1.4	1.0	68.4	2.1	118.7	0.0	0.0	0.0	13.5	168.6	33.6	202.2
1965	0.0	77.2	23.3	25.9	7.3	2.9	1.8	0.9	60.6	7.4	130.0	0.0	0.0	0.0	22.0	229.2	52.5	281.7
1970	0.0	96.3	27.0	26.2	6.3	3.5	2.5	1.1	51.2	7.5	125.4	0.0	0.0	0.0	32.0	253.6	77.4	331.0
1975	0.5	96.6	24.3	27.5	0.7	4.6	3.4	0.5	46.3	9.1	116.4	0.0	0.0	0.0	45.4	258.9	109.4	368.3
1980	17.1	108.6	29.8	41.2	0.9	19.6	3.7	0.5	86.0	16.7	198.2	0.0	0.0	0.0	63.5	387.4	154.3	541.7
1981	13.5	123.8	33.3	28.0	0.6	14.8	3.5	0.0	49.7	21.6	151.5	0.0	0.0	0.0	54.9	343.8	131.0	474.7
1982	10.8	102.6	33.2	17.2	3.3	14.5	3.2	1.5	27.9	16.9	117.7	0.0	0.0	0.0	50.0	281.1	120.1	401.2
1983	15.6	90.8	38.0	26.4	0.2	11.3	3.4	1.5	27.5	15.2	123.5	0.0	0.0	0.0	51.2	281.1	122.8	403.8
1984	20.4	86.8	46.1	27.1	0.2	7.5	3.6	2.2	37.5	17.5	141.6	0.0	0.0	0.0	55.3	304.2	128.8	R 433.0
1985	22.6	84.2	44.2	27.0	3.5	9.0	3.3	5.4	39.5	16.8	148.7	0.0	0.0	0.0	53.7	309.3	126.2	435.4
1986	19.5	70.3	54.7	29.8	0.2	9.4	3.3	5.4	24.0	18.9	145.6	0.0	0.0	0.0	51.1	286.6	117.5	404.1
1987	24.9	74.6	50.3	29.4	0.2	7.9	3.7	5.2	11.2	18.2	126.2	0.0	0.0	0.0	52.7	278.4	120.4	398.8
1988	26.8	89.4	52.6	24.4	0.5	7.6	3.6	4.9	25.1	18.0	R 136.7	0.0	0.0	0.0	55.8	308.7	126.2	R 434.9
1989	28.6	91.7	43.0	21.6	0.7	7.8	3.6	5.4	18.1	17.6	117.8	0.0	0.0	0.0	58.1	296.2	R 130.6	R 426.8
1990	30.2	94.2	45.1	20.3	0.3	6.0	3.8	5.6	20.5	19.9	121.6	f 0.0	f 52.5	f 0.0	56.7	f 355.1	R 123.9	R f 479.0
1991	28.5	95.7	48.5	18.0	0.1	6.2	3.4	5.1	16.4	16.6	114.2	0.0	59.0	0.0	56.2	353.7	R 122.4	R 476.1
1992	33.4	99.0	46.0	21.1	0.1	6.2	3.4	5.1	25.9	17.4	125.3	0.0	67.9	0.0	56.3	381.9	120.2	R 502.1
1993	32.5	112.1	55.4	24.2	0.1	7.1	3.5	5.1	33.1	17.5	145.9	0.0	70.5	0.0	55.6	416.6	R 117.5	534.1
1994	32.5	143.5	48.5	22.0	(s)	6.2	3.6	5.4	29.2	17.6	132.6	0.0	R 74.6	0.0	56.3	R 439.6	R 117.6	R 557.1
1995	33.3	143.7	44.0	32.7	(s)	10.9	3.6	6.0	31.8	16.8	145.8	0.0	R 75.1	0.0	56.2	R 454.0	117.1	R 571.0
1996	31.9	154.0	39.3	33.4	0.2	11.8	3.5	6.0	25.0	17.4	136.5	0.0	78.7	0.0	58.7	459.8	122.2	582.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 75. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Florida**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	0	1	4,517	3,858	9,482	82	674	42,281	3,770	64,663	0	0	-	0	-
1965	0	3	4,273	4,482	17,525	134	723	52,244	4,751	84,132	0	0	-	0	-
1970	0	4	3,138	7,493	23,840	197	669	74,670	2,244	112,252	0	0	-	0	-
1975	(s)	2	1,921	10,160	24,199	169	622	99,462	2,211	138,744	0	0	-	0	-
1980	0	4	1,339	16,014	35,911	161	805	107,853	11,613	173,695	0	0	-	0	-
1981	0	4	1,138	19,304	35,598	314	772	110,987	6,828	174,941	0	0	-	0	-
1982	0	4	881	17,751	33,730	357	704	113,070	5,704	172,197	0	0	-	0	-
1983	0	4	882	19,761	30,140	424	737	116,774	4,056	172,774	0	0	-	0	-
1984	0	4	704	20,921	24,240	R 538	786	119,732	4,079	R 171,000	0	7	-	16	-
1985	0	4	841	20,335	23,101	390	733	R 122,956	6,892	R 175,247	0	17	-	39	-
1986	0	4	1,023	21,800	25,022	437	716	R 128,640	7,549	R 185,188	0	36	-	84	-
1987	0	4	778	22,232	26,502	195	810	R 135,406	9,228	R 195,152	0	40	-	92	-
1988	0	3	882	25,361	31,960	218	781	R 139,486	8,216	R 206,903	0	33	-	74	-
1989	0	4	976	26,073	33,566	213	801	R 139,968	8,099	R 209,696	0	38	-	86	-
1990	0	3	808	31,958	31,958	R 213	824	R 139,870	10,085	R 209,311	R e 5,118	40	-	88	-
1991	0	3	712	23,253	25,048	179	737	R 139,547	8,347	R 197,823	R 4,057	41	-	88	-
1992	0	4	593	26,334	24,436	167	752	R 141,380	10,382	R 204,043	R 4,930	39	-	83	-
1993	0	4	527	14,616	26,644	R 164	766	R 149,218	11,774	R 203,709	R 5,502	37	-	79	-
1994	0	5	526	26,196	28,640	279	800	R 151,211	10,224	R 217,876	R 4,417	39	-	81	-
1995	0	8	599	29,863	28,045	148	786	R 156,410	8,567	R 224,418	R 2,358	38	-	79	-
1996	0	6	519	29,504	29,345	124	763	157,789	8,264	226,309	830	40	-	84	-

**Trillion Btu**

1960	0.0	1.0	22.8	22.5	51.5	0.3	4.1	222.1	23.7	347.0	0.0	0.0	348.0	0.0	348.0
1965	0.0	2.6	21.6	26.1	97.2	0.5	4.4	274.4	29.9	454.1	0.0	0.0	456.7	0.0	456.7
1970	0.0	4.5	15.8	43.6	133.2	0.7	4.1	392.2	14.1	603.8	0.0	0.0	608.3	0.0	608.3
1975	(s)	2.5	9.7	59.2	135.5	0.6	3.8	522.5	13.9	745.2	0.0	0.0	747.7	0.0	747.7
1980	0.0	3.9	6.8	93.3	201.6	0.6	4.9	566.6	73.0	946.6	0.0	0.0	950.6	0.0	950.6
1981	0.0	4.5	5.7	112.4	200.0	1.1	4.7	583.0	42.9	949.9	0.0	0.0	954.5	0.0	954.5
1982	0.0	4.5	4.4	103.4	189.3	1.3	4.3	594.0	35.9	932.5	0.0	0.0	937.0	0.0	937.0
1983	0.0	4.6	4.5	115.1	169.2	1.5	4.5	613.4	25.5	933.7	0.0	0.0	938.2	0.0	938.2
1984	0.0	4.8	3.6	121.9	135.6	1.9	4.8	629.0	25.6	922.4	0.0	(s)	R 927.1	0.1	927.2
1985	0.0	4.3	4.2	118.4	129.2	1.4	4.4	R 645.9	43.3	R 946.9	0.0	0.1	R 951.3	0.1	R 951.4
1986	0.0	4.2	5.2	127.0	140.1	1.6	4.3	R 675.7	47.5	1,001.4	0.0	0.1	R 1,005.7	0.3	1,006.0
1987	0.0	4.9	3.9	129.5	148.4	0.7	4.9	R 711.3	58.0	R 1,056.8	0.0	0.1	R 1,061.8	0.3	R 1,062.1
1988	0.0	3.6	4.5	147.7	179.3	0.8	4.7	R 732.7	51.7	R 1,121.4	0.0	0.1	R 1,125.1	0.3	R 1,125.4
1989	0.0	4.5	4.9	151.9	188.5	0.8	4.9	R 735.3	50.9	R 1,137.1	0.0	0.1	R 1,141.8	0.3	R 1,142.1
1990	0.0	3.0	4.1	148.8	179.6	0.8	5.0	R 734.7	63.4	R 1,136.4	R e 0.4	0.1	R e 1,139.6	0.3	R e 1,139.9
1991	0.0	3.8	3.6	135.4	140.8	0.6	4.5	R 733.0	52.5	R 1,070.5	R 0.3	0.1	R 1,074.4	0.3	R 1,074.7
1992	0.0	4.8	3.0	153.4	137.5	0.6	4.6	R 742.7	65.3	R 1,107.0	R 0.4	0.1	R 1,111.9	0.3	R 1,112.2
1993	0.0	4.8	2.7	85.1	150.3	0.6	4.6	R 783.8	74.0	R 1,101.2	R 0.4	0.1	R 1,106.1	0.3	R 1,106.4
1994	0.0	6.0	2.7	152.6	162.1	1.0	4.9	R 794.3	64.3	R 1,181.8	0.3	0.1	R 1,188.0	0.3	R 1,188.3
1995	0.0	8.1	3.0	174.0	159.0	0.5	4.8	821.6	53.9	R 1,216.7	0.2	0.1	1,225.0	0.3	1,225.3
1996	0.0	6.4	2.6	171.9	166.4	0.4	4.6	828.9	52.0	1,226.8	0.1	0.1	1,233.3	0.3	1,233.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 76. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Florida**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	1,104	0	1,104	89	13,419	191	0	13,610	0	278	0	0	0	-
1965	2,323	0	2,323	87	27,349	388	0	27,737	0	298	0	0	0	-
1970	5,131	0	5,131	198	41,783	593	0	42,376	0	292	0	0	0	-
1975	5,758	0	5,758	141	68,180	5,205	0	73,385	8,370	234	0	0	0	-
1980	8,785	0	8,785	166	69,994	3,200	0	73,194	16,737	215	0	0	0	-
1981	9,209	192	9,401	171	74,857	2,249	0	77,107	14,448	180	0	0	0	-
1982	9,545	0	9,545	182	53,953	856	0	54,809	19,319	261	(s)	0	0	-
1983	12,435	0	12,435	175	49,295	1,007	0	50,302	14,805	220	(s)	0	0	-
1984	14,579	0	14,579	175	31,026	935	0	31,961	24,078	213	(s)	0	0	-
1985	18,283	0	18,283	166	22,432	1,246	0	23,678	23,461	244	0	0	0	-
1986	17,822	0	17,822	170	43,440	1,025	0	44,465	22,036	212	0	0	0	-
1987	22,598	0	22,598	176	32,647	1,047	0	33,694	18,773	217	0	0	0	-
1988	23,528	0	23,528	155	39,623	1,037	0	40,660	26,198	209	0	0	0	-
1989	24,292	0	24,292	187	40,532	2,435	0	42,966	20,916	234	0	0	0	-
1990	24,022	0	24,022	189	38,752	1,869	0	40,620	21,780	175	0	0	0	-
1991	24,870	0	24,870	201	46,621	1,809	0	48,430	20,508	263	0	0	0	-
1992	25,016	0	25,016	203	43,516	1,424	0	44,940	25,116	236	0	0	0	-
1993	25,108	0	25,108	174	52,931	1,420	0	54,351	25,887	0	0	0	0	-
1994	24,758	0	24,758	181	52,055	1,313	0	53,369	26,682	274	0	0	0	-
1995	25,200	0	25,200	319	33,692	1,379	0	35,071	28,741	231	0	0	0	-
1996	27,172	0	27,172	284	35,286	1,586	313	37,185	25,470	216	0	0	0	-

**Trillion Btu**

1960	27.2	0.0	27.2	91.6	84.4	1.1	0.0	85.5	0.0	3.0	0.0	0.0	0.0	207.3
1965	55.2	0.0	55.2	90.2	171.9	2.3	0.0	174.2	0.0	3.1	0.0	0.0	0.0	322.7
1970	116.7	0.0	116.7	206.5	262.7	3.5	0.0	266.1	0.0	3.1	0.0	0.0	0.0	592.4
1975	133.0	0.0	133.0	142.4	428.6	30.3	0.0	459.0	92.2	2.4	0.0	0.0	0.0	829.0
1980	208.1	0.0	208.1	168.5	440.1	18.6	0.0	458.7	182.6	2.2	0.0	0.0	0.0	1,020.1
1981	219.4	3.5	222.9	173.7	470.6	13.1	0.0	483.7	159.4	1.9	0.0	0.0	0.0	1,041.6
1982	229.3	0.0	229.3	185.0	339.2	5.0	0.0	344.2	213.9	2.7	(s)	0.0	0.0	975.1
1983	303.0	0.0	303.0	176.7	309.9	5.9	0.0	315.8	161.4	2.3	(s)	0.0	0.0	959.3
1984	356.5	0.0	356.5	176.7	195.1	5.4	0.0	200.5	261.1	2.2	(s)	0.0	0.0	997.0
1985	447.0	0.0	447.0	167.5	141.0	7.3	0.0	148.3	253.7	2.5	0.0	0.0	0.0	1,019.1
1986	437.6	0.0	437.6	170.9	273.1	6.0	0.0	279.1	238.0	2.2	0.0	0.0	0.0	1,127.7
1987	560.4	0.0	560.4	177.1	205.3	6.1	0.0	211.4	202.3	2.3	0.0	0.0	0.0	1,153.4
1988	584.6	0.0	584.6	155.8	249.1	6.0	0.0	255.2	281.4	2.2	0.0	0.0	0.0	1,279.2
1989	601.6	0.0	601.6	188.7	254.8	14.2	0.0	269.0	224.3	2.4	0.0	0.0	0.0	1,286.0
1990	594.0	0.0	594.0	191.2	243.6	10.9	0.0	254.5	232.6	1.8	0.0	0.0	0.0	1,274.2
1991	614.3	0.0	614.3	204.1	293.1	10.5	0.0	303.6	220.3	2.7	0.0	0.0	0.0	1,345.1
1992	618.9	0.0	618.9	204.8	273.6	8.3	0.0	281.9	268.2	2.4	0.0	0.0	0.0	1,376.2
1993	619.3	0.0	619.3	175.9	332.8	8.3	0.0	341.1	276.5	2.2	0.0	0.0	0.0	1,414.9
1994	608.7	0.0	608.7	182.5	327.3	7.7	0.0	334.9	284.9	2.8	0.0	0.0	0.0	1,413.8
1995	619.8	0.0	619.8	322.0	211.8	8.0	0.0	219.9	306.3	2.4	0.0	0.0	0.0	1,470.3
1996	662.6	0.0	662.6	285.8	221.8	9.2	1.9	233.0	270.6	2.2	0.0	0.0	0.0	1,454.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 77. Energy Consumption Estimates by Source, Selected Years 1960-1996, Georgia**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	3,548	182	2,482	262	5,140	2,306	1,554	4,253	819	32,079	6,551	273	55,720	0	2,306	0	0	7,839	-
1965	6,116	211	4,007	928	8,531	2,158	1,297	5,424	967	39,136	8,413	1,005	71,867	0	3,234	0	0	13,600	-
1970	8,131	333	3,916	600	12,781	10,506	457	7,430	1,023	54,081	10,279	1,031	102,104	0	2,519	0	0	27,394	-
1975	13,141	327	4,198	399	16,115	12,887	246	8,168	1,126	65,541	10,809	2,038	121,527	3,093	4,334	0	0	9,175	-
1980	21,892	315	4,795	386	19,437	16,421	552	7,444	1,250	65,506	9,036	5,272	130,097	8,436	4,423	0	0	-15,441	-
1981	23,073	317	3,757	330	19,276	14,829	272	6,813	1,198	65,602	6,281	5,265	123,625	7,235	2,328	0	0	-9,055	-
1982	22,295	295	3,927	244	18,374	15,085	313	6,367	1,093	66,046	5,395	4,241	121,085	6,606	3,652	0	0	-3,589	-
1983	24,202	296	5,229	220	21,761	16,495	154	6,402	1,144	67,969	4,635	4,085	128,095	7,774	4,120	0	0	-15,244	-
1984	28,072	307	5,639	219	23,693	16,790	86	6,168	1,220	71,471	5,859	4,786	135,932	5,472	4,137	0	0	-17,230	-
1985	29,898	282	4,580	212	23,818	16,236	367	6,825	1,137	R 72,993	11,931	4,372	R 142,471	10,130	2,826	0	0	-28,970	-
1986	28,460	279	5,641	253	24,610	17,742	338	6,342	1,112	R 76,957	3,628	4,667	R 141,290	7,238	2,151	0	0	4,273	-
1987	29,126	303	5,977	218	26,033	19,691	220	6,337	1,257	R 80,118	3,164	4,565	R 147,581	15,259	3,175	0	0	-16,764	-
1988	28,654	323	6,048	227	27,922	20,295	337	6,731	1,212	R 83,520	3,118	4,490	R 153,899	15,149	2,065	0	0	-1,868	-
1989	27,918	318	4,958	210	28,125	17,451	314	7,394	1,243	R 83,571	2,659	4,400	R 150,327	24,961	3,929	0	0	R -24,210	-
1990	30,067	311	6,398	196	28,537	18,439	198	6,021	1,279	R 83,148	3,539	4,880	R 152,635	24,797	i NA	i NA	i NA	R -31,190	-
1991	26,957	323	5,192	182	26,960	14,441	194	6,747	1,145	R 83,715	2,954	7,626	R 149,155	26,016	NA	NA	NA	R -11,525	-
1992	25,481	343	4,897	166	27,207	12,422	155	7,185	1,167	R 83,906	6,875	8,003	R 151,983	27,996	NA	NA	NA	R -10,046	-
1993	27,081	351	5,324	167	31,273	15,204	223	7,614	1,188	R 83,036	5,548	8,043	R 167,620	27,233	NA	NA	NA	R -4,212	-
1994	29,254	341	5,251	160	31,485	16,936	243	7,548	1,242	R 93,493	4,798	8,151	R 169,308	28,927	NA	NA	NA	R -16,965	-
1995	31,288	370	5,526	156	35,275	18,451	195	7,288	1,221	97,672	4,165	7,774	177,723	30,661	NA	NA	NA	R -15,241	-
1996	31,158	383	5,428	168	41,616	17,293	212	7,326	1,185	101,063	4,857	8,112	187,260	29,925	NA	NA	NA	3,494	-
Trillion Btu																			
1960	89.0	188.5	16.5	1.3	29.9	12.4	8.8	17.1	5.0	168.5	41.2	1.6	302.2	0.0	24.8	0.0	0.0	26.7	631.2
1965	152.6	219.8	26.6	4.7	49.7	11.6	7.4	21.8	5.9	205.6	52.9	5.4	391.4	0.0	33.8	0.0	0.0	46.4	844.0
1970	193.2	342.8	26.0	3.0	74.5	59.0	2.6	28.1	6.2	284.1	64.6	5.6	553.6	0.0	26.4	0.0	0.0	93.5	1,209.5
1975	312.0	335.4	27.9	2.0	93.9	72.6	1.4	30.3	6.8	344.3	68.0	11.2	658.3	34.1	45.1	0.0	0.0	31.3	1,416.1
1980	521.5	325.3	31.8	1.9	113.2	92.6	3.1	27.3	7.6	344.1	56.8	28.8	707.3	92.0	45.9	0.0	0.0	-52.7	1,639.4
1981	552.1	325.2	24.9	1.7	112.3	83.6	1.5	24.8	7.3	344.6	39.5	28.8	669.0	79.8	24.3	0.0	0.0	-30.9	1,619.5
1982	535.4	303.5	26.1	1.2	107.0	85.0	1.8	23.0	6.6	346.9	33.9	23.1	654.7	73.1	38.2	0.0	0.0	-12.2	1,592.7
1983	584.8	303.2	34.7	1.1	126.8	93.0	0.9	23.1	6.9	357.0	29.1	22.5	695.2	84.8	43.3	0.0	0.0	-52.0	1,659.3
1984	681.5	315.3	37.4	1.1	138.0	94.4	0.5	22.2	7.4	375.4	36.8	25.8	739.2	59.3	43.2	0.0	0.0	-58.8	1,779.8
1985	725.7	289.7	30.4	1.1	138.7	91.5	2.1	24.6	6.9	R 383.4	75.0	23.8	R 777.5	109.5	29.5	0.0	0.0	-98.8	R 1,833.1
1986	692.5	286.6	37.4	1.3	143.4	100.1	1.9	23.1	6.7	404.3	22.8	25.6	766.5	78.2	22.5	0.0	0.0	14.6	1,860.9
1987	710.6	311.3	39.7	1.1	151.6	111.2	1.2	23.2	7.6	R 420.9	19.9	24.6	R 801.0	164.4	33.1	0.0	0.0	-57.2	R 1,963.2
1988	699.0	331.1	40.1	1.1	162.6	114.6	1.9	24.6	7.4	R 438.7	19.6	24.4	R 835.1	162.8	21.3	0.0	0.0	-6.4	R 2,042.9
1989	676.8	325.9	32.9	1.1	163.8	98.5	1.8	27.2	7.5	R 439.0	16.7	23.8	R 812.4	267.7	R 41.0	0.0	0.0	-82.6	R 2,041.2
1990	718.2	319.4	42.5	1.0	166.2	104.2	1.1	21.8	7.8	R 436.8	22.2	26.5	R 830.1	264.8	R i 51.1	R i 102.3	i 0.1	R -106.4	R i 2,179.4
1991	646.2	331.8	34.5	0.9	157.0	81.5	1.1	24.4	6.9	R 439.8	18.6	41.5	R 806.1	279.4	R 48.7	R 107.4	0.1	R -39.3	R 2,180.1
1992	615.5	351.5	32.5	0.8	158.5	70.0	0.9	26.0	7.1	R 440.8	43.2	43.2	R 823.0	298.9	R 55.8	R 111.4	0.1	R -34.3	R 2,221.6
1993	659.4	360.1	35.3	0.8	182.2	85.8	1.3	27.5	7.2	R 488.7	34.9	43.4	R 907.1	290.9	R 49.5	R 115.7	0.1	R -14.4	R 2,368.0
1994	691.9	351.6	34.8	0.8	183.4	95.9	1.4	27.4	7.5	R 491.1	30.2	44.0	R 916.6	308.8	R 50.6	114.9	0.1	R -57.9	R 2,376.6
1995	728.5	380.0	36.7	0.8	205.5	104.6	1.1	26.4	7.4	513.1	26.2	41.9	963.6	326.8	48.8	113.6	0.1	-52.0	R 2,509.5
1996	725.6	392.2	36.0	0.8	242.4	98.0	1.2	26.5	7.2	530.9	30.5	43.5	1,017.1	317.9	51.6	118.1	0.2	11.9	2,634.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 78. Residential Energy Consumption Estimates, Selected Years 1960-1996, Georgia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	134	0	134	56	131	633	2,279	3,042	0	0	4,469	—	11,116	—
1965	68	0	68	67	211	460	3,092	3,764	0	0	6,936	—	16,560	—
1970	44	0	44	87	250	121	4,164	4,536	0	0	12,474	—	30,229	—
1975	18	0	18	87	298	34	3,896	4,229	0	0	16,457	—	39,696	—
1980	8	0	8	90	578	91	3,553	4,222	0	0	20,033	—	48,713	—
1981	11	0	11	92	184	34	3,313	3,531	0	0	20,207	—	48,159	—
1982	5	0	5	87	163	62	2,779	3,003	0	0	20,147	—	48,390	—
1983	1	0	1	91	225	103	3,304	3,631	0	0	20,726	—	49,656	—
1984	25	0	25	95	231	61	3,603	3,894	0	0	22,570	—	52,535	—
1985	13	1	14	84	353	257	3,952	4,562	0	0	23,505	—	55,222	—
1986	3	0	3	89	364	203	3,549	4,116	0	0	25,808	—	59,365	—
1987	13	0	13	101	343	130	3,701	4,173	0	0	26,991	—	61,672	—
1988	9	1	10	108	258	206	3,724	4,187	0	0	27,609	—	62,418	—
1989	4	(s)	5	104	267	177	4,093	4,537	0	0	28,349	—	R 63,678	—
1990	8	(s)	8	90	250	111	3,400	3,761	e 723	e 27	29,933	—	R 65,467	—
1991	3	(s)	3	97	178	113	3,651	3,943	761	30	30,187	—	R 65,702	—
1992	13	(s)	13	108	178	109	4,020	4,306	801	32	30,528	—	R 65,205	—
1993	8	(s)	8	116	236	136	4,196	4,568	871	35	33,867	—	R 71,554	—
1994	10	(s)	10	105	113	80	4,216	4,408	854	37	32,735	—	R 68,302	—
1995	21	R 0	21	115	159	126	4,001	4,285	948	42	35,812	—	R 74,599	—
1996	1	0	1	127	153	144	3,882	4,179	946	46	37,763	—	78,597	—
<b>Trillion Btu</b>														
1960	3.3	0.0	3.3	57.8	0.8	3.6	9.1	13.5	0.0	0.0	15.2	89.9	37.9	127.8
1965	1.7	0.0	1.7	69.9	1.2	2.6	12.4	16.2	0.0	0.0	23.7	111.4	56.5	167.9
1970	1.1	0.0	1.1	90.1	1.5	0.7	15.7	17.9	0.0	0.0	42.6	151.6	103.1	254.7
1975	0.4	0.0	0.4	89.5	1.7	0.2	14.5	16.4	0.0	0.0	56.2	162.5	135.4	297.9
1980	0.2	0.0	0.2	93.1	3.4	0.5	13.1	16.9	0.0	0.0	68.4	178.6	166.2	344.8
1981	0.3	0.0	0.3	94.4	1.1	0.2	12.1	13.3	0.0	0.0	68.9	177.0	164.3	341.3
1982	0.1	0.0	0.1	89.4	0.9	0.4	10.0	11.3	0.0	0.0	68.7	169.6	165.1	334.7
1983	(s)	0.0	(s)	93.8	1.3	0.6	11.9	13.8	0.0	0.0	70.7	178.3	169.4	347.8
1984	0.6	0.0	0.6	97.8	1.3	0.3	13.0	14.7	0.0	0.0	77.0	190.1	179.2	369.3
1985	0.3	(s)	0.3	86.4	2.1	1.5	14.2	17.8	0.0	0.0	80.2	184.7	188.4	373.1
1986	0.1	0.0	0.1	91.6	2.1	1.1	12.9	16.2	0.0	0.0	88.1	195.9	202.6	398.4
1987	0.3	0.0	0.3	103.2	2.0	0.7	13.5	16.3	0.0	0.0	92.1	211.9	210.4	422.4
1988	0.2	(s)	0.2	110.8	1.5	1.2	13.6	16.3	0.0	0.0	94.2	221.5	213.0	434.5
1989	0.1	(s)	0.1	106.4	1.6	1.0	15.1	17.6	0.0	0.0	96.7	220.9	R 217.3	R 438.1
1990	0.2	(s)	0.2	92.7	1.5	0.6	12.3	14.4	e 14.5	e 0.1	102.1	e 224.0	R 223.4	R e 447.4
1991	0.1	(s)	0.1	99.3	1.0	0.6	13.2	14.9	15.2	0.1	103.0	232.5	R 224.2	R 456.7
1992	0.3	(s)	0.3	110.9	1.0	0.6	14.6	16.2	16.0	0.1	104.2	247.8	R 222.5	R 470.3
1993	0.2	(s)	0.2	118.8	1.4	0.8	15.1	17.3	17.4	0.1	115.6	269.3	R 244.1	R 513.5
1994	0.2	(s)	0.3	108.6	0.7	0.5	15.3	16.4	17.1	0.1	111.7	254.2	R 233.0	R 487.2
1995	0.5	R 0.0	0.5	117.7	0.9	0.7	14.5	16.1	19.0	0.1	122.2	275.6	254.5	530.1
1996	(s)	0.0	(s)	130.0	0.9	0.8	14.0	15.7	18.9	0.2	128.8	293.7	268.2	561.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 79. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Georgia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	249	0	249	21	373	206	402	269	59	1,308	0	2,764	-	6,875	-
1965	125	0	125	26	603	149	546	306	83	1,687	0	4,560	-	10,887	-
1970	82	0	82	39	713	39	735	349	108	1,945	0	8,174	-	19,807	-
1975	33	0	33	49	851	11	688	372	80	2,002	0	11,226	-	27,079	-
1980	14	0	14	59	315	12	627	363	10	1,327	0	11,965	-	29,096	-
1981	21	0	21	57	1,227	18	585	410	9	2,249	0	12,831	-	30,581	-
1982	9	0	9	55	1,041	143	490	422	5	2,101	0	13,476	-	32,367	-
1983	2	0	2	56	2,161	28	583	402	518	3,693	0	13,756	-	32,956	-
1984	47	0	47	56	2,217	15	636	370	708	3,945	0	15,605	-	36,322	-
1985	24	(s)	25	52	1,546	46	697	R 310	468	3,066	0	17,014	-	39,973	-
1986	5	0	5	50	992	73	626	360	1,039	3,090	0	18,257	-	41,996	-
1987	24	0	24	55	1,004	34	653	R 409	995	R 3,094	0	19,411	-	44,353	-
1988	17	(s)	17	56	1,203	21	657	R 454	767	3,102	0	20,694	-	46,785	-
1989	8	(s)	8	53	975	73	722	404	259	R 2,433	0	22,260	-	R 50,001	-
1990	14	(s)	14	49	1,271	64	600	R 519	69	R 2,523	e NA	23,725	-	R 51,889	-
1991	5	(s)	5	51	862	53	644	330	22	1,912	NA	24,096	-	R 52,446	-
1992	25	(s)	25	54	1,038	37	709	415	6	2,205	NA	24,605	-	R 52,555	-
1993	14	(s)	14	58	1,134	65	740	64	6	2,010	31	26,181	-	R 55,314	-
1994	18	(s)	18	54	1,035	149	744	171	7	2,106	29	27,167	-	R 56,685	-
1995	R 39	R 0	39	57	1,407	35	706	62	12	2,221	40	28,814	-	R 60,021	-
1996	2	0	2	61	1,172	31	685	62	11	1,962	35	30,292	-	63,048	-

**Trillion Btu**

1960	6.2	0.0	6.2	22.1	2.2	1.2	1.6	1.4	0.4	6.7	0.0	9.4	44.5	23.5	67.9
1965	3.1	0.0	3.1	27.1	3.5	0.8	2.2	1.6	0.5	8.7	0.0	15.6	54.4	37.1	91.6
1970	2.0	0.0	2.0	39.9	4.2	0.2	2.8	1.8	0.7	9.7	0.0	27.9	79.4	67.6	147.0
1975	0.8	0.0	0.8	50.8	5.0	0.1	2.6	2.0	0.5	10.0	0.0	38.3	99.9	92.4	192.3
1980	0.3	0.0	0.3	60.6	1.8	0.1	2.3	1.9	0.1	6.2	0.0	40.8	108.0	99.3	207.3
1981	0.5	0.0	0.5	58.7	7.1	0.1	2.1	2.2	0.1	11.6	0.0	43.8	114.6	104.3	218.9
1982	0.2	0.0	0.2	56.4	6.1	0.8	1.8	2.2	(s)	10.9	0.0	46.0	113.5	110.4	223.9
1983	0.1	0.0	0.1	57.7	12.6	0.2	2.1	2.1	3.3	20.2	0.0	46.9	125.0	112.4	237.4
1984	1.2	0.0	1.2	57.4	12.9	0.1	2.3	1.9	4.5	21.7	0.0	53.2	133.5	123.9	257.4
1985	0.6	(s)	0.6	53.0	9.0	0.3	2.5	1.6	2.9	16.3	0.0	58.1	128.0	136.4	264.4
1986	0.1	0.0	0.1	51.8	5.8	0.4	2.3	1.9	6.5	16.9	0.0	62.3	131.1	143.3	274.4
1987	0.6	0.0	0.6	56.0	5.8	0.2	2.4	2.1	6.3	16.8	0.0	66.2	139.7	151.3	291.0
1988	0.4	(s)	0.4	57.4	7.0	0.1	2.4	2.4	4.8	16.7	0.0	70.6	145.1	159.6	304.8
1989	0.2	(s)	0.2	54.5	5.7	0.4	2.7	2.1	1.6	12.5	0.0	76.0	143.1	R 170.6	R 313.7
1990	0.4	(s)	0.4	50.8	7.4	0.4	2.2	2.7	0.4	13.1	e NA	80.9	145.2	R 177.0	R 322.3
1991	0.1	(s)	0.1	52.4	5.0	0.3	2.3	1.7	0.1	9.5	NA	82.2	144.3	R 178.9	R 323.2
1992	0.6	(s)	0.6	55.2	6.0	0.2	2.6	2.2	(s)	11.0	NA	84.0	150.8	R 179.3	330.1
1993	0.4	(s)	0.4	59.1	6.6	0.4	2.7	0.3	(s)	10.0	0.6	89.3	R 159.4	R 188.7	R 348.1
1994	0.5	(s)	0.5	55.7	6.0	0.8	2.7	0.9	(s)	10.5	0.6	92.7	R 159.9	R 193.4	R 353.4
1995	1.0	R 0.0	1.0	58.0	8.2	0.2	2.6	0.3	0.1	11.3	0.8	98.3	R 169.4	R 204.8	R 374.2
1996	(s)	0.0	(s)	62.8	6.8	0.2	2.5	0.3	0.1	9.9	0.7	103.4	176.8	215.1	391.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 80. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Georgia**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	548	76	2,482	2,043	715	1,507	289	936	4,909	273	13,153	63	0	0	4,713	-	11,723	-
1965	630	113	4,007	3,538	687	1,716	384	616	7,117	1,005	19,070	64	0	0	6,903	-	16,481	-
1970	506	141	3,916	4,014	296	2,430	474	124	8,457	1,031	20,741	58	0	0	10,853	-	26,300	-
1975	434	145	4,198	3,557	200	3,478	610	60	6,243	2,038	20,384	56	0	0	13,866	-	33,446	-
1980	679	155	4,795	3,993	449	3,188	632	26	5,361	5,272	23,717	54	0	0	19,195	-	46,676	-
1981	1,100	157	3,757	2,891	220	2,703	606	21	3,141	5,265	18,605	54	0	0	19,379	-	46,185	-
1982	1,087	144	3,927	2,367	108	2,895	553	16	2,987	4,241	17,093	54	0	0	18,960	-	45,539	-
1983	1,420	140	5,229	3,012	23	2,275	579	20	2,905	4,085	18,127	54	0	0	19,737	-	47,286	-
1984	1,544	150	5,639	3,089	11	R 1,611	617	525	3,966	4,786	R 20,243	54	0	0	22,259	-	51,809	-
1985	1,575	140	4,580	3,653	65	1,964	575	1,251	10,397	4,372	26,855	54	0	0	23,122	-	54,324	-
1986	1,801	128	5,641	3,984	63	1,979	562	1,160	1,550	4,667	19,605	54	0	0	24,367	-	56,050	-
1987	1,960	141	5,977	3,583	56	1,853	636	R 1,220	1,463	4,565	R 19,353	54	0	0	25,227	-	57,641	-
1988	2,115	150	6,048	3,401	110	2,213	613	R 1,153	1,723	4,490	R 19,751	54	0	0	25,984	-	58,743	-
1989	2,067	153	4,958	3,970	64	R 2,461	629	1,299	1,707	4,400	19,489	54	0	0	26,388	-	R 59,273	-
1990	2,232	162	6,398	4,068	23	R 1,916	647	R 1,288	2,030	4,880	R 21,250	f NA	f NA	f NA	26,717	-	R 58,435	-
1991	2,101	167	5,192	3,433	28	2,340	579	1,173	1,747	7,626	22,118	NA	NA	NA	27,193	-	R 59,187	-
1992	1,787	172	4,897	2,797	10	R 2,346	590	1,223	3,425	8,003	23,290	NA	NA	NA	28,197	-	R 60,227	-
1993	1,720	167	5,324	3,838	22	2,560	601	R 712	2,804	8,043	23,904	NA	NA	NA	29,084	-	R 61,449	-
1994	1,933	174	5,251	3,472	14	R 2,339	628	R 777	2,857	8,151	R 23,490	NA	NA	NA	29,942	-	R 62,475	-
1995	1,949	184	5,526	4,831	35	2,441	617	829	2,639	7,774	24,692	NA	NA	NA	31,493	-	R 65,602	-
1996	1,985	182	5,428	5,562	37	2,638	599	907	3,503	8,112	26,787	NA	NA	NA	33,175	-	69,048	-

**Trillion Btu**

1960	13.9	78.6	16.5	11.9	4.1	6.0	1.8	4.9	30.9	1.6	77.6	0.7	0.0	0.0	16.1	186.9	40.0	226.9
1965	15.9	117.0	26.6	20.6	3.9	6.9	2.3	3.2	44.7	5.4	113.7	0.7	0.0	0.0	23.6	270.8	56.2	327.0
1970	12.0	145.3	26.0	23.4	1.7	9.2	2.9	0.7	53.2	5.6	122.5	0.6	0.0	0.0	37.0	317.4	89.7	407.1
1975	10.2	149.4	27.9	20.7	1.1	12.9	3.7	0.3	39.2	11.2	117.1	0.6	0.0	0.0	47.3	324.5	114.1	438.6
1980	16.5	160.1	31.8	23.3	2.5	11.7	3.8	0.1	33.7	28.8	135.8	0.6	0.0	0.0	65.5	378.5	159.3	537.8
1981	26.7	161.3	24.9	16.8	1.2	9.8	3.7	0.1	19.7	28.8	105.2	0.6	0.0	0.0	66.1	359.9	157.6	517.5
1982	26.6	148.7	26.1	13.8	0.6	10.5	3.4	0.1	18.8	23.1	96.3	0.6	0.0	0.0	64.7	336.9	155.4	492.3
1983	35.1	143.9	34.7	17.5	0.1	8.2	3.5	0.1	18.3	22.5	105.0	0.6	0.0	0.0	67.3	352.0	161.3	513.3
1984	38.2	153.4	37.4	18.0	0.1	5.8	3.7	2.8	24.9	25.8	118.5	0.6	0.0	0.0	75.9	386.6	176.8	563.4
1985	39.1	143.9	30.4	21.3	0.4	7.1	3.5	6.6	65.4	23.8	158.3	0.6	0.0	0.0	78.9	420.8	185.4	606.1
1986	44.9	131.9	37.4	23.2	0.4	7.2	3.4	6.1	9.7	25.6	113.0	0.6	0.0	0.0	83.1	373.5	191.2	564.8
1987	49.0	144.9	39.7	20.9	0.3	6.8	3.9	6.4	9.2	24.6	111.7	0.6	0.0	0.0	86.1	392.3	196.7	R 589.0
1988	52.9	154.2	40.1	19.8	0.6	8.1	3.7	6.1	10.8	24.4	113.6	0.6	0.0	0.0	88.7	409.9	200.4	610.3
1989	51.2	157.1	32.9	23.1	0.4	9.1	3.8	R 6.8	10.7	23.8	110.7	0.6	0.0	0.0	90.0	R 409.6	R 202.2	R 611.8
1990	56.1	166.4	42.5	23.7	0.1	6.9	3.9	R 6.8	12.8	26.5	123.2	f 0.3	f 87.6	f 0.0	91.2	f 524.7	R 199.4	R f 724.1
1991	52.8	171.6	34.5	20.0	0.2	8.5	3.5	6.2	11.0	41.5	125.2	0.3	92.0	0.0	92.8	534.6	R 201.9	R 736.6
1992	44.9	176.5	32.5	16.3	0.1	8.5	3.6	6.4	21.5	43.2	132.1	0.6	95.0	0.0	96.2	545.4	R 205.5	R 750.9
1993	43.2	171.9	35.3	22.4	0.1	9.2	3.6	3.7	17.6	43.4	135.5	0.5	R 97.2	0.0	99.2	547.6	R 209.7	R 757.2
1994	48.5	179.1	34.8	20.2	0.1	8.5	3.8	4.1	18.0	44.0	133.5	0.6	R 97.2	0.0	102.2	R 560.9	R 213.2	R 774.1
1995	49.1	188.5	36.7	28.1	0.2	8.8	3.7	4.4	16.6	41.9	140.5	0.5	R 93.9	0.0	107.5	R 579.9	R 223.8	R 803.7
1996	49.9	185.9	36.0	32.4	0.2	9.5	3.6	4.8	22.0	43.5	152.1	0.5	98.4	0.0	113.2	600.1	235.6	835.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 81. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Georgia**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	10	4	262	2,592	2,306	66	530	30,875	1,544	38,175	0	44	-	109	-
1965	2	5	928	4,177	2,158	69	583	38,215	1,162	47,292	0	0	-	0	-
1970	1	7	600	7,747	10,506	100	549	53,608	172	73,283	0	0	-	0	-
1975	(s)	4	399	10,331	12,887	106	516	65,110	427	89,776	0	0	-	0	-
1980	0	7	386	14,135	16,421	76	618	65,116	2,995	99,747	0	16	-	38	-
1981	0	8	330	14,602	14,829	212	592	65,171	2,656	98,392	0	17	-	40	-
1982	0	7	244	14,544	15,085	203	540	65,608	2,314	98,538	0	25	-	60	-
1983	0	6	220	16,148	16,495	241	566	67,547	1,146	102,363	0	24	-	58	-
1984	0	6	219	17,988	16,790	R 319	603	70,577	1,153	R 107,648	0	34	-	79	-
1985	0	5	212	18,031	16,236	212	562	R 71,432	1,009	R 107,695	0	56	-	130	-
1986	0	5	253	19,101	17,742	188	550	R 75,437	683	R 113,954	0	59	-	135	-
1987	0	6	218	20,949	19,691	130	621	R 78,490	499	R 120,600	0	51	-	117	-
1988	0	7	227	22,746	20,295	136	599	R 81,913	449	R 126,365	0	59	-	133	-
1989	0	7	210	22,595	17,451	117	615	R 81,868	666	R 123,522	0	62	-	R 139	-
1990	0	7	196	22,731	18,439	R 105	632	R 81,341	1,325	R 124,769	R e 4,429	65	-	143	-
1991	0	7	182	22,292	14,441	112	566	R 82,211	1,165	R 120,969	R 3,511	63	-	138	-
1992	0	8	166	22,995	12,422	R 110	577	R 82,268	3,376	R 121,914	R 4,267	62	-	132	-
1993	0	7	167	25,729	15,204	R 118	587	R 92,260	2,568	R 136,633	R 4,762	59	-	R 126	-
1994	0	7	160	26,568	16,936	249	614	R 92,545	1,873	R 138,945	R 1,343	69	-	144	-
1995	0	8	156	28,494	18,451	140	603	96,781	1,405	R 146,030	R 124	73	-	151	-
1996	0	8	168	34,173	17,293	121	586	100,094	1,258	153,692	0	77	-	160	-

**Trillion Btu**

1960	0.2	3.7	1.3	15.1	12.4	0.3	3.2	162.2	9.7	204.2	0.0	0.1	208.3	0.4	208.6
1965	0.1	5.0	4.7	24.3	11.6	0.3	3.5	200.7	7.3	252.5	0.0	0.0	257.5	0.0	257.5
1970	(s)	7.1	3.0	45.1	59.0	0.4	3.3	281.6	1.1	393.5	0.0	0.0	400.6	0.0	400.6
1975	(s)	4.3	2.0	60.2	72.6	0.4	3.1	342.0	2.7	483.0	0.0	0.0	487.3	0.0	487.3
1980	0.0	7.6	1.9	82.3	92.6	0.3	3.7	342.1	18.8	541.8	0.0	0.1	549.4	0.1	549.6
1981	0.0	7.9	1.7	85.1	83.6	0.8	3.6	342.3	16.7	533.7	0.0	0.1	541.6	0.1	541.8
1982	0.0	7.4	1.2	84.7	85.0	0.7	3.3	344.6	14.5	534.1	0.0	0.1	541.6	0.2	541.8
1983	0.0	6.1	1.1	94.1	93.0	R 0.9	3.4	354.8	7.2	554.5	0.0	0.1	560.7	0.2	560.9
1984	0.0	6.1	1.1	104.8	94.4	R 1.1	3.7	370.7	7.2	583.1	0.0	0.1	589.4	0.3	589.7
1985	0.0	5.5	1.1	105.0	91.5	0.8	3.4	R 375.2	6.3	R 583.4	0.0	0.2	R 589.1	0.4	R 589.5
1986	0.0	5.4	1.3	111.3	100.1	0.7	3.3	396.3	4.3	617.2	0.0	0.2	R 622.8	0.5	623.3
1987	0.0	6.3	1.1	122.0	111.2	0.5	3.8	R 412.3	3.1	R 654.0	0.0	0.2	R 660.5	0.4	R 660.9
1988	0.0	7.1	1.1	132.5	114.6	0.5	3.6	R 430.3	2.8	R 685.5	0.0	0.2	R 692.8	0.5	R 693.2
1989	0.0	7.2	1.1	131.6	98.5	0.4	3.7	R 430.1	4.2	R 669.6	0.0	0.2	R 677.0	0.5	R 677.5
1990	0.0	7.5	1.0	132.4	104.2	0.4	3.8	R 427.3	8.3	R 677.4	R e 0.3	0.2	R e 685.2	0.5	R e 685.6
1991	0.0	7.6	0.9	129.9	81.5	0.4	3.4	R 431.9	7.3	R 655.3	R 0.3	0.2	R 663.1	0.5	R 663.6
1992	0.0	7.7	0.8	133.9	70.0	0.4	3.5	432.2	21.2	R 662.0	R 0.3	0.2	R 669.9	0.5	R 670.4
1993	0.0	7.2	0.8	149.9	85.8	0.4	3.6	R 484.6	16.1	R 741.3	R 0.4	0.2	R 748.7	0.4	R 749.1
1994	0.0	7.2	0.8	154.8	95.9	0.9	3.7	R 486.1	11.8	R 754.0	0.1	0.2	R 761.4	0.5	R 761.9
1995	0.0	7.9	0.8	166.0	104.6	0.5	3.7	508.4	8.8	792.8	(s)	0.2	800.9	0.5	801.4
1996	0.0	8.7	0.8	199.1	98.0	0.4	3.6	525.8	7.9	835.6	0.0	0.3	844.6	0.5	845.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 82. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Georgia**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	2,608	0	2,608	25	39	1	0	40	0	2,243	0	0	0	--
1965	5,291	0	5,291	1	52	2	0	54	0	3,170	0	0	0	--
1970	7,498	0	7,498	59	1,542	58	0	1,600	0	2,461	0	0	0	--
1975	12,656	0	12,656	40	4,059	1,077	0	5,136	3,093	4,278	0	0	0	--
1980	21,191	0	21,191	4	670	415	0	1,085	8,436	4,369	0	0	0	--
1981	21,941	0	21,941	3	476	372	0	848	7,235	2,274	0	0	0	--
1982	21,195	0	21,195	2	89	259	0	349	6,606	3,598	0	0	0	--
1983	22,778	0	22,778	2	65	215	0	280	7,774	4,065	0	0	0	--
1984	26,455	0	26,455	1	32	169	0	201	5,472	4,083	0	0	0	--
1985	28,285	0	28,285	1	57	235	0	292	10,130	2,772	0	0	0	--
1986	26,652	0	26,652	6	356	169	0	525	7,238	2,097	0	0	0	--
1987	27,130	0	27,130	1	207	154	0	361	15,259	3,121	0	0	0	--
1988	26,513	0	26,513	2	180	315	0	494	15,149	2,011	0	0	0	--
1989	25,839	0	25,839	1	27	318	0	346	24,961	3,874	0	0	0	--
1990	27,812	0	27,812	2	115	218	0	333	24,797	4,887	0	0	0	--
1991	24,848	0	24,848	1	20	194	0	213	26,016	4,639	0	0	0	--
1992	23,656	0	23,656	1	69	199	0	268	27,996	5,342	0	0	0	--
1993	25,339	0	25,339	3	170	336	0	506	27,233	4,753	0	0	0	--
1994	27,293	0	27,293	1	61	297	0	358	28,927	4,857	0	0	0	--
1995	29,280	0	29,280	8	109	385	0	494	30,661	4,684	0	0	0	--
1996	29,170	0	29,170	5	84	555	0	640	29,925	4,936	0	0	0	--

**Trillion Btu**

1960	65.3	0.0	65.3	26.2	0.2	(s)	0.0	0.3	0.0	24.1	0.0	0.0	0.0	115.9
1965	131.9	0.0	131.9	0.9	0.3	(s)	0.0	0.3	0.0	33.1	0.0	0.0	0.0	166.3
1970	178.1	0.0	178.1	60.5	9.7	0.3	0.0	10.0	0.0	25.8	0.0	0.0	0.0	274.5
1975	300.6	0.0	300.6	41.5	25.5	6.3	0.0	31.8	34.1	44.5	0.0	0.0	0.0	452.4
1980	504.5	0.0	504.5	3.8	4.2	2.4	0.0	6.6	92.0	45.4	0.0	0.0	0.0	652.3
1981	524.6	0.0	524.6	2.9	3.0	2.2	0.0	5.2	79.8	23.8	0.0	0.0	0.0	636.2
1982	508.5	0.0	508.5	1.6	0.6	1.5	0.0	2.1	73.1	37.6	0.0	0.0	0.0	622.9
1983	549.6	0.0	549.6	1.7	0.4	1.3	0.0	1.7	84.8	42.8	0.0	0.0	0.0	680.5
1984	641.6	0.0	641.6	0.6	0.2	1.0	0.0	1.2	59.3	42.6	0.0	0.0	0.0	745.3
1985	685.7	0.0	685.7	0.9	0.4	1.4	0.0	1.7	109.5	29.0	0.0	0.0	0.0	826.8
1986	647.4	0.0	647.4	5.9	2.2	1.0	0.0	3.2	78.2	21.9	0.0	0.0	0.0	756.7
1987	660.6	0.0	660.6	0.8	1.3	0.9	0.0	2.2	164.4	32.5	0.0	0.0	0.0	860.6
1988	645.5	0.0	645.5	1.6	1.1	1.8	0.0	3.0	162.8	20.8	0.0	0.0	0.0	833.5
1989	625.3	0.0	625.3	0.7	0.2	1.9	0.0	2.0	267.7	R 40.4	0.0	0.0	0.0	R 936.1
1990	661.5	0.0	661.5	2.0	0.7	1.3	0.0	2.0	264.8	R 50.8	0.0	0.0	0.0	R 981.2
1991	593.2	0.0	593.2	0.9	0.1	1.1	0.0	1.3	279.4	R 48.4	0.0	0.0	0.0	R 923.1
1992	569.6	0.0	569.6	1.2	0.4	1.2	0.0	1.6	298.9	R 55.2	0.0	0.0	0.0	R 926.6
1993	615.6	0.0	615.6	3.1	1.1	2.0	0.0	3.0	290.9	R 49.0	0.0	0.0	0.0	R 961.7
1994	642.7	0.0	642.7	1.1	0.4	1.7	0.0	2.1	308.8	R 50.1	0.0	0.0	0.0	R 1,004.8
1995	677.9	0.0	677.9	8.0	0.7	2.2	0.0	2.9	326.8	R 48.3	0.0	0.0	0.0	1,063.9
1996	675.6	0.0	675.6	4.8	0.5	3.2	0.0	3.8	317.9	51.0	0.0	0.0	0.0	1,053.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 83. Energy Consumption Estimates by Source, Selected Years 1960-1996, Hawaii**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	0	0	29	2,640	886	4,321	91	112	38	3,429	4,766	553	16,864	0	27	0	0	0	-
1965	0	0	306	613	1,612	7,618	49	219	94	4,082	7,230	684	22,507	0	105	0	0	0	-
1970	0	0	377	133	1,695	14,273	153	938	71	5,691	10,154	643	34,129	0	108	24	0	0	-
1975	0	0	379	116	1,948	14,849	76	872	104	6,766	11,255	693	37,056	0	89	25	0	0	-
1980	0	3	285	199	5,987	14,116	9	1,573	94	7,231	13,196	815	43,505	0	86	0	0	0	-
1981	0	3	187	183	6,021	10,028	0	1,337	90	7,185	13,160	530	38,721	0	80	15	0	0	-
1982	47	3	172	137	4,545	7,472	0	2,104	82	7,261	13,292	572	35,637	0	90	26	0	0	-
1983	42	3	259	156	2,326	11,271	1	2,102	86	7,240	12,148	707	36,297	0	84	28	0	0	-
1984	38	2	205	146	2,701	12,946	2	121	92	7,528	12,796	716	37,252	0	82	28	21	0	-
1985	46	2	308	155	4,611	13,260	2	133	86	R 7,594	13,185	671	R 40,005	0	86	25	19	0	-
1986	16	2	272	279	4,584	10,176	3	126	84	7,878	14,326	1,203	38,931	0	78	0	18	0	-
1987	63	3	397	249	4,059	11,481	2	157	95	R 8,186	13,595	1,468	R 39,688	0	82	0	13	0	-
1988	50	3	351	281	5,914	11,972	(s)	178	91	R 8,476	16,935	1,921	R 46,122	0	81	0	16	0	-
1989	32	3	296	287	5,685	13,239	(s)	186	94	R 8,754	17,400	2,004	R 47,944	0	89	11	14	0	-
1990	28	3	381	272	6,822	12,646	(s)	178	96	R 8,670	17,433	2,156	R 48,655	0	i NA	i NA	i NA	0	-
1991	37	3	383	261	7,239	11,123	(s)	214	86	R 8,970	15,418	1,803	R 45,499	0	NA	NA	NA	0	-
1992	47	3	431	243	5,588	9,993	(s)	651	88	R 8,870	16,271	2,230	R 44,365	0	NA	NA	NA	0	-
1993	73	3	444	198	4,837	8,891	1	884	90	R 9,060	12,361	2,026	R 38,791	0	NA	NA	NA	0	-
1994	86	3	407	210	5,063	9,472	1	1,619	94	R 9,343	12,931	2,221	R 41,361	0	NA	NA	NA	0	-
1995	R 192	3	438	218	5,017	9,940	1	1,317	92	9,416	12,348	2,115	40,902	0	NA	NA	NA	0	-
1996	169	3	401	165	4,418	10,087	1	1,354	89	9,374	10,379	2,501	38,769	0	NA	NA	NA	0	-

  

Trillion Btu																			
1960	0.0	0.0	0.2	13.3	5.2	23.5	0.5	0.4	0.2	18.0	30.0	3.3	94.7	0.0	0.3	0.0	0.0	0.0	95.0
1965	0.0	0.0	2.0	3.1	9.4	42.3	0.3	0.9	0.6	21.4	45.5	4.1	129.5	0.0	1.1	0.0	0.0	0.0	130.6
1970	0.0	0.0	2.5	0.7	9.9	80.1	0.9	3.5	0.4	29.9	63.8	3.9	195.5	0.0	1.1	0.3	0.0	0.0	196.9
1975	0.0	0.0	2.5	0.6	11.3	83.5	0.4	3.2	0.6	35.5	70.8	4.2	212.7	0.0	0.9	0.3	0.0	0.0	213.9
1980	0.0	3.0	1.9	1.0	34.9	79.2	0.1	5.8	0.6	38.0	83.0	4.9	249.3	0.0	0.9	0.0	0.0	0.0	253.2
1981	0.0	2.8	1.2	0.9	35.1	56.2	0.0	4.9	0.5	37.7	82.7	3.3	222.6	0.0	0.8	0.2	0.0	0.0	226.4
1982	1.1	2.8	1.1	0.7	26.5	41.6	0.0	7.6	0.5	38.1	83.6	3.6	203.3	0.0	0.9	0.3	0.0	0.0	208.5
1983	1.0	2.7	1.7	0.8	13.6	62.5	(s)	7.6	0.5	38.0	76.4	4.3	205.4	0.0	0.9	0.3	0.0	0.0	210.3
1984	0.9	2.4	1.4	0.7	15.7	72.6	(s)	0.4	0.6	39.5	80.4	4.4	215.8	0.0	0.9	0.3	0.4	0.0	220.8
1985	1.1	2.7	2.0	0.8	26.9	74.4	(s)	0.5	0.5	39.9	82.9	4.2	232.1	0.0	0.9	0.3	0.4	0.0	237.4
1986	0.4	2.7	1.8	1.4	26.7	57.0	(s)	0.5	0.5	41.4	90.1	7.6	226.9	0.0	0.8	0.0	0.4	0.0	231.2
1987	1.6	2.8	2.6	1.3	23.6	64.4	(s)	0.6	0.6	R 43.0	85.5	9.0	R 230.6	0.0	0.9	0.0	0.3	0.0	R 236.1
1988	1.2	2.8	2.3	1.4	34.5	67.2	(s)	0.7	0.6	R 44.5	106.5	11.7	269.3	0.0	0.8	0.0	0.3	0.0	R 274.5
1989	0.8	2.9	2.0	1.4	33.1	74.4	(s)	0.7	0.6	46.0	109.4	12.1	279.6	0.0	0.9	0.1	0.3	0.0	R 284.7
1990	0.7	3.0	2.5	1.4	39.7	71.1	(s)	0.6	0.6	R 45.5	109.6	13.0	R 284.0	0.0	i 0.6	i 8.8	i 0.9	0.0	R i 298.0
1991	0.9	2.9	2.5	1.3	42.2	62.6	(s)	0.8	0.5	47.1	96.9	11.0	264.9	0.0	0.5	8.2	1.2	0.0	278.6
1992	1.2	2.9	2.9	1.2	32.6	56.5	(s)	2.4	0.5	46.6	102.3	13.4	258.3	0.0	0.6	8.1	1.2	0.0	272.3
1993	1.8	2.8	2.9	1.0	28.2	50.4	(s)	3.2	0.5	47.6	77.7	12.3	223.8	0.0	0.6	8.0	4.5	0.0	241.5
1994	1.8	2.9	2.7	1.1	29.5	53.7	(s)	5.9	0.6	49.1	81.3	13.4	237.2	0.0	1.5	7.9	5.2	0.0	R 256.5
1995	R 4.1	2.9	2.9	1.1	29.2	56.4	(s)	4.8	0.6	49.5	77.6	12.8	234.8	0.0	1.0	7.1	6.3	0.0	R 256.3
1996	3.6	2.8	2.7	0.8	25.7	57.2	(s)	4.9	0.5	49.2	65.3	15.0	221.4	0.0	1.1	6.5	6.6	0.0	242.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 84. Residential Energy Consumption Estimates, Selected Years 1960-1996, Hawaii

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	0	0	0	(s)	0	57	58	0	0	514	-	1,550	-
1965	0	0	0	0	1	0	113	114	0	0	861	-	1,976	-
1970	0	0	0	0	1	0	447	449	0	0	1,285	-	3,021	-
1975	0	0	0	0	1	0	320	321	0	0	1,663	-	3,732	-
1980	0	0	0	1	1	0	430	431	0	0	1,841	-	4,103	-
1981	0	0	0	1	1	0	406	407	0	0	1,924	-	4,008	-
1982	0	0	0	1	0	0	383	383	0	0	1,842	-	3,712	-
1983	0	0	0	1	1	0	452	453	0	0	1,854	-	3,808	-
1984	0	0	0	1	1	0	91	92	0	0	1,838	-	3,918	-
1985	0	0	0	1	(s)	0	101	101	0	0	1,879	-	3,928	-
1986	0	0	0	1	1	0	95	96	0	0	1,962	-	3,998	-
1987	0	0	0	1	1	0	119	120	0	0	2,073	-	4,304	-
1988	0	0	0	1	2	0	134	136	0	0	2,151	-	4,539	-
1989	0	0	0	1	(s)	0	139	140	0	0	2,242	-	R 4,834	-
1990	0	0	0	1	(s)	0	127	128	e 0	e 228	2,324	-	4,734	-
1991	0	0	0	1	(s)	(s)	131	131	0	247	2,396	-	4,131	-
1992	0	0	0	1	(s)	(s)	413	413	0	262	2,438	-	3,711	-
1993	0	0	0	1	1	(s)	88	89	0	277	2,469	-	R 3,061	-
1994	0	0	0	1	1	(s)	90	91	0	293	2,557	-	R 2,859	-
1995	0	0	0	1	1	(s)	86	88	0	311	2,606	-	2,923	-
1996	0	0	0	1	(s)	(s)	107	107	0	329	2,676	-	3,023	-

Trillion Btu

1960	0.0	0.0	0.0	0.0	(s)	0.0	0.2	0.2	0.0	0.0	1.8	2.0	5.3	7.3
1965	0.0	0.0	0.0	0.0	(s)	0.0	0.5	0.5	0.0	0.0	2.9	3.4	6.7	10.1
1970	0.0	0.0	0.0	0.0	(s)	0.0	1.7	1.7	0.0	0.0	4.4	6.1	10.3	16.4
1975	0.0	0.0	0.0	0.0	(s)	0.0	1.2	1.2	0.0	0.0	5.7	6.9	12.7	19.6
1980	0.0	0.0	0.0	1.4	(s)	0.0	1.6	1.6	0.0	0.0	6.3	9.2	14.0	23.2
1981	0.0	0.0	0.0	1.2	(s)	0.0	1.5	1.5	0.0	0.0	6.6	9.3	13.7	23.0
1982	0.0	0.0	0.0	1.2	0.0	0.0	1.4	1.4	0.0	0.0	6.3	8.9	12.7	21.5
1983	0.0	0.0	0.0	1.1	(s)	0.0	1.6	1.6	0.0	0.0	6.3	9.1	13.0	22.1
1984	0.0	0.0	0.0	1.1	(s)	0.0	0.3	0.3	0.0	0.0	6.3	7.7	13.4	21.0
1985	0.0	0.0	0.0	0.7	(s)	0.0	0.4	0.4	0.0	0.0	6.4	7.5	13.4	20.9
1986	0.0	0.0	0.0	0.6	(s)	0.0	0.3	0.4	0.0	0.0	6.7	7.7	13.6	21.3
1987	0.0	0.0	0.0	0.6	(s)	0.0	0.4	0.4	0.0	0.0	7.1	8.1	14.7	22.8
1988	0.0	0.0	0.0	0.6	(s)	0.0	0.5	0.5	0.0	0.0	7.3	8.4	15.5	23.9
1989	0.0	0.0	0.0	0.6	(s)	0.0	0.5	0.5	0.0	0.0	7.7	8.8	16.5	25.3
1990	0.0	0.0	0.0	0.6	(s)	0.0	0.5	0.5	e 0.0	e 0.8	7.9	e 9.8	16.2	e 25.9
1991	0.0	0.0	0.0	0.6	(s)	(s)	0.5	0.5	0.0	0.8	8.2	10.1	14.1	24.2
1992	0.0	0.0	0.0	0.6	(s)	(s)	1.5	1.5	0.0	0.9	8.3	11.3	12.7	24.0
1993	0.0	0.0	0.0	0.6	(s)	(s)	0.3	0.3	0.0	0.9	8.4	10.3	10.4	20.7
1994	0.0	0.0	0.0	0.6	(s)	(s)	0.3	0.3	0.0	1.0	8.7	10.7	9.8	20.4
1995	0.0	0.0	0.0	0.6	(s)	(s)	0.3	0.3	0.0	1.1	8.9	10.9	10.0	20.8
1996	0.0	0.0	0.0	0.6	(s)	(s)	0.4	0.4	0.0	1.1	9.1	11.2	10.3	21.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 85. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Hawaii**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	0	0	0	48	23	10	55	41	177	0	306	-	921	-
1965	0	0	0	0	71	39	20	59	31	220	0	495	-	1,136	-
1970	0	0	0	0	174	87	79	133	38	511	0	771	-	1,813	-
1975	0	0	0	0	84	45	57	98	15	299	0	1,109	-	2,489	-
1980	0	0	0	2	398	0	76	54	25	552	0	1,462	-	3,259	-
1981	0	0	0	2	178	0	72	59	54	363	0	1,451	-	3,023	-
1982	0	0	0	2	55	0	68	58	106	287	0	1,408	-	2,837	-
1983	0	0	0	2	99	1	80	49	9	238	0	1,441	-	2,958	-
1984	0	0	0	1	111	2	16	43	23	196	0	1,598	-	3,408	-
1985	0	0	0	2	136	1	18	47	21	223	0	1,612	-	3,371	-
1986	0	0	0	2	181	3	17	46	67	313	0	1,831	-	3,730	-
1987	0	0	0	2	483	2	21	44	53	604	0	1,942	-	4,033	-
1988	0	0	0	2	604	(s)	24	53	1,762	2,443	0	2,072	-	4,372	-
1989	0	0	0	2	495	(s)	25	52	1,470	2,042	0	2,152	-	4,639	-
1990	0	0	0	2	507	(s)	22	59	837	R 1,426	e NA	2,253	-	4,589	-
1991	0	0	0	2	613	(s)	23	49	19	703	NA	2,355	-	4,062	-
1992	0	0	0	2	437	(s)	73	45	1,063	1,618	NA	2,417	-	3,678	-
1993	0	0	0	2	279	1	15	11	35	341	0	2,419	-	3,000	-
1994	0	0	0	2	252	(s)	16	11	439	718	0	2,601	-	2,908	-
1995	0	0	0	2	253	(s)	15	11	63	343	0	2,779	-	3,116	-
1996	0	0	0	2	152	(s)	19	11	13	195	0	2,819	-	3,185	-

**Trillion Btu**

1960	0.0	0.0	0.0	0.0	0.3	0.1	(s)	0.3	0.3	1.0	0.0	1.0	2.0	3.1	5.2
1965	0.0	0.0	0.0	0.0	0.4	0.2	0.1	0.3	0.2	1.2	0.0	1.7	2.9	3.9	6.8
1970	0.0	0.0	0.0	0.0	1.0	0.5	0.3	0.7	0.2	2.7	0.0	2.6	5.4	6.2	11.6
1975	0.0	0.0	0.0	0.0	0.5	0.3	0.2	0.5	0.1	1.6	0.0	3.8	5.4	8.5	13.8
1980	0.0	0.0	0.0	1.7	2.3	0.0	0.3	0.3	0.2	3.0	0.0	5.0	9.7	11.1	20.8
1981	0.0	0.0	0.0	1.5	1.0	0.0	0.3	0.3	0.3	1.9	0.0	5.0	8.4	10.3	18.8
1982	0.0	0.0	0.0	1.6	0.3	0.0	0.2	0.3	0.7	1.5	0.0	4.8	7.9	9.7	17.6
1983	0.0	0.0	0.0	1.6	0.6	(s)	0.3	0.3	0.1	1.2	0.0	4.9	7.7	10.1	17.8
1984	0.0	0.0	0.0	1.4	0.6	(s)	0.1	0.2	0.1	1.1	0.0	5.5	7.9	11.6	19.5
1985	0.0	0.0	0.0	2.0	0.8	(s)	0.1	0.2	0.1	1.2	0.0	5.5	8.8	11.5	20.3
1986	0.0	0.0	0.0	2.0	1.1	(s)	0.1	0.2	0.4	1.8	0.0	6.2	10.1	12.7	22.8
1987	0.0	0.0	0.0	2.2	2.8	(s)	0.1	0.2	0.3	3.5	0.0	6.6	12.3	13.8	26.0
1988	0.0	0.0	0.0	2.2	3.5	(s)	0.1	0.3	11.1	15.0	0.0	7.1	24.2	14.9	39.2
1989	0.0	0.0	0.0	2.3	2.9	(s)	0.1	0.3	9.2	12.5	0.0	7.3	22.1	15.8	38.0
1990	0.0	0.0	0.0	2.4	3.0	(s)	0.1	0.3	5.3	8.6	e NA	7.7	18.7	15.7	34.3
1991	0.0	0.0	0.0	2.3	3.6	(s)	0.1	0.3	0.1	4.0	NA	8.0	14.4	13.9	28.2
1992	0.0	0.0	0.0	2.3	2.5	(s)	0.3	0.2	6.7	9.7	NA	8.2	20.3	12.6	32.8
1993	0.0	0.0	0.0	2.3	1.6	(s)	0.1	0.1	0.2	2.0	0.0	8.3	12.5	10.2	22.7
1994	0.0	0.0	0.0	2.3	1.5	(s)	0.1	0.1	2.8	4.3	0.0	8.9	15.5	9.9	25.4
1995	0.0	0.0	0.0	2.3	1.5	(s)	0.1	0.1	0.4	2.0	0.0	9.5	13.8	10.6	24.4
1996	0.0	0.0	0.0	2.3	0.9	(s)	0.1	0.1	0.1	1.1	0.0	9.6	13.0	10.9	23.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 86. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Hawaii

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	0	0	29	554	68	43	18	83	1,038	553	2,386	0	0	0	465	-	1,403	-
1965	0	0	306	635	10	82	21	76	1,712	684	3,526	83	0	0	1,096	-	2,516	-
1970	0	0	377	701	66	386	4	49	1,671	643	3,898	86	0	0	1,720	-	4,044	-
1975	0	0	379	603	31	472	30	53	1,346	693	3,607	71	0	0	2,538	-	5,696	-
1980	0	0	285	1,369	9	1,041	20	49	1,491	815	5,078	67	0	0	3,028	-	6,749	-
1981	0	0	187	1,380	0	804	19	51	1,527	530	4,498	67	0	0	3,270	-	6,811	-
1982	47	0	172	1,296	0	1,612	17	52	2,136	572	5,857	67	0	0	3,248	-	6,547	-
1983	42	0	259	332	(s)	1,523	18	38	449	707	3,327	67	0	0	3,286	-	6,748	-
1984	38	0	205	375	(s)	6	19	52	1,132	716	2,505	67	0	0	3,169	-	6,756	-
1985	46	0	308	471	(s)	9	18	104	1,344	671	R 2,925	67	0	0	3,143	-	6,571	-
1986	16	0	272	541	(s)	9	18	101	1,952	1,203	R 4,096	67	0	0	3,239	-	6,601	-
1987	63	0	397	776	(s)	11	20	108	1,332	1,468	R 4,113	67	0	0	3,284	-	6,820	-
1988	50	0	351	768	(s)	12	19	110	1,768	1,921	4,951	67	0	0	3,495	-	7,375	-
1989	32	0	296	514	(s)	13	20	129	1,439	2,004	4,414	67	0	0	3,576	-	7,709	-
1990	28	0	381	812	(s)	15	20	133	1,765	2,156	5,283	f NA	f NA	f NA	3,734	-	7,605	-
1991	37	0	383	692	(s)	46	18	150	1,804	1,803	4,896	NA	NA	NA	3,773	-	6,507	-
1992	47	0	431	602	(s)	130	18	152	1,372	2,230	4,934	NA	NA	NA	3,811	-	5,800	-
1993	73	0	444	451	(s)	772	19	241	1,070	2,026	5,023	NA	NA	NA	3,770	-	4,675	-
1994	86	0	407	349	(s)	1,499	20	245	1,202	2,221	5,943	NA	NA	NA	3,791	-	4,238	-
1995	R 192	0	438	405	(s)	1,207	19	245	1,040	2,115	5,470	NA	NA	NA	3,803	-	4,265	-
1996	169	0	401	324	(s)	1,226	19	259	973	2,501	5,702	NA	NA	NA	3,884	-	4,388	-

Trillion Btu

1960	0.0	0.0	0.2	3.2	0.4	0.2	0.1	0.4	6.5	3.3	14.4	0.0	0.0	0.0	1.6	16.0	4.8	20.7
1965	0.0	0.0	2.0	3.7	0.1	0.3	0.1	0.4	10.8	4.1	21.5	0.9	0.0	0.0	3.7	26.1	8.6	34.7
1970	0.0	0.0	2.5	4.1	0.4	1.5	(s)	0.3	10.5	3.9	23.1	0.9	0.0	0.0	5.9	29.8	13.8	43.6
1975	0.0	0.0	2.5	3.5	0.2	1.8	0.2	0.3	8.5	4.2	21.0	0.7	0.0	0.0	8.7	30.4	19.4	49.9
1980	0.0	0.0	1.9	8.0	0.1	3.8	0.1	0.3	9.4	4.9	28.4	0.7	0.0	0.0	10.3	39.4	23.0	62.4
1981	0.0	0.0	1.2	8.0	0.0	2.9	0.1	0.3	9.6	3.3	25.5	0.7	0.0	0.0	11.2	37.4	23.2	60.6
1982	1.1	0.0	1.1	7.6	0.0	5.8	0.1	0.3	13.4	3.6	31.9	0.7	0.0	0.0	11.1	44.8	22.3	67.1
1983	1.0	0.0	1.7	1.9	(s)	5.5	0.1	0.2	2.8	4.3	16.6	0.7	0.0	0.0	11.2	29.6	23.0	52.6
1984	0.9	0.0	1.4	2.2	(s)	(s)	0.1	0.3	7.1	4.4	15.4	0.7	0.0	0.0	10.8	27.9	23.1	50.9
1985	1.1	0.0	2.0	2.7	(s)	(s)	0.1	0.5	8.4	4.2	18.1	0.7	0.0	0.0	10.7	30.6	22.4	53.0
1986	0.4	0.0	1.8	3.1	(s)	(s)	0.1	0.5	12.3	7.6	25.5	0.7	0.0	0.0	11.1	37.7	22.5	60.2
1987	1.6	0.0	2.6	4.5	(s)	(s)	0.1	0.6	8.4	9.0	25.3	0.7	0.0	0.0	11.2	38.8	23.3	62.0
1988	1.2	0.0	2.3	4.5	(s)	(s)	0.1	0.6	11.1	11.7	30.3	0.7	0.0	0.0	11.9	44.2	25.2	69.4
1989	0.8	0.0	2.0	3.0	(s)	(s)	0.1	0.7	9.0	12.1	26.9	0.7	0.0	0.0	12.2	40.6	26.3	66.9
1990	0.7	0.0	2.5	4.7	(s)	0.1	0.1	0.7	11.1	13.0	32.2	f 0.4	f 8.7	f 0.1	12.7	f 54.8	25.9	f 80.8
1991	0.9	0.0	2.5	4.0	(s)	0.2	0.1	0.8	11.3	11.0	30.0	0.3	8.2	0.3	12.9	52.6	22.2	74.8
1992	1.2	0.0	2.9	3.5	(s)	0.5	0.1	0.8	8.6	13.4	29.7	0.5	8.1	0.3	13.0	52.9	19.8	72.7
1993	1.8	0.0	2.9	2.6	(s)	2.8	0.1	1.3	6.7	12.3	28.7	0.4	8.0	3.5	12.9	55.3	R 16.0	71.3
1994	1.8	0.0	2.7	2.0	(s)	5.5	0.1	1.3	7.6	13.4	32.5	1.3	7.9	4.2	12.9	60.7	14.5	75.2
1995	R 4.1	0.0	2.9	2.4	(s)	4.4	0.1	1.3	6.5	12.8	30.4	R 0.8	7.1	5.3	13.0	R 60.7	14.6	R 75.2
1996	3.6	0.0	2.7	1.9	(s)	4.4	0.1	1.4	6.1	15.0	31.6	0.9	6.5	5.5	13.3	61.3	15.0	76.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 87. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Hawaii**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	0	0	2,640	247	4,321	2	19	3,290	968	11,487	0	0	-	0	-
1965	0	0	613	844	7,618	4	73	3,947	1,195	14,294	0	0	-	0	-
1970	0	0	133	722	14,273	26	68	5,508	1,744	22,473	0	0	-	0	-
1975	0	0	116	831	14,849	22	74	6,615	1,013	23,520	0	0	-	0	-
1980	0	0	199	3,331	14,116	26	74	7,129	1,441	26,317	0	0	-	0	-
1981	0	0	183	3,683	10,028	56	71	7,075	1,231	22,326	0	0	-	0	-
1982	0	0	137	2,589	7,472	41	65	7,151	1,060	18,516	0	0	-	0	-
1983	0	0	156	1,248	11,271	47	68	7,153	1,461	21,403	0	0	-	0	-
1984	0	0	146	1,388	12,946	8	73	7,433	1,320	23,312	0	0	-	0	-
1985	0	0	155	3,253	13,260	6	68	R 7,443	1,526	R 25,710	0	0	-	0	-
1986	0	0	279	3,038	10,176	5	66	7,730	1,557	22,851	0	0	-	0	-
1987	0	0	249	1,729	11,481	6	75	R 8,033	1,082	R 22,655	0	0	-	0	-
1988	0	0	281	3,267	11,972	9	72	R 8,313	1,634	R 25,548	0	0	-	0	-
1989	0	0	287	3,279	13,239	9	74	R 8,574	2,235	R 27,697	0	0	-	0	-
1990	0	0	272	3,870	12,646	13	76	R 8,477	2,694	R 28,049	e 0	0	-	0	-
1991	0	0	261	4,224	11,123	14	68	R 8,771	2,609	R 27,072	0	0	-	0	-
1992	0	0	243	2,597	9,993	R 35	69	R 8,674	3,799	R 25,410	0	0	-	0	-
1993	0	0	198	2,017	8,891	9	71	R 8,808	2,689	R 22,682	0	0	-	0	-
1994	0	0	210	2,362	9,472	14	74	R 9,088	2,980	R 24,201	0	0	-	0	-
1995	0	0	218	2,171	9,940	8	73	9,160	2,719	24,289	0	0	-	0	-
1996	0	0	165	1,641	10,087	2	71	9,104	714	21,784	0	0	-	0	-

  

Trillion Btu															
1960	0.0	0.0	13.3	1.4	23.5	(s)	0.1	17.3	6.1	61.8	0.0	0.0	61.8	0.0	61.8
1965	0.0	0.0	3.1	4.9	42.3	(s)	0.4	20.7	7.5	79.0	0.0	0.0	79.0	0.0	79.0
1970	0.0	0.0	0.7	4.2	80.1	0.1	0.4	28.9	11.0	125.3	0.0	0.0	125.3	0.0	125.3
1975	0.0	0.0	0.6	4.8	83.5	0.1	0.5	34.7	6.4	130.5	0.0	0.0	130.5	0.0	130.5
1980	0.0	0.0	1.0	19.4	79.2	0.1	0.5	37.4	9.1	146.7	0.0	0.0	146.7	0.0	146.7
1981	0.0	0.0	0.9	21.5	56.2	0.2	0.4	37.2	7.7	124.1	0.0	0.0	124.1	0.0	124.1
1982	0.0	0.0	0.7	15.1	41.6	0.1	0.4	37.6	6.7	102.2	0.0	0.0	102.2	0.0	102.2
1983	0.0	0.0	0.8	7.3	62.5	0.2	0.4	37.6	9.2	117.9	0.0	0.0	117.9	0.0	117.9
1984	0.0	0.0	0.7	8.1	72.6	(s)	0.4	39.0	8.3	129.3	0.0	0.0	129.3	0.0	129.3
1985	0.0	0.0	0.8	18.9	74.4	(s)	0.4	39.1	9.6	143.3	0.0	0.0	143.3	0.0	143.3
1986	0.0	0.0	1.4	17.7	57.0	(s)	0.4	40.6	9.8	126.9	0.0	0.0	126.9	0.0	126.9
1987	0.0	0.0	1.3	10.1	64.4	(s)	0.5	R 42.2	6.8	R 125.2	0.0	0.0	R 125.2	0.0	R 125.2
1988	0.0	0.0	1.4	19.0	67.2	(s)	0.4	43.7	10.3	R 142.0	0.0	0.0	R 142.0	0.0	R 142.0
1989	0.0	0.0	1.4	19.1	74.4	(s)	0.4	45.0	14.1	R 154.5	0.0	0.0	R 154.5	0.0	R 154.5
1990	0.0	0.0	1.4	22.5	71.1	(s)	0.5	R 44.5	16.9	R 156.9	e 0.0	0.0	R e 156.9	0.0	R e 156.9
1991	0.0	0.0	1.3	24.6	62.6	(s)	0.4	46.1	16.4	151.4	0.0	0.0	151.4	0.0	151.4
1992	0.0	0.0	1.2	15.1	56.5	0.1	0.4	45.6	23.9	142.9	0.0	0.0	142.9	0.0	142.9
1993	0.0	0.0	1.0	11.7	50.4	(s)	0.4	46.3	16.9	126.8	0.0	0.0	126.8	0.0	126.8
1994	0.0	0.0	1.1	13.8	53.7	0.1	0.4	R 47.7	18.7	135.5	0.0	0.0	135.5	0.0	135.5
1995	0.0	0.0	1.1	12.6	56.4	(s)	0.4	48.1	17.1	135.8	0.0	0.0	135.8	0.0	135.8
1996	0.0	0.0	0.8	9.6	57.2	(s)	0.4	47.8	4.5	120.3	0.0	0.0	120.3	0.0	120.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 88. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Hawaii**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	0	0	0	0	2,719	37	0	2,756	0	27	0	0	0	-
1965	0	0	0	0	4,292	61	0	4,353	0	22	0	0	0	-
1970	0	0	0	0	6,702	96	0	6,798	0	22	24	0	0	-
1975	0	0	0	0	8,880	429	0	9,309	0	18	25	0	0	-
1980	0	0	0	0	10,239	888	0	11,127	0	20	0	0	0	-
1981	0	0	0	0	10,348	779	0	11,127	0	14	15	0	0	-
1982	0	0	0	0	9,990	605	0	10,595	0	23	26	0	0	-
1983	0	0	0	0	10,229	647	0	10,876	0	17	28	0	0	-
1984	0	0	0	0	10,320	826	0	11,147	0	15	28	21	0	-
1985	0	0	0	0	10,295	752	0	11,047	0	19	25	19	0	-
1986	0	0	0	0	10,751	824	0	11,575	0	12	0	18	0	-
1987	0	0	0	0	11,127	1,069	0	12,196	0	15	0	13	0	-
1988	0	0	0	0	11,771	1,274	0	13,044	0	14	0	16	0	-
1989	0	0	0	0	12,255	1,396	0	13,651	0	22	11	14	0	-
1990	0	0	0	0	12,138	1,632	0	13,769	0	23	6	0	0	-
1991	0	0	0	0	10,986	1,710	0	12,696	0	20	0	0	0	-
1992	0	0	0	0	10,037	1,952	0	11,989	0	10	0	0	0	-
1993	0	0	0	0	8,568	2,088	0	10,656	0	14	0	0	0	-
1994	0	0	0	0	8,310	2,100	0	10,409	0	19	0	0	0	-
1995	0	0	0	0	8,525	2,187	0	10,713	0	16	0	0	0	-
1996	0	0	0	0	8,679	2,301	0	10,980	0	18	0	0	0	-

  

Trillion Btu														
1960	0.0	0.0	0.0	0.0	17.1	0.2	0.0	17.3	0.0	0.3	0.0	0.0	0.0	17.6
1965	0.0	0.0	0.0	0.0	27.0	0.4	0.0	27.3	0.0	0.2	0.0	0.0	0.0	27.6
1970	0.0	0.0	0.0	0.0	42.1	0.6	0.0	42.7	0.0	0.2	0.3	0.0	0.0	43.2
1975	0.0	0.0	0.0	0.0	55.8	2.5	0.0	58.3	0.0	0.2	0.3	0.0	0.0	58.8
1980	0.0	0.0	0.0	0.0	64.4	5.2	0.0	69.5	0.0	0.2	0.0	0.0	0.0	69.7
1981	0.0	0.0	0.0	0.0	65.1	4.5	0.0	69.6	0.0	0.1	0.2	0.0	0.0	69.9
1982	0.0	0.0	0.0	0.0	62.8	3.5	0.0	66.3	0.0	0.2	0.3	0.0	0.0	66.9
1983	0.0	0.0	0.0	0.0	64.3	3.8	0.0	68.1	0.0	0.2	0.3	0.0	0.0	68.6
1984	0.0	0.0	0.0	0.0	64.9	4.8	0.0	69.7	0.0	0.2	0.3	0.4	0.0	70.6
1985	0.0	0.0	0.0	0.0	64.7	4.4	0.0	69.1	0.0	0.2	0.3	0.4	0.0	70.0
1986	0.0	0.0	0.0	0.0	67.6	4.8	0.0	72.4	0.0	0.1	0.0	0.4	0.0	72.9
1987	0.0	0.0	0.0	0.0	70.0	6.2	0.0	76.2	0.0	0.2	0.0	0.3	0.0	76.6
1988	0.0	0.0	0.0	0.0	74.0	7.4	0.0	81.4	0.0	0.1	0.0	0.3	0.0	81.9
1989	0.0	0.0	0.0	0.0	77.0	8.1	0.0	85.2	0.0	0.2	0.1	0.3	0.0	85.8
1990	0.0	0.0	0.0	0.0	76.3	9.5	0.0	85.8	0.0	0.2	0.1	0.0	0.0	86.1
1991	0.0	0.0	0.0	0.0	69.1	10.0	0.0	79.0	0.0	0.2	0.0	0.0	0.0	79.2
1992	0.0	0.0	0.0	0.0	63.1	11.4	0.0	74.5	0.0	0.1	0.0	0.0	0.0	74.6
1993	0.0	0.0	0.0	0.0	53.9	12.2	0.0	66.0	0.0	0.1	0.0	0.0	0.0	66.2
1994	0.0	0.0	0.0	0.0	52.2	12.2	0.0	64.5	0.0	0.2	0.0	0.0	0.0	64.7
1995	0.0	0.0	0.0	0.0	53.6	12.7	0.0	66.3	0.0	0.2	0.0	0.0	0.0	66.5
1996	0.0	0.0	0.0	0.0	54.6	13.4	0.0	68.0	0.0	0.2	0.0	0.0	0.0	68.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the

portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

- =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 89. Energy Consumption Estimates by Source, Selected Years 1960-1996, Idaho**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	699	22	491	133	4,072	899	107	455	147	6,965	205	9	13,484	0	6,165	0	0	-5	-
1965	673	34	710	177	4,803	870	521	560	160	7,654	356	8	15,819	0	6,640	0	0	4,753	-
1970	353	47	1,147	154	5,600	960	230	1,057	151	9,684	277	17	19,278	0	7,075	0	0	14,161	-
1975	647	60	880	120	7,560	950	145	1,184	163	11,288	684	0	22,973	0	10,274	0	0	11,347	-
1980	514	49	797	162	5,662	1,243	0	993	182	11,078	613	0	20,731	0	9,507	0	0	18,078	-
1981	535	45	537	121	4,764	1,223	17	879	175	10,523	54	0	18,294	0	9,507	0	0	26,974	-
1982	575	40	540	83	4,483	1,044	31	1,030	159	10,275	215	0	17,861	0	11,591	0	0	19,310	-
1983	516	35	662	73	5,237	959	11	1,067	167	10,385	104	0	18,664	0	12,771	0	0	14,294	-
1984	490	39	474	55	5,905	1,089	11	673	178	10,528	63	0	18,976	0	13,195	0	0	13,227	-
1985	486	39	632	80	5,584	1,122	7	778	166	10,672	86	0	19,126	0	10,919	0	0	21,495	-
1986	466	35	544	87	5,907	1,117	8	735	162	10,893	20	0	19,473	0	12,153	0	0	14,906	-
1987	494	37	499	76	6,385	1,154	9	621	183	10,727	64	0	19,720	0	8,146	0	0	28,030	-
1988	524	41	402	52	6,507	1,178	10	747	177	11,205	56	0	20,333	0	6,846	0	0	35,257	-
1989	533	46	831	55	6,865	1,239	4	839	181	11,527	45	0	21,585	0	8,955	0	0	30,463	-
1990	549	46	1,281	39	7,173	1,143	9	610	186	11,453	47	0	21,942	0	NA	NA	NA	30,836	-
1991	673	51	988	39	8,508	957	4	814	167	11,610	44	18	23,149	0	NA	NA	NA	31,610	-
1992	535	49	1,465	1	7,187	973	2	669	170	11,947	22	19	22,456	0	NA	NA	NA	39,850	-
1993	528	56	1,533	63	7,749	1,076	2	682	173	12,770	38	21	24,108	0	NA	NA	NA	30,612	-
1994	534	57	1,798	54	8,086	1,201	6	645	181	12,927	21	21	24,940	0	NA	NA	NA	38,722	-
1995	465	64	2,014	48	8,355	1,568	20	758	178	13,521	7	21	26,490	0	NA	NA	NA	29,959	-
1996	397	67	2,034	55	9,457	874	17	2,725	173	14,174	7	25	29,540	0	NA	NA	NA	27,359	-
Trillion Btu																			
1960	16.8	22.8	3.3	0.7	23.7	4.8	0.6	1.8	0.9	36.6	1.3	0.1	73.7	0.0	66.3	0.0	0.0	(s)	179.7
1965	15.9	36.1	4.7	0.9	28.0	4.7	3.0	2.2	1.0	40.2	2.2	(s)	86.9	0.0	69.4	0.0	0.0	16.2	224.5
1970	7.9	49.4	7.6	0.8	32.6	5.2	1.3	4.0	0.9	50.9	1.7	0.1	105.1	0.0	74.2	0.0	0.0	48.3	285.0
1975	13.4	63.8	5.8	0.6	44.0	5.2	0.8	4.4	1.0	59.3	4.3	0.0	125.5	0.0	106.9	0.0	0.0	38.7	348.3
1980	9.6	51.6	5.3	0.8	33.0	6.8	0.0	3.7	1.1	58.2	3.9	0.0	112.7	0.0	98.8	0.0	0.0	61.7	334.4
1981	9.8	48.1	3.6	0.6	27.8	6.7	0.1	3.2	1.1	55.3	0.3	0.0	98.6	0.0	99.4	0.0	0.0	92.0	347.9
1982	10.4	42.8	3.6	0.4	26.1	5.7	0.2	3.7	1.0	54.0	1.4	0.0	96.0	0.0	121.2	0.0	0.0	65.9	336.3
1983	9.5	36.8	4.4	0.4	30.5	5.2	0.1	3.9	1.0	54.6	0.7	0.0	100.6	0.0	134.4	0.0	0.0	48.8	330.0
1984	9.0	40.3	3.1	0.3	34.4	5.9	0.1	2.4	1.1	55.3	0.4	0.0	103.0	0.0	137.8	0.0	0.0	45.1	335.2
1985	8.9	41.1	4.2	0.4	32.5	6.1	(s)	2.8	1.0	56.1	0.5	0.0	103.7	0.0	114.1	0.0	0.0	73.3	341.1
1986	8.6	35.5	3.6	0.4	34.4	6.1	(s)	2.7	1.0	57.2	0.1	0.0	105.6	0.0	126.9	0.0	0.0	50.9	327.5
1987	8.9	37.8	3.3	0.4	37.2	6.3	0.1	2.3	1.1	56.4	0.4	0.0	107.4	0.0	84.9	0.0	0.0	95.6	334.5
1988	9.7	41.6	2.7	0.3	37.9	6.4	0.1	2.7	1.1	58.9	0.4	0.0	110.3	0.0	70.7	0.0	0.0	120.3	352.6
1989	9.8	46.9	5.5	0.3	40.0	6.8	(s)	3.1	1.1	60.6	0.3	0.0	117.6	0.0	93.4	0.0	0.0	103.9	371.6
1990	10.1	46.8	8.5	0.2	41.8	6.3	0.1	2.2	1.1	60.2	0.3	0.0	120.6	0.0	93.9	17.3	(s)	105.2	394.0
1991	12.3	52.7	6.6	0.2	49.6	5.3	(s)	2.9	1.0	61.0	0.3	0.1	126.9	0.0	91.9	17.9	(s)	107.9	409.8
1992	9.6	50.4	9.7	(s)	41.9	5.3	(s)	2.4	1.0	62.8	0.1	0.1	123.4	0.0	70.9	18.9	(s)	136.0	409.7
1993	9.8	58.3	10.2	0.3	45.1	5.9	(s)	2.5	1.0	67.1	0.2	0.1	132.5	0.0	101.2	19.1	(s)	104.4	425.6
1994	9.7	59.1	11.9	0.3	47.1	6.6	(s)	2.3	1.1	67.9	0.1	0.1	137.5	0.0	82.9	21.9	(s)	132.1	443.9
1995	8.9	65.7	13.4	0.2	48.7	8.6	0.1	2.7	1.1	71.0	(s)	0.1	146.0	0.0	113.6	21.9	(s)	102.2	458.5
1996	7.3	69.0	13.5	0.3	55.1	4.9	0.1	9.8	1.0	74.5	(s)	0.1	159.4	0.0	138.9	22.5	(s)	93.3	491.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 90. Residential Energy Consumption Estimates, Selected Years 1960-1996, Idaho**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	166	0	166	2	663	0	314	977	0	0	1,463	—	3,639	—
1965	123	0	123	5	708	0	348	1,056	0	0	1,779	—	4,247	—
1970	63	0	63	8	837	0	711	1,548	0	0	2,354	—	5,706	—
1975	66	0	66	14	972	0	712	1,684	0	0	3,870	—	9,336	—
1980	40	0	40	7	485	0	316	801	0	0	4,936	—	12,003	—
1981	29	0	29	7	423	0	292	715	0	0	5,148	—	12,269	—
1982	25	0	25	7	276	0	325	601	0	0	5,499	—	13,208	—
1983	29	0	29	7	587	3	398	988	0	0	5,212	—	12,487	—
1984	30	0	30	7	599	4	257	860	0	0	5,710	—	13,291	—
1985	16	0	16	8	635	2	328	964	0	0	5,780	—	13,580	—
1986	13	0	13	7	634	5	288	927	0	0	5,433	—	12,497	—
1987	8	0	8	7	575	7	251	832	0	0	5,209	—	11,901	—
1988	27	0	27	8	615	7	326	948	0	0	5,449	—	12,319	—
1989	28	(s)	28	9	558	2	399	960	0	0	5,713	—	R 12,833	—
1990	21	0	21	9	530	5	318	853	e 102	e (s)	5,626	—	R 12,306	—
1991	24	0	24	10	704	2	373	1,078	108	(s)	5,971	—	R 12,996	—
1992	18	0	18	10	570	2	297	869	113	(s)	5,739	—	R 12,258	—
1993	15	0	15	13	619	2	328	948	109	(s)	6,245	—	R 13,195	—
1994	14	(s)	14	12	524	2	307	833	107	(s)	6,222	—	R 12,982	—
1995	R 14	R 0	14	13	510	15	374	899	118	(s)	6,193	—	R 12,901	—
1996	10	0	10	15	526	13	449	988	118	(s)	6,508	—	13,545	—

  

Trillion Btu														
1960	4.1	0.0	4.1	2.3	3.9	0.0	1.3	5.1	0.0	0.0	5.0	16.5	12.4	28.9
1965	3.0	0.0	3.0	5.2	4.1	0.0	1.4	5.5	0.0	0.0	6.1	19.8	14.5	34.3
1970	1.5	0.0	1.5	8.2	4.9	0.0	2.7	7.6	0.0	0.0	8.0	25.3	19.5	44.8
1975	1.5	0.0	1.5	14.9	5.7	0.0	2.6	8.3	0.0	0.0	13.2	37.9	31.9	69.7
1980	0.9	0.0	0.9	7.8	2.8	0.0	1.2	4.0	0.0	0.0	16.8	29.5	41.0	70.4
1981	0.6	0.0	0.6	7.2	2.5	0.0	1.1	3.5	0.0	0.0	17.6	28.9	41.9	70.8
1982	0.5	0.0	0.5	7.4	1.6	0.0	1.2	2.8	0.0	0.0	18.8	29.5	45.1	74.5
1983	0.6	0.0	0.6	6.8	3.4	(s)	1.4	4.9	0.0	0.0	17.8	30.1	42.6	72.7
1984	0.7	0.0	0.7	7.7	3.5	(s)	0.9	4.4	0.0	0.0	19.5	32.2	45.3	77.6
1985	0.4	0.0	0.4	8.1	3.7	(s)	1.2	4.9	0.0	0.0	19.7	33.1	46.3	79.5
1986	0.3	0.0	0.3	7.4	3.7	(s)	1.0	4.8	0.0	0.0	18.5	31.0	42.6	73.7
1987	0.2	0.0	0.2	7.1	3.3	(s)	0.9	4.3	0.0	0.0	17.8	29.4	40.6	70.0
1988	0.6	0.0	0.6	7.8	3.6	(s)	1.2	4.8	0.0	0.0	18.6	31.8	42.0	73.9
1989	0.6	(s)	0.6	9.0	3.3	(s)	1.5	4.7	0.0	0.0	19.5	33.9	R 43.8	R 77.6
1990	0.5	0.0	0.5	8.8	3.1	(s)	1.2	4.3	e 2.0	e (s)	19.2	e 34.8	R 42.0	R e 76.8
1991	0.5	0.0	0.5	10.6	4.1	(s)	1.3	5.5	2.2	(s)	20.4	39.1	44.3	83.4
1992	0.4	0.0	0.4	9.9	3.3	(s)	1.1	4.4	2.3	(s)	19.6	36.6	41.8	78.4
1993	0.3	0.0	0.3	13.0	3.6	(s)	1.2	4.8	2.2	(s)	21.3	41.7	45.0	86.7
1994	0.3	(s)	0.3	12.8	3.1	(s)	1.1	4.2	2.1	(s)	21.2	40.6	44.3	84.9
1995	0.3	R 0.0	0.3	13.4	3.0	0.1	1.4	4.4	2.4	(s)	21.1	41.6	44.0	85.6
1996	0.2	0.0	0.2	15.4	3.1	0.1	1.6	4.8	2.4	(s)	22.2	44.9	46.2	91.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 91. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Idaho**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	307	0	307	3	232	102	55	45	0	435	0	1,261	-	3,136	-
1965	228	0	228	5	248	500	61	52	0	862	0	1,290	-	3,079	-
1970	118	0	118	6	294	116	125	65	0	600	0	2,088	-	5,059	-
1975	123	0	123	12	341	81	126	90	0	637	0	3,530	-	8,515	-
1980	73	0	73	6	218	0	56	100	487	860	0	3,973	-	9,661	-
1981	54	0	54	5	122	0	51	131	29	333	0	4,868	-	11,601	-
1982	47	0	47	6	469	8	57	131	17	682	0	4,638	-	11,141	-
1983	54	0	54	6	397	5	70	118	19	610	0	4,323	-	10,357	-
1984	55	0	55	8	406	3	45	264	12	731	0	4,204	-	9,785	-
1985	30	0	30	9	366	3	58	134	25	586	0	4,592	-	10,789	-
1986	24	0	24	9	285	2	51	136	3	476	0	4,435	-	10,202	-
1987	15	0	15	8	422	2	44	R 141	10	619	0	4,611	-	10,535	-
1988	49	0	49	8	431	1	57	R 376	7	873	0	4,909	-	11,098	-
1989	52	(s)	52	9	348	(s)	70	R 356	26	802	0	4,965	-	R 11,152	-
1990	39	0	39	9	340	1	56	R 148	19	R 565	e NA	5,212	-	R 11,399	-
1991	44	0	44	10	434	(s)	66	345	1	846	NA	5,166	-	R 11,243	-
1992	33	0	33	9	414	(s)	52	312	14	793	NA	5,718	-	R 12,214	-
1993	28	0	28	11	339	(s)	58	38	30	464	9	5,253	-	R 11,098	-
1994	26	R(s)	26	10	441	2	54	38	7	542	12	6,010	-	R 12,540	-
1995	25	R	0	10	454	3	66	38	4	566	13	5,584	-	R 11,631	-
1996	18	0	18	12	612	4	79	167	4	867	18	6,231	-	12,969	-

  

Trillion Btu															
1960	7.6	0.0	7.6	2.9	1.4	0.6	0.2	0.2	0.0	2.4	0.0	4.3	17.2	10.7	27.9
1965	5.6	0.0	5.6	5.4	1.4	2.8	0.2	0.3	0.0	4.8	0.0	4.4	20.2	10.5	30.7
1970	2.8	0.0	2.8	6.2	1.7	0.7	0.5	0.3	0.0	3.2	0.0	7.1	19.3	17.3	36.6
1975	2.8	0.0	2.8	12.8	2.0	0.5	0.5	0.5	0.0	3.4	0.0	12.0	31.1	29.1	60.1
1980	1.6	0.0	1.6	6.1	1.3	0.0	0.2	0.5	3.1	5.1	0.0	13.6	26.3	33.0	59.3
1981	1.2	0.0	1.2	5.8	0.7	0.0	0.2	0.7	0.2	1.8	0.0	16.6	25.3	39.6	64.9
1982	1.0	0.0	1.0	6.1	2.7	(s)	0.2	0.7	0.1	3.8	0.0	15.8	26.8	38.0	64.8
1983	1.2	0.0	1.2	6.0	2.3	(s)	0.3	0.6	0.1	3.3	0.0	14.8	25.3	35.3	60.6
1984	1.2	0.0	1.2	8.9	2.4	(s)	0.2	1.4	0.1	4.0	0.0	14.3	28.4	33.4	61.8
1985	0.7	0.0	0.7	9.4	2.1	(s)	0.2	0.7	0.2	3.2	0.0	15.7	29.0	36.8	65.8
1986	0.5	0.0	0.5	8.7	1.7	(s)	0.2	0.7	(s)	2.6	0.0	15.1	27.0	34.8	61.8
1987	0.3	0.0	0.3	7.7	2.5	(s)	0.2	0.7	0.1	3.4	0.0	15.7	27.3	35.9	63.2
1988	1.1	0.0	1.1	8.4	2.5	(s)	0.2	2.0	(s)	R 4.7	0.0	16.7	31.0	37.9	68.9
1989	1.1	(s)	1.1	9.3	2.0	(s)	0.3	1.9	0.2	4.3	0.0	16.9	31.7	38.0	69.7
1990	0.9	0.0	0.9	8.8	2.0	(s)	0.2	0.8	0.1	3.1	e NA	17.8	30.5	38.9	69.4
1991	1.0	0.0	1.0	9.9	2.5	(s)	0.2	1.8	(s)	4.6	NA	17.6	33.1	R 38.4	R 71.5
1992	0.7	0.0	0.7	9.2	2.4	(s)	0.2	1.6	0.1	4.3	NA	19.5	33.8	41.7	R 75.5
1993	0.6	0.0	0.6	11.1	2.0	(s)	0.2	0.2	0.2	2.6	0.2	17.9	R 32.4	37.9	R 70.2
1994	0.6	(s)	0.6	10.5	2.6	(s)	0.2	0.2	(s)	3.0	0.2	20.5	R 34.8	42.8	R 77.6
1995	0.5	R	0.0	10.7	2.6	(s)	0.2	0.2	(s)	3.1	0.3	19.1	R 33.7	39.7	R 73.3
1996	0.4	0.0	0.4	11.9	3.6	(s)	0.3	0.9	(s)	4.8	0.4	21.3	38.7	44.3	82.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 92. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Idaho**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	222	17	491	2,529	5	79	19	930	153	9	4,217	(s)	0	0	2,849	-	7,087	-
1965	321	23	710	2,768	21	146	32	859	301	8	4,846	(s)	0	0	4,340	-	10,361	-
1970	171	29	1,147	3,206	114	212	32	626	275	17	5,630	0	0	0	6,052	-	14,665	-
1975	459	30	880	3,935	64	325	44	801	684	0	6,734	0	0	0	5,112	-	12,331	-
1980	401	32	797	2,209	0	598	44	639	126	0	4,413	0	0	0	4,798	-	11,667	-
1981	452	29	537	2,198	17	492	42	405	26	0	3,717	0	0	0	6,567	-	15,650	-
1982	502	24	540	1,438	23	572	38	391	198	0	3,200	0	0	0	5,979	-	14,362	-
1983	434	20	662	2,108	3	526	40	298	84	0	3,721	0	0	0	6,270	-	15,023	-
1984	406	19	474	2,153	3	286	43	443	52	0	R 3,454	0	0	0	6,195	-	14,419	-
1985	439	19	632	1,751	2	333	40	511	61	0	3,330	0	0	0	6,029	-	14,165	-
1986	429	16	544	2,133	1	331	39	R 488	17	0	3,554	0	0	0	5,923	-	13,625	-
1987	470	19	499	2,394	1	291	44	R 433	54	0	R 3,716	0	0	0	6,286	-	14,364	-
1988	448	21	402	2,458	1	324	43	408	50	0	3,684	0	0	0	6,807	-	15,389	-
1989	452	23	831	2,673	1	328	44	R 433	19	0	4,328	0	0	0	7,143	-	R 16,045	-
1990	489	23	1,281	2,726	3	187	45	R 352	28	0	R 4,623	f NA	f NA	f NA	7,165	-	R 15,671	-
1991	604	27	988	3,744	2	336	40	439	43	18	5,611	NA	NA	NA	6,909	-	R 15,037	-
1992	484	27	1,465	2,458	1	284	41	388	8	19	4,664	NA	NA	NA	7,551	-	R 16,129	-
1993	486	29	1,533	2,289	1	262	42	R 339	8	21	4,494	NA	NA	NA	7,222	-	R 15,259	-
1994	494	30	1,798	2,522	1	234	44	R 378	14	21	R 5,012	NA	NA	NA	7,647	-	R 15,955	-
1995	426	34	2,014	2,623	2	291	43	400	3	21	5,396	NA	NA	NA	7,843	-	R 16,338	-
1996	369	35	2,034	2,922	1	2,174	42	412	2	25	7,612	NA	NA	NA	8,380	-	17,442	-

**Trillion Btu**

1960	5.0	17.1	3.3	14.7	(s)	0.3	0.1	4.9	1.0	0.1	24.4	(s)	0.0	0.0	9.7	56.2	24.2	80.4
1965	7.2	24.4	4.7	16.1	0.1	0.6	0.2	4.5	1.9	(s)	28.2	(s)	0.0	0.0	14.8	74.5	35.4	109.9
1970	3.6	30.6	7.6	18.7	0.6	0.8	0.2	3.3	1.7	0.1	33.0	0.0	0.0	0.0	20.6	87.9	50.0	137.9
1975	9.1	31.6	5.8	22.9	0.4	1.2	0.3	4.2	4.3	0.0	39.1	0.0	0.0	0.0	17.4	97.3	42.1	139.4
1980	7.1	33.3	5.3	12.9	0.0	2.2	0.3	3.4	0.8	0.0	24.8	0.0	0.0	0.0	16.4	81.6	39.8	121.4
1981	8.0	30.9	3.6	12.8	0.1	1.8	0.3	2.1	0.2	0.0	20.8	0.0	0.0	0.0	22.4	82.1	53.4	135.5
1982	8.8	26.0	3.6	8.4	0.1	2.1	0.2	2.1	1.2	0.0	17.7	0.0	0.0	0.0	20.4	72.9	49.0	121.9
1983	7.6	21.1	4.4	12.3	(s)	1.9	0.2	1.6	0.5	0.0	20.9	0.0	0.0	0.0	21.4	71.0	51.3	122.3
1984	7.1	20.0	3.1	12.5	(s)	1.0	0.3	2.3	0.3	0.0	19.6	0.0	0.0	0.0	21.1	67.9	49.2	117.1
1985	7.8	20.4	4.2	10.2	(s)	1.2	0.2	2.7	0.4	0.0	18.9	0.0	0.0	0.0	20.6	67.7	48.3	116.0
1986	7.8	16.6	3.6	12.4	(s)	1.2	0.2	2.6	0.1	0.0	20.2	0.0	0.0	0.0	20.2	64.8	46.5	111.2
1987	8.3	19.3	3.3	13.9	(s)	1.1	0.3	2.3	0.3	0.0	21.2	0.0	0.0	0.0	21.4	70.3	49.0	119.3
1988	8.0	21.1	2.7	14.3	(s)	1.2	0.3	2.1	0.3	0.0	20.9	0.0	0.0	0.0	23.2	73.2	52.5	125.7
1989	8.0	23.5	5.5	15.6	(s)	1.2	0.3	2.3	0.1	0.0	25.0	0.0	0.0	0.0	24.4	80.9	54.7	R 135.6
1990	8.7	24.0	8.5	15.9	(s)	0.7	0.3	R 1.9	0.2	0.0	27.4	f 3.5	f 15.2	f 0.0	24.4	f 103.3	R 53.5	f 156.7
1991	10.7	27.5	6.6	21.8	(s)	1.2	0.2	2.3	0.3	0.1	32.5	4.5	15.7	0.0	23.6	114.5	51.3	165.8
1992	8.5	27.9	9.7	14.3	(s)	1.0	0.2	2.0	(s)	0.1	27.5	4.1	16.6	0.0	25.8	110.3	55.0	165.3
1993	8.8	30.3	10.2	13.3	(s)	0.9	0.3	1.8	0.1	0.1	26.7	7.2	16.6	0.0	24.6	114.2	R 52.1	R 166.3
1994	8.8	30.9	11.9	14.7	(s)	0.9	0.3	2.0	0.1	0.1	29.9	6.4	R 19.5	0.0	26.1	R 121.6	54.4	R 176.0
1995	8.1	35.0	13.4	15.3	(s)	1.1	0.3	2.1	(s)	0.1	32.2	9.6	R 19.2	0.0	26.8	R 131.0	55.7	R 186.7
1996	6.7	35.6	13.5	17.0	(s)	7.9	0.3	2.2	(s)	0.1	41.0	10.8	19.8	0.0	28.6	142.5	59.5	202.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 93. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Idaho**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	4	(s)	133	648	899	7	127	5,990	52	7,856	0	0	-	0	-
1965	1	1	177	1,079	870	4	128	6,743	55	9,055	0	0	-	0	-
1970	(s)	4	154	1,263	960	9	119	8,993	2	11,500	0	0	-	0	-
1975	(s)	4	120	2,306	950	21	119	10,396	0	13,912	0	0	-	0	-
1980	0	4	162	2,750	1,243	23	138	10,339	0	14,655	0	0	-	0	-
1981	0	4	121	2,021	1,223	43	132	9,988	0	13,529	0	0	-	0	-
1982	0	3	83	2,300	1,044	75	121	9,753	0	13,377	0	0	-	0	-
1983	0	3	73	2,144	959	73	126	9,969	0	13,345	0	0	-	0	-
1984	0	4	55	2,745	1,089	85	135	9,821	0	13,930	0	0	-	0	-
1985	0	3	80	2,830	1,122	59	126	R 10,026	0	R 14,244	0	0	-	0	-
1986	0	3	87	2,854	1,117	65	123	10,270	0	14,515	0	0	-	0	-
1987	0	4	76	2,994	1,154	35	139	R 10,154	0	R 14,552	0	0	-	0	-
1988	0	4	52	3,001	1,178	41	134	R 10,421	0	R 14,827	0	0	-	0	-
1989	0	5	55	3,281	1,239	41	137	R 10,738	0	R 15,491	0	0	-	0	-
1990	0	5	39	3,575	1,143	48	141	R 10,952	0	R 15,899	R e 717	0	-	0	-
1991	0	5	39	3,626	957	40	126	R 10,826	0	R 15,614	R 568	0	-	0	-
1992	0	3	1	3,743	973	36	129	R 11,246	0	R 16,128	R 691	0	-	0	-
1993	0	4	63	4,503	1,076	34	131	R 12,394	0	R 18,201	R 771	0	-	0	-
1994	0	5	54	4,598	1,201	50	137	R 12,511	0	R 18,552	R 677	0	-	0	-
1995	0	6	48	4,768	1,568	27	135	13,083	0	19,629	R 438	0	-	0	-
1996	0	6	55	5,395	874	22	131	13,595	0	20,073	0	0	-	0	-

**Trillion Btu**

1960	0.1	0.5	0.7	3.8	4.8	(s)	0.8	31.5	0.3	41.9	0.0	0.0	42.5	0.0	42.5
1965	(s)	1.1	0.9	6.3	4.7	(s)	0.8	35.4	0.3	48.4	0.0	0.0	49.6	0.0	49.6
1970	(s)	4.5	0.8	7.4	5.2	(s)	0.7	47.2	(s)	61.3	0.0	0.0	65.8	0.0	65.8
1975	(s)	4.5	0.6	13.4	5.2	0.1	0.7	54.6	0.0	74.6	0.0	0.0	79.1	0.0	79.1
1980	0.0	4.4	0.8	16.0	6.8	0.1	0.8	54.3	0.0	78.9	0.0	0.0	83.3	0.0	83.3
1981	0.0	4.2	0.6	11.8	6.7	0.2	0.8	52.5	0.0	72.5	0.0	0.0	76.7	0.0	76.7
1982	0.0	3.3	0.4	13.4	5.7	0.3	0.7	51.2	0.0	71.8	0.0	0.0	75.1	0.0	75.1
1983	0.0	2.9	0.4	12.5	5.2	0.3	0.8	52.4	0.0	71.5	0.0	0.0	74.4	0.0	74.4
1984	0.0	3.8	0.3	16.0	5.9	0.3	0.8	51.6	0.0	74.9	0.0	0.0	78.7	0.0	78.7
1985	0.0	3.1	0.4	16.5	6.1	0.2	0.8	52.7	0.0	76.6	0.0	0.0	79.7	0.0	79.7
1986	0.0	2.7	0.4	16.6	6.1	0.2	0.7	53.9	0.0	78.1	0.0	0.0	80.8	0.0	80.8
1987	0.0	3.6	0.4	17.4	6.3	0.1	0.8	R 53.3	0.0	R 78.4	0.0	0.0	R 82.1	0.0	R 82.1
1988	0.0	4.2	0.3	17.5	6.4	0.1	0.8	R 54.7	0.0	R 79.9	0.0	0.0	R 84.1	0.0	R 84.1
1989	0.0	5.1	0.3	19.1	6.8	0.2	0.8	R 56.4	0.0	R 83.6	0.0	0.0	R 88.7	0.0	R 88.7
1990	0.0	5.2	0.2	20.8	6.3	0.2	0.9	R 57.5	0.0	R 85.9	R e 0.1	0.0	R e 91.1	0.0	R e 91.1
1991	0.0	4.7	0.2	21.1	5.3	0.1	0.8	R 56.9	0.0	R 84.4	(s)	0.0	89.1	0.0	89.1
1992	0.0	3.4	(s)	21.8	5.3	0.1	0.8	59.1	0.0	R 87.1	R 0.1	0.0	90.5	0.0	90.5
1993	0.0	3.9	0.3	26.2	5.9	0.1	0.8	65.1	0.0	98.5	R 0.1	0.0	102.4	0.0	102.4
1994	0.0	4.9	0.3	26.8	6.6	0.2	0.8	65.7	0.0	100.4	R 0.1	0.0	R 105.3	0.0	R 105.3
1995	0.0	6.6	0.2	27.8	8.6	0.1	0.8	68.7	0.0	106.3	(s)	0.0	112.8	0.0	112.8
1996	0.0	6.2	0.3	31.4	4.9	0.1	0.8	71.4	0.0	108.9	0.0	0.0	115.1	0.0	115.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 94. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Idaho**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	0	0	0	0	0	(s)	0	(s)	0	6,165	0	0	0	--
1965	0	0	0	0	0	(s)	0	(s)	0	6,640	0	0	0	--
1970	0	0	0	0	0	1	0	1	0	7,075	0	0	0	--
1975	0	0	0	(s)	0	5	0	5	0	10,274	0	0	0	--
1980	0	0	0	(s)	0	(s)	0	(s)	0	9,507	0	0	0	--
1981	0	0	0	(s)	0	(s)	0	(s)	0	9,507	0	0	0	--
1982	0	0	0	(s)	0	(s)	0	(s)	0	11,591	0	0	0	--
1983	0	0	0	(s)	0	(s)	0	(s)	0	12,771	0	0	0	--
1984	0	0	0	(s)	0	1	0	1	0	13,195	0	0	0	--
1985	0	0	0	(s)	0	1	0	1	0	10,919	0	0	0	--
1986	0	0	0	(s)	0	1	0	1	0	12,153	0	0	0	--
1987	0	0	0	(s)	0	(s)	0	(s)	0	8,146	0	0	0	--
1988	0	0	0	0	0	1	0	1	0	6,846	0	0	0	--
1989	0	0	0	0	0	4	0	4	0	8,955	0	0	0	--
1990	0	0	0	0	0	2	0	2	0	8,689	0	0	0	--
1991	0	0	0	0	0	1	0	1	0	8,385	0	0	0	--
1992	0	0	0	0	0	1	0	1	0	6,459	0	0	0	--
1993	0	0	0	0	0	(s)	0	(s)	0	9,124	0	0	0	--
1994	0	0	0	0	0	(s)	0	(s)	0	7,417	0	0	0	--
1995	0	0	0	0	0	1	0	1	0	10,093	0	0	0	--
1996	0	0	0	0	0	(s)	0	(s)	0	12,391	0	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	66.3	0.0	0.0	0.0	66.3
1965	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	69.4	0.0	0.0	0.0	69.4
1970	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	74.2	0.0	0.0	0.0	74.3
1975	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	106.9	0.0	0.0	0.0	107.0
1980	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	98.8	0.0	0.0	0.0	98.8
1981	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	99.4	0.0	0.0	0.0	99.4
1982	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	121.2	0.0	0.0	0.0	121.2
1983	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	134.4	0.0	0.0	0.0	134.4
1984	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	137.8	0.0	0.0	0.0	137.8
1985	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	114.1	0.0	0.0	0.0	114.1
1986	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	126.9	0.0	0.0	0.0	127.0
1987	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	0.0	84.9	0.0	0.0	0.0	84.9
1988	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	70.7	0.0	0.0	0.0	70.7
1989	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 93.4	0.0	0.0	0.0	R 93.4
1990	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 90.4	0.0	0.0	0.0	R 90.6
1991	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 87.4	0.0	0.0	0.0	R 87.7
1992	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 66.8	0.0	0.0	0.0	R 67.4
1993	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 94.1	0.0	0.0	0.0	R 94.4
1994	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	R 76.5	0.0	0.0	0.0	R 77.2
1995	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	104.0	0.0	0.0	0.0	R 104.2
1996	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	0.0	128.1	0.0	0.0	0.0	128.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 95. Energy Consumption Estimates by Source, Selected Years 1960-1996, Illinois

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	39,674	518	7,244	3,733	42,592	4,356	5,369	14,958	2,672	78,026	26,533	12,578	198,061	254	185	0	0	-18,487	-
1965	44,715	757	9,751	383	41,011	12,176	5,337	18,763	2,616	88,769	23,091	18,923	220,821	965	175	3	0	-8,786	-
1970	42,136	1,174	12,651	264	44,495	22,644	3,583	28,481	3,255	107,084	27,949	22,957	273,365	2,514	166	(s)	0	5,391	-
1975	40,374	1,095	10,213	82	51,249	24,769	2,622	35,135	3,120	118,637	28,142	27,915	301,883	22,315	122	0	0	-4,391	-
1980	40,147	1,090	8,094	132	36,704	19,664	606	38,811	3,473	109,062	28,271	29,427	274,245	27,742	138	0	0	4,045	-
1981	37,523	1,062	6,089	272	34,511	16,928	666	34,147	3,330	107,296	20,791	20,959	244,990	29,483	134	0	0	6,167	-
1982	36,572	994	4,860	216	32,568	16,642	439	26,872	3,037	105,170	15,466	19,225	224,496	27,625	124	0	0	14,323	-
1983	39,881	938	5,365	234	34,788	15,944	638	27,037	3,180	106,955	13,700	20,991	228,832	28,021	134	0	0	15,602	-
1984	38,394	1,033	5,727	201	36,415	2,687	642	26,069	3,391	105,079	9,845	21,312	211,366	34,976	141	0	0	7,728	-
1985	37,706	962	7,502	212	32,189	2,748	755	27,168	3,160	111,114	6,508	20,408	211,404	39,106	136	0	0	6,167	-
1986	37,176	924	6,185	209	35,132	2,054	405	32,529	3,090	108,641	8,316	23,855	220,416	42,614	141	0	0	-223	-
1987	35,648	873	6,315	159	34,129	1,997	303	41,884	3,493	110,508	6,964	25,707	231,459	50,194	107	0	0	-3,412	-
1988	34,006	965	5,604	187	33,662	3,956	350	45,341	3,369	116,048	5,908	28,476	242,901	69,166	65	0	0	-31,788	-
1989	32,457	996	8,052	192	34,565	4,497	367	12,389	3,455	115,548	4,048	28,341	211,455	74,820	67	0	0	-47,815	-
1990	33,904	939	8,339	164	42,529	3,952	174	12,471	3,556	105,948	3,622	30,916	211,669	71,887	i NA	i NA	i NA	-49,391	-
1991	34,677	988	7,917	176	36,149	6,437	203	14,539	3,181	104,380	3,454	32,315	208,751	71,866	NA	NA	NA	-38,934	-
1992	31,599	993	9,293	176	36,377	7,399	142	12,482	3,243	106,297	2,354	36,324	214,086	73,742	NA	NA	NA	-42,966	-
1993	38,135	1,031	6,310	231	38,385	9,170	176	21,649	3,302	109,587	2,282	35,075	226,168	78,373	NA	NA	NA	-80,258	-
1994	39,077	1,025	7,798	204	33,949	9,619	201	24,708	3,452	111,255	2,712	36,703	230,599	72,654	NA	NA	NA	-62,085	-
1995	39,623	1,079	7,457	215	37,535	10,360	293	25,822	3,392	111,207	1,463	34,906	232,651	78,481	NA	NA	NA	-67,016	-
1996	44,431	1,119	9,127	202	37,926	12,076	398	23,924	3,292	111,554	2,010	37,655	238,165	69,774	NA	NA	NA	-62,503	-
Trillion Btu																			
1960	914.7	536.1	48.1	18.8	248.1	24.4	30.4	60.0	16.2	409.9	166.8	75.3	1,098.1	3.0	2.0	0.0	0.0	-63.1	2,490.8
1965	1,014.5	778.7	64.7	1.9	238.9	68.8	30.3	75.3	15.9	466.3	145.2	109.8	1,217.0	11.4	1.8	(s)	0.0	-30.0	2,993.4
1970	920.3	1,203.2	84.0	1.3	259.2	128.2	20.3	107.6	19.7	562.5	175.7	133.2	1,491.7	27.6	1.7	(s)	0.0	18.4	3,663.0
1975	845.6	1,123.6	67.8	0.4	298.5	140.2	14.9	130.5	18.9	623.2	176.9	163.5	1,634.9	245.8	1.3	0.0	0.0	-15.0	3,836.1
1980	844.5	1,113.7	53.7	0.7	213.8	111.3	3.4	142.6	21.1	572.9	177.7	170.1	1,467.3	302.6	1.4	0.0	0.0	13.8	3,743.3
1981	796.6	1,083.2	40.4	1.4	201.0	95.8	3.8	124.4	20.2	563.6	130.7	122.1	1,303.4	325.2	1.4	0.0	0.0	21.0	3,530.9
1982	778.5	1,016.1	32.3	1.1	189.7	94.2	2.5	97.1	18.4	552.5	97.2	112.5	1,197.5	305.9	1.3	0.0	0.0	48.9	3,348.1
1983	848.2	976.8	35.6	1.2	202.6	90.2	3.6	97.7	19.3	561.8	86.1	123.0	1,221.2	305.6	1.4	0.0	0.0	53.2	3,406.5
1984	833.2	1,074.1	38.0	1.0	212.1	15.0	3.6	93.8	20.6	552.0	61.9	122.4	1,120.5	379.2	1.5	0.0	0.0	26.4	3,434.8
1985	811.1	1,000.5	49.8	1.1	187.5	15.4	4.3	97.9	19.2	583.7	40.9	116.9	1,116.6	422.9	1.4	0.0	0.0	21.0	3,373.5
1986	804.2	943.7	41.0	1.1	204.6	11.5	2.3	118.4	18.7	570.7	52.3	138.8	1,159.5	460.2	1.5	0.0	0.0	-0.8	3,368.3
1987	783.2	886.5	41.9	0.8	198.8	11.1	1.7	153.3	21.2	580.5	43.8	148.1	1,201.1	540.9	1.1	0.0	0.0	-11.6	3,401.3
1988	745.2	982.8	37.2	0.9	196.1	22.2	2.0	165.6	20.4	609.6	37.1	164.6	1,255.8	743.1	0.7	0.0	0.0	-108.5	3,619.0
1989	714.2	1,017.4	53.4	1.0	201.3	25.3	2.1	45.6	21.0	607.0	25.5	163.0	1,145.2	802.4	0.7	0.0	0.0	-163.1	3,516.7
1990	747.9	960.1	55.3	0.8	247.7	22.3	1.0	45.2	21.6	556.5	22.8	178.0	1,151.2	767.8	i 1.5	R i 63.0	i (s)	-168.5	R i 3,510.7
1991	757.7	1,006.4	52.5	0.9	210.6	36.3	1.2	52.5	19.3	548.3	21.7	185.3	1,128.6	771.8	1.4	R 61.6	1.7	R -132.8	R 3,586.5
1992	692.5	1,011.3	61.7	0.9	211.9	41.8	0.8	45.2	19.7	558.4	14.8	207.1	1,162.2	787.4	1.4	R 66.7	0.1	R -146.6	R 3,563.2
1993	812.4	1,052.9	41.9	1.2	223.6	51.9	1.0	78.1	20.0	575.7	14.3	200.3	1,207.9	837.2	1.3	R 52.4	0.1	R -273.8	R 3,677.1
1994	818.9	1,046.4	51.7	1.0	197.8	54.4	1.1	89.8	20.9	584.4	17.1	209.7	1,228.0	775.7	1.3	R 60.2	0.1	R -211.8	R 3,702.3
1995	816.9	1,100.1	49.5	1.1	218.6	58.7	1.7	93.6	20.6	584.2	9.2	199.5	1,236.6	836.4	1.3	R 58.9	0.1	-228.7	R 3,808.1
1996	906.9	1,140.6	60.6	1.0	220.9	68.5	2.3	86.4	20.0	586.0	12.6	214.5	1,272.8	741.2	1.1	57.9	0.1	-213.3	3,897.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 96. Residential Energy Consumption Estimates, Selected Years 1960-1996, Illinois**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	2,229	4	2,233	232	15,330	2,052	5,192	22,574	0	0	9,969	-	24,797	-
1965	1,380	3	1,383	342	13,154	2,518	5,989	21,661	0	0	14,173	-	33,839	-
1970	768	2	770	439	11,980	1,336	8,616	21,932	0	0	22,533	-	54,604	-
1975	268	1	268	479	12,384	1,225	9,145	22,754	0	0	26,366	-	63,599	-
1980	65	1	65	478	3,512	161	4,051	7,724	0	0	29,930	-	72,780	-
1981	89	2	91	467	2,618	149	4,050	6,817	0	0	28,380	-	67,636	-
1982	122	1	122	459	2,667	335	3,992	6,994	0	0	28,600	-	68,693	-
1983	161	2	163	431	1,927	183	4,749	6,858	0	0	30,740	-	73,646	-
1984	158	1	159	480	2,081	328	3,304	5,712	0	0	30,431	-	70,832	-
1985	94	1	94	447	2,258	568	3,518	6,343	0	0	29,976	-	70,425	-
1986	94	0	94	437	2,196	202	3,027	5,425	0	0	30,965	-	71,228	-
1987	100	1	101	408	1,907	150	3,279	5,335	0	0	31,995	-	73,106	-
1988	94	1	94	462	2,122	217	3,049	5,387	0	0	33,980	-	76,821	-
1989	107	1	108	500	1,581	208	3,506	5,294	0	0	32,378	-	R 72,728	-
1990	92	1	93	442	1,200	101	3,209	4,510	e 1,608	e 13	32,871	-	R 71,894	-
1991	89	2	91	467	1,228	117	3,797	5,141	1,694	14	35,964	-	R 78,276	-
1992	98	1	99	475	999	61	3,661	4,720	1,782	15	32,367	-	R 69,134	-
1993	91	(s)	91	495	741	81	3,883	4,705	905	17	35,226	-	R 74,425	-
1994	90	(s)	90	474	807	72	3,771	4,650	887	22	35,706	-	R 74,501	-
1995	78	1	78	501	822	84	3,871	4,777	984	27	38,386	-	R 79,960	-
1996	65	1	66	539	756	96	4,625	5,477	983	29	37,535	-	78,122	-
<b>Trillion Btu</b>														
1960	53.6	0.1	53.7	240.2	89.3	11.6	20.8	121.8	0.0	0.0	34.0	449.7	84.6	534.3
1965	33.0	0.1	33.1	351.9	76.6	14.3	24.0	114.9	0.0	0.0	48.4	548.2	115.5	663.7
1970	17.7	(s)	17.8	450.1	69.8	7.6	32.6	109.9	0.0	0.0	76.9	654.7	186.3	841.0
1975	6.0	(s)	6.0	491.0	72.1	6.9	34.0	113.1	0.0	0.0	90.0	700.1	217.0	917.1
1980	1.4	(s)	1.4	489.0	20.5	0.9	14.9	36.3	0.0	0.0	102.1	628.8	248.3	877.1
1981	2.0	0.1	2.0	476.7	15.2	0.8	14.8	30.8	0.0	0.0	96.8	606.4	230.8	837.2
1982	2.7	(s)	2.7	468.7	15.5	1.9	14.4	31.9	0.0	0.0	97.6	600.8	234.4	835.2
1983	3.6	(s)	3.6	448.3	11.2	1.0	17.2	29.4	0.0	0.0	104.9	586.3	251.3	837.5
1984	3.5	(s)	3.5	498.8	12.1	1.9	11.9	25.9	0.0	0.0	103.8	632.0	241.7	873.7
1985	2.1	(s)	2.1	464.5	13.2	3.2	12.7	29.0	0.0	0.0	102.3	597.9	240.3	838.2
1986	2.1	0.0	2.1	446.2	12.8	1.1	11.0	25.0	0.0	0.0	105.7	578.9	243.0	822.0
1987	2.3	(s)	2.3	414.0	11.1	0.8	12.0	24.0	0.0	0.0	109.2	549.4	249.4	798.8
1988	2.1	(s)	2.1	470.7	12.4	1.2	11.1	24.7	0.0	0.0	115.9	613.4	262.1	875.5
1989	2.4	(s)	2.4	511.0	9.2	1.2	12.9	23.3	0.0	0.0	110.5	647.2	R 248.1	R 895.4
1990	2.1	(s)	2.1	451.9	7.0	0.6	11.6	19.2	e 32.2	e (s)	112.2	e 617.5	R 245.3	R e 862.8
1991	2.0	(s)	2.1	475.8	7.2	0.7	13.7	21.5	33.9	(s)	122.7	656.1	R 267.1	R 923.1
1992	2.2	(s)	2.3	483.9	5.8	0.3	13.3	19.4	35.6	0.1	110.4	651.8	R 235.9	R 887.6
1993	2.1	(s)	2.1	505.8	4.3	0.5	14.0	18.8	18.1	0.1	120.2	664.9	R 253.9	R 918.9
1994	R 2.0	(s)	2.0	483.7	4.7	0.4	13.7	18.8	17.7	0.1	121.8	644.2	R 254.2	R 898.4
1995	R 1.7	(s)	1.8	510.9	4.8	0.5	14.0	19.3	19.7	0.1	131.0	682.7	R 272.8	R 955.5
1996	1.5	(s)	1.5	549.0	4.4	0.5	16.7	21.7	19.7	0.1	128.1	719.9	266.6	986.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 97. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Illinois**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	4,139	3	4,142	47	4,834	78	916	358	8,336	14,523	0	9,994	-	24,859	-
1965	2,563	2	2,565	129	4,148	96	1,057	469	7,453	13,223	0	15,072	-	35,986	-
1970	1,427	1	1,428	193	3,778	51	1,520	533	7,627	13,509	0	22,463	-	54,436	-
1975	497	1	498	216	3,905	47	1,614	678	4,960	11,203	0	28,094	-	67,767	-
1980	120	(s)	121	228	2,100	16	715	1,008	2,633	6,471	0	31,591	-	76,818	-
1981	164	2	166	223	4,060	14	715	1,072	1,248	7,108	0	32,846	-	78,280	-
1982	226	(s)	227	219	3,130	7	704	1,077	1,032	5,951	0	33,061	-	79,408	-
1983	299	1	300	205	4,722	19	838	590	1,048	7,215	0	33,754	-	80,867	-
1984	294	(s)	294	232	5,099	15	583	451	699	6,848	0	34,136	-	79,454	-
1985	174	(s)	175	214	3,975	96	621	549	343	5,583	0	32,609	-	76,612	-
1986	174	0	174	205	1,985	98	534	575	890	4,082	0	33,657	-	77,421	-
1987	186	(s)	187	191	1,648	42	579	R 553	911	R 3,733	0	35,883	-	81,990	-
1988	174	(s)	175	215	1,956	59	538	546	579	R 3,678	0	37,759	-	85,364	-
1989	199	(s)	199	196	1,409	63	619	469	228	R 2,789	0	38,088	-	R 85,553	-
1990	171	(s)	172	200	1,548	26	566	R 560	207	R 2,908	e NA	39,053	-	R 85,414	-
1991	165	1	166	194	1,689	40	670	399	39	2,838	NA	40,831	-	R 88,870	-
1992	183	1	184	197	1,801	34	646	374	43	2,900	NA	38,905	-	R 83,099	-
1993	169	(s)	170	203	1,994	32	685	132	56	2,898	55	41,980	-	R 88,695	-
1994	166	(s)	167	198	2,214	50	665	161	67	3,158	63	43,698	-	R 91,178	-
1995	144	(s)	145	204	2,021	80	683	138	46	2,968	58	45,290	-	R 94,341	-
1996	121	1	121	218	1,843	67	816	184	193	3,104	55	45,663	-	95,039	-

  

Trillion Btu															
1960	99.5	0.1	99.6	48.9	28.2	0.4	3.7	1.9	52.4	86.6	0.0	34.1	269.1	84.8	354.0
1965	61.3	(s)	61.3	132.7	24.2	0.5	4.2	2.5	46.9	78.3	0.0	51.4	323.8	122.8	446.5
1970	33.0	(s)	33.0	198.3	22.0	0.3	5.7	2.8	47.9	78.8	0.0	76.6	386.7	185.7	572.4
1975	11.2	(s)	11.2	221.3	22.7	0.3	6.0	3.6	31.2	63.8	0.0	95.9	392.1	231.2	623.3
1980	2.7	(s)	2.7	233.2	12.2	0.1	2.6	5.3	16.6	36.8	0.0	107.8	380.4	262.1	642.5
1981	3.6	(s)	3.7	227.9	23.7	0.1	2.6	5.6	7.8	39.8	0.0	112.1	383.4	267.1	650.5
1982	5.0	(s)	5.0	223.6	18.2	(s)	2.5	5.7	6.5	33.0	0.0	112.8	374.3	270.9	645.3
1983	6.6	(s)	6.7	213.3	27.5	0.1	3.0	3.1	6.6	40.3	0.0	115.2	375.4	275.9	651.3
1984	6.5	(s)	6.5	241.5	29.7	0.1	2.1	2.4	4.4	38.7	0.0	116.5	403.1	271.1	674.2
1985	3.9	(s)	3.9	222.1	23.2	0.5	2.2	2.9	2.2	31.0	0.0	111.3	368.2	261.4	629.6
1986	3.9	0.0	3.9	209.3	11.6	0.6	1.9	3.0	5.6	22.7	0.0	114.8	350.7	264.2	614.8
1987	4.2	(s)	4.2	193.9	9.6	0.2	2.1	2.9	5.7	20.6	0.0	122.4	341.1	279.7	620.9
1988	3.9	(s)	3.9	219.1	11.4	0.3	2.0	2.9	3.6	20.2	0.0	128.8	372.1	291.3	663.3
1989	4.5	(s)	4.5	200.5	8.2	0.4	2.3	2.5	1.4	14.7	0.0	130.0	349.7	R 291.9	R 641.6
1990	3.8	(s)	3.9	204.7	9.0	0.1	2.1	2.9	1.3	R 15.5	e NA	133.2	357.2	R 291.4	R 648.7
1991	3.7	(s)	3.8	197.5	9.8	0.2	2.4	2.1	0.2	14.8	NA	139.3	355.4	R 303.2	R 658.7
1992	4.2	(s)	4.2	200.5	10.5	0.2	2.3	2.0	0.3	15.3	NA	132.7	352.7	R 283.5	R 636.2
1993	3.8	(s)	3.8	207.4	11.6	0.2	2.5	0.7	0.4	15.3	1.1	143.2	R 370.9	R 302.6	R 673.5
1994	R 3.7	(s)	3.7	201.7	12.9	0.3	2.4	0.8	0.4	16.9	1.3	149.1	R 372.7	R 311.1	R 683.8
1995	R 3.2	(s)	3.3	207.9	11.8	0.5	2.5	0.7	0.3	15.7	1.2	154.5	R 382.6	321.9	R 704.5
1996	2.7	(s)	2.7	222.2	10.7	0.4	2.9	1.0	1.2	16.2	1.1	155.8	398.1	324.3	722.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 98. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Illinois**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	13,842	186	7,244	13,545	3,239	8,534	1,340	6,476	16,835	12,578	69,790	19	0	0	13,722	-	34,131	-
1965	15,669	238	9,751	12,074	2,723	11,399	1,321	6,512	15,064	18,923	77,766	17	0	0	18,708	-	44,668	-
1970	10,928	381	12,651	10,836	2,196	17,818	2,015	6,017	16,694	22,957	91,186	20	0	0	25,647	-	62,151	-
1975	7,257	352	10,213	11,138	1,351	23,889	1,668	4,290	15,728	27,915	96,192	19	0	0	30,330	-	73,160	-
1980	5,350	349	8,094	7,842	429	33,867	1,959	3,505	12,598	29,427	97,720	17	0	0	35,158	-	85,492	-
1981	4,854	346	6,089	6,893	503	29,017	1,878	3,008	9,950	20,959	78,297	17	0	0	33,700	-	80,316	-
1982	4,703	292	4,860	7,684	97	21,694	1,713	2,287	7,240	19,225	64,800	17	0	0	30,434	-	73,098	-
1983	5,153	281	5,365	6,638	437	20,878	1,793	2,054	6,771	20,991	64,928	17	0	0	32,349	-	77,500	-
1984	5,887	304	5,727	7,169	299	R 21,483	1,912	1,935	4,519	21,312	R 64,357	17	0	0	34,032	-	79,213	-
1985	5,829	285	7,502	6,373	91	22,607	1,782	1,738	3,410	20,048	63,551	17	0	0	36,178	-	84,997	-
1986	6,064	268	6,185	9,259	105	28,590	1,743	1,572	3,175	23,855	74,484	17	0	0	36,786	-	84,617	-
1987	6,467	265	6,315	9,600	112	R 37,717	1,970	R 1,570	2,716	25,707	R 85,707	17	0	0	36,575	-	83,571	-
1988	7,056	269	5,604	7,841	75	41,418	1,900	R 1,497	2,973	28,476	R 89,783	17	0	0	37,942	-	85,779	-
1989	6,393	279	8,052	6,907	96	R 7,998	1,949	1,418	2,228	28,341	56,989	17	0	0	38,481	-	R 86,436	-
1990	6,243	276	8,339	7,616	47	R 8,368	2,006	R 1,264	1,741	30,916	R 60,296	f NA	f NA	f NA	39,299	-	R 85,951	-
1991	6,666	303	7,917	7,678	47	9,761	1,794	1,342	851	32,315	61,705	NA	NA	NA	39,712	-	R 86,435	-
1992	6,052	300	9,293	8,493	47	R 7,857	1,829	R 1,212	373	36,324	R 65,428	NA	NA	NA	40,898	-	R 87,356	-
1993	6,130	305	6,310	7,089	64	R 16,800	1,863	1,590	536	35,075	R 69,327	NA	NA	NA	40,249	-	R 85,039	-
1994	6,222	305	7,798	7,663	78	19,741	1,947	1,515	608	36,703	R 76,052	NA	NA	NA	41,765	-	R 87,145	-
1995	5,937	322	7,457	8,479	129	20,981	1,913	1,500	369	34,520	75,349	NA	NA	NA	42,251	-	R 88,011	-
1996	6,154	322	9,127	7,797	235	18,251	1,857	1,464	602	37,414	76,747	NA	NA	NA	42,050	-	87,520	-

**Trillion Btu**

1960	338.8	192.7	48.1	78.9	18.4	34.2	8.1	34.0	105.8	75.3	402.9	0.2	0.0	0.0	46.8	981.4	116.5	1,097.9
1965	381.7	244.6	64.7	70.3	15.4	45.7	8.0	34.2	94.7	109.8	442.9	0.2	0.0	0.0	63.8	1,133.2	152.4	1,285.7
1970	260.2	390.5	84.0	63.1	12.5	67.3	12.2	31.6	105.0	133.2	508.8	0.2	0.0	0.0	87.5	1,247.2	212.1	1,459.3
1975	172.9	361.4	67.8	64.9	7.7	88.7	10.1	22.5	98.9	163.5	524.1	0.2	0.0	0.0	103.5	1,162.1	249.6	1,411.7
1980	127.7	357.0	53.7	45.7	2.4	124.4	11.9	18.4	79.2	170.1	505.8	0.2	0.0	0.0	120.0	1,110.6	291.7	1,402.3
1981	116.3	352.7	40.4	40.1	2.9	105.7	11.4	15.8	62.6	122.1	401.0	0.2	0.0	0.0	115.0	985.1	274.0	1,259.2
1982	113.4	298.8	32.3	44.8	0.6	78.4	10.4	12.0	45.5	112.5	336.4	0.2	0.0	0.0	103.8	852.6	249.4	1,102.0
1983	124.9	293.0	35.6	38.7	2.5	75.5	10.9	10.8	42.6	123.0	339.5	0.2	0.0	0.0	110.4	867.9	264.4	1,132.3
1984	144.0	316.1	38.0	41.8	1.7	77.3	11.6	10.2	28.4	122.4	331.4	0.2	0.0	0.0	116.1	907.7	270.3	1,178.0
1985	142.3	296.3	49.8	37.1	0.5	81.5	10.8	9.1	21.4	116.9	327.2	0.2	0.0	0.0	123.4	889.4	290.0	1,179.4
1986	148.2	273.5	41.0	53.9	0.6	104.1	10.6	8.3	20.0	138.8	377.3	0.2	0.0	0.0	125.5	924.6	288.7	1,213.3
1987	158.5	268.6	41.9	55.9	0.6	138.0	11.9	8.2	17.1	148.1	421.8	0.2	0.0	0.0	124.8	973.8	285.1	1,259.0
1988	171.6	274.1	37.2	45.7	0.4	151.3	11.5	7.9	18.7	164.6	R 437.2	0.2	0.0	0.0	129.5	1,012.6	292.7	1,305.3
1989	155.8	285.0	53.4	40.2	0.5	29.5	11.8	7.4	14.0	163.0	320.0	0.2	0.0	0.0	131.3	892.3	R 294.9	R 1,187.2
1990	150.8	281.8	55.3	44.4	0.3	30.3	12.2	6.6	10.9	178.0	338.0	f 0.9	f 18.6	f 0.0	134.1	R f 924.2	R 293.3	R f 1,217.5
1991	156.8	308.6	52.5	44.7	0.3	35.3	10.9	R 7.1	5.4	185.3	341.4	0.9	17.9	1.6	135.5	962.6	R 294.9	R 1,257.5
1992	147.1	305.9	61.7	49.5	0.3	28.5	11.1	6.4	2.3	207.1	366.7	0.9	19.1	0.0	139.5	979.3	R 298.1	R 1,277.3
1993	148.6	311.6	41.9	41.3	0.4	60.6	11.3	8.4	3.4	200.3	367.5	0.9	R 20.0	0.0	137.3	985.9	R 290.2	R 1,276.1
1994	149.4	311.6	51.7	44.6	0.4	71.8	11.8	8.0	3.8	209.7	401.9	0.8	R 24.8	0.0	142.5	R 1,031.0	R 297.3	R 1,328.3
1995	144.6	328.0	49.5	49.4	0.7	76.0	11.6	7.9	2.3	197.1	394.6	0.8	R 23.8	0.0	144.2	R 1,036.0	R 300.3	R 1,336.3
1996	150.1	328.5	60.6	45.4	1.3	65.9	11.3	7.7	3.8	213.0	409.0	0.9	R 25.9	0.0	143.5	1,057.9	298.6	1,356.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 99. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Illinois**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	239	10	3,733	8,721	4,356	316	1,333	71,193	1,168	90,819	0	316	-	785	-
1965	51	13	383	11,509	12,176	318	1,295	81,788	423	107,891	0	290	-	692	-
1970	17	28	264	15,234	22,644	526	1,239	100,534	408	140,850	0	238	-	577	-
1975	1	14	82	20,488	24,271	486	1,452	113,669	215	160,662	0	265	-	639	-
1980	0	15	132	22,560	19,508	178	1,514	104,550	279	148,721	0	270	-	658	-
1981	0	12	272	20,388	16,899	365	1,452	103,216	7	142,600	0	299	-	712	-
1982	0	14	216	18,560	16,596	481	1,324	101,805	26	139,009	0	293	-	705	-
1983	0	10	234	20,954	15,944	572	1,386	104,312	79	143,481	0	256	-	612	-
1984	0	11	201	21,653	2,687	R 699	1,478	102,692	138	R 129,548	0	294	-	685	-
1985	0	11	212	19,147	2,748	423	1,378	R 108,826	187	R 132,921	0	348	-	818	-
1986	0	8	209	21,233	2,054	377	1,347	R 106,493	86	R 131,799	0	350	-	805	-
1987	0	7	159	20,549	1,997	R 310	1,523	R 108,384	102	R 133,024	0	336	-	767	-
1988	0	13	187	21,191	3,956	336	1,469	R 114,006	350	R 141,494	0	359	-	812	-
1989	0	14	192	24,213	4,497	R 267	1,506	R 113,661	57	R 144,394	0	353	-	R 794	-
1990	0	12	164	31,675	3,952	R 328	1,550	R 104,123	52	R 141,843	R e 161,472	354	-	774	-
1991	0	11	176	25,059	6,437	312	1,387	R 102,638	13	R 136,023	R 127,996	362	-	R 788	-
1992	0	11	176	24,718	7,399	R 319	1,414	R 104,710	32	R 138,768	R 155,564	350	-	748	-
1993	0	12	231	28,093	9,170	R 281	1,440	R 107,865	37	R 147,117	R 173,605	331	-	700	-
1994	0	14	204	22,640	9,619	R 531	1,505	R 109,579	51	R 144,128	R 214,718	321	-	669	-
1995	0	13	215	25,674	10,360	287	1,479	R 109,570	36	R 147,621	R 177,816	304	-	633	-
1996	0	14	202	26,982	12,076	232	1,435	109,906	31	150,864	129,290	341	-	710	-

**Trillion Btu**

1960	5.7	10.4	18.8	50.8	24.4	1.3	8.1	374.0	7.3	484.7	0.0	1.1	501.9	2.7	504.6
1965	1.2	13.8	1.9	67.0	68.8	1.3	7.9	429.6	2.7	579.2	0.0	1.0	595.1	2.4	597.5
1970	0.4	28.7	1.3	88.7	128.2	2.0	7.5	528.1	2.6	758.4	0.0	0.8	788.3	2.0	790.3
1975	(s)	14.6	0.4	119.3	137.4	1.8	8.8	597.1	1.4	866.2	0.0	0.9	881.8	2.2	883.9
1980	0.0	14.9	0.7	131.4	110.4	0.7	9.2	549.2	1.8	803.3	0.0	0.9	819.1	2.2	821.3
1981	0.0	12.4	1.4	118.8	95.6	1.3	8.8	542.2	(s)	768.1	0.0	1.0	781.5	2.4	784.0
1982	0.0	14.4	1.1	108.1	93.9	1.7	8.0	534.8	0.2	747.8	0.0	1.0	763.2	2.4	765.6
1983	0.0	9.9	1.2	122.1	90.2	2.1	8.4	548.0	0.5	772.4	0.0	0.9	783.2	2.1	785.3
1984	0.0	11.6	1.0	126.1	15.0	2.5	9.0	539.4	0.9	R 693.9	0.0	1.0	706.6	2.3	708.9
1985	0.0	11.6	1.1	111.5	15.4	1.5	8.4	R 571.7	1.2	R 710.7	0.0	1.2	R 723.5	2.8	R 726.3
1986	0.0	8.5	1.1	123.7	11.5	1.4	8.2	559.4	0.5	705.7	0.0	1.2	715.4	2.7	718.1
1987	0.0	6.9	0.8	119.7	11.1	1.1	9.2	R 569.3	0.6	R 712.0	0.0	1.1	R 720.0	2.6	R 722.6
1988	0.0	13.0	0.9	123.4	22.2	1.2	8.9	R 598.9	2.2	R 757.8	0.0	1.2	R 772.1	2.8	R 774.8
1989	0.0	13.8	1.0	141.0	25.3	1.0	9.1	R 597.1	0.4	R 774.8	0.0	1.2	R 789.9	2.7	R 792.6
1990	0.0	12.4	0.8	184.5	22.3	1.2	9.4	R 547.0	0.3	R 765.5	R e 12.3	1.2	R e 779.1	2.6	R e 781.7
1991	0.0	11.3	0.9	146.0	36.3	1.1	8.4	R 539.2	0.1	R 732.0	R 9.8	1.2	R 744.5	2.7	R 747.2
1992	0.0	11.5	0.9	144.0	41.8	1.2	8.6	R 550.0	0.2	R 746.7	R 11.9	1.2	R 759.4	2.6	R 761.9
1993	0.0	11.9	1.2	163.6	51.9	1.0	8.7	R 566.6	0.2	R 793.3	R 13.3	1.1	R 806.3	2.4	R 808.7
1994	0.0	14.1	1.0	131.9	54.4	1.9	9.1	R 575.6	0.3	R 774.3	R 16.4	1.1	R 789.6	2.3	R 791.9
1995	0.0	13.5	1.1	149.5	58.7	1.0	9.0	575.6	0.2	795.2	R 13.6	1.0	809.7	2.2	811.9
1996	0.0	14.7	1.0	157.2	68.5	0.8	8.7	577.3	0.2	813.7	9.9	1.2	829.6	2.4	832.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 100. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Illinois**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	19,218	0	19,218	42	194	161	0	355	254	166	0	0	0	-
1965	25,047	0	25,047	35	152	126	0	278	965	158	3	0	0	-
1970	28,993	0	28,993	132	3,221	2,667	0	5,888	2,514	146	(s)	0	0	-
1975	32,350	0	32,350	34	7,239	3,833	0	11,072	22,315	104	0	0	0	-
1980	34,611	0	34,611	19	12,762	847	0	13,608	27,742	121	0	0	0	-
1981	32,411	0	32,411	13	9,587	580	0	10,167	29,483	117	0	0	0	-
1982	31,519	0	31,519	10	7,168	573	0	7,742	27,625	107	0	0	0	-
1983	34,265	0	34,265	12	5,802	547	0	6,349	28,021	117	0	0	0	-
1984	32,054	0	32,054	6	4,489	413	0	4,902	34,976	124	0	0	0	-
1985	31,608	0	31,608	6	2,569	436	0	3,005	39,106	119	0	0	0	-
1986	30,844	0	30,844	6	4,165	459	0	4,624	42,614	124	0	0	0	-
1987	28,894	0	28,894	3	3,235	425	0	3,660	50,194	90	0	0	0	-
1988	26,681	0	26,681	6	2,007	552	0	2,559	69,166	48	0	0	0	-
1989	25,758	0	25,758	7	1,535	455	0	1,990	74,820	50	0	0	0	-
1990	27,396	0	27,396	9	1,622	491	0	2,113	71,887	61	0	0	0	-
1991	27,754	0	27,754	13	2,550	495	0	3,044	71,866	53	0	0	0	-
1992	25,264	0	25,264	9	1,906	365	0	2,271	73,742	52	8	0	0	-
1993	31,744	0	31,744	16	1,653	469	0	2,122	78,373	40	0	0	0	-
1994	32,599	0	32,599	35	1,986	624	0	2,611	72,654	45	0	0	0	-
1995	33,463	0	33,463	39	1,013	539	385	1,938	78,481	48	68	0	0	-
1996	38,091	0	38,091	26	1,184	548	241	1,973	69,774	22	134	0	0	-

  

Trillion Btu														
1960	416.9	0.0	416.9	43.8	1.2	0.9	0.0	2.2	3.0	1.8	0.0	0.0	0.0	467.6
1965	537.2	0.0	537.2	35.6	1.0	0.7	0.0	1.7	11.4	1.7	(s)	0.0	0.0	587.6
1970	608.9	0.0	608.9	135.7	20.3	15.5	0.0	35.8	27.6	1.5	(s)	0.0	0.0	809.5
1975	655.4	0.0	655.4	35.2	45.5	22.2	0.0	67.8	245.8	1.1	0.0	0.0	0.0	1,005.2
1980	712.7	0.0	712.7	19.6	80.2	4.9	0.0	85.1	302.6	1.3	0.0	0.0	0.0	1,121.4
1981	674.7	0.0	674.7	13.5	60.3	3.4	0.0	63.6	325.2	1.2	0.0	0.0	0.0	1,078.2
1982	657.5	0.0	657.5	10.6	45.1	3.3	0.0	48.4	305.9	1.1	0.0	0.0	0.0	1,023.5
1983	713.0	0.0	713.0	12.3	36.5	3.2	0.0	39.7	305.6	1.2	0.0	0.0	0.0	1,071.8
1984	679.1	0.0	679.1	6.1	28.2	2.4	0.0	30.6	379.2	1.3	0.0	0.0	0.0	1,096.4
1985	662.8	0.0	662.8	6.0	16.2	2.5	0.0	18.7	422.9	1.2	0.0	0.0	0.0	1,111.6
1986	650.0	0.0	650.0	6.2	26.2	2.7	0.0	28.9	460.2	1.3	0.0	0.0	0.0	1,146.6
1987	618.2	0.0	618.2	3.3	20.3	2.5	0.0	22.8	540.9	0.9	0.0	0.0	0.0	1,186.1
1988	567.5	0.0	567.5	5.8	12.6	3.2	0.0	15.8	743.1	0.5	0.0	0.0	0.0	1,332.7
1989	551.5	0.0	551.5	7.1	9.6	2.7	0.0	12.3	802.4	0.5	0.0	0.0	0.0	1,373.8
1990	591.1	0.0	591.1	9.3	10.2	2.9	0.0	13.1	767.8	0.6	0.0	0.0	0.0	1,381.9
1991	595.1	0.0	595.1	13.1	16.0	2.9	0.0	18.9	771.8	0.5	0.0	0.0	0.0	1,399.5
1992	539.0	0.0	539.0	9.4	12.0	2.1	0.0	14.1	787.4	0.5	0.1	0.0	0.0	R 1,350.6
1993	657.8	0.0	657.8	16.3	10.4	2.7	0.0	13.1	837.2	0.4	0.0	0.0	0.0	1,524.8
1994	663.8	0.0	663.8	35.3	12.5	3.6	0.0	16.1	775.7	0.5	0.0	0.0	0.0	1,491.3
1995	667.3	0.0	667.3	39.8	6.4	3.1	2.3	11.8	836.4	0.5	0.7	0.0	0.0	1,556.5
1996	752.5	0.0	752.5	26.2	7.4	3.2	1.5	12.1	741.2	0.2	1.4	0.0	0.0	1,533.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 101. Energy Consumption Estimates by Source, Selected Years 1960-1996, Indiana**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	32,599	212	3,277	453	25,707	1,316	3,899	5,751	1,181	43,595	13,076	9,955	108,209	0	100	0	0	-31,833	-
1965	37,350	358	4,283	1,110	25,948	1,848	3,444	6,654	1,458	48,051	13,033	11,840	117,670	0	94	0	0	-38,137	-
1970	42,776	545	6,101	367	29,379	2,558	2,130	8,978	1,583	58,905	9,769	14,363	134,133	0	495	0	0	-27,768	-
1975	46,210	477	6,067	217	32,655	2,619	841	12,335	1,604	64,639	15,007	14,369	150,353	0	444	0	0	114	-
1980	50,485	489	5,165	260	30,795	2,151	659	7,961	1,788	60,192	14,615	12,920	136,505	0	474	0	0	-9,357	-
1981	50,038	496	5,803	188	28,944	2,848	709	7,251	1,715	61,155	7,563	12,719	128,895	0	509	0	0	-3,899	-
1982	44,243	468	5,400	129	28,851	4,361	591	6,828	1,564	56,476	4,680	10,985	119,864	0	428	0	0	2,438	-
1983	48,340	427	5,786	151	27,711	4,395	1,011	6,870	1,638	57,442	3,005	10,919	118,927	0	418	0	0	-8,114	-
1984	53,571	452	6,001	250	31,145	15,451	1,014	5,334	1,746	58,057	2,108	11,745	132,852	0	436	0	0	-47,021	-
1985	53,291	433	5,336	393	30,776	15,445	731	4,947	1,627	R 57,936	3,768	11,055	R 132,015	0	426	0	0	-27,809	-
1986	50,643	395	6,063	434	31,807	18,611	731	6,143	1,591	R 59,993	4,308	10,135	R 139,815	0	506	0	0	-23,880	-
1987	51,385	413	7,600	378	31,649	19,141	601	6,094	1,799	R 63,316	3,594	11,714	R 145,885	0	507	0	0	-16,737	-
1988	55,830	457	6,941	432	28,745	16,546	712	6,753	1,735	R 64,140	3,130	13,295	R 142,429	0	441	0	0	-24,254	-
1989	57,388	462	6,396	288	33,122	17,557	650	8,113	1,779	R 61,701	3,256	13,264	R 146,126	0	450	0	0	-33,117	-
1990	61,701	451	8,552	302	32,718	17,889	368	9,563	1,831	R 61,930	3,881	14,787	R 151,821	0	i NA	i NA	i NA	-64,939	-
1991	60,790	457	7,058	302	32,418	17,228	406	9,508	1,638	R 61,302	3,239	15,563	R 148,663	0	NA	NA	NA	-56,326	-
1992	58,765	483	6,210	252	31,959	16,001	298	7,045	1,670	R 61,975	4,112	18,531	R 148,052	0	NA	NA	NA	-55,990	-
1993	60,353	518	9,501	201	33,109	16,366	347	7,778	1,701	R 65,531	2,925	16,130	R 153,588	0	NA	NA	NA	-50,366	-
1994	59,996	519	10,219	149	35,828	17,299	429	7,134	1,778	R 66,838	3,045	17,045	R 159,763	0	NA	NA	NA	-58,130	-
1995	62,631	535	7,085	144	35,339	17,344	330	6,788	1,747	R 70,100	1,862	16,428	157,168	0	NA	NA	NA	-52,045	-
1996	64,021	574	8,528	171	35,679	12,576	441	7,782	1,695	69,578	1,350	18,582	156,384	0	NA	NA	NA	-50,733	-
Trillion Btu																			
1960	795.1	219.8	21.7	2.3	149.7	7.1	22.1	23.1	7.2	229.0	82.2	59.7	604.1	0.0	1.1	0.0	0.0	-108.6	1,511.5
1965	900.6	357.5	28.4	5.6	151.1	10.2	19.5	26.7	8.8	252.4	81.9	70.2	655.0	0.0	1.0	0.0	0.0	-130.1	1,783.9
1970	1,006.8	548.6	40.5	1.9	171.1	14.2	12.1	33.9	9.6	309.4	61.4	85.0	739.1	0.0	5.2	0.0	0.0	-94.7	2,205.1
1975	1,061.2	472.6	40.3	1.1	190.2	14.6	4.8	45.8	9.7	339.6	94.3	85.1	825.5	0.0	4.6	0.0	0.0	0.4	2,364.2
1980	1,157.0	483.9	34.3	1.3	179.4	12.0	3.7	29.2	10.8	316.2	91.9	76.2	755.1	0.0	4.9	0.0	0.0	-31.9	2,368.9
1981	1,150.6	492.9	38.5	0.9	168.6	15.9	4.0	26.4	10.4	321.2	47.5	74.7	708.3	0.0	5.3	0.0	0.0	-13.3	2,343.8
1982	1,007.2	475.3	35.8	0.6	168.1	24.5	3.4	24.7	9.5	296.7	29.4	64.8	657.4	0.0	4.5	0.0	0.0	8.3	2,152.7
1983	1,105.1	429.3	38.4	0.8	161.4	24.7	5.7	24.8	9.9	301.7	18.9	64.7	651.1	0.0	4.4	0.0	0.0	-27.7	2,162.3
1984	1,209.5	455.5	39.8	1.3	181.4	87.4	5.8	19.2	10.6	305.0	13.3	68.5	732.1	0.0	4.5	0.0	0.0	-160.4	2,241.2
1985	1,193.3	436.4	35.4	2.0	179.3	87.4	4.1	17.8	9.9	304.3	23.7	65.1	R 729.0	0.0	4.5	0.0	0.0	-94.9	R 2,268.3
1986	1,130.1	398.7	40.2	2.2	185.3	105.3	4.1	22.4	9.7	315.1	27.1	60.5	771.9	0.0	5.3	0.0	0.0	-81.5	R 2,224.6
1987	1,166.6	416.3	50.4	1.9	184.4	108.3	3.4	22.3	10.9	R 332.6	22.6	69.2	R 806.0	0.0	5.3	0.0	0.0	-57.1	R 2,337.1
1988	1,267.2	463.7	46.1	2.2	167.4	93.6	4.0	24.7	10.5	R 336.9	19.7	78.5	R 783.6	0.0	4.6	0.0	0.0	-82.8	R 2,436.3
1989	1,286.4	469.4	42.4	1.5	192.9	99.3	3.7	29.9	10.8	R 324.1	20.5	77.9	R 803.0	0.0	R 4.7	0.0	0.0	-113.0	R 2,436.3
1990	1,361.8	459.1	56.7	1.5	190.6	101.3	2.1	34.7	11.1	R 325.3	24.4	86.9	R 834.6	0.0	i 4.6	R i 27.7	i (s)	R -221.6	R i 2,460.8
1991	1,340.1	463.7	46.8	1.5	188.8	97.5	2.3	34.4	9.9	R 322.0	20.4	90.7	R 814.3	0.0	R 4.2	R 27.1	(s)	R -192.2	R 2,453.0
1992	1,296.5	488.8	41.2	1.3	186.2	90.5	1.7	25.5	10.1	325.6	25.9	107.6	R 815.5	0.0	5.8	R 29.1	(s)	R -191.0	R 2,439.6
1993	1,318.5	524.5	63.1	1.0	192.9	92.7	2.0	28.0	10.3	R 344.2	18.4	93.5	R 846.1	0.0	4.6	R 22.1	(s)	R -171.8	R 2,538.2
1994	1,299.0	526.1	67.8	0.8	208.7	98.0	2.4	25.9	10.8	R 351.1	19.1	98.8	R 883.5	0.0	4.2	R 24.9	(s)	R -198.3	R 2,533.8
1995	1,341.9	541.7	47.0	0.7	205.8	98.3	1.9	24.6	10.6	368.2	11.7	95.3	864.2	0.0	4.8	R 27.3	(s)	-177.6	R 2,595.3
1996	1,372.1	579.8	56.6	0.9	207.8	71.3	2.5	28.1	10.3	365.5	8.5	107.7	859.2	0.0	4.6	24.6	(s)	-173.1	2,663.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 102. Residential Energy Consumption Estimates, Selected Years 1960-1996, Indiana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	740	4	744	76	8,536	3,370	3,389	15,296	0	0	6,371	-	15,847	-
1965	378	3	380	114	8,146	2,498	3,993	14,637	0	0	8,651	-	20,656	-
1970	245	2	247	159	8,027	1,837	6,312	16,175	0	0	13,488	-	32,686	-
1975	315	1	315	163	8,647	717	6,665	16,029	0	0	16,375	-	39,499	-
1980	77	1	78	164	5,398	492	3,351	9,241	0	0	19,262	-	46,839	-
1981	114	1	115	159	4,100	537	3,296	7,933	0	0	19,118	-	45,563	-
1982	204	1	205	160	4,222	343	2,873	7,437	0	0	19,307	-	46,371	-
1983	246	1	247	145	2,417	406	3,417	6,241	0	0	19,931	-	47,749	-
1984	230	1	230	152	2,611	537	2,743	5,891	0	0	20,193	-	47,002	-
1985	183	1	184	146	2,558	466	2,340	5,364	0	0	19,803	-	46,526	-
1986	190	1	192	140	2,882	393	2,602	5,878	0	0	20,508	-	47,174	-
1987	189	1	190	139	2,762	403	2,973	6,138	0	0	21,171	-	48,373	-
1988	220	1	221	154	2,794	519	3,386	6,699	0	0	22,486	-	50,836	-
1989	181	1	182	156	2,314	532	4,083	6,929	0	0	22,281	-	50,048	-
1990	192	1	193	140	1,719	278	3,494	5,492	<sup>e</sup> 802	<sup>e</sup> 3	22,111	-	48,360	-
1991	150	3	152	146	1,937	316	3,490	5,743	844	3	24,220	-	52,716	-
1992	143	2	145	153	1,897	186	3,422	5,505	888	4	22,837	-	48,779	-
1993	117	3	120	164	2,110	253	3,769	6,132	459	5	24,978	-	52,775	-
1994	123	2	125	157	1,827	275	3,698	5,801	450	6	25,048	-	52,264	-
1995	98	3	102	161	1,595	215	3,768	5,578	499	7	26,560	-	55,326	-
1996	122	5	127	180	1,467	288	4,484	6,240	498	9	26,860	-	55,905	-
<b>Trillion Btu</b>														
1960	17.8	0.1	17.9	78.7	49.7	19.1	13.6	82.4	0.0	0.0	21.7	200.7	54.1	254.8
1965	9.0	0.1	9.1	114.2	47.5	14.2	16.0	77.6	0.0	0.0	29.5	230.5	70.5	301.0
1970	5.7	(s)	5.7	159.7	46.8	10.4	23.9	81.0	0.0	0.0	46.0	292.4	111.5	403.9
1975	7.0	(s)	7.0	161.2	50.4	4.1	24.8	79.2	0.0	0.0	55.9	303.2	134.8	438.0
1980	1.7	(s)	1.7	161.9	31.4	2.8	12.3	46.5	0.0	0.0	65.7	275.8	159.8	435.6
1981	2.5	(s)	2.5	157.9	23.9	3.0	12.0	38.9	0.0	0.0	65.2	264.6	155.5	420.0
1982	4.5	(s)	4.5	162.6	24.6	1.9	10.4	36.9	0.0	0.0	65.9	270.0	158.2	428.2
1983	5.4	(s)	5.4	146.1	14.1	2.3	12.3	28.7	0.0	0.0	68.0	248.3	162.9	411.2
1984	5.1	(s)	5.1	152.6	15.2	3.0	9.9	28.1	0.0	0.0	68.9	254.7	160.4	415.1
1985	4.1	(s)	4.1	147.4	14.9	2.6	8.4	26.0	0.0	0.0	67.6	245.0	158.7	403.8
1986	4.3	(s)	4.3	141.4	16.8	2.2	9.5	28.5	0.0	0.0	70.0	244.2	161.0	405.1
1987	4.3	(s)	4.3	140.3	16.1	2.3	10.9	29.3	0.0	0.0	72.2	246.1	165.0	411.2
1988	5.0	(s)	5.0	155.9	16.3	2.9	12.4	31.6	0.0	0.0	76.7	269.2	173.5	442.7
1989	4.0	(s)	4.1	158.4	13.5	3.0	15.0	31.5	0.0	0.0	76.0	270.1	170.8	440.8
1990	4.3	(s)	4.3	143.1	10.0	1.6	12.7	24.3	<sup>e</sup> 16.0	<sup>e</sup> (s)	75.4	<sup>e</sup> 263.1	165.0	428.1
1991	3.4	0.1	3.4	148.5	11.3	1.8	12.6	25.7	16.9	(s)	82.6	277.2	179.9	457.1
1992	3.2	(s)	3.3	154.4	11.1	1.1	12.4	24.5	17.8	(s)	77.9	277.9	166.4	444.3
1993	2.6	0.1	2.7	166.1	12.3	1.4	13.6	27.3	9.2	(s)	85.2	290.5	180.1	470.6
1994	2.8	0.1	2.8	159.5	10.6	1.6	13.4	25.6	9.0	(s)	85.5	282.5	178.3	460.8
1995	2.2	0.1	2.3	163.0	9.3	1.2	13.7	24.2	10.0	(s)	90.6	290.0	188.8	478.8
1996	2.7	0.1	2.8	181.9	8.5	1.6	16.2	26.4	10.0	(s)	91.6	312.8	190.7	503.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 103. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Indiana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	1,373	3	1,376	20	2,968	328	598	168	1,394	5,456	0	2,900	-	7,213	-
1965	702	2	703	42	2,832	243	705	171	1,520	5,472	0	4,243	-	10,132	-
1970	455	1	456	78	2,791	179	1,114	251	844	5,178	0	6,520	-	15,800	-
1975	584	1	585	71	3,007	70	1,176	120	1,645	6,017	0	9,071	-	21,881	-
1980	144	(s)	144	70	1,985	31	591	223	2,431	5,262	0	10,423	-	25,345	-
1981	211	1	212	71	1,139	9	582	221	78	2,030	0	10,832	-	25,815	-
1982	379	1	379	72	1,441	18	507	213	89	2,268	0	11,290	-	27,116	-
1983	458	(s)	458	65	3,093	374	603	358	1,074	5,501	0	11,401	-	27,313	-
1984	427	(s)	427	72	3,340	245	484	341	717	5,126	0	11,916	-	27,735	-
1985	340	(s)	340	70	2,637	133	413	R 352	388	3,923	0	12,257	-	28,797	-
1986	353	1	354	65	1,839	137	459	487	243	3,166	0	12,933	-	29,749	-
1987	351	1	351	65	1,396	50	525	R 465	278	R 2,713	0	13,455	-	30,743	-
1988	409	1	410	72	1,338	78	598	453	241	R 2,707	0	15,715	-	35,529	-
1989	336	1	336	74	1,155	40	721	R 429	353	2,697	0	15,863	-	R 35,631	-
1990	356	1	357	67	1,071	35	617	R 561	63	R 2,346	e NA	16,118	-	R 35,251	-
1991	278	2	280	68	1,176	43	616	353	205	2,393	NA	17,016	-	R 37,036	-
1992	265	1	266	73	1,415	59	604	333	18	2,429	NA	16,690	-	R 35,649	-
1993	217	2	219	78	1,619	48	665	289	38	2,660	45	17,526	-	R 37,029	-
1994	229	1	231	76	1,536	67	653	260	41	2,556	43	17,985	-	R 37,527	-
1995	183	2	185	83	1,193	70	665	175	32	2,135	34	18,657	-	R 38,864	-
1996	227	3	230	87	978	69	791	159	14	2,011	29	18,825	-	39,182	-

  

Trillion Btu															
1960	33.0	0.1	33.1	20.7	17.3	1.9	2.4	0.9	8.8	31.2	0.0	9.9	94.9	24.6	119.6
1965	16.8	(s)	16.8	42.2	16.5	1.4	2.8	0.9	9.6	31.2	0.0	14.5	104.7	34.6	139.3
1970	10.5	(s)	10.5	78.0	16.3	1.0	4.2	1.3	5.3	28.1	0.0	22.2	138.9	53.9	192.8
1975	12.9	(s)	12.9	69.8	17.5	0.4	4.4	0.6	10.3	33.3	0.0	31.0	146.9	74.7	221.6
1980	3.1	(s)	3.2	69.3	11.6	0.2	2.2	1.2	15.3	30.4	0.0	35.6	138.4	86.5	224.8
1981	4.6	(s)	4.7	70.7	6.6	0.1	2.1	1.2	0.5	10.5	0.0	37.0	122.7	88.1	210.8
1982	8.4	(s)	8.4	73.1	8.4	0.1	1.8	1.1	0.6	12.0	0.0	38.5	132.0	92.5	224.5
1983	10.1	(s)	10.1	65.8	18.0	2.1	2.2	1.9	6.8	30.9	0.0	38.9	145.7	93.2	238.9
1984	9.4	(s)	9.4	72.3	19.5	1.4	1.7	1.8	4.5	28.9	0.0	40.7	151.3	94.6	245.9
1985	7.6	(s)	7.6	70.2	15.4	0.8	1.5	1.8	2.4	21.9	0.0	41.8	141.5	98.3	239.7
1986	7.9	(s)	7.9	65.4	10.7	0.8	1.7	2.6	1.5	17.2	0.0	44.1	134.7	101.5	236.2
1987	8.0	(s)	8.0	65.5	8.1	0.3	1.9	2.4	1.7	14.5	0.0	45.9	133.9	104.9	238.8
1988	9.2	(s)	9.3	72.8	7.8	0.4	2.2	2.4	1.5	14.3	0.0	53.6	150.0	121.2	271.2
1989	7.5	(s)	7.5	74.8	6.7	0.2	2.7	2.3	2.2	14.1	0.0	54.1	150.5	R 121.6	R 272.1
1990	8.0	(s)	8.0	68.4	6.2	0.2	2.2	2.9	0.4	12.0	e NA	55.0	143.5	R 120.3	R 263.8
1991	6.2	(s)	6.3	69.4	6.9	0.2	2.2	1.9	1.3	12.5	NA	58.1	146.2	R 126.4	R 272.5
1992	5.9	(s)	6.0	73.5	8.2	0.3	2.2	1.8	0.1	12.6	NA	56.9	149.1	121.6	270.7
1993	4.9	(s)	5.0	79.1	9.4	0.3	2.4	1.5	0.2	13.9	0.9	59.8	R 158.6	126.3	R 284.9
1994	5.2	(s)	5.2	76.8	8.9	0.4	2.4	1.4	0.3	13.3	0.9	61.4	R 157.6	128.0	R 285.6
1995	4.1	0.1	4.1	83.7	6.9	0.4	2.4	0.9	0.2	10.9	0.7	63.7	R 163.0	132.6	R 295.7
1996	5.0	0.1	5.1	88.4	5.7	0.4	2.9	0.8	0.1	9.9	0.6	64.2	168.2	133.7	301.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 104. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Indiana**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	16,702	102	3,277	9,976	202	1,716	489	2,813	11,229	9,955	39,656	(s)	0	0	8,226	-	20,461	-
1965	18,093	180	4,283	9,766	703	1,904	843	2,686	10,866	11,840	42,893	0	0	0	12,360	-	29,510	-
1970	19,394	268	6,101	10,180	115	1,455	974	2,238	8,391	14,109	43,562	0	0	0	17,952	-	43,504	-
1975	18,006	223	6,067	9,324	55	4,369	842	1,263	11,688	14,369	47,976	0	0	0	26,675	-	64,343	-
1980	16,599	245	5,165	5,053	136	3,930	1,096	752	11,984	12,920	41,036	0	0	0	30,730	-	74,725	-
1981	17,491	252	5,803	5,827	163	3,195	1,051	810	7,295	12,719	36,863	0	0	0	30,601	-	72,932	-
1982	13,092	224	5,400	5,343	230	3,297	959	611	4,565	10,985	31,390	0	0	0	28,347	-	68,084	-
1983	14,110	208	5,786	4,308	231	2,686	1,004	508	1,840	10,919	27,282	0	0	0	30,447	-	72,944	-
1984	14,516	221	6,001	4,652	233	1,888	1,070	965	1,228	11,745	R 27,782	0	0	0	27,411	-	63,803	-
1985	14,457	211	5,336	4,502	131	2,046	998	901	3,348	11,055	28,318	0	0	0	31,784	-	74,674	-
1986	12,788	183	6,063	5,372	201	2,935	975	831	4,016	9,896	30,290	0	0	0	30,950	-	71,194	-
1987	13,857	201	7,600	5,688	148	R 2,465	1,103	R 838	3,203	11,434	R 32,479	0	0	0	32,999	-	75,400	-
1988	15,139	219	6,941	4,265	115	2,620	1,063	R 803	2,735	12,971	R 31,513	0	0	0	33,474	-	75,677	-
1989	14,492	220	6,396	4,817	78	R 3,157	1,091	R 757	2,691	12,824	R 31,812	0	0	0	34,747	-	R 78,047	-
1990	13,496	228	8,552	4,555	54	R 5,300	1,123	R 625	3,620	13,831	R 37,660	f NA	f NA	f NA	35,743	-	R 78,175	-
1991	12,638	228	7,058	5,332	47	5,243	1,004	R 709	2,944	15,217	37,554	NA	NA	NA	35,787	-	R 77,891	-
1992	11,416	246	6,210	5,489	54	2,857	1,024	639	3,886	18,230	38,388	NA	NA	NA	37,439	-	R 79,967	-
1993	11,178	263	9,501	4,758	45	R 3,216	1,043	739	2,547	16,130	37,980	NA	NA	NA	39,415	-	R 83,277	-
1994	9,085	270	10,219	5,158	87	2,549	1,090	836	2,778	17,045	R 39,761	NA	NA	NA	40,763	-	R 85,053	-
1995	10,255	275	7,085	5,150	45	2,250	1,071	849	1,591	16,346	34,388	NA	NA	NA	41,777	-	R 87,023	-
1996	10,810	289	8,528	4,736	84	2,394	1,039	808	1,039	18,284	36,912	NA	NA	NA	43,203	-	89,920	-

**Trillion Btu**

1960	431.8	106.1	21.7	58.1	1.1	6.9	3.0	14.8	70.6	59.7	235.9	(s)	0.0	0.0	28.1	801.8	69.8	871.7
1965	466.3	179.8	28.4	56.9	4.0	7.6	5.1	14.1	68.3	70.2	254.7	0.0	0.0	0.0	42.2	942.9	100.7	1,043.6
1970	490.9	270.1	40.5	59.3	0.6	5.5	5.9	11.8	52.8	83.5	259.8	0.0	0.0	0.0	61.3	1,082.1	148.4	1,230.5
1975	461.6	221.1	40.3	54.3	0.3	16.2	5.1	6.6	73.5	85.1	281.4	0.0	0.0	0.0	91.0	1,055.2	219.5	1,274.7
1980	423.9	242.0	34.3	29.4	0.8	14.4	6.6	3.9	75.3	76.2	241.0	0.0	0.0	0.0	104.9	1,011.8	255.0	1,266.8
1981	446.1	250.4	38.5	33.9	0.9	11.6	6.4	4.3	45.9	74.7	216.2	0.0	0.0	0.0	104.4	1,017.1	248.8	1,266.0
1982	328.7	228.1	35.8	31.1	1.3	11.9	5.8	3.2	28.7	64.8	182.7	0.0	0.0	0.0	96.7	836.1	232.3	1,068.4
1983	355.5	209.0	38.4	25.1	1.3	9.7	6.1	2.7	11.6	64.7	159.5	0.0	0.0	0.0	103.9	827.8	248.9	1,076.7
1984	366.6	222.9	39.8	27.1	1.3	6.8	6.5	5.1	7.7	68.5	162.8	0.0	0.0	0.0	93.5	845.8	217.7	1,063.5
1985	365.1	212.8	35.4	26.2	0.7	7.4	6.1	4.7	21.1	65.1	166.7	0.0	0.0	0.0	108.4	853.0	254.8	1,107.8
1986	321.1	184.9	40.2	31.3	1.1	10.7	5.9	4.4	25.2	59.1	178.0	0.0	0.0	0.0	105.6	789.6	242.9	1,032.5
1987	349.5	203.2	50.4	33.1	0.8	9.0	6.7	4.4	20.1	67.6	192.2	0.0	0.0	0.0	112.6	857.6	257.3	1,114.8
1988	385.0	222.1	46.1	24.8	0.7	9.6	6.5	4.2	17.2	76.6	R 185.5	0.0	0.0	0.0	114.2	906.8	258.2	1,165.0
1989	368.1	223.5	42.4	28.1	0.4	11.6	6.6	4.0	16.9	75.3	185.4	0.0	0.0	0.0	118.6	895.5	R 266.3	R 1,161.8
1990	342.8	232.3	56.7	26.5	0.3	19.2	6.8	3.3	22.8	81.2	216.8	f 0.0	f 6.3	f 0.0	122.0	f 920.1	R 266.7	R f 1,186.9
1991	321.6	231.0	46.8	31.1	0.3	18.9	6.1	3.7	18.5	88.6	214.0	0.0	6.0	0.0	122.1	894.8	R 265.8	R 1,160.5
1992	289.5	248.3	41.2	32.0	0.3	10.4	6.2	3.4	24.4	105.8	223.6	0.0	6.2	0.0	127.7	895.3	R 272.8	R 1,168.2
1993	281.5	266.7	63.1	27.7	0.3	11.6	6.3	3.9	16.0	93.5	222.4	0.0	6.2	0.0	134.5	911.3	R 284.1	R 1,195.4
1994	225.8	273.6	67.8	30.0	0.5	9.3	6.6	4.4	17.5	98.8	234.9	0.0	R 9.4	0.0	139.1	R 882.8	R 290.2	R 1,173.0
1995	258.5	278.8	47.0	30.0	0.3	8.2	6.5	4.5	10.0	94.8	201.2	0.0	R 9.6	0.0	142.5	R 890.6	R 296.9	R 1,187.5
1996	269.3	292.4	56.6	27.6	0.5	8.6	6.3	4.2	6.5	105.9	216.3	0.0	10.4	0.0	147.4	935.9	306.8	1,242.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 105. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Indiana**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	294	5	453	4,097	1,316	47	692	40,615	350	47,570	0	1	-	2	-
1965	60	8	1,110	5,124	1,848	52	615	45,194	583	54,526	0	0	-	0	-
1970	31	11	367	8,123	2,558	97	610	56,417	330	68,501	0	0	-	0	-
1975	3	10	217	11,200	2,619	125	763	63,256	331	78,510	0	0	-	0	-
1980	0	9	260	17,629	2,151	88	692	59,217	200	80,236	0	0	-	0	-
1981	0	9	188	17,134	2,848	179	664	60,125	189	81,326	0	0	-	0	-
1982	0	9	129	17,320	4,361	151	605	55,652	26	78,244	0	0	-	0	-
1983	0	6	151	17,538	4,395	163	634	56,576	91	79,547	0	0	-	0	-
1984	0	6	250	20,236	15,451	R 218	676	56,751	164	93,747	0	0	-	0	-
1985	0	5	393	20,665	15,445	148	630	R 56,684	31	R 93,996	0	0	-	0	-
1986	0	6	434	21,390	18,611	146	616	R 58,675	49	R 99,921	0	0	-	0	-
1987	0	6	378	21,451	19,141	R 131	696	R 62,014	113	R 103,923	0	0	-	0	-
1988	0	9	432	19,970	16,546	149	671	R 62,885	154	R 100,807	0	0	-	0	-
1989	0	8	288	24,466	17,557	R 152	689	R 60,515	212	R 103,878	0	0	-	0	-
1990	0	8	302	24,950	17,889	R 153	709	R 60,744	197	R 104,944	R e 70,032	11	-	23	-
1991	0	5	302	23,622	17,228	159	634	R 60,240	90	R 102,275	R 55,513	11	-	23	-
1992	0	5	252	22,893	16,001	162	646	R 61,003	208	R 101,165	R 67,470	11	-	23	-
1993	0	7	201	24,229	16,366	R 128	658	R 64,502	340	R 106,423	R 75,295	11	-	24	-
1994	0	7	149	26,895	17,299	234	688	R 65,742	226	R 111,233	R 73,435	11	-	24	-
1995	0	8	144	17,059	17,344	104	676	R 69,076	238	R 114,642	R 91,446	11	-	24	-
1996	0	13	171	28,145	12,576	112	656	68,611	298	110,569	46,662	12	-	26	-

**Trillion Btu**

1960	7.1	5.2	2.3	23.9	7.1	0.2	4.2	213.3	2.2	253.2	0.0	(s)	265.5	(s)	265.5
1965	1.4	8.0	5.6	29.8	10.2	0.2	3.7	237.4	3.7	290.6	0.0	0.0	300.1	0.0	300.1
1970	0.7	11.2	1.9	47.3	14.2	0.4	3.7	296.4	2.1	365.9	0.0	0.0	377.8	0.0	377.8
1975	0.1	9.5	1.1	65.2	14.6	0.5	4.6	332.3	2.1	420.4	0.0	0.0	430.0	0.0	430.0
1980	0.0	8.8	1.3	102.7	12.0	0.3	4.2	311.1	1.3	432.8	0.0	0.0	441.6	0.0	441.6
1981	0.0	8.6	0.9	99.8	15.9	0.7	4.0	315.8	1.2	438.4	0.0	0.0	446.9	0.0	446.9
1982	0.0	8.9	0.6	100.9	24.5	0.5	3.7	292.3	0.2	422.7	0.0	0.0	431.6	0.0	431.6
1983	0.0	5.5	0.8	102.2	24.7	0.6	3.8	297.2	0.6	429.8	0.0	0.0	435.4	0.0	435.4
1984	0.0	6.1	1.3	117.9	87.4	0.8	4.1	298.1	1.0	510.5	0.0	0.0	516.6	0.0	516.6
1985	0.0	4.9	2.0	120.4	87.4	0.5	3.8	R 297.8	0.2	512.0	0.0	R 516.9	0.0	R 516.9	
1986	0.0	5.9	2.2	124.6	105.3	0.5	3.7	308.2	0.3	544.9	0.0	0.0	550.8	0.0	550.8
1987	0.0	6.0	1.9	125.0	108.3	0.5	4.2	R 325.8	0.7	R 566.3	0.0	0.0	R 572.3	0.0	R 572.3
1988	0.0	9.4	2.2	116.3	93.6	0.5	4.1	R 330.3	1.0	R 548.0	0.0	0.0	R 557.4	0.0	R 557.4
1989	0.0	8.6	1.5	142.5	99.3	0.6	4.2	R 317.9	1.3	R 567.3	0.0	0.0	R 575.9	0.0	R 575.9
1990	0.0	8.6	1.5	145.3	101.3	0.6	4.3	R 319.1	1.2	R 573.3	R e 5.4	(s)	R e 582.0	0.1	R e 582.0
1991	0.0	4.7	1.5	137.6	97.5	0.6	3.8	R 316.4	0.6	R 558.0	R 4.2	(s)	R 562.8	0.1	R 562.9
1992	0.0	4.8	1.3	133.4	90.5	0.6	3.9	R 320.4	1.3	R 551.4	R 5.2	(s)	R 556.3	0.1	556.4
1993	0.0	6.9	1.0	141.1	92.7	0.5	4.0	R 338.8	2.1	R 580.2	R 5.8	(s)	R 587.2	0.1	R 587.3
1994	0.0	7.0	0.8	156.7	98.0	0.9	4.2	R 345.3	1.4	R 607.2	R 5.6	(s)	R 614.3	0.1	R 614.3
1995	0.0	7.8	0.7	157.6	98.3	0.4	4.1	362.9	1.5	625.5	R 7.0	(s)	633.3	0.1	633.4
1996	0.0	12.7	0.9	163.9	71.3	0.4	4.0	360.4	1.9	602.8	3.6	(s)	615.5	0.1	615.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 106. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Indiana**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	13,483	0	13,483	9	103	130	0	232	0	100	0	0	0	--
1965	18,113	0	18,113	13	63	80	0	142	0	94	0	0	0	--
1970	22,648	0	22,648	30	204	257	255	716	0	495	0	0	0	--
1975	27,301	0	27,301	11	1,344	477	0	1,821	0	444	0	0	0	--
1980	33,664	0	33,664	2	0	730	0	730	0	474	0	0	0	--
1981	32,219	0	32,219	5	0	743	0	743	0	509	0	0	0	--
1982	30,566	0	30,566	3	0	525	0	525	0	428	0	0	0	--
1983	33,525	0	33,525	3	0	356	0	356	0	418	0	0	0	--
1984	38,398	0	38,398	1	0	306	0	306	0	436	0	0	0	--
1985	38,310	0	38,310	1	0	414	0	414	0	426	0	0	0	--
1986	37,309	0	37,309	1	0	323	239	562	0	506	0	0	0	--
1987	36,987	0	36,987	1	0	352	279	632	0	507	0	0	0	--
1988	40,060	0	40,060	3	0	379	324	703	0	441	0	0	0	--
1989	42,378	0	42,378	4	0	370	440	810	0	450	0	0	0	--
1990	47,654	0	47,654	7	0	423	956	1,379	0	441	0	0	0	--
1991	47,720	0	47,720	10	0	351	346	698	0	399	0	0	0	--
1992	46,937	0	46,937	8	0	264	301	565	0	562	0	0	0	--
1993	48,836	0	48,836	6	0	393	0	393	0	448	0	0	0	--
1994	50,554	0	50,554	9	0	412	0	412	0	407	0	0	0	--
1995	52,089	0	52,089	8	0	342	82	424	0	467	0	0	0	--
1996	52,855	0	52,855	4	0	353	298	652	0	448	0	0	0	--

**Trillion Btu**

1960	305.2	0.0	305.2	9.1	0.6	0.8	0.0	1.4	0.0	1.1	0.0	0.0	0.0	316.8
1965	406.9	0.0	406.9	13.3	0.4	0.5	0.0	0.9	0.0	1.0	0.0	0.0	0.0	422.0
1970	498.9	0.0	498.9	29.7	1.3	1.5	1.5	4.3	0.0	5.2	0.0	0.0	0.0	538.1
1975	579.6	0.0	579.6	11.0	8.5	2.8	0.0	11.2	0.0	4.6	0.0	0.0	0.0	606.4
1980	728.2	0.0	728.2	1.9	0.0	4.3	0.0	4.3	0.0	4.9	0.0	0.0	0.0	739.3
1981	697.3	0.0	697.3	5.3	0.0	4.3	0.0	4.3	0.0	5.3	0.0	0.0	0.0	712.3
1982	665.6	0.0	665.6	2.7	0.0	3.1	0.0	3.1	0.0	4.5	0.0	0.0	0.0	675.8
1983	734.1	0.0	734.1	2.9	0.0	2.1	0.0	2.1	0.0	4.4	0.0	0.0	0.0	743.5
1984	828.4	0.0	828.4	1.5	0.0	1.8	0.0	1.8	0.0	4.5	0.0	0.0	0.0	836.2
1985	816.5	0.0	816.5	1.1	0.0	2.4	0.0	2.4	0.0	4.5	0.0	0.0	0.0	824.5
1986	796.9	0.0	796.9	1.1	0.0	1.9	1.4	3.3	0.0	5.3	0.0	0.0	0.0	806.6
1987	804.7	0.0	804.7	1.3	0.0	2.1	1.7	3.7	0.0	5.3	0.0	0.0	0.0	815.0
1988	868.0	0.0	868.0	3.5	0.0	2.2	2.0	4.2	0.0	4.6	0.0	0.0	0.0	880.2
1989	906.8	0.0	906.8	4.1	0.0	2.2	2.7	4.8	0.0	R 4.7	0.0	0.0	0.0	920.3
1990	1,006.6	0.0	1,006.6	6.6	0.0	2.5	5.8	8.2	0.0	R 4.6	0.0	0.0	0.0	1,026.1
1991	1,008.8	0.0	1,008.8	10.1	0.0	2.0	2.1	4.1	0.0	R 4.2	0.0	0.0	0.0	1,027.1
1992	997.7	0.0	997.7	7.8	0.0	1.5	1.8	3.4	0.0	5.8	0.0	0.0	0.0	1,014.7
1993	1,029.4	0.0	1,029.4	5.7	0.0	2.3	0.0	2.3	0.0	4.6	0.0	0.0	0.0	1,042.0
1994	1,065.1	0.0	1,065.1	9.2	0.0	2.4	0.0	2.4	0.0	4.2	0.0	0.0	0.0	1,080.9
1995	1,077.0	0.0	1,077.0	8.5	0.0	2.0	0.5	2.5	0.0	4.8	0.0	0.0	0.0	1,092.8
1996	1,094.8	0.0	1,094.8	4.4	0.0	2.1	1.8	3.9	0.0	4.6	0.0	0.0	0.0	1,107.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 107. Energy Consumption Estimates by Source, Selected Years 1960-1996, Iowa**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	5,257	187	2,579	366	11,163	195	2,587	5,017	713	29,463	1,071	44	53,197	0	881	25	0	-2,370	-	
1965	5,722	248	2,569	358	11,068	232	1,523	7,448	698	30,792	531	542	55,760	0	928	30	0	3,241	-	
1970	6,166	349	2,914	256	13,677	725	490	11,038	700	35,701	401	627	66,528	0	935	38	0	1,618	-	
1975	6,407	346	2,294	191	14,553	835	214	13,645	655	39,042	608	986	73,024	2,291	879	40	0	13,729	-	
1980	12,340	270	1,699	184	15,930	813	171	11,167	714	35,394	415	5,236	71,721	2,563	946	29	0	13,041	-	
1981	13,483	253	1,972	161	14,513	717	374	9,891	684	34,274	98	2,381	65,066	2,204	982	17	0	14,484	-	
1982	13,033	237	1,915	111	16,235	635	450	11,953	624	33,030	334	1,850	67,137	2,269	918	23	0	17,193	-	
1983	13,540	221	1,603	109	14,099	591	89	12,026	653	32,386	207	1,623	63,387	2,309	920	45	0	18,752	-	
1984	13,624	235	1,841	89	15,360	615	180	7,336	697	32,223	140	1,890	60,371	2,700	918	45	0	9,868	-	
1985	14,342	226	2,023	83	15,490	592	155	8,507	649	R 31,465	182	1,778	R 60,925	1,927	2,048	60	0	6,022	-	
1986	13,862	207	2,038	151	15,962	595	115	8,774	635	R 31,355	508	877	R 61,009	2,993	953	70	0	8,942	-	
1987	15,191	203	1,788	110	15,762	779	110	6,098	718	R 31,687	117	905	R 58,075	2,523	971	67	0	6,760	-	
1988	16,114	239	2,213	145	15,946	713	107	6,612	692	R 32,509	258	868	R 60,063	3,163	699	57	0	4,806	-	
1989	17,126	226	1,710	111	14,961	750	71	7,174	710	R 32,574	183	847	R 59,092	3,139	673	24	0	R 3,816	-	
1990	17,929	218	1,537	99	15,223	891	81	6,355	731	R 31,684	126	937	R 57,663	3,012	i NA	i NA	i NA	R 592	-	
1991	18,741	233	1,563	82	14,605	892	51	7,255	654	R 32,471	96	676	R 58,346	4,147	NA	NA	NA	R -1,876	-	
1992	17,992	231	1,406	75	16,370	803	42	8,978	666	R 31,713	107	748	R 60,908	3,405	NA	NA	NA	R 421	-	
1993	19,188	248	1,354	70	16,970	720	71	15,651	679	R 32,703	164	756	R 69,139	3,235	NA	NA	NA	R 1,659	-	
1994	19,341	248	1,964	69	18,531	897	60	15,663	709	R 33,887	182	688	R 72,630	4,107	NA	NA	NA	R -529	-	
1995	20,636	262	1,636	72	18,879	1,046	69	16,989	697	34,418	94	640	74,540	3,730	NA	NA	NA	R -744	-	
1996	21,171	273	2,052	71	20,276	819	54	10,319	676	35,909	96	684	70,957	3,924	NA	NA	NA	901	-	
Trillion Btu																				
1960	115.9	193.7	17.1	1.8	65.0	1.0	14.7	20.1	4.3	154.8	6.7	0.2	285.9	0.0	9.5	0.3	0.0	-8.1	597.2	
1965	126.6	250.0	17.0	1.8	64.5	1.3	8.6	29.9	4.2	161.7	3.3	2.9	295.3	0.0	9.7	0.3	0.0	11.1	693.0	
1970	130.9	351.8	19.3	1.3	79.7	4.1	2.8	41.7	4.2	187.5	2.5	3.3	346.4	0.0	9.8	0.4	0.0	5.5	844.8	
1975	131.6	348.6	15.2	1.0	84.8	4.7	1.2	50.7	4.0	205.1	3.8	5.4	375.8	25.2	9.1	0.4	0.0	46.8	937.6	
1980	234.4	270.4	11.3	0.9	92.8	4.6	1.0	41.0	4.3	185.9	2.6	28.7	373.1	28.0	9.8	0.3	0.0	44.5	960.5	
1981	252.1	254.0	13.1	0.8	84.5	4.0	2.1	36.0	4.2	180.0	0.6	13.0	338.4	24.3	10.3	0.2	0.0	49.4	928.7	
1982	243.9	239.0	12.7	0.6	94.6	3.6	2.6	43.2	3.8	173.5	2.1	10.1	346.6	25.1	9.6	0.2	0.0	58.7	923.1	
1983	253.7	223.6	10.6	0.6	82.1	3.3	0.5	43.5	4.0	170.1	1.3	9.0	324.9	25.2	9.7	0.5	0.0	64.0	901.5	
1984	251.5	238.4	12.2	0.4	89.5	3.4	1.0	26.4	4.2	169.3	0.9	10.1	317.5	29.3	9.6	0.5	0.0	33.7	880.4	
1985	268.8	228.4	13.4	0.4	90.2	3.3	0.9	30.7	3.9	R 165.3	1.1	9.6	318.9	20.8	21.4	0.6	0.0	20.5	879.5	
1986	262.1	209.0	13.5	0.8	93.0	3.3	0.7	31.9	3.9	R 164.7	3.2	4.7	319.7	32.3	10.0	0.7	0.0	30.5	864.3	
1987	287.3	204.7	11.9	0.6	91.8	4.4	0.6	22.3	4.4	R 166.5	0.7	4.9	R 308.0	27.2	10.1	0.7	0.0	23.1	R 861.1	
1988	306.1	240.8	14.7	0.7	92.9	4.0	0.6	24.1	4.2	R 170.8	1.6	4.7	R 318.3	34.0	7.2	0.6	0.0	16.4	R 923.5	
1989	319.0	228.2	11.3	0.6	87.1	4.2	0.4	26.4	4.3	R 171.1	1.2	4.6	R 311.2	33.7	R 7.0	0.2	0.0	R 13.0	R 912.4	
1990	331.7	219.7	10.2	0.5	88.7	5.0	0.5	23.0	4.4	R 166.4	0.8	5.1	R 304.6	32.2	R i 9.1	R i 13.5	i (s)	R 2.0	R i 907.9	
1991	346.4	235.0	10.4	0.4	85.1	5.0	0.3	26.2	4.0	R 170.6	0.6	3.6	R 306.2	44.5	R 9.4	R 12.8	(s)	R -6.4	R 944.1	
1992	326.7	231.9	9.3	0.4	95.4	4.5	0.2	32.5	4.0	166.6	0.7	4.0	R 317.7	36.4	10.3	R 14.0	(s)	1.4	R 933.8	
1993	339.9	248.8	9.0	0.4	98.9	4.1	0.4	56.4	4.1	R 171.8	1.0	4.0	R 350.1	34.6	7.7	R 13.6	(s)	R 5.7	R 995.0	
1994	346.9	250.3	13.0	0.3	107.9	5.1	0.3	56.9	4.3	R 178.0	1.1	3.7	R 370.8	43.9	11.0	R 15.3	(s)	R -1.8	R 1,030.6	
1995	368.8	263.6	10.9	0.4	110.0	5.9	0.4	61.5	4.2	180.8	0.6	3.4	378.1	39.8	10.3	R 15.8	(s)	-2.5	R 1,068.2	
1996	380.5	274.3	13.6	0.4	118.1	4.6	0.3	37.3	4.1	188.6	0.6	3.7	371.3	41.7	9.7	13.8	(s)	3.1	1,090.7	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 108. Residential Energy Consumption Estimates, Selected Years 1960-1996, Iowa**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	319	0	319	58	2,610	2,301	3,312	8,223	0	0	3,720	—	9,253	—
1965	171	0	171	77	2,347	1,327	4,741	8,416	0	0	5,044	—	12,042	—
1970	62	0	62	96	2,232	325	6,826	9,383	0	0	6,480	—	15,703	—
1975	49	0	49	94	1,802	138	6,799	8,740	0	0	8,338	—	20,112	—
1980	32	0	32	85	2,388	47	3,890	6,325	0	0	10,038	—	24,409	—
1981	69	1	70	77	2,011	235	3,601	5,848	0	0	9,852	—	23,479	—
1982	61	3	64	85	2,110	299	3,768	6,177	0	0	10,198	—	24,494	—
1983	66	0	66	77	1,014	54	4,482	5,550	0	0	11,064	—	26,507	—
1984	74	1	76	80	1,095	133	2,945	4,173	0	0	9,870	—	22,974	—
1985	97	1	98	79	1,435	115	2,996	4,546	0	0	9,851	—	23,144	—
1986	89	1	89	74	1,388	75	3,267	4,730	0	0	10,008	—	23,021	—
1987	117	1	119	65	1,218	57	2,523	3,799	0	0	10,045	—	22,952	—
1988	130	9	138	76	1,116	78	3,073	4,266	0	0	10,677	—	24,138	—
1989	60	2	63	77	1,065	41	3,372	4,479	0	0	10,394	—	R 23,348	—
1990	85	1	86	71	797	24	2,742	3,563	e 348	e 2	10,513	—	R 22,994	—
1991	78	(s)	78	79	887	34	3,359	4,279	366	2	11,159	—	R 24,288	—
1992	22	1	23	75	779	20	3,401	4,199	386	2	10,290	—	R 21,980	—
1993	23	3	26	83	821	33	3,955	4,809	319	2	11,103	—	R 23,459	—
1994	13	2	15	78	973	19	3,925	4,917	313	2	11,062	—	R 23,080	—
1995	31	R 0	R 31	82	844	25	3,964	4,832	348	3	11,640	—	R 24,246	—
1996	78	0	78	88	785	30	4,717	5,532	347	3	11,537	—	24,013	—
<b>Trillion Btu</b>														
1960	6.8	0.0	6.8	60.5	15.2	13.0	13.3	41.5	0.0	0.0	12.7	121.5	31.6	153.1
1965	3.6	0.0	3.6	78.0	13.7	7.5	19.0	40.2	0.0	0.0	17.2	139.1	41.1	180.2
1970	1.3	0.0	1.3	97.1	13.0	1.8	25.8	40.6	0.0	0.0	22.1	161.1	53.6	214.7
1975	0.9	0.0	0.9	95.1	10.5	0.8	25.3	36.5	0.0	0.0	28.4	161.0	68.6	229.6
1980	0.6	0.0	0.6	85.2	13.9	0.3	14.3	28.5	0.0	0.0	34.2	148.6	83.3	231.8
1981	1.4	(s)	1.4	77.2	11.7	1.3	13.1	26.2	0.0	0.0	33.6	138.5	80.1	218.6
1982	1.3	0.1	1.3	85.5	12.3	1.7	13.6	27.6	0.0	0.0	34.8	149.2	83.6	232.8
1983	1.4	0.0	1.4	78.4	5.9	0.3	16.2	22.4	0.0	0.0	37.8	140.0	90.4	230.4
1984	1.6	(s)	1.6	80.9	6.4	0.8	10.6	17.7	0.0	0.0	33.7	133.9	78.4	212.3
1985	2.1	(s)	2.1	79.6	8.4	0.7	10.8	19.8	0.0	0.0	33.6	135.1	79.0	214.1
1986	1.9	(s)	1.9	74.9	8.1	0.4	11.9	20.4	0.0	0.0	34.1	131.4	78.5	209.9
1987	2.4	(s)	2.5	65.8	7.1	0.3	9.2	16.7	0.0	0.0	34.3	119.1	78.3	197.5
1988	2.7	0.2	2.9	76.6	6.5	0.4	11.2	18.2	0.0	0.0	36.4	134.1	82.4	216.5
1989	1.4	0.1	1.4	78.3	6.2	0.2	12.4	18.9	0.0	0.0	35.5	134.0	R 79.7	R 213.7
1990	2.0	(s)	2.1	71.9	4.6	0.1	9.9	14.7	e 7.0	e (s)	35.9	e 131.5	R 78.5	R e 210.0
1991	1.9	(s)	1.9	79.4	5.2	0.2	12.1	17.5	7.3	(s)	38.1	144.2	R 82.9	R 227.1
1992	0.5	(s)	0.5	75.2	4.5	0.1	12.3	17.0	7.7	(s)	35.1	135.5	75.0	210.5
1993	0.5	0.1	0.6	83.7	4.8	0.2	14.3	19.2	6.4	(s)	37.9	147.8	80.0	227.8
1994	0.3	0.1	0.4	78.9	5.7	0.1	14.3	20.0	6.3	(s)	37.7	143.3	R 78.8	R 222.1
1995	0.8	R 0.0	0.8	82.6	4.9	0.1	14.4	19.4	7.0	(s)	39.7	149.5	82.7	232.2
1996	1.9	0.0	1.9	88.6	4.6	0.2	17.0	21.8	6.9	(s)	39.4	158.6	81.9	240.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 109. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Iowa**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	592	0	592	28	1,046	94	584	178	232	2,135	0	1,812	-	4,506	-
1965	318	0	318	39	941	54	837	194	135	2,161	0	2,797	-	6,679	-
1970	116	0	116	57	895	13	1,205	271	65	2,449	0	3,655	-	8,857	-
1975	90	0	90	67	722	6	1,200	323	115	2,366	0	5,121	-	12,353	-
1980	59	0	59	51	751	5	686	350	79	1,871	0	5,502	-	13,379	-
1981	128	1	129	47	623	14	636	381	28	1,681	0	6,780	-	16,158	-
1982	113	2	115	52	647	36	665	381	28	1,757	0	6,850	-	16,454	-
1983	123	0	123	47	1,223	4	791	241	4	2,263	0	7,182	-	17,207	-
1984	138	1	139	48	1,321	5	520	204	3	2,052	0	6,285	-	14,628	-
1985	179	1	180	48	1,124	7	529	237	1	1,898	0	6,306	-	14,816	-
1986	165	(s)	165	44	681	2	577	273	39	1,571	0	6,551	-	15,068	-
1987	218	1	219	38	759	6	445	R 266	18	R 1,494	0	6,717	-	15,347	-
1988	241	6	247	45	685	5	542	R 339	20	R 1,591	0	7,136	-	16,133	-
1989	112	2	113	46	490	6	595	R 233	33	1,357	0	7,301	-	R 16,399	-
1990	158	1	159	44	495	38	484	R 142	31	R 1,190	e NA	7,532	-	R 16,473	-
1991	145	(s)	145	47	563	3	593	727	9	R 1,895	NA	7,938	-	R 17,278	-
1992	40	1	41	46	488	4	600	645	37	1,775	NA	7,783	-	R 16,625	-
1993	42	2	44	50	356	7	698	637	5	1,703	10	8,536	-	R 18,034	-
1994	24	1	25	48	391	13	693	35	1	1,132	11	8,753	-	R 18,264	-
1995	58	R 0	58	50	449	3	700	35	0	1,186	13	8,890	-	R 18,519	-
1996	144	0	144	55	361	4	832	244	1	1,442	11	8,673	-	18,052	-

  

Trillion Btu															
1960	12.6	0.0	12.6	28.8	6.1	0.5	2.3	0.9	1.5	11.4	0.0	6.2	59.0	15.4	74.4
1965	6.7	0.0	6.7	39.1	5.5	0.3	3.4	1.0	0.9	11.0	0.0	9.5	66.4	22.8	89.2
1970	2.4	0.0	2.4	57.8	5.2	0.1	4.6	1.4	0.4	11.7	0.0	12.5	84.3	30.2	114.5
1975	1.6	0.0	1.6	67.5	4.2	(s)	4.5	1.7	0.7	11.1	0.0	17.5	97.7	42.1	139.8
1980	1.2	0.0	1.2	50.7	4.4	(s)	2.5	1.8	0.5	9.3	0.0	18.8	79.9	45.6	125.6
1981	2.6	(s)	2.7	46.9	3.6	0.1	2.3	2.0	0.2	8.2	0.0	23.1	80.9	55.1	136.1
1982	2.3	(s)	2.4	51.9	3.8	0.2	2.4	2.0	0.2	8.6	0.0	23.4	86.2	56.1	142.4
1983	2.7	0.0	2.7	47.5	7.1	(s)	2.9	1.3	(s)	11.3	0.0	24.5	86.0	58.7	144.7
1984	2.9	(s)	2.9	48.8	7.7	(s)	1.9	1.1	(s)	10.7	0.0	21.4	83.8	49.9	133.8
1985	3.8	(s)	3.9	48.2	6.5	(s)	1.9	1.2	(s)	9.7	0.0	21.5	83.3	50.6	133.8
1986	3.5	(s)	3.5	44.1	4.0	(s)	2.1	1.4	0.2	7.8	0.0	22.4	77.7	51.4	129.2
1987	4.5	(s)	4.5	38.4	4.4	(s)	1.6	1.4	0.1	7.6	0.0	22.9	73.4	52.4	R 125.8
1988	4.9	0.2	5.1	45.3	4.0	(s)	2.0	1.8	0.1	7.9	0.0	24.3	82.6	55.0	R 137.6
1989	2.5	(s)	2.6	46.7	2.9	(s)	2.2	1.2	0.2	6.5	0.0	24.9	80.7	R 56.0	R 136.6
1990	3.8	(s)	3.8	44.3	2.9	0.2	1.8	0.7	0.2	5.8	e NA	25.7	79.6	56.2	R 135.8
1991	3.5	(s)	3.5	47.0	3.3	(s)	2.1	3.8	0.1	9.3	NA	27.1	86.9	R 59.0	145.8
1992	0.9	(s)	1.0	46.3	2.8	(s)	2.2	3.4	0.2	8.7	NA	26.6	82.5	56.7	139.2
1993	1.0	0.1	1.0	50.5	2.1	(s)	2.5	3.3	(s)	8.0	0.2	29.1	R 88.9	61.5	R 150.4
1994	0.6	(s)	0.6	48.3	2.3	0.1	2.5	0.2	(s)	5.1	0.2	29.9	R 84.1	62.3	R 146.4
1995	1.4	R 0.0	1.4	50.6	2.6	(s)	2.5	0.2	0.0	5.3	0.3	30.3	R 87.9	63.2	R 151.1
1996	3.5	0.0	3.5	54.9	2.1	(s)	3.0	1.3	(s)	6.4	0.2	29.6	94.7	61.6	156.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 110. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Iowa

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,193	43	2,579	5,536	192	1,098	196	5,797	573	44	16,016	2	0	0	2,676	-	6,657	-
1965	2,464	68	2,569	5,607	142	1,815	218	5,373	354	542	16,620	2	0	0	3,719	-	8,879	-
1970	1,955	99	2,914	5,884	152	2,949	220	5,391	261	627	18,398	1	0	0	5,338	-	12,936	-
1975	1,333	121	2,294	4,670	70	5,593	155	3,791	279	986	17,838	1	0	0	6,626	-	15,984	-
1980	1,505	115	1,699	4,698	119	6,557	192	2,612	273	5,236	21,385	1	0	0	9,318	-	22,658	-
1981	1,476	115	1,972	4,310	125	5,551	184	2,902	57	2,381	17,482	1	0	0	9,750	-	23,238	-
1982	1,420	89	1,915	4,589	115	7,417	168	2,162	281	1,850	18,496	1	0	0	9,321	-	22,386	-
1983	1,430	85	1,603	3,816	31	6,630	176	928	185	1,623	14,991	1	0	0	9,507	-	22,777	-
1984	1,443	93	1,841	4,121	42	3,728	187	1,740	123	1,890	13,673	1	0	0	9,527	-	22,176	-
1985	1,572	87	2,023	4,788	33	4,893	175	1,703	179	1,778	15,571	1	0	0	9,520	-	22,367	-
1986	1,563	80	2,038	5,849	39	4,789	171	1,508	469	877	15,739	1	0	0	9,797	-	22,535	-
1987	1,857	88	1,788	4,957	47	3,082	193	1,490	92	905	12,553	1	0	0	10,264	-	23,453	-
1988	1,808	102	2,213	5,136	24	2,951	186	1,407	238	868	13,024	1	0	0	11,025	-	24,924	-
1989	2,351	89	1,710	4,110	24	3,156	191	1,304	150	847	11,492	1	0	0	11,017	-	24,746	-
1990	2,353	90	1,537	4,137	19	3,087	196	1,072	95	937	11,080	f NA	f NA	f NA	11,392	-	24,917	-
1991	2,672	97	1,563	4,604	15	3,255	176	1,160	87	676	11,536	NA	NA	NA	11,684	-	25,431	-
1992	2,571	101	1,406	6,221	18	4,932	179	1,052	70	748	14,625	NA	NA	NA	12,134	-	25,918	-
1993	2,494	103	1,354	6,150	31	10,944	182	799	160	756	20,378	NA	NA	NA	12,465	-	26,336	-
1994	2,735	109	1,964	6,680	28	10,894	191	1,108	181	688	21,734	NA	NA	NA	13,224	-	27,593	-
1995	2,761	115	1,636	6,091	41	12,267	187	1,038	94	640	21,994	NA	NA	NA	13,771	-	28,686	-
1996	3,085	114	2,052	6,334	20	4,678	182	1,105	95	684	15,149	NA	NA	NA	14,789	-	30,780	-

Trillion Btu

1960	51.7	44.9	17.1	32.2	1.1	4.4	1.2	30.5	3.6	0.2	90.3	(s)	0.0	0.0	9.1	196.0	22.7	218.7
1965	57.5	68.9	17.0	32.7	0.8	7.3	1.3	28.2	2.2	2.9	92.4	(s)	0.0	0.0	12.7	231.6	30.3	261.8
1970	43.0	99.9	19.3	34.3	0.9	11.1	1.3	28.3	1.6	3.3	100.2	(s)	0.0	0.0	18.2	261.3	44.1	305.4
1975	28.4	122.5	15.2	27.2	0.4	20.8	0.9	19.9	1.8	5.4	91.6	(s)	0.0	0.0	22.6	265.1	54.5	319.6
1980	32.4	114.9	11.3	27.4	0.7	24.1	1.2	13.7	1.7	28.7	108.7	(s)	0.0	0.0	31.8	287.7	77.3	365.0
1981	32.1	115.5	13.1	25.1	0.7	20.2	1.1	15.2	0.4	13.0	88.8	(s)	0.0	0.0	33.3	269.7	79.3	349.0
1982	31.2	90.1	12.7	26.7	0.7	26.8	1.0	11.4	1.8	10.1	91.1	(s)	0.0	0.0	31.8	244.2	76.4	320.6
1983	31.6	86.3	10.6	22.2	0.2	24.0	1.1	4.9	1.2	9.0	73.1	(s)	0.0	0.0	32.4	223.4	77.7	301.1
1984	32.3	94.7	12.2	24.0	0.2	13.4	1.1	9.1	0.8	10.1	71.1	(s)	0.0	0.0	32.5	230.7	75.7	306.3
1985	35.6	88.0	13.4	27.9	0.2	17.6	1.1	8.9	1.1	9.6	79.9	(s)	0.0	0.0	32.5	235.9	76.3	312.2
1986	35.5	81.2	13.5	34.1	0.2	17.4	1.0	7.9	3.0	4.7	81.9	(s)	0.0	0.0	33.4	232.0	76.9	308.8
1987	42.5	89.1	11.9	28.9	0.3	11.3	1.2	7.8	0.6	4.9	66.7	(s)	0.0	0.0	35.0	233.3	80.0	313.3
1988	41.7	102.7	14.7	29.9	0.1	10.8	1.1	7.4	1.5	4.7	70.2	(s)	0.0	0.0	37.6	252.3	85.0	337.3
1989	54.0	90.3	11.3	23.9	0.1	11.6	1.2	6.9	0.9	4.6	60.6	(s)	0.0	0.0	37.6	242.4	84.4	326.9
1990	53.1	90.9	10.2	24.1	0.1	11.2	1.2	5.6	0.6	5.1	58.1	f 0.2	f 1.5	f 0.0	38.9	f 242.6	85.0	327.7
1991	59.3	98.2	10.4	26.8	0.1	11.8	1.1	6.1	0.5	3.6	60.4	0.2	1.4	0.0	39.9	259.4	86.8	346.1
1992	52.9	101.2	9.3	36.2	0.1	17.9	1.1	5.5	0.4	4.0	74.6	0.2	1.5	0.0	41.4	271.8	88.4	360.2
1993	50.3	102.9	9.0	35.8	0.2	39.5	1.1	4.2	1.0	4.0	94.8	0.1	1.6	0.0	42.5	292.3	89.9	382.1
1994	55.0	109.6	13.0	38.9	0.2	39.6	1.2	5.8	1.1	3.7	103.5	0.2	R 2.7	0.0	45.1	R 316.1	94.1	R 410.2
1995	57.9	115.7	10.9	35.5	0.2	44.4	1.1	5.5	0.6	3.4	101.6	0.1	R 2.7	0.0	47.0	R 325.0	97.9	R 422.9
1996	65.7	114.7	13.6	36.9	0.1	16.9	1.1	5.8	0.6	3.7	78.7	0.2	2.8	0.0	50.5	312.5	105.0	417.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 111. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Iowa**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	36	9	366	1,711	195	23	516	23,488	227	26,526	0	0	-	0	-
1965	8	11	358	1,991	232	55	480	25,224	15	28,354	0	0	-	0	-
1970	3	18	256	4,339	725	58	480	30,039	26	35,923	0	0	-	0	-
1975	(s)	16	191	6,851	835	53	501	34,929	0	43,359	0	0	-	0	-
1980	0	13	184	7,924	813	34	522	32,432	0	41,909	0	0	-	0	-
1981	0	11	161	7,394	717	103	500	30,991	7	39,874	0	0	-	0	-
1982	0	9	111	8,756	635	103	456	30,487	0	40,549	0	0	-	0	-
1983	0	8	109	7,907	591	123	478	31,217	3	40,428	0	0	-	0	-
1984	0	11	89	8,715	615	143	509	30,280	5	40,356	0	0	-	0	-
1985	0	10	83	8,042	592	90	475	R 29,525	0	R 38,807	0	0	-	0	-
1986	0	7	151	7,940	595	141	464	R 29,574	0	R 38,865	0	0	-	0	-
1987	0	8	110	8,713	779	48	525	R 29,932	8	R 40,114	0	0	-	0	-
1988	0	11	145	8,886	713	46	506	R 30,763	0	R 41,059	0	0	-	0	-
1989	0	10	111	9,184	750	51	519	R 31,036	(s)	R 41,652	0	0	-	0	-
1990	0	9	99	9,671	891	R 42	534	R 30,470	(s)	R 41,708	R e 63,107	0	-	0	-
1991	0	7	82	8,442	892	49	478	R 30,584	0	R 40,528	R 50,024	0	-	0	-
1992	0	7	75	8,792	803	46	487	R 30,016	0	R 40,219	R 60,799	0	-	0	-
1993	0	7	70	9,521	720	54	496	R 31,266	0	R 42,128	R 67,850	0	-	0	-
1994	0	11	69	10,305	897	151	519	R 32,744	0	R 44,684	R 77,134	0	-	0	-
1995	0	11	72	11,349	1,046	58	510	33,345	0	46,380	R 74,525	0	-	0	-
1996	0	13	71	12,662	819	92	495	34,561	0	48,700	47,761	0	-	0	-

  

Trillion Btu															
1960	0.9	9.2	1.8	10.0	1.0	0.1	3.1	123.4	1.4	140.9	0.0	0.0	151.0	0.0	151.0
1965	0.2	11.2	1.8	11.6	1.3	0.2	2.9	132.5	0.1	150.4	0.0	0.0	161.7	0.0	161.7
1970	0.1	18.5	1.3	25.3	4.1	0.2	2.9	157.8	0.2	191.7	0.0	0.0	210.2	0.0	210.2
1975	(s)	16.2	1.0	39.9	4.7	0.2	3.0	183.5	0.0	232.3	0.0	0.0	248.5	0.0	248.5
1980	0.0	12.7	0.9	46.2	4.6	0.1	3.2	170.4	0.0	225.3	0.0	0.0	238.0	0.0	238.0
1981	0.0	10.9	0.8	43.1	4.0	0.4	3.0	162.8	(s)	214.2	0.0	0.0	225.1	0.0	225.1
1982	0.0	8.9	0.6	51.0	3.6	0.4	2.8	160.1	0.0	218.4	0.0	0.0	227.3	0.0	227.3
1983	0.0	8.0	0.6	46.1	3.3	0.4	2.9	164.0	(s)	217.3	0.0	0.0	225.3	0.0	225.3
1984	0.0	10.7	0.4	50.8	3.4	0.5	3.1	159.1	(s)	217.4	0.0	0.0	228.0	0.0	228.0
1985	0.0	10.5	0.4	46.8	3.3	0.3	2.9	155.1	0.0	R 208.9	0.0	0.0	219.3	0.0	219.3
1986	0.0	7.3	0.8	46.2	3.3	0.5	2.8	155.4	0.0	209.0	0.0	0.0	216.4	0.0	216.4
1987	0.0	8.2	0.6	50.8	4.4	0.2	3.2	R 157.2	0.1	R 216.3	0.0	0.0	R 224.5	0.0	R 224.5
1988	0.0	10.7	0.7	51.8	4.0	0.2	3.1	R 161.6	0.0	R 221.3	0.0	0.0	R 232.0	0.0	R 232.0
1989	0.0	10.6	0.6	53.5	4.2	0.2	3.1	163.0	(s)	224.6	0.0	0.0	R 235.2	0.0	R 235.2
1990	0.0	9.2	0.5	56.3	5.0	0.2	3.2	R 160.1	(s)	R 225.3	R e 4.8	0.0	R e 234.5	0.0	R e 234.5
1991	0.0	6.7	0.4	49.2	5.0	0.2	2.9	R 160.7	0.0	218.3	R 3.8	0.0	225.0	0.0	225.0
1992	0.0	7.0	0.4	51.2	4.5	0.2	3.0	157.7	0.0	216.9	R 4.6	0.0	223.9	0.0	223.9
1993	0.0	7.4	0.4	55.5	4.1	0.2	3.0	164.2	0.0	227.3	R 5.2	0.0	R 234.7	0.0	R 234.7
1994	0.0	10.8	0.3	60.0	5.1	0.5	3.1	R 172.0	0.0	R 241.1	R 5.9	0.0	R 251.9	0.0	R 251.9
1995	0.0	11.1	0.4	66.1	5.9	0.2	3.1	175.2	0.0	250.9	R 5.7	0.0	262.0	0.0	262.0
1996	0.0	12.7	0.4	73.8	4.6	0.3	3.0	181.5	0.0	263.6	3.6	0.0	276.4	0.0	276.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 112. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Iowa

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	2,118	0	2,118	49	39	259	0	298	0	879	25	0	0	--
1965	2,760	0	2,760	52	27	183	0	210	0	926	30	0	0	--
1970	4,030	0	4,030	78	49	327	0	375	0	934	38	0	0	--
1975	4,936	0	4,936	47	214	507	0	722	2,291	877	40	0	0	--
1980	10,745	0	10,745	7	63	168	0	231	2,563	945	29	0	0	--
1981	11,808	0	11,808	3	6	175	0	181	2,204	980	17	0	0	--
1982	11,435	0	11,435	3	25	133	0	158	2,269	917	23	0	0	--
1983	11,921	0	11,921	3	16	139	0	155	2,309	918	45	0	0	--
1984	11,966	0	11,966	3	9	108	0	117	2,700	917	45	0	0	--
1985	12,491	0	12,491	2	2	101	0	103	1,927	2,047	60	0	0	--
1986	12,044	0	12,044	1	0	105	0	105	2,993	952	70	0	0	--
1987	12,997	0	12,997	3	0	115	0	115	2,523	970	67	0	0	--
1988	13,921	0	13,921	5	0	123	0	123	3,163	698	57	0	0	--
1989	14,598	0	14,598	2	0	112	0	112	3,139	672	24	0	0	--
1990	15,331	0	15,331	3	0	123	0	123	3,012	857	17	0	0	--
1991	15,846	0	15,846	4	0	109	0	109	4,147	883	20	0	0	--
1992	15,357	0	15,357	2	0	90	0	90	3,405	981	14	0	0	--
1993	16,623	0	16,623	4	0	122	0	122	3,235	737	20	0	0	--
1994	16,565	0	16,565	3	0	183	0	183	4,107	1,053	28	0	(s)	--
1995	17,785	0	17,785	4	0	148	0	148	3,730	991	20	0	(s)	--
1996	17,864	0	17,864	3	0	134	0	134	3,924	918	23	0	(s)	--

## Trillion Btu

1960	44.0	0.0	44.0	50.3	0.2	1.5	0.0	1.8	0.0	9.5	0.3	0.0	0.0	105.8
1965	58.6	0.0	58.6	52.8	0.2	1.1	0.0	1.2	0.0	9.7	0.3	0.0	0.0	122.6
1970	84.2	0.0	84.2	78.6	0.3	1.9	0.0	2.2	0.0	9.8	0.4	0.0	0.0	175.2
1975	100.6	0.0	100.6	47.3	1.3	3.0	0.0	4.3	25.2	9.1	0.4	0.0	0.0	187.0
1980	200.2	0.0	200.2	6.9	0.4	1.0	0.0	1.4	28.0	9.8	0.3	0.0	0.0	246.6
1981	215.9	0.0	215.9	3.4	(s)	1.0	0.0	1.1	24.3	10.2	0.2	0.0	0.0	255.1
1982	209.0	0.0	209.0	2.5	0.2	0.8	0.0	0.9	25.1	9.6	0.2	0.0	0.0	247.4
1983	218.0	0.0	218.0	3.3	0.1	0.8	0.0	0.9	25.2	9.7	0.5	0.0	0.0	257.6
1984	214.7	0.0	214.7	3.2	0.1	0.6	0.0	0.7	29.3	9.6	0.5	0.0	0.0	257.9
1985	227.3	0.0	227.3	2.1	(s)	0.6	0.0	0.6	20.8	21.4	0.6	0.0	0.0	272.9
1986	221.3	0.0	221.3	1.4	0.0	0.6	0.0	0.6	32.3	9.9	0.7	0.0	0.0	266.3
1987	237.9	0.0	237.9	3.3	0.0	0.7	0.0	0.7	27.2	10.1	0.7	0.0	0.0	279.8
1988	256.5	0.0	256.5	5.5	0.0	0.7	0.0	0.7	34.0	7.2	0.6	0.0	0.0	304.4
1989	261.0	0.0	261.0	2.4	0.0	0.7	0.0	0.7	33.7	R 7.0	0.2	0.0	0.0	R 305.0
1990	272.6	0.0	272.6	3.5	0.0	0.7	0.0	0.7	32.2	R 8.9	0.2	0.0	0.0	R 318.1
1991	281.8	0.0	281.8	3.7	0.0	0.6	0.0	0.6	44.5	R 9.2	0.2	0.0	0.0	R 340.0
1992	272.3	0.0	272.3	2.3	0.0	0.5	0.0	0.5	36.4	10.1	0.1	0.0	0.0	R 321.8
1993	287.9	0.0	287.9	4.3	0.0	0.7	0.0	0.7	34.6	R 7.6	0.2	0.0	0.0	335.3
1994	291.0	0.0	291.0	2.7	0.0	1.1	0.0	1.1	43.9	R 10.9	0.3	0.0	(s)	349.7
1995	308.7	0.0	308.7	3.6	0.0	0.9	0.0	0.9	39.8	10.2	0.2	0.0	(s)	363.4
1996	309.3	0.0	309.3	3.4	0.0	0.8	0.0	0.8	41.7	9.5	0.2	0.0	(s)	364.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 113. Energy Consumption Estimates by Source, Selected Years 1960-1996, Kansas**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	675	361	2,198	170	4,739	952	696	5,590	737	23,712	2,403	6,577	47,774	0	20	0	0	-4,181	-
1965	644	443	3,061	493	5,257	1,053	1,813	6,521	770	25,525	1,066	7,119	52,677	0	13	0	0	-3,746	-
1970	458	576	2,188	326	7,550	1,561	306	8,009	655	28,849	1,127	7,355	57,926	0	7	0	0	-5,106	-
1975	3,117	499	2,162	177	11,273	1,310	100	8,857	773	32,004	6,365	8,539	71,560	0	5	0	0	-5,045	-
1980	10,370	488	3,019	221	14,764	2,466	492	8,404	1,011	29,584	1,498	8,734	70,194	0	8	0	0	-9,085	-
1981	11,684	428	1,869	214	13,414	2,442	240	7,438	970	29,272	1,037	7,259	64,154	0	8	0	0	-8,386	-
1982	11,895	401	1,890	190	13,814	1,834	226	11,948	884	28,588	1,028	5,678	66,078	0	7	0	0	-3,740	-
1983	13,103	346	1,450	176	14,009	1,492	182	12,021	926	28,603	1,956	6,236	67,051	0	6	0	0	-3,404	-
1984	15,565	364	1,928	154	15,150	3,338	142	26,692	987	28,499	1,154	6,573	84,616	0	7	0	(s)	-10,938	-
1985	14,715	355	1,700	137	15,040	4,424	57	24,510	920	R 28,209	86	5,908	R 80,992	3,856	9	0	(s)	-13,553	-
1986	14,359	313	2,657	162	14,319	7,038	75	16,615	900	R 28,453	487	6,075	R 76,780	6,959	8	0	(s)	-20,105	-
1987	15,194	328	2,614	121	16,713	4,285	72	16,113	1,017	R 29,123	353	6,524	R 76,934	6,471	9	0	(s)	-21,902	-
1988	14,951	353	4,378	148	16,591	4,176	42	19,029	981	R 30,819	811	7,687	R 84,661	6,650	12	0	(s)	-20,333	-
1989	14,963	341	3,109	156	15,785	3,833	56	18,889	1,006	R 29,852	370	7,763	R 80,819	9,709	10	0	(s)	-29,465	-
1990	15,175	353	3,875	136	16,561	3,701	27	15,565	1,035	R 28,626	232	7,870	R 77,630	7,874	i NA	i NA	i NA	-25,082	-
1991	14,881	371	3,721	124	15,714	3,296	24	13,293	926	R 28,041	128	6,069	R 71,336	5,859	NA	NA	NA	-17,257	-
1992	14,227	343	3,715	142	15,154	4,164	33	16,816	944	R 27,821	180	6,695	R 75,664	8,491	NA	NA	NA	-19,228	-
1993	17,386	392	3,635	151	16,268	3,617	36	8,269	962	R 28,480	373	5,658	R 67,448	7,900	NA	NA	NA	-28,905	-
1994	17,158	418	4,741	142	15,770	1,981	17	7,754	1,005	R 29,073	190	6,218	R 66,891	8,529	NA	NA	NA	-30,108	-
1995	R 16,521	368	3,911	146	19,446	2,414	28	4,924	988	29,402	31	5,971	67,261	10,062	NA	NA	NA	-29,767	-
1996	19,084	363	3,581	177	16,964	2,009	37	10,131	959	30,927	292	6,417	71,494	8,205	NA	NA	NA	-33,852	-
Trillion Btu																			
1960	15.7	373.7	14.6	0.9	27.6	5.1	3.9	22.4	4.5	124.6	15.1	39.5	258.1	0.0	0.2	0.0	0.0	-14.3	633.5
1965	15.3	440.8	20.3	2.5	30.6	5.7	10.3	26.2	4.7	134.1	6.7	42.7	283.7	0.0	0.1	0.0	0.0	-12.8	727.1
1970	10.7	574.5	14.5	1.6	44.0	8.6	1.7	30.3	4.0	151.5	7.1	43.9	307.2	0.0	0.1	0.0	0.0	-17.4	875.1
1975	62.3	490.7	14.3	0.9	65.7	7.2	0.6	32.9	4.7	168.1	40.0	51.0	385.4	0.0	(s)	0.0	0.0	-17.2	921.3
1980	191.6	482.0	20.0	1.1	86.0	13.8	2.8	30.9	6.1	155.4	9.4	52.0	377.5	0.0	0.1	0.0	0.0	-31.0	1,020.2
1981	212.9	422.6	12.4	1.1	78.1	13.6	1.4	27.1	5.9	153.8	6.5	43.7	343.6	0.0	0.1	0.0	0.0	-28.6	950.5
1982	212.5	400.5	12.5	1.0	80.5	10.2	1.3	43.2	5.4	150.2	6.5	34.0	344.6	0.0	0.1	0.0	0.0	-12.8	945.0
1983	231.2	345.9	9.6	0.9	81.6	8.2	1.0	43.4	5.6	150.3	12.3	37.3	350.3	0.0	0.1	0.0	0.0	-11.6	915.7
1984	274.8	360.8	12.8	0.8	88.3	18.7	0.8	96.1	6.0	149.7	7.3	38.8	419.2	0.0	0.1	0.0	(s)	-37.3	1,017.5
1985	259.5	354.8	11.3	0.7	87.6	24.8	0.3	88.3	5.6	R 148.2	0.5	35.3	402.7	41.7	0.1	0.0	(s)	-46.2	1,012.5
1986	251.7	308.0	17.6	0.8	83.4	39.7	0.4	60.5	5.5	149.5	3.1	36.7	397.2	75.1	0.1	0.0	(s)	-68.6	963.5
1987	267.4	343.2	17.3	0.6	97.4	24.1	0.4	59.0	6.2	R 153.0	2.2	38.8	R 398.9	69.7	0.1	0.0	(s)	-74.7	R 1,004.6
1988	269.3	348.0	29.1	0.7	96.6	23.4	0.2	69.5	5.9	R 161.9	5.1	45.7	R 438.2	71.4	0.1	0.0	(s)	-69.4	R 1,057.6
1989	266.5	338.6	20.6	0.8	91.9	21.5	0.3	69.6	6.1	R 156.8	2.3	45.8	R 415.8	104.1	0.1	0.0	(s)	-100.5	R 1,024.5
1990	272.6	352.6	25.7	0.7	96.5	20.7	0.2	56.4	6.3	R 150.4	1.5	46.4	R 404.7	84.1	i 0.2	R i 7.4	i (s)	-85.6	R i 1,035.7
1991	268.7	373.2	24.7	0.6	91.5	18.3	0.1	48.0	5.6	147.3	0.8	36.3	373.4	62.9	0.2	R 7.7	(s)	-68.9	R 1,026.9
1992	254.3	338.8	24.7	0.7	88.3	23.2	0.2	60.9	5.7	R 146.1	1.1	39.7	R 390.6	90.7	0.1	R 8.1	(s)	-65.6	1,016.5
1993	301.9	386.5	24.1	0.8	94.8	20.2	0.2	29.8	5.8	149.6	2.3	33.6	361.3	84.4	0.1	R 7.3	(s)	-98.6	R 1,042.4
1994	300.0	417.2	31.5	0.7	91.9	11.0	0.1	28.2	6.1	R 152.7	1.2	36.9	360.3	91.1	0.1	R 7.6	(s)	-102.7	R 1,073.0
1995	R 289.6	369.1	26.0	0.7	113.3	13.7	0.2	17.8	6.0	154.4	0.2	35.5	367.8	107.2	0.1	R 8.1	(s)	-101.6	R 1,040.1
1996	338.6	362.0	23.8	0.9	98.8	11.4	0.2	36.6	5.8	162.5	1.8	38.0	379.7	87.2	0.1	8.1	(s)	-115.5	1,060.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 114. Residential Energy Consumption Estimates, Selected Years 1960-1996, Kansas

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	22	0	22	73	53	303	3,447	3,804	0	0	2,360	—	5,869	—
1965	6	0	6	87	50	1,285	3,991	5,327	0	0	3,251	—	7,762	—
1970	4	0	4	97	53	116	4,825	4,994	0	0	5,348	—	12,960	—
1975	0	0	0	98	96	60	4,563	4,719	0	0	5,695	—	13,736	—
1980	2	0	2	85	150	5	2,083	2,237	0	0	7,189	—	17,481	—
1981	1	0	1	75	19	10	1,631	1,660	0	0	7,600	—	18,113	—
1982	4	0	4	82	173	18	1,609	1,800	0	0	7,746	—	18,604	—
1983	1	0	1	81	43	29	1,913	1,985	0	0	8,368	—	20,048	—
1984	1	0	1	79	46	41	1,009	1,096	0	0	8,269	—	19,248	—
1985	(s)	0	(s)	78	65	27	1,469	1,561	0	0	8,195	—	19,252	—
1986	(s)	0	(s)	71	24	18	1,208	1,251	0	0	8,346	—	19,198	—
1987	(s)	0	(s)	70	21	19	1,285	1,325	0	0	8,617	—	19,689	—
1988	(s)	(s)	(s)	76	30	20	1,435	1,485	0	0	9,121	—	20,620	—
1989	2	0	2	76	32	18	1,453	1,502	0	0	8,898	—	R 19,986	—
1990	(s)	0	(s)	71	24	11	1,182	1,218	e 317	e 9	9,515	—	R 20,810	—
1991	(s)	(s)	(s)	75	23	10	1,305	1,338	334	9	9,933	—	R 21,620	—
1992	(s)	0	(s)	72	29	13	1,079	1,121	352	10	8,873	—	R 18,952	—
1993	8	0	8	85	27	20	1,092	1,139	292	10	9,986	—	R 21,099	—
1994	11	0	11	74	27	8	1,054	1,089	287	10	10,131	—	R 21,138	—
1995	R 13	0	R 13	76	15	13	1,469	1,497	318	10	10,356	—	R 21,572	—
1996	27	0	27	85	18	19	1,748	1,784	318	10	10,672	—	22,213	—

  

Trillion Btu														
1960	0.5	0.0	0.5	76.1	0.3	1.7	13.8	15.9	0.0	0.0	8.1	100.4	20.0	120.5
1965	0.1	0.0	0.1	86.4	0.3	7.3	16.0	23.6	0.0	0.0	11.1	121.2	26.5	147.7
1970	0.1	0.0	0.1	97.1	0.3	0.7	18.2	19.2	0.0	0.0	18.2	134.6	44.2	178.9
1975	0.0	0.0	0.0	96.6	0.6	0.3	17.0	17.9	0.0	0.0	19.4	133.8	46.9	180.7
1980	(s)	0.0	(s)	84.8	0.9	(s)	7.7	8.6	0.0	0.0	24.5	117.9	59.6	177.5
1981	(s)	0.0	(s)	74.2	0.1	0.1	5.9	6.1	0.0	0.0	25.9	106.2	61.8	168.0
1982	0.1	0.0	0.1	82.4	1.0	0.1	5.8	6.9	0.0	0.0	26.4	115.8	63.5	179.3
1983	(s)	0.0	(s)	81.0	0.2	0.2	6.9	7.3	0.0	0.0	28.6	116.9	68.4	185.4
1984	(s)	0.0	(s)	78.8	0.3	0.2	3.6	4.1	0.0	0.0	28.2	111.2	65.7	176.9
1985	(s)	0.0	(s)	78.3	0.4	0.2	5.3	5.8	0.0	0.0	28.0	112.1	65.7	177.8
1986	(s)	0.0	(s)	69.6	0.1	0.1	4.4	4.6	0.0	0.0	28.5	102.7	65.5	168.2
1987	(s)	0.0	(s)	73.1	0.1	0.1	4.7	4.9	0.0	0.0	29.4	107.4	67.2	174.6
1988	(s)	(s)	(s)	75.3	0.2	0.1	5.2	5.5	0.0	0.0	31.1	112.0	70.4	182.3
1989	(s)	0.0	(s)	75.5	0.2	0.1	5.3	5.6	0.0	0.0	30.4	111.6	R 68.2	R 179.8
1990	(s)	0.0	(s)	71.3	0.1	0.1	4.3	4.5	e 6.3	e (s)	32.5	e 114.6	R 71.0	R e 185.7
1991	(s)	(s)	(s)	75.7	0.1	0.1	4.7	4.9	6.7	(s)	33.9	121.2	R 73.8	R 195.0
1992	(s)	0.0	(s)	70.6	0.2	0.1	3.9	4.2	7.0	(s)	30.3	112.1	R 64.7	176.8
1993	0.2	0.0	0.2	83.9	0.2	0.1	3.9	4.2	5.8	(s)	34.1	128.2	72.0	200.2
1994	0.3	0.0	0.3	74.1	0.2	(s)	3.8	4.0	5.7	(s)	34.6	118.7	72.1	190.8
1995	R 0.3	0.0	R 0.3	76.1	0.1	0.1	5.3	5.5	6.4	(s)	35.3	R 123.7	73.6	R 197.3
1996	0.7	0.0	0.7	85.2	0.1	0.1	6.3	6.5	6.4	(s)	36.4	135.2	75.8	210.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 115. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Kansas**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	40	0	40	41	115	87	608	179	47	1,036	0	1,727	-	4,296	-
1965	11	0	11	38	109	367	704	204	19	1,403	0	2,597	-	6,200	-
1970	7	0	7	53	115	33	851	215	34	1,249	0	3,967	-	9,614	-
1975	0	0	0	52	209	17	805	268	36	1,335	0	5,614	-	13,542	-
1980	3	0	3	59	360	10	368	279	0	1,016	0	6,806	-	16,550	-
1981	2	0	2	52	296	5	288	256	0	845	0	7,151	-	17,043	-
1982	7	0	7	55	146	7	284	266	3	706	0	7,210	-	17,317	-
1983	2	0	2	53	919	10	338	183	5	1,455	0	7,432	-	17,805	-
1984	2	0	2	58	993	9	178	164	3	1,348	0	7,928	-	18,454	-
1985	1	0	1	57	698	10	259	177	0	1,145	0	8,174	-	19,205	-
1986	1	0	1	56	342	9	213	174	9	747	0	8,361	-	19,232	-
1987	1	0	1	54	271	15	227	R 190	(s)	703	0	8,547	-	19,529	-
1988	(s)	(s)	(s)	61	385	10	253	167	1	R 815	0	9,000	-	20,347	-
1989	4	0	4	59	333	16	256	R 153	10	769	0	9,127	-	R 20,501	-
1990	(s)	0	(s)	56	283	6	209	R 162	27	R 687	e NA	9,547	-	R 20,880	-
1991	(s)	(s)	(s)	59	363	4	230	124	7	728	NA	9,935	-	R 21,624	-
1992	(s)	0	(s)	54	502	4	190	109	22	827	NA	9,746	-	R 20,816	-
1993	15	0	15	56	645	7	193	55	30	929	18	10,120	-	R 21,381	-
1994	R 21	0	R 21	52	499	4	186	76	2	766	14	10,482	-	R 21,871	-
1995	R 25	0	R 25	53	608	6	259	74	12	959	17	10,645	-	R 22,174	-
1996	51	0	51	57	562	5	308	99	2	976	17	11,388	-	23,702	-

**Trillion Btu**

1960	0.9	0.0	0.9	42.6	0.7	0.5	2.4	0.9	0.3	4.8	0.0	5.9	54.2	14.7	68.9
1965	0.2	0.0	0.2	38.3	0.6	2.1	2.8	1.1	0.1	6.7	0.0	8.9	54.1	21.2	75.3
1970	0.1	0.0	0.1	52.5	0.7	0.2	3.2	1.1	0.2	5.4	0.0	13.5	71.6	32.8	104.4
1975	0.0	0.0	0.0	50.8	1.2	0.1	3.0	1.4	0.2	5.9	0.0	19.2	75.8	46.2	122.1
1980	0.1	0.0	0.1	58.5	2.1	0.1	1.4	1.5	0.0	5.0	0.0	23.2	86.8	56.5	143.3
1981	(s)	0.0	(s)	51.7	1.7	(s)	1.0	1.3	0.0	4.1	0.0	24.4	80.2	58.2	138.4
1982	0.2	0.0	0.2	55.8	0.8	(s)	1.0	1.4	(s)	3.3	0.0	24.6	83.9	59.1	143.0
1983	(s)	0.0	(s)	52.9	5.4	0.1	1.2	1.0	(s)	7.6	0.0	25.4	85.9	60.8	146.6
1984	(s)	0.0	(s)	57.2	5.8	0.1	0.6	0.9	(s)	7.4	0.0	27.1	91.6	63.0	154.6
1985	(s)	0.0	(s)	56.5	4.1	0.1	0.9	0.9	0.0	6.0	0.0	27.9	90.4	65.5	155.9
1986	(s)	0.0	(s)	54.9	2.0	0.1	0.8	0.9	0.1	3.8	0.0	28.5	87.3	65.6	152.9
1987	(s)	0.0	(s)	56.2	1.6	0.1	0.8	1.0	(s)	3.5	0.0	29.2	88.9	66.6	155.5
1988	(s)	(s)	(s)	60.2	2.2	0.1	0.9	0.9	(s)	4.1	0.0	30.7	95.1	69.4	164.5
1989	0.1	0.0	0.1	58.2	1.9	0.1	0.9	0.8	0.1	3.8	0.0	31.1	93.2	R 69.9	R 163.2
1990	(s)	0.0	(s)	56.0	1.6	(s)	0.8	R 0.9	0.2	3.5	e NA	32.6	92.1	R 71.2	R 163.3
1991	(s)	(s)	(s)	59.2	2.1	(s)	0.8	0.7	(s)	3.7	NA	33.9	96.8	R 73.8	R 170.6
1992	(s)	0.0	(s)	53.3	2.9	(s)	0.7	0.6	0.1	4.3	NA	33.3	90.9	R 71.0	R 161.9
1993	0.3	0.0	0.3	55.3	3.8	(s)	0.7	0.3	0.2	5.0	0.4	34.5	R 95.5	R 73.0	R 168.5
1994	0.5	0.0	0.5	52.2	2.9	(s)	0.7	0.4	(s)	4.0	0.3	35.8	R 92.8	R 74.6	R 167.4
1995	R 0.6	0.0	R 0.6	53.3	3.5	(s)	0.9	0.4	0.1	5.0	0.3	36.3	R 95.6	R 75.7	R 171.2
1996	1.2	0.0	1.2	57.1	3.3	(s)	1.1	0.5	(s)	4.9	0.3	38.9	102.5	80.9	183.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 116. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Kansas

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	175	121	2,198	1,405	306	1,321	230	4,557	1,924	6,577	18,518	0	0	0	2,932	-	7,293	-
1965	148	155	3,061	1,553	160	1,530	303	3,535	755	7,119	18,017	0	0	0	3,902	-	9,318	-
1970	103	184	2,188	2,515	157	1,985	207	2,777	701	7,355	17,886	0	0	0	4,548	-	11,022	-
1975	134	152	2,162	3,532	23	3,125	253	2,406	2,178	8,535	22,214	0	0	0	6,214	-	14,990	-
1980	331	191	3,019	3,476	477	5,844	408	1,198	1,004	8,734	24,159	0	0	0	7,845	-	19,076	-
1981	354	175	1,869	3,538	225	5,280	391	1,351	675	7,259	20,587	0	0	0	7,484	-	17,836	-
1982	372	160	1,890	3,934	201	9,817	357	1,073	730	5,678	23,679	0	0	0	6,872	-	16,506	-
1983	286	134	1,450	3,428	142	9,486	373	842	1,601	6,236	23,559	0	0	0	6,780	-	16,243	-
1984	310	158	1,928	3,702	91	25,402	398	1,305	1,068	6,573	40,467	0	0	0	7,038	-	16,381	-
1985	363	161	1,700	3,908	20	22,687	371	1,064	66	5,908	35,724	0	0	0	7,167	-	16,839	-
1986	261	139	2,657	4,575	47	15,093	363	929	464	6,075	30,202	0	0	0	7,128	-	16,396	-
1987	252	158	2,614	4,297	38	14,490	410	978	327	6,524	29,678	0	0	0	7,266	-	16,603	-
1988	208	154	4,378	4,459	12	17,201	396	846	689	7,687	35,667	0	0	0	7,708	-	17,425	-
1989	183	144	3,109	3,924	22	16,996	406	837	306	7,763	33,362	0	0	0	7,797	-	17,514	-
1990	157	158	3,875	3,912	10	14,032	418	765	184	7,870	31,064	f NA	f NA	f NA	8,087	-	17,688	-
1991	148	168	3,721	4,580	11	11,649	374	755	118	6,069	27,276	NA	NA	NA	8,284	-	18,030	-
1992	158	175	3,715	4,546	15	15,448	381	675	157	6,695	31,631	NA	NA	NA	8,451	-	18,050	-
1993	137	196	3,635	5,103	10	6,885	388	892	303	5,658	22,873	NA	NA	NA	8,702	-	18,386	-
1994	137	233	4,741	5,387	6	6,364	405	943	175	6,218	24,240	NA	NA	NA	9,001	-	18,782	-
1995	138	177	3,911	5,207	10	3,140	398	995	19	5,971	19,651	NA	NA	NA	9,356	-	19,489	-
1996	154	159	3,581	4,892	13	8,054	387	1,021	135	6,417	24,499	NA	NA	NA	9,231	-	19,212	-

Trillion Btu

1960	4.0	125.7	14.6	8.2	1.7	5.3	1.4	23.9	12.1	39.5	106.7	0.0	0.0	0.0	10.0	246.3	24.9	271.2
1965	3.3	154.3	20.3	9.0	0.9	6.1	1.8	18.6	4.7	42.7	104.2	0.0	0.0	0.0	13.3	275.2	31.8	307.0
1970	2.2	184.1	14.5	14.7	0.9	7.5	1.3	14.6	4.4	43.9	101.7	0.0	0.0	0.0	15.5	303.5	37.6	341.2
1975	2.7	148.8	14.3	20.6	0.1	11.6	1.5	12.6	13.7	51.0	125.5	0.0	0.0	0.0	21.2	298.3	51.1	349.4
1980	7.1	189.7	20.0	20.2	2.7	21.5	2.5	6.3	6.3	52.0	131.5	0.0	0.0	0.0	26.8	355.1	65.1	420.2
1981	7.6	173.4	12.4	20.6	1.3	19.2	2.4	7.1	4.2	43.7	110.9	0.0	0.0	0.0	25.5	317.4	60.9	378.3
1982	8.0	161.4	12.5	22.9	1.1	35.5	2.2	5.6	4.6	34.0	118.5	0.0	0.0	0.0	23.4	311.3	56.3	367.6
1983	6.1	134.7	9.6	20.0	0.8	34.3	2.3	4.4	10.1	37.3	118.7	0.0	0.0	0.0	23.1	282.7	55.4	338.1
1984	6.7	157.3	12.8	21.6	0.5	91.4	2.4	6.9	6.7	38.8	181.1	0.0	0.0	0.0	24.0	369.1	55.9	425.0
1985	7.8	161.3	11.3	22.8	0.1	81.7	2.3	5.6	0.4	35.3	159.5	0.0	0.0	0.0	24.5	353.0	57.5	410.5
1986	5.6	136.9	17.6	26.6	0.3	54.9	2.2	4.9	2.9	36.7	146.2	0.0	0.0	0.0	24.3	313.0	55.9	369.0
1987	5.5	165.6	17.3	25.0	0.2	53.0	2.5	5.1	2.1	38.8	144.1	0.0	0.0	0.0	24.8	340.0	56.6	396.6
1988	4.6	151.8	29.1	26.0	0.1	62.8	2.4	4.4	4.3	45.7	174.7	0.0	0.0	0.0	26.3	357.4	59.5	416.9
1989	4.1	143.3	20.6	22.9	0.1	62.6	2.5	4.4	1.9	45.8	160.8	0.0	0.0	0.0	26.6	334.8	59.8	394.5
1990	3.8	157.8	25.7	22.8	0.1	50.9	2.5	4.0	1.2	46.4	153.5	f 0.1	f 0.7	f 0.0	27.6	f 343.5	60.4	f 403.8
1991	3.6	170.0	24.7	26.7	0.1	42.1	-2.3	4.0	0.7	36.3	136.8	0.1	0.6	0.0	28.3	339.5	61.5	R 401.0
1992	3.9	172.4	24.7	26.5	0.1	56.0	2.3	3.5	1.0	39.7	153.7	0.1	0.7	0.0	28.8	359.6	61.6	421.1
1993	3.2	193.3	24.1	29.7	0.1	24.8	2.4	4.7	1.9	33.6	121.3	0.1	0.7	0.0	29.7	348.2	62.7	R 411.0
1994	3.3	232.4	31.5	31.4	(s)	23.1	2.5	5.0	1.1	36.9	131.4	0.1	R 1.1	0.0	30.7	R 399.0	64.1	R 463.1
1995	3.3	177.5	26.0	30.3	0.1	11.4	2.4	5.2	0.1	35.5	111.0	0.1	R 1.1	0.0	31.9	R 324.9	66.5	R 391.4
1996	3.9	159.1	23.8	28.5	0.1	29.1	2.3	5.4	0.8	38.0	127.9	0.1	1.2	0.0	31.5	323.7	65.6	389.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 117. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Kansas**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	3	43	170	3,056	952	215	507	18,976	190	24,065	0	0	-	0	-
1965	(s)	50	493	3,473	1,053	295	467	21,786	137	27,704	0	0	-	0	-
1970	(s)	73	326	4,691	1,561	348	448	25,857	8	33,238	0	0	-	0	-
1975	(s)	69	177	5,898	1,310	364	520	29,331	17	37,615	0	0	-	0	-
1980	0	52	221	10,397	2,466	110	603	28,107	2	41,906	0	0	-	0	-
1981	0	48	214	9,293	2,442	239	579	27,666	1	40,433	0	0	-	0	-
1982	0	42	190	9,296	1,834	239	528	27,248	0	39,334	0	0	-	0	-
1983	0	32	176	9,358	1,492	284	552	27,578	82	39,521	0	0	-	0	-
1984	0	36	154	10,197	3,338	103	589	27,030	43	R 41,452	0	0	-	0	-
1985	0	38	137	10,173	4,424	95	549	R 26,968	0	R 42,347	0	0	-	0	-
1986	0	32	162	9,204	7,038	101	537	27,350	(s)	R 44,391	0	0	-	0	-
1987	0	31	121	11,992	4,285	111	607	R 27,956	0	R 45,071	0	0	-	0	-
1988	0	42	148	11,556	4,176	140	585	R 29,807	0	R 46,411	0	0	-	0	-
1989	0	43	156	11,304	3,833	R 185	600	R 28,862	0	R 44,940	0	0	-	0	-
1990	0	41	136	12,213	3,701	R 142	618	R 27,700	0	R 44,509	R e 5,695	0	-	0	-
1991	0	33	124	10,595	3,296	108	553	R 27,162	0	R 41,838	R 4,515	0	-	0	-
1992	0	29	142	9,975	4,164	99	563	R 27,037	0	R 41,981	R 5,487	0	-	0	-
1993	0	33	151	10,367	3,617	R 100	574	R 27,533	0	R 42,341	R 6,123	0	-	0	-
1994	0	32	142	9,727	1,981	R 151	600	R 28,054	0	R 40,655	R 5,720	0	-	0	-
1995	0	35	146	13,466	2,414	56	589	R 28,333	0	R 45,004	R 4,535	0	-	0	-
1996	0	38	177	11,317	2,009	22	572	29,807	0	43,904	2,799	0	-	0	-

**Trillion Btu**

1960	0.1	44.3	0.9	17.8	5.1	0.9	3.1	99.7	1.2	128.6	0.0	0.0	172.9	0.0	172.9
1965	(s)	49.5	2.5	20.2	5.7	1.2	2.8	114.4	0.9	147.7	0.0	0.0	197.2	0.0	197.2
1970	(s)	73.2	1.6	27.3	8.6	1.3	2.7	135.8	0.1	177.5	0.0	0.0	250.7	0.0	250.7
1975	(s)	68.0	0.9	34.4	7.2	1.4	3.2	154.1	0.1	201.1	0.0	0.0	269.1	0.0	269.1
1980	0.0	52.0	1.1	60.6	13.8	0.4	3.7	147.6	(s)	227.2	0.0	0.0	279.2	0.0	279.2
1981	0.0	47.3	1.1	54.1	13.6	0.9	3.5	145.3	(s)	218.6	0.0	0.0	265.9	0.0	265.9
1982	0.0	42.6	1.0	54.1	10.2	0.9	3.2	143.1	0.0	212.5	0.0	0.0	255.0	0.0	255.0
1983	0.0	32.2	0.9	54.5	8.2	1.0	3.4	144.9	0.5	213.4	0.0	0.0	245.6	0.0	245.6
1984	0.0	36.0	0.8	59.4	18.7	0.4	3.6	142.0	0.3	225.1	0.0	0.0	261.1	0.0	261.1
1985	0.0	38.1	0.7	59.3	24.8	0.3	3.3	R 141.7	0.0	230.1	0.0	0.0	268.2	0.0	268.2
1986	0.0	32.0	0.8	53.6	39.7	0.4	3.3	143.7	(s)	241.4	0.0	0.0	273.4	0.0	273.4
1987	0.0	32.3	0.6	69.9	24.1	0.4	3.7	R 146.9	0.0	R 245.5	0.0	0.0	R 277.8	0.0	R 277.8
1988	0.0	41.8	0.7	67.3	23.4	0.5	3.5	R 156.6	0.0	R 252.1	0.0	0.0	R 294.0	0.0	R 294.0
1989	0.0	43.0	0.8	65.8	21.5	0.7	3.6	R 151.6	0.0	R 244.0	0.0	0.0	287.0	0.0	287.0
1990	0.0	40.6	0.7	71.1	20.7	0.5	3.7	R 145.5	0.0	R 242.3	R e 0.4	0.0	R e 282.9	0.0	R e 282.9
1991	0.0	33.3	0.6	61.7	18.3	0.4	3.4	R 142.7	0.0	R 227.1	R 0.3	0.0	R 260.4	0.0	R 260.4
1992	0.0	28.8	0.7	58.1	23.2	0.4	3.4	R 142.0	0.0	R 227.8	R 0.4	0.0	256.7	0.0	256.7
1993	0.0	33.0	0.8	60.4	20.2	0.4	3.5	144.6	0.0	229.8	R 0.5	0.0	R 262.8	0.0	R 262.8
1994	0.0	31.7	0.7	56.7	11.0	0.5	3.6	147.4	0.0	R 219.9	0.4	0.0	251.7	0.0	251.7
1995	0.0	34.8	0.7	78.4	13.7	0.2	3.6	148.8	0.0	245.5	0.3	0.0	280.2	0.0	280.2
1996	0.0	38.2	0.9	65.9	11.4	0.1	3.5	156.6	0.0	238.3	0.2	0.0	276.5	0.0	276.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 118. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Kansas

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	435	0	435	82	241	110	0	351	0	20	0	0	0	--
1965	478	0	478	113	156	71	0	226	0	13	0	0	0	--
1970	344	0	344	168	385	175	0	560	0	7	0	0	0	--
1975	2,983	0	2,983	128	4,134	1,539	4	5,676	0	5	0	0	0	--
1980	10,034	0	10,034	101	492	382	0	875	0	8	0	0	0	--
1981	11,327	0	11,327	79	360	268	0	628	0	8	0	0	0	--
1982	11,512	0	11,512	61	295	264	0	559	0	7	0	0	0	--
1983	12,814	0	12,814	47	268	262	0	530	0	6	0	0	0	--
1984	15,252	0	15,252	32	39	213	0	253	0	7	0	0	(s)	--
1985	14,351	0	14,351	21	20	195	0	215	3,856	9	0	0	(s)	--
1986	14,097	0	14,097	15	15	174	0	188	6,959	8	0	0	(s)	--
1987	14,942	0	14,942	16	25	131	0	156	6,471	9	0	0	(s)	--
1988	14,742	0	14,742	19	121	161	0	283	6,650	12	0	0	(s)	--
1989	14,774	0	14,774	19	54	191	0	246	9,709	10	0	0	(s)	--
1990	15,018	0	15,018	27	22	130	0	152	7,874	12	0	0	(s)	--
1991	14,732	0	14,732	36	4	153	0	156	5,859	9	0	0	(s)	--
1992	14,068	0	14,068	14	2	103	0	104	8,491	0	0	0	(s)	--
1993	17,226	0	17,226	22	40	126	0	166	7,900	0	0	0	(s)	--
1994	16,989	0	16,989	27	12	129	0	142	8,529	0	0	0	(s)	--
1995	16,345	0	16,345	28	1	150	0	151	10,062	0	0	0	R (s)	--
1996	18,852	0	18,852	23	155	176	0	331	8,205	0	0	0	0	--

Trillion Btu

1960	10.3	0.0	10.3	85.1	1.5	0.6	0.0	2.2	0.0	0.2	0.0	0.0	0.0	97.8
1965	11.6	0.0	11.6	112.4	1.0	0.4	0.0	1.4	0.0	0.1	0.0	0.0	0.0	125.5
1970	8.3	0.0	8.3	167.5	2.4	1.0	0.0	3.4	0.0	0.1	0.0	0.0	0.0	179.4
1975	59.5	0.0	59.5	126.7	26.0	9.0	(s)	35.0	0.0	(s)	0.0	0.0	0.0	221.2
1980	184.3	0.0	184.3	97.0	3.1	2.2	0.0	5.3	0.0	0.1	0.0	0.0	0.0	286.7
1981	205.3	0.0	205.3	76.1	2.3	1.6	0.0	3.8	0.0	0.1	0.0	0.0	0.0	285.3
1982	204.3	0.0	204.3	58.4	1.9	1.5	0.0	3.4	0.0	0.1	0.0	0.0	0.0	266.1
1983	225.0	0.0	225.0	45.0	1.7	1.5	0.0	3.2	0.0	0.1	0.0	0.0	0.0	273.2
1984	268.1	0.0	268.1	31.4	0.2	1.2	0.0	1.5	0.0	0.1	0.0	0.0	(s)	301.1
1985	251.7	0.0	251.7	20.5	0.1	1.1	0.0	1.3	41.7	0.1	0.0	0.0	(s)	315.2
1986	246.1	0.0	246.1	14.6	0.1	1.0	0.0	1.1	75.1	0.1	0.0	0.0	(s)	337.0
1987	261.9	0.0	261.9	15.9	0.2	0.8	0.0	0.9	69.7	0.1	0.0	0.0	(s)	348.5
1988	264.7	0.0	264.7	18.8	0.8	0.9	0.0	1.7	71.4	0.1	0.0	0.0	(s)	356.7
1989	262.3	0.0	262.3	18.6	0.3	1.1	0.0	1.5	104.1	0.1	0.0	0.0	(s)	386.5
1990	268.8	0.0	268.8	26.9	0.1	0.8	0.0	0.9	84.1	0.1	0.0	0.0	(s)	380.8
1991	265.1	0.0	265.1	35.0	(s)	0.9	0.0	0.9	62.9	0.1	0.0	0.0	(s)	364.0
1992	250.4	0.0	250.4	13.6	(s)	0.6	0.0	0.6	90.7	0.0	0.0	0.0	(s)	355.2
1993	298.1	0.0	298.1	21.1	0.3	0.7	0.0	1.0	84.4	0.0	0.0	0.0	(s)	404.6
1994	295.9	0.0	295.9	26.8	0.1	0.8	0.0	0.8	91.1	0.0	0.0	0.0	(s)	414.6
1995	285.4	0.0	285.4	27.4	(s)	0.9	0.0	0.9	107.2	0.0	0.0	0.0	R (s)	420.9
1996	332.8	0.0	332.8	22.5	1.0	1.0	0.0	2.0	87.2	0.0	0.0	0.0	0.0	444.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 119. Energy Consumption Estimates by Source, Selected Years 1960-1996, Kentucky**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	12,006	149	1,482	652	4,850	497	1,585	4,152	544	21,535	337	2,556	38,188	0	2,633	0	0	38,952	-	
1965	17,584	172	2,112	1,052	5,567	1,284	2,375	5,869	755	25,780	600	4,382	49,776	0	2,464	0	0	1,224	-	
1970	23,558	248	3,090	330	8,211	3,089	3,094	9,564	842	33,581	1,063	7,672	70,536	0	3,174	0	0	-26,029	-	
1975	25,556	208	2,622	129	10,924	2,150	1,577	10,977	1,048	40,816	2,169	9,178	81,589	0	3,463	0	0	8,996	-	
1980	27,728	202	2,021	112	22,906	2,897	2,912	10,223	1,057	39,829	1,012	13,775	96,744	0	2,940	0	0	-2,827	-	
1981	28,811	199	1,933	92	18,192	3,230	1,164	7,924	1,014	40,181	1,139	7,966	82,833	0	2,598	0	0	-14,610	-	
1982	27,279	189	2,896	89	17,482	3,702	1,140	7,112	924	40,066	1,154	6,897	81,463	0	3,343	0	0	-14,443	-	
1983	27,461	174	2,101	95	20,433	4,009	1,549	7,156	968	40,272	1,175	6,985	84,743	0	3,244	0	0	-13,810	-	
1984	28,933	189	2,170	73	22,171	3,261	1,378	5,782	1,032	40,786	782	8,040	85,475	0	3,514	0	0	-4,586	-	
1985	31,066	173	1,872	66	21,768	3,434	1,507	5,539	962	R 39,924	622	7,509	R 83,202	0	2,941	0	0	-21,176	-	
1986	32,185	167	2,285	85	20,417	3,549	1,088	5,118	940	R 42,518	739	6,992	R 83,732	0	2,734	0	0	-37,637	-	
1987	32,085	172	2,701	62	20,534	4,827	649	6,750	1,063	R 43,068	852	8,555	R 89,061	0	2,948	0	0	-35,172	-	
1988	35,263	184	2,616	62	24,693	4,985	977	6,719	1,025	R 44,133	569	8,988	R 94,766	0	2,423	0	0	-46,481	-	
1989	32,889	189	2,764	53	28,135	5,071	943	6,329	1,052	R 43,428	474	8,816	R 97,066	0	4,404	0	0	-20,200	-	
1990	34,449	184	3,032	51	23,408	5,713	567	6,154	1,082	R 43,040	545	9,749	R 93,341	0	NA	i NA	i NA	-24,481	-	
1991	34,517	187	2,801	51	22,666	6,368	551	6,709	968	R 43,766	458	18,234	R 102,573	0	NA	NA	NA	-20,548	-	
1992	34,704	190	2,537	55	25,603	6,882	505	6,427	987	R 44,786	422	20,910	R 109,113	0	NA	NA	NA	-17,528	-	
1993	39,095	203	2,550	40	27,952	5,705	612	5,815	1,005	R 45,756	336	19,702	R 109,473	0	NA	NA	NA	-39,623	-	
1994	38,090	208	2,843	46	28,041	6,343	562	5,673	1,050	R 46,180	329	20,458	R 111,526	0	NA	NA	NA	-25,739	-	
1995	39,516	224	2,778	44	29,108	6,305	647	5,607	1,032	48,104	204	19,868	113,698	0	NA	NA	NA	-24,556	-	
1996	40,862	236	2,714	47	28,350	5,590	670	6,620	1,002	43,543	247	21,283	110,068	0	NA	NA	NA	-25,027	-	
Trillion Btu																				
1960	286.6	153.8	9.8	3.3	28.2	2.7	9.0	16.7	3.3	113.1	2.1	15.2	203.4	0.0	28.3	0.0	0.0	132.9	805.1	
1965	415.5	176.7	14.0	5.3	32.4	7.2	13.5	23.5	4.6	135.4	3.8	25.1	264.8	0.0	25.8	0.0	0.0	4.2	886.9	
1970	527.0	252.3	20.5	1.7	47.8	17.4	17.5	36.1	5.1	176.4	6.7	43.9	373.1	0.0	33.3	0.0	0.0	-88.8	1,097.0	
1975	558.3	209.2	17.4	0.6	63.6	12.1	8.9	40.8	6.4	214.4	13.6	52.7	430.6	0.0	36.0	0.0	0.0	30.7	1,264.9	
1980	641.7	204.1	13.4	0.6	133.4	16.3	16.5	37.6	6.4	209.2	6.4	77.8	517.6	0.0	30.5	0.0	0.0	-9.6	1,384.2	
1981	663.9	202.2	12.8	0.5	106.0	18.2	6.6	28.9	6.1	211.1	7.2	46.5	443.8	0.0	27.2	0.0	0.0	-49.8	1,287.3	
1982	627.0	191.2	19.2	0.4	101.8	20.9	6.5	25.7	5.6	210.5	7.3	40.3	438.2	0.0	34.9	0.0	0.0	-49.3	1,242.0	
1983	637.8	177.8	13.9	0.5	119.0	22.6	8.8	25.9	5.9	211.5	7.4	40.8	456.3	0.0	34.1	0.0	0.0	-47.1	1,259.0	
1984	671.0	193.4	14.4	0.4	129.1	18.4	7.8	20.8	6.3	214.2	4.9	46.4	462.7	0.0	36.7	0.0	0.0	-15.6	1,348.2	
1985	716.9	177.7	12.4	0.3	126.8	19.3	8.5	20.0	5.8	209.7	3.9	43.8	R 450.7	0.0	30.7	0.0	0.0	-72.3	R 1,303.8	
1986	749.9	173.5	15.2	0.4	118.9	20.0	6.2	18.6	5.7	R 223.3	4.6	41.3	454.4	0.0	28.6	0.0	0.0	-128.4	R 1,277.9	
1987	746.7	178.3	17.9	0.3	119.6	27.3	3.7	24.7	6.4	R 226.2	5.4	50.3	R 481.8	0.0	30.7	0.0	0.0	-120.0	R 1,317.5	
1988	821.8	190.9	17.4	0.3	143.8	28.2	5.5	24.5	6.2	R 231.8	3.6	52.9	R 514.3	0.0	25.0	0.0	0.0	-158.6	R 1,393.4	
1989	765.0	195.9	18.3	0.3	163.9	28.7	5.3	23.3	6.4	R 228.1	3.0	51.7	R 529.0	0.0	R 45.9	0.0	0.0	-88.9	R 1,467.0	
1990	804.3	191.7	20.1	0.3	136.4	32.3	3.2	22.3	6.6	R 226.1	3.4	57.3	R 507.9	0.0	R i 32.9	R i 27.7	i (s)	R -83.5	R i 1,479.1	
1991	804.6	196.3	18.6	0.3	132.0	36.0	3.1	24.2	5.9	R 229.9	2.9	103.2	R 556.1	0.0	R 38.1	R 27.5	(s)	R -70.1	R 1,551.0	
1992	813.6	200.9	16.8	0.3	149.1	38.9	2.9	23.3	6.0	R 235.3	2.7	118.2	R 593.5	0.0	R 39.0	R 28.9	(s)	R -59.8	R 1,614.3	
1993	922.4	213.1	16.9	0.2	162.8	32.3	3.5	21.0	6.1	R 240.4	2.1	111.1	R 596.4	0.0	R 32.5	R 26.0	(s)	R -135.2	R 1,653.2	
1994	897.5	221.3	18.9	0.2	163.3	35.9	3.2	20.6	6.4	R 242.6	2.1	115.5	R 608.6	0.0	R 41.4	R 25.9	(s)	R -87.8	R 1,706.1	
1995	927.6	245.6	18.4	0.2	169.6	35.7	3.7	20.3	6.3	252.7	1.3	112.2	620.4	0.0	35.3	R 26.4	(s)	-83.8	R 1,771.1	
1996	951.8	248.0	18.0	0.2	165.1	31.7	3.8	23.9	6.1	228.7	1.6	119.9	599.1	0.0	36.2	27.5	(s)	-85.4	1,776.8	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 120. Residential Energy Consumption Estimates, Selected Years 1960-1996, Kentucky**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	237	29	266	63	242	897	1,396	2,534	0	0	2,760	—	6,866	—
1965	157	18	176	64	278	1,653	1,594	3,526	0	0	3,763	—	8,984	—
1970	179	11	190	86	403	2,077	3,356	5,836	0	0	6,987	—	16,932	—
1975	99	6	105	79	442	1,073	3,740	5,255	0	0	9,586	—	23,122	—
1980	98	4	102	74	820	1,751	2,063	4,633	0	0	13,075	—	31,794	—
1981	172	5	178	71	572	474	1,871	2,917	0	0	13,700	—	32,651	—
1982	143	1	144	68	647	527	1,522	2,696	0	0	13,697	—	32,897	—
1983	127	3	130	63	679	911	1,810	3,400	0	0	14,461	—	34,645	—
1984	125	5	130	67	733	852	1,347	2,933	0	0	14,675	—	34,157	—
1985	87	0	87	60	824	833	1,586	3,244	0	0	14,539	—	34,159	—
1986	102	0	102	59	682	672	1,649	3,003	0	0	15,307	—	35,210	—
1987	100	2	101	59	760	446	2,358	3,564	0	0	16,080	—	36,742	—
1988	127	(s)	127	64	887	645	2,146	3,678	0	0	16,811	—	38,006	—
1989	83	(s)	83	65	745	583	2,223	3,551	0	0	16,922	—	38,010	—
1990	53	(s)	53	56	644	321	1,825	2,791	<sup>e</sup> 683	<sup>e</sup> 1	16,814	—	36,774	—
1991	65	(s)	65	59	703	378	2,152	3,233	719	1	18,644	—	40,580	—
1992	74	(s)	74	62	769	365	2,027	3,160	757	1	17,787	—	37,991	—
1993	92	2	94	67	779	396	2,347	3,522	573	1	19,223	—	40,615	—
1994	99	1	100	63	816	390	2,270	3,477	561	1	19,481	—	40,647	—
1995	<sup>R</sup> 46	<sup>R</sup> 0	46	66	781	415	2,260	3,455	623	1	20,537	—	42,780	—
1996	41	0	41	70	672	438	2,689	3,799	622	1	21,353	—	44,443	—
<b>Trillion Btu</b>														
1960	5.8	0.7	6.5	65.2	1.4	5.1	5.6	12.1	0.0	0.0	9.4	93.2	23.4	116.7
1965	3.8	0.4	4.3	65.9	1.6	9.4	6.4	17.4	0.0	0.0	12.8	100.4	30.7	131.0
1970	4.2	0.3	4.4	87.9	2.3	11.8	12.7	26.8	0.0	0.0	23.8	143.0	57.8	200.8
1975	2.3	0.1	2.4	79.8	2.6	6.1	13.9	22.6	0.0	0.0	32.7	137.5	78.9	216.4
1980	2.3	0.1	2.4	74.9	4.8	9.9	7.6	22.3	0.0	0.0	44.6	144.2	108.5	252.7
1981	4.1	0.1	4.3	71.5	3.3	2.7	6.8	12.8	0.0	0.0	46.7	135.3	111.4	246.8
1982	3.4	(s)	3.5	68.5	3.8	3.0	5.5	12.3	0.0	0.0	46.7	131.0	112.2	243.2
1983	3.0	0.1	3.1	64.3	4.0	5.2	6.5	15.7	0.0	0.0	49.3	132.4	118.2	250.6
1984	3.0	0.1	3.2	68.4	4.3	4.8	4.8	14.0	0.0	0.0	50.1	135.6	116.5	252.1
1985	2.1	0.0	2.1	61.9	4.8	4.7	5.7	15.2	0.0	0.0	49.6	128.9	116.6	245.4
1986	2.5	0.0	2.5	61.6	4.0	3.8	6.0	13.8	0.0	0.0	52.2	130.1	120.1	250.3
1987	2.4	(s)	2.5	61.3	4.4	2.5	8.6	15.6	0.0	0.0	54.9	134.2	125.4	259.6
1988	3.1	(s)	3.1	66.4	5.2	3.7	7.8	16.7	0.0	0.0	57.4	143.5	129.7	273.2
1989	2.0	(s)	2.0	67.6	4.3	3.3	8.2	15.8	0.0	0.0	57.7	143.2	129.7	272.8
1990	1.3	(s)	1.3	58.3	3.8	1.8	6.6	12.2	<sup>e</sup> 13.7	<sup>e</sup> (s)	57.4	<sup>e</sup> 142.8	<sup>R</sup> 125.5	<sup>R</sup> 268.3
1991	1.6	(s)	1.6	62.3	4.1	2.1	7.8	14.0	14.4	(s)	63.6	155.9	<sup>R</sup> 138.5	<sup>R</sup> 294.4
1992	1.8	(s)	1.8	65.5	4.5	2.1	7.3	13.9	15.1	(s)	60.7	157.1	129.6	<sup>R</sup> 286.7
1993	2.3	(s)	2.3	70.1	4.5	2.2	8.5	15.2	11.5	(s)	65.6	164.8	<sup>R</sup> 138.6	303.3
1994	2.5	(s)	2.5	66.4	4.8	2.2	8.3	15.2	11.2	(s)	66.5	161.8	<sup>R</sup> 138.7	300.5
1995	1.1	<sup>R</sup> 0.0	1.1	72.5	4.5	2.4	8.2	15.1	12.5	(s)	70.1	171.3	146.0	317.2
1996	1.0	0.0	1.0	73.7	3.9	2.5	9.7	16.1	12.4	(s)	72.9	176.1	151.6	327.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
— =Not applicable.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 121. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Kentucky**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	440	19	460	18	501	176	246	336	4	1,263	0	1,590	-	3,955	-
1965	292	12	305	21	576	325	281	268	8	1,459	0	2,166	-	5,171	-
1970	332	7	339	42	835	408	592	263	11	2,110	0	3,465	-	8,396	-
1975	183	4	187	38	915	211	660	275	7	2,069	0	6,489	-	15,652	-
1980	182	3	185	39	2,632	622	364	250	19	3,887	0	8,432	-	20,504	-
1981	320	4	323	36	602	125	330	258	18	1,332	0	8,755	-	20,865	-
1982	266	(s)	267	35	491	83	269	264	4	1,110	0	9,017	-	21,657	-
1983	235	2	237	34	1,584	191	319	319	45	2,458	0	9,377	-	22,466	-
1984	231	4	235	36	1,711	172	238	295	30	2,446	0	9,288	-	21,618	-
1985	162	0	162	34	1,521	92	280	377	1	2,271	0	9,465	-	22,237	-
1986	190	0	190	33	1,024	149	291	404	32	1,900	0	9,913	-	22,803	-
1987	185	1	186	33	533	67	416	R 419	1	R 1,436	0	10,248	-	23,415	-
1988	235	(s)	235	36	976	143	379	404	39	R 1,940	0	10,821	-	24,464	-
1989	154	(s)	154	36	649	164	392	R 393	(s)	1,598	0	11,392	-	R 25,589	-
1990	98	(s)	98	32	656	94	322	R 445	(s)	R 1,517	e NA	11,740	-	R 25,677	-
1991	121	(s)	122	34	716	102	380	319	0	1,516	NA	12,610	-	R 27,447	-
1992	138	(s)	138	35	878	58	358	277	0	R 1,570	NA	12,198	-	R 26,053	-
1993	171	1	172	38	662	78	414	40	2	1,197	18	12,606	-	R 26,634	-
1994	R 184	1	R 185	37	988	73	401	40	2	1,503	28	12,956	-	R 27,032	-
1995	R 85	R 0	R 85	39	1,203	117	399	42	0	1,762	34	13,521	-	R 28,165	-
1996	76	0	76	41	1,209	111	475	40	(s)	1,835	36	13,736	-	28,589	-

  

Trillion Btu															
1960	10.7	0.5	11.2	18.9	2.9	1.0	1.0	1.8	(s)	6.7	0.0	5.4	42.2	13.5	55.7
1965	7.1	0.3	7.4	21.9	3.4	1.8	1.1	1.4	(s)	7.8	0.0	7.4	44.5	17.6	62.2
1970	7.8	0.2	8.0	43.2	4.9	2.3	2.2	1.4	0.1	10.9	0.0	11.8	73.8	28.6	102.5
1975	4.3	0.1	4.3	38.8	5.3	1.2	2.5	1.4	(s)	10.5	0.0	22.1	75.8	53.4	129.2
1980	4.3	0.1	4.4	39.7	15.3	3.5	1.3	1.3	0.1	21.6	0.0	28.8	94.5	70.0	164.5
1981	7.7	0.1	7.7	36.9	3.5	0.7	1.2	1.4	0.1	6.9	0.0	29.9	81.4	71.2	152.6
1982	6.4	(s)	6.4	35.8	2.9	0.5	1.0	1.4	(s)	5.7	0.0	30.8	78.6	73.9	152.5
1983	5.6	(s)	5.7	34.8	9.2	1.1	1.2	1.7	0.3	13.4	0.0	32.0	85.9	76.7	162.6
1984	5.6	0.1	5.7	36.9	10.0	1.0	0.9	1.6	0.2	13.5	0.0	31.7	87.9	73.8	161.6
1985	3.9	0.0	3.9	34.8	8.9	0.5	1.0	2.0	(s)	12.4	0.0	32.3	83.4	75.9	159.3
1986	4.7	0.0	4.7	33.9	6.0	0.8	1.1	2.1	0.2	10.2	0.0	33.8	82.6	77.8	160.4
1987	4.5	(s)	4.6	34.5	3.1	0.4	1.5	2.2	(s)	7.2	0.0	35.0	81.3	79.9	161.2
1988	5.7	(s)	5.7	37.0	5.7	0.8	1.4	2.1	0.2	10.2	0.0	36.9	R 89.9	83.5	173.4
1989	3.6	(s)	3.6	37.6	3.8	0.9	1.4	2.1	(s)	8.2	0.0	38.9	88.3	R 87.3	R 175.6
1990	2.4	(s)	2.4	33.1	3.8	0.5	1.2	2.3	(s)	R 7.9	e NA	40.1	83.4	R 87.6	R 171.0
1991	3.0	(s)	3.0	35.3	4.2	0.6	1.4	1.7	0.0	7.8	NA	43.0	89.1	R 93.6	R 182.8
1992	3.4	(s)	3.4	37.5	5.1	0.3	1.3	1.5	0.0	8.2	NA	41.6	90.7	R 88.9	R 179.6
1993	4.2	(s)	4.3	39.6	3.9	0.4	1.5	0.2	(s)	6.0	0.4	43.0	R 93.3	R 90.9	R 184.2
1994	4.6	(s)	4.6	39.0	5.8	0.4	1.5	0.2	(s)	7.8	0.6	44.2	R 96.2	92.2	R 188.5
1995	2.1	R 0.0	2.1	42.3	7.0	0.7	1.4	0.2	0.0	9.3	0.7	46.1	R 100.6	96.1	R 196.7
1996	1.9	0.0	1.9	43.0	7.0	0.6	1.7	0.2	(s)	9.6	0.7	46.9	102.0	97.5	199.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 122. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Kentucky**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	3,754	46	1,482	1,558	512	2,476	138	485	289	2,556	9,495	0	0	0	23,818	-	59,243	-
1965	4,879	58	2,112	1,987	397	3,957	346	430	536	4,382	14,148	0	0	0	20,893	-	49,884	-
1970	4,325	75	3,090	2,078	608	5,562	474	209	786	7,672	20,479	0	0	0	20,586	-	49,887	-
1975	2,898	66	2,622	3,346	293	6,511	518	195	2,059	9,178	24,721	0	0	0	31,006	-	74,790	-
1980	3,058	66	2,021	6,433	539	7,784	539	89	857	13,775	32,035	0	0	0	28,280	-	68,767	-
1981	2,400	66	1,933	5,347	565	5,638	517	72	871	7,966	22,909	0	0	0	27,364	-	65,216	-
1982	2,413	65	2,896	4,918	530	5,045	471	61	1,140	6,897	21,958	0	0	0	24,377	-	58,549	-
1983	2,858	61	2,101	4,185	447	4,698	493	50	1,119	6,985	20,077	0	0	0	23,323	-	55,877	-
1984	3,554	67	2,170	4,520	354	R 3,905	526	R 640	747	8,040	R 20,901	0	0	0	28,594	-	66,555	-
1985	3,732	63	1,872	5,622	582	3,574	490	R 843	621	7,509	R 21,114	0	0	0	26,564	-	62,409	-
1986	3,358	55	2,285	4,987	267	3,098	479	822	707	6,992	19,638	0	0	0	24,476	-	56,301	-
1987	3,228	58	2,701	5,456	136	3,904	542	R 845	851	8,555	R 22,992	0	0	0	24,459	-	55,887	-
1988	3,083	63	2,616	5,221	189	4,121	523	R 784	530	8,988	R 22,972	0	0	0	26,446	-	59,789	-
1989	3,542	66	2,764	4,787	196	3,641	536	839	473	8,816	22,055	0	0	0	30,173	-	R 67,774	-
1990	3,431	72	3,032	5,211	152	3,941	552	R 848	544	9,749	R 24,029	f NA	f NA	f NA	32,543	-	R 71,177	-
1991	2,898	74	2,801	5,226	72	4,125	493	R 865	458	18,234	32,274	NA	NA	NA	32,939	-	R 71,693	-
1992	2,777	76	2,537	5,792	82	3,986	503	861	422	20,910	35,093	NA	NA	NA	37,084	-	R 79,208	-
1993	3,565	79	2,550	5,257	138	R 2,997	512	R 1,043	334	19,702	32,532	NA	NA	NA	36,320	-	R 76,737	-
1994	3,241	86	2,843	6,400	99	2,909	535	1,114	328	20,458	R 34,686	NA	NA	NA	40,049	-	R 83,563	-
1995	3,679	93	2,778	6,614	115	2,902	526	1,168	204	19,868	34,174	NA	NA	NA	40,490	-	R 84,343	-
1996	3,674	97	2,714	6,181	121	3,411	511	1,199	247	21,283	35,668	NA	NA	NA	41,930	-	87,269	-

  

Trillion Btu																		
1960	95.9	47.7	9.8	9.1	2.9	9.9	0.8	2.5	1.8	15.2	52.1	0.0	0.0	0.0	81.3	277.1	202.1	479.2
1965	123.9	60.0	14.0	11.6	2.3	15.9	2.1	2.3	3.4	25.1	76.5	0.0	0.0	0.0	71.3	331.8	170.2	502.0
1970	105.9	76.1	20.5	12.1	3.4	21.0	2.9	1.1	4.9	43.9	109.9	0.0	0.0	0.0	70.2	362.1	170.2	532.3
1975	71.1	66.6	17.4	19.5	1.7	24.2	3.1	1.0	12.9	52.7	132.6	0.0	0.0	0.0	105.8	376.1	255.2	631.3
1980	76.1	66.4	13.4	37.5	3.1	28.6	3.3	0.5	5.4	77.8	169.4	0.0	0.0	0.0	96.5	408.4	234.6	643.1
1981	58.7	67.0	12.8	31.1	3.2	20.5	3.1	0.4	5.5	46.5	123.2	0.0	0.0	0.0	93.4	342.2	222.5	564.8
1982	59.5	65.7	19.2	28.6	3.0	18.2	2.9	0.3	7.2	40.3	119.7	0.0	0.0	0.0	83.2	328.2	199.8	527.9
1983	72.3	62.4	13.9	24.4	2.5	17.0	3.0	0.3	7.0	40.8	108.9	0.0	0.0	0.0	79.6	323.2	190.7	513.8
1984	90.0	68.7	14.4	26.3	2.0	14.1	3.2	3.4	4.7	46.4	114.4	0.0	0.0	0.0	97.6	370.7	227.1	597.8
1985	94.2	65.1	12.4	32.8	3.3	12.9	3.0	4.4	3.9	43.8	116.5	0.0	0.0	0.0	90.6	366.4	212.9	579.3
1986	85.1	56.6	15.2	29.0	1.5	11.3	2.9	4.3	4.4	41.3	110.0	0.0	0.0	0.0	83.5	335.3	192.1	527.4
1987	82.8	59.9	17.9	31.8	0.8	14.3	3.3	4.4	5.4	50.3	128.1	0.0	0.0	0.0	83.5	R 354.3	190.7	544.9
1988	79.3	65.4	17.4	30.4	1.1	15.0	3.2	4.1	3.3	52.9	127.4	0.0	0.0	0.0	90.2	362.4	204.0	566.4
1989	90.3	68.9	18.3	27.9	1.1	13.4	3.3	4.4	3.0	51.7	123.1	0.0	0.0	0.0	102.9	385.3	R 231.2	R 616.6
1990	87.1	74.4	20.1	30.4	0.9	14.3	3.3	R 4.5	3.4	57.3	134.1	f 0.0	f 12.2	f 0.0	111.0	f 418.8	R 242.9	R f 661.7
1991	73.8	77.6	18.6	30.4	0.4	14.9	3.0	4.5	2.9	103.2	177.9	0.0	11.7	0.0	112.4	453.3	R 244.6	R 698.0
1992	71.3	80.9	16.8	33.7	0.5	14.4	3.1	4.5	2.7	118.2	193.9	0.0	12.0	0.0	126.5	484.6	R 270.3	R 754.9
1993	90.9	83.1	16.9	30.6	0.8	10.8	3.1	5.5	2.1	111.1	181.0	0.0	12.2	0.0	123.9	491.0	R 261.8	R 752.8
1994	82.8	91.2	18.9	37.3	0.6	10.6	3.2	R 5.8	2.1	115.5	193.9	0.0	R 13.3	0.0	136.6	R 517.8	R 285.1	R 803.0
1995	94.2	102.4	18.4	38.5	0.7	10.5	3.2	6.1	1.3	112.2	190.9	0.0	12.9	0.0	138.2	R 538.6	R 287.8	R 826.4
1996	93.7	101.7	18.0	36.0	0.7	12.3	3.1	6.3	1.6	119.9	197.9	0.0	13.9	0.0	143.1	550.2	297.8	848.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 123. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Kentucky**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	60	19	652	2,549	497	34	405	20,715	35	24,886	0	0	-	0	-
1965	15	28	1,052	2,725	1,284	36	409	25,082	42	30,630	0	0	-	0	-
1970	7	36	330	4,891	3,089	54	368	33,109	145	41,986	0	0	-	0	-
1975	(s)	24	129	6,215	2,150	66	530	40,346	2	49,437	0	0	-	0	-
1980	0	21	112	12,795	2,897	13	518	39,490	136	55,961	0	0	-	0	-
1981	0	24	92	11,348	3,230	85	497	39,852	250	55,353	0	0	-	0	-
1982	0	19	89	11,131	3,702	277	453	39,742	10	55,404	0	0	-	0	-
1983	0	15	95	13,738	4,009	329	474	39,904	12	58,562	0	0	-	0	-
1984	0	17	73	14,905	3,261	R 291	506	39,851	6	R 58,893	0	0	-	0	-
1985	0	14	66	13,530	3,434	98	471	R 38,704	0	R 56,304	0	0	-	0	-
1986	0	20	85	13,488	3,549	81	461	R 41,291	0	R 58,955	0	0	-	0	-
1987	0	21	62	13,559	4,827	71	521	R 41,804	0	R 60,844	0	0	-	0	-
1988	0	21	62	17,407	4,985	73	503	R 42,945	0	R 65,974	0	0	-	0	-
1989	0	21	53	21,724	5,071	73	516	R 42,196	0	R 69,632	0	0	-	0	-
1990	0	25	51	16,685	5,713	65	531	R 41,748	0	R 64,792	R e 23,930	0	-	0	-
1991	0	20	51	15,793	6,368	52	475	R 42,583	0	R 65,322	R 18,969	0	-	0	-
1992	0	16	55	17,969	6,882	57	484	R 43,648	0	R 69,095	R 23,054	0	-	0	-
1993	0	19	40	21,040	5,705	56	493	R 44,674	0	R 72,008	R 25,728	0	-	0	-
1994	0	23	46	19,519	6,343	93	515	R 45,027	0	R 71,542	R 10,758	0	-	0	-
1995	0	25	44	20,228	6,305	47	506	46,894	0	74,024	R 5,332	0	-	0	-
1996	0	26	47	19,980	5,590	47	491	42,303	0	68,458	5,544	0	-	0	-

**Trillion Btu**

1960	1.5	19.6	3.3	14.8	2.7	0.1	2.5	108.8	0.2	132.5	0.0	0.0	153.5	0.0	153.5
1965	0.4	28.4	5.3	15.9	7.2	0.1	2.5	131.8	0.3	163.0	0.0	0.0	191.8	0.0	191.8
1970	0.2	36.3	1.7	28.5	17.4	0.2	2.2	173.9	0.9	224.8	0.0	0.0	261.3	0.0	261.3
1975	(s)	23.7	0.6	36.2	12.1	0.2	3.2	211.9	(s)	264.4	0.0	0.0	288.1	0.0	288.1
1980	0.0	21.1	0.6	74.5	16.3	(s)	3.1	207.4	0.9	302.9	0.0	0.0	324.0	0.0	324.0
1981	0.0	24.2	0.5	66.1	18.2	0.3	3.0	209.3	1.6	299.0	0.0	0.0	323.2	0.0	323.2
1982	0.0	19.6	0.4	64.8	20.9	1.0	2.7	208.8	0.1	298.7	0.0	0.0	318.3	0.0	318.3
1983	0.0	15.1	0.5	80.0	22.6	R 1.2	2.9	209.6	0.1	316.9	0.0	0.0	331.9	0.0	331.9
1984	0.0	17.6	0.4	86.8	18.4	R 1.0	3.1	209.3	(s)	319.1	0.0	0.0	336.7	0.0	336.7
1985	0.0	14.7	0.3	78.8	19.3	0.4	2.9	203.3	0.0	305.0	0.0	0.0	R 319.8	0.0	R 319.8
1986	0.0	20.9	0.4	78.6	20.0	0.3	2.8	216.9	0.0	319.0	0.0	0.0	339.9	0.0	339.9
1987	0.0	22.2	0.3	79.0	27.3	0.3	3.2	R 219.6	0.0	R 329.6	0.0	0.0	R 351.8	0.0	R 351.8
1988	0.0	21.6	0.3	101.4	28.2	0.3	3.0	R 225.6	0.0	R 358.8	0.0	0.0	R 380.4	0.0	R 380.4
1989	0.0	21.4	0.3	126.5	28.7	0.3	3.1	R 221.7	0.0	R 380.5	0.0	0.0	R 402.0	0.0	R 402.0
1990	0.0	25.6	0.3	97.2	32.3	0.2	3.2	R 219.3	0.0	R 352.5	R e 1.8	0.0	R e 378.1	0.0	R e 378.1
1991	0.0	20.9	0.3	92.0	36.0	0.2	2.9	R 223.7	0.0	R 355.1	R 1.4	0.0	R 376.0	0.0	R 376.0
1992	0.0	16.8	0.3	104.7	38.9	0.2	2.9	R 229.3	0.0	R 376.3	R 1.8	0.0	R 393.1	0.0	R 393.1
1993	0.0	19.9	0.2	122.6	32.3	0.2	3.0	R 234.7	0.0	R 392.9	R 2.0	0.0	412.8	0.0	412.8
1994	0.0	24.3	0.2	113.7	35.9	0.3	3.1	R 236.5	0.0	R 389.8	R 0.8	0.0	R 414.1	0.0	R 414.1
1995	0.0	27.4	0.2	117.8	35.7	0.2	3.1	246.3	0.0	403.4	0.4	0.0	430.8	0.0	430.8
1996	0.0	27.8	0.2	116.4	31.7	0.2	3.0	222.2	0.0	373.7	0.4	0.0	401.5	0.0	401.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 124. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Kentucky**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	7,466	0	7,466	2	9	(s)	0	10	0	2,633	0	0	0	--
1965	12,210	0	12,210	(s)	14	(s)	0	14	0	2,464	0	0	0	--
1970	18,698	0	18,698	9	121	4	0	124	0	3,174	0	0	0	--
1975	22,366	0	22,366	(s)	100	7	0	108	0	3,463	0	0	0	--
1980	24,383	0	24,383	2	0	227	0	227	0	2,940	0	0	0	--
1981	25,910	0	25,910	3	0	323	0	323	0	2,598	0	0	0	--
1982	24,455	0	24,455	2	0	295	0	295	0	3,343	0	0	0	--
1983	24,236	0	24,236	1	0	246	0	246	0	3,244	0	0	0	--
1984	25,014	0	25,014	2	0	302	0	302	0	3,514	0	0	0	--
1985	27,085	0	27,085	1	0	270	0	270	0	2,941	0	0	0	--
1986	28,535	0	28,535	(s)	0	236	0	236	0	2,734	0	0	0	--
1987	28,569	0	28,569	(s)	0	225	0	225	0	2,948	0	0	0	--
1988	31,818	0	31,818	(s)	0	202	0	202	0	2,423	0	0	0	--
1989	29,109	0	29,109	(s)	0	230	0	230	0	4,404	0	0	0	--
1990	30,867	0	30,867	(s)	0	212	0	212	0	3,160	0	0	0	--
1991	31,432	0	31,432	(s)	0	228	0	228	0	3,658	0	0	0	--
1992	31,715	0	31,715	(s)	0	195	0	195	0	3,767	0	0	0	--
1993	35,264	0	35,264	(s)	0	214	0	214	0	3,155	0	0	0	--
1994	34,564	0	34,564	(s)	0	317	0	317	0	4,014	0	0	0	--
1995	35,707	0	35,707	1	0	282	0	282	0	3,423	0	0	0	--
1996	37,071	0	37,071	2	0	308	0	308	0	3,497	0	0	0	--

**Trillion Btu**

1960	171.5	0.0	171.5	2.4	0.1	(s)	0.0	0.1	0.0	28.3	0.0	0.0	0.0	202.3
1965	279.5	0.0	279.5	0.5	0.1	(s)	0.0	0.1	0.0	25.8	0.0	0.0	0.0	305.8
1970	408.6	0.0	408.6	8.7	0.8	(s)	0.0	0.8	0.0	33.3	0.0	0.0	0.0	451.3
1975	480.4	0.0	480.4	0.3	0.6	(s)	0.0	0.7	0.0	36.0	0.0	0.0	0.0	517.4
1980	558.8	0.0	558.8	1.9	0.0	1.3	0.0	1.3	0.0	30.5	0.0	0.0	0.0	592.6
1981	593.2	0.0	593.2	2.7	0.0	1.9	0.0	1.9	0.0	27.2	0.0	0.0	0.0	624.9
1982	557.6	0.0	557.6	1.6	0.0	1.7	0.0	1.7	0.0	34.9	0.0	0.0	0.0	595.9
1983	556.8	0.0	556.8	1.2	0.0	1.4	0.0	1.4	0.0	34.1	0.0	0.0	0.0	593.5
1984	572.1	0.0	572.1	1.8	0.0	1.8	0.0	1.8	0.0	36.7	0.0	0.0	0.0	612.4
1985	616.7	0.0	616.7	1.1	0.0	1.6	0.0	1.6	0.0	30.7	0.0	0.0	0.0	650.2
1986	657.6	0.0	657.6	0.4	0.0	1.4	0.0	1.4	0.0	28.6	0.0	0.0	0.0	688.0
1987	656.9	0.0	656.9	0.3	0.0	1.3	0.0	1.3	0.0	30.7	0.0	0.0	0.0	689.2
1988	733.6	0.0	733.6	0.5	0.0	1.2	0.0	1.2	0.0	R 25.0	0.0	0.0	0.0	R 760.3
1989	669.1	0.0	669.1	0.3	0.0	1.3	0.0	1.3	0.0	R 45.9	0.0	0.0	0.0	R 716.7
1990	713.5	0.0	713.5	0.3	0.0	1.2	0.0	1.2	0.0	R 32.9	0.0	0.0	0.0	R 747.9
1991	726.2	0.0	726.2	0.2	0.0	1.3	0.0	1.3	0.0	R 38.1	0.0	0.0	0.0	R 765.9
1992	737.1	0.0	737.1	0.3	0.0	1.1	0.0	1.1	0.0	R 39.0	0.0	0.0	0.0	R 777.4
1993	825.0	0.0	825.0	0.3	0.0	1.2	0.0	1.2	0.0	R 32.5	0.0	0.0	0.0	R 859.0
1994	807.6	0.0	807.6	0.4	0.0	1.8	0.0	1.8	0.0	R 41.4	0.0	0.0	0.0	R 851.2
1995	830.2	0.0	830.2	0.9	0.0	1.6	0.0	1.6	0.0	35.3	0.0	0.0	0.0	868.0
1996	855.3	0.0	855.3	1.9	0.0	1.8	0.0	1.8	0.0	36.2	0.0	0.0	0.0	895.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 125. Energy Consumption Estimates by Source, Selected Years 1960-1996, Louisiana**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	0	970	2,201	847	10,710	3,207	927	21,646	1,259	22,550	8,769	16,736	88,852	0	0	0	0	-2,067	-	
1965	(s)	1,110	2,539	1,055	8,357	6,097	803	31,150	1,483	27,404	7,889	22,547	109,325	0	0	0	0	362	-	
1970	0	1,841	2,210	447	11,799	5,879	2,509	47,555	1,590	34,850	11,118	32,167	150,124	0	0	0	0	321	-	
1975	0	1,789	2,812	295	21,502	6,082	2,418	52,953	1,826	43,192	28,410	54,576	214,065	0	0	0	0	2,064	-	
1980	111	1,794	1,946	255	22,579	8,644	5,711	52,872	1,999	47,157	64,084	91,100	296,347	0	0	0	0	36,712	-	
1981	1,363	1,782	2,746	379	37,923	7,812	6,865	73,786	1,917	48,933	55,459	59,731	295,551	0	0	0	0	54,778	-	
1982	3,724	1,556	2,970	255	30,871	8,195	5,751	88,462	1,748	50,411	46,714	52,442	287,818	0	0	0	0	58,955	-	
1983	6,154	1,413	2,616	224	31,116	10,935	1,185	88,979	1,830	50,471	37,223	51,640	276,220	0	0	0	0	66,130	-	
1984	6,855	1,594	2,019	187	31,365	12,705	1,270	63,315	1,952	50,391	30,062	55,711	248,977	0	0	0	0	78,285	-	
1985	9,217	1,386	1,835	171	33,602	12,803	187	70,430	1,819	R 49,302	24,717	53,471	R 248,339	2,457	0	0	0	64,216	-	
1986	10,459	1,439	1,792	166	34,958	17,838	226	60,686	1,779	R 49,922	26,518	67,716	R 261,599	10,637	0	0	0	30,227	-	
1987	10,391	1,501	2,275	132	36,641	18,874	72	53,296	2,011	R 48,217	24,093	72,876	R 258,487	12,324	0	0	0	31,746	-	
1988	12,848	1,446	2,398	122	38,908	21,424	258	52,569	1,939	R 48,817	26,675	79,515	R 272,626	13,785	0	0	0	15,560	-	
1989	12,471	1,538	2,315	115	37,049	22,321	168	50,617	1,989	R 46,885	26,075	79,668	R 267,202	12,391	0	0	0	R 29,442	-	
1990	12,547	1,571	1,672	108	39,230	25,879	81	47,504	2,047	R 43,967	23,302	86,024	R 269,813	14,197	i NA	i NA	i NA	R 19,840	-	
1991	12,965	1,508	1,498	93	34,796	32,179	87	51,957	1,831	R 43,005	26,096	73,338	R 264,880	13,956	NA	NA	NA	R 24,010	-	
1992	13,674	1,546	1,689	87	31,546	26,950	46	54,256	1,867	R 45,117	30,253	83,254	R 275,065	10,356	NA	NA	NA	R 29,850	-	
1993	13,676	1,578	1,860	219	35,151	25,124	62	55,642	1,901	R 46,073	27,878	81,920	R 275,830	14,398	NA	NA	NA	R 23,023	-	
1994	14,100	1,624	1,682	132	38,762	32,225	49	67,586	1,987	R 45,627	24,555	84,052	R 296,655	12,779	NA	NA	NA	R 24,847	-	
1995	13,357	1,718	1,652	87	32,699	28,853	37	66,974	1,953	47,247	23,418	80,401	283,321	15,686	NA	NA	NA	R 15,196	-	
1996	12,534	1,664	1,720	81	39,288	29,030	54	68,385	1,895	50,871	26,988	89,318	307,630	15,765	NA	NA	NA	45,234	-	
Trillion Btu																				
1960	0.0	1,003.8	14.6	4.3	62.4	17.4	5.3	86.8	7.6	118.5	55.1	100.3	472.2	0.0	0.0	0.0	0.0	-7.1	1,468.9	
1965	(s)	1,156.4	16.8	5.3	48.7	33.8	4.6	124.9	9.0	144.0	49.6	134.1	570.8	0.0	0.0	0.0	0.0	1.2	1,728.5	
1970	0.0	1,894.2	14.7	2.3	68.7	32.6	14.2	179.7	9.6	183.1	69.9	189.7	764.5	0.0	0.0	0.0	0.0	1.1	2,659.8	
1975	0.0	1,854.8	18.7	1.5	125.2	33.9	13.7	196.7	11.1	226.9	178.6	318.3	1,124.6	0.0	0.0	0.0	0.0	7.0	2,986.4	
1980	2.5	1,862.2	12.9	1.3	131.5	48.4	32.4	194.3	12.1	247.7	402.9	521.2	1,604.7	0.0	0.0	0.0	0.0	125.3	3,594.6	
1981	23.7	1,847.6	18.2	1.9	220.9	43.7	38.9	268.8	11.6	257.0	348.7	346.7	1,556.6	0.0	0.0	0.0	0.0	186.9	3,614.8	
1982	64.3	1,629.2	19.7	1.3	179.8	45.8	32.6	319.8	10.6	264.8	293.7	306.1	1,474.3	0.0	0.0	0.0	0.0	201.2	3,368.9	
1983	106.7	1,472.3	17.4	1.1	181.3	61.4	6.7	321.6	11.1	265.1	234.0	304.6	1,404.2	0.0	0.0	0.0	0.0	225.6	3,208.9	
1984	119.1	1,661.3	13.4	0.9	182.7	71.4	7.2	227.9	11.8	264.7	189.0	322.5	1,291.5	0.0	0.0	0.0	0.0	267.1	3,339.0	
1985	159.1	1,441.8	12.2	0.9	195.7	72.0	1.1	253.8	11.0	R 259.0	155.4	313.0	R 1,274.0	26.6	0.0	0.0	0.0	219.1	3,120.5	
1986	171.9	1,496.1	11.9	0.8	203.6	100.5	1.3	220.9	10.8	262.2	166.7	393.1	1,371.9	114.9	0.0	0.0	0.0	103.1	3,258.0	
1987	172.4	1,560.7	15.1	0.7	213.4	106.3	0.4	195.0	12.2	R 253.3	151.5	419.2	R 1,367.2	132.8	0.0	0.0	0.0	108.3	R 3,341.3	
1988	212.1	1,506.4	15.9	0.6	226.6	120.7	1.5	192.0	11.8	R 256.4	167.7	457.9	R 1,451.1	148.1	0.0	0.0	0.0	53.1	R 3,370.8	
1989	207.0	1,604.6	15.4	0.6	215.8	125.8	1.0	186.4	12.1	R 246.3	163.9	456.4	R 1,423.6	132.9	0.0	0.0	0.0	R 100.5	R 3,468.6	
1990	208.5	1,636.9	11.1	0.5	228.5	146.1	0.5	172.2	12.4	R 231.0	146.5	492.4	R 1,441.2	151.6	i 6.9	i 101.4	i 0.1	R 67.7	R i 3,613.5	
1991	214.3	1,579.0	9.9	0.5	202.7	181.9	0.5	187.8	11.1	R 225.9	164.1	422.5	R 1,406.8	149.9	6.9	103.5	0.1	R 81.9	R 3,541.8	
1992	223.5	1,613.8	11.2	0.4	183.8	152.3	0.3	196.6	11.3	R 237.0	190.2	477.1	R 1,460.2	110.6	6.8	106.5	0.1	R 101.8	R 3,622.6	
1993	222.7	1,636.8	12.3	1.1	204.8	142.0	0.4	200.6	11.5	R 242.0	175.3	471.1	R 1,461.1	153.8	12.8	R 107.3	0.1	R 78.6	R 3,672.4	
1994	230.8	1,688.7	11.2	0.7	225.8	182.6	0.3	245.7	12.1	R 239.7	154.4	481.9	R 1,554.1	136.4	10.1	R 103.5	0.1	R 84.8	R 3,807.5	
1995	217.5	1,778.0	11.0	0.4	190.5	163.6	0.2	242.6	11.8	248.2	147.2	460.9	1,476.5	167.2	9.9	R 101.5	0.1	51.8	R 3,801.8	
1996	205.6	1,737.7	11.4	0.4	228.9	164.6	0.3	247.1	11.5	267.2	169.7	511.1	1,612.2	167.5	10.0	107.8	0.1	154.3	3,994.9	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 126. Residential Energy Consumption Estimates, Selected Years 1960-1996, Louisiana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	56	11	7	1,567	1,585	0	0	3,014	-	7,498	-
1965	0	0	0	61	6	14	2,159	2,178	0	0	5,161	-	12,323	-
1970	0	0	0	86	6	20	2,709	2,735	0	0	9,334	-	22,620	-
1975	0	0	0	96	10	21	2,086	2,117	0	0	11,923	-	28,761	-
1980	1	0	1	73	5	0	1,147	1,152	0	0	16,832	-	40,930	-
1981	0	0	0	81	0	28	1,146	1,174	0	0	17,601	-	41,949	-
1982	1	0	1	68	84	76	855	1,015	0	0	17,989	-	43,206	-
1983	0	0	0	68	3	92	1,017	1,112	0	0	17,351	-	41,570	-
1984	4	0	4	70	3	147	903	1,053	0	0	19,298	-	44,918	-
1985	0	0	0	61	8	18	989	1,014	0	0	20,168	-	47,383	-
1986	0	(s)	(s)	58	9	16	1,060	1,084	0	0	20,263	-	46,611	-
1987	0	0	0	61	2	10	1,012	1,024	0	0	19,986	-	45,667	-
1988	0	(s)	(s)	60	2	12	963	977	0	0	20,134	-	45,518	-
1989	0	0	0	58	8	32	904	944	0	0	20,515	-	46,080	-
1990	0	0	0	53	9	13	774	797	e 421	e 17	21,434	-	46,878	-
1991	0	(s)	(s)	55	2	14	825	840	444	18	21,577	-	46,963	-
1992	0	0	0	55	(s)	9	1,058	1,067	467	18	21,188	-	45,256	-
1993	0	1	1	57	(s)	7	712	719	408	18	22,430	-	47,391	-
1994	0	0	0	53	13	5	683	701	400	19	22,629	-	47,215	-
1995	2	0	2	53	1	9	626	636	444	20	24,116	-	50,236	-
1996	0	0	0	57	1	17	791	809	443	20	24,311	-	50,599	-

  

Trillion Btu														
1960	0.0	0.0	0.0	57.8	0.1	(s)	6.3	6.4	0.0	0.0	10.3	74.4	25.6	100.0
1965	0.0	0.0	0.0	63.6	(s)	0.1	8.7	8.8	0.0	0.0	17.6	90.0	42.0	132.0
1970	0.0	0.0	0.0	88.6	(s)	0.1	10.2	10.4	0.0	0.0	31.8	130.9	77.2	208.1
1975	0.0	0.0	0.0	99.3	0.1	0.1	7.7	7.9	0.0	0.0	40.7	147.9	98.1	246.0
1980	(s)	0.0	(s)	75.8	(s)	0.0	4.2	4.2	0.0	0.0	57.4	137.5	139.7	277.2
1981	0.0	0.0	0.0	84.4	0.0	0.2	4.2	4.3	0.0	0.0	60.1	148.8	143.1	291.9
1982	(s)	0.0	(s)	71.7	0.5	0.4	3.1	4.0	0.0	0.0	61.4	137.1	147.4	284.6
1983	0.0	0.0	0.0	71.0	(s)	0.5	3.7	4.2	0.0	0.0	59.2	134.5	141.8	276.3
1984	0.1	0.0	0.1	72.4	(s)	0.8	3.3	4.1	0.0	0.0	65.8	142.4	153.3	295.6
1985	0.0	0.0	0.0	63.0	(s)	0.1	3.6	3.7	0.0	0.0	68.8	135.5	161.7	297.2
1986	0.0	(s)	(s)	60.4	0.1	0.1	3.9	4.0	0.0	0.0	69.1	133.5	159.0	292.6
1987	0.0	0.0	0.0	63.8	(s)	0.1	3.7	3.8	0.0	0.0	68.2	135.8	155.8	291.6
1988	0.0	(s)	(s)	62.2	(s)	0.1	3.5	3.6	0.0	0.0	68.7	134.5	155.3	289.8
1989	0.0	0.0	0.0	60.2	(s)	0.2	3.3	3.6	0.0	0.0	70.0	133.7	157.2	291.0
1990	0.0	0.0	0.0	55.6	0.1	0.1	2.8	2.9	e 8.4	e 0.1	73.1	e 140.2	R 159.9	R e 300.1
1991	0.0	(s)	(s)	57.2	(s)	0.1	3.0	3.1	8.9	0.1	73.6	142.8	R 160.2	R 303.1
1992	0.0	0.0	0.0	57.7	(s)	0.1	3.8	3.9	9.3	0.1	72.3	143.2	R 154.4	R 297.7
1993	0.0	(s)	(s)	58.6	(s)	(s)	2.6	2.6	8.2	0.1	76.5	146.0	R 161.7	R 307.7
1994	0.0	0.0	0.0	55.0	0.1	(s)	2.5	2.6	8.0	0.1	77.2	142.9	R 161.1	R 304.0
1995	(s)	0.0	(s)	54.3	(s)	0.1	2.3	2.3	8.9	0.1	82.3	147.9	171.4	319.3
1996	0.0	0.0	0.0	59.1	(s)	0.1	2.9	3.0	8.9	0.1	82.9	154.0	172.6	326.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 127. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Louisiana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	0	0	23	1,604	156	276	259	304	2,599	0	2,493	-	6,200	-
1965	0	0	0	23	815	305	381	299	206	2,006	0	4,890	-	11,676	-
1970	0	0	0	70	838	445	478	381	502	2,645	0	8,427	-	20,422	-
1975	0	0	0	51	1,458	467	368	465	1,830	4,588	0	9,225	-	22,253	-
1980	3	0	3	40	399	549	202	168	13,466	14,784	0	12,809	-	31,147	-
1981	0	0	0	40	517	2,530	202	178	15,376	18,802	0	13,707	-	32,667	-
1982	2	0	2	34	347	331	151	184	16,622	17,635	0	14,008	-	33,644	-
1983	0	0	0	35	2,115	79	180	235	1,245	3,854	0	14,078	-	33,727	-
1984	6	0	6	33	2,077	199	159	207	832	3,476	0	16,011	-	37,267	-
1985	0	0	0	30	3,743	65	174	235	575	4,793	0	16,548	-	38,878	-
1986	0	(s)	(s)	28	4,029	21	187	239	231	4,707	0	16,553	-	38,076	-
1987	0	0	0	28	1,880	21	179	R 249	267	R 2,596	0	16,181	-	36,973	-
1988	0	(s)	(s)	27	1,296	110	170	237	215	2,028	0	16,316	-	36,886	-
1989	0	0	0	27	845	35	159	R 222	253	1,515	0	16,563	-	R 37,203	-
1990	0	0	0	25	1,091	21	137	R 318	40	R 1,606	e NA	16,528	-	R 36,149	-
1991	0	(s)	(s)	25	899	22	146	258	121	1,445	NA	16,541	-	R 36,002	-
1992	0	0	0	28	606	10	187	245	6	1,054	NA	16,442	-	R 35,118	-
1993	0	(s)	(s)	25	865	26	126	41	(s)	1,057	24	16,884	-	R 35,673	-
1994	0	0	0	24	865	13	121	41	0	1,039	25	17,631	-	R 36,787	-
1995	3	0	3	24	213	6	110	41	0	370	6	18,016	-	R 37,529	-
1996	0	0	0	26	118	7	140	41	1	307	4	18,412	-	38,320	-

**Trillion Btu**

1960	0.0	0.0	0.0	24.3	9.3	0.9	1.1	1.4	1.9	14.6	0.0	8.5	47.4	21.2	68.6
1965	0.0	0.0	0.0	23.5	4.7	1.7	1.5	1.6	1.3	10.9	0.0	16.7	51.1	39.8	90.9
1970	0.0	0.0	0.0	72.4	4.9	2.5	1.8	2.0	3.2	14.4	0.0	28.8	115.5	69.7	185.2
1975	0.0	0.0	0.0	52.3	8.5	2.6	1.4	2.4	11.5	26.5	0.0	31.5	110.2	75.9	186.1
1980	0.1	0.0	0.1	41.5	2.3	3.1	0.7	0.9	84.7	91.7	0.0	43.7	177.0	106.3	283.2
1981	0.0	0.0	0.0	40.9	3.0	14.3	0.7	0.9	96.7	115.7	0.0	46.8	203.4	111.5	314.8
1982	(s)	0.0	(s)	35.3	2.0	1.9	0.5	1.0	104.5	109.9	0.0	47.8	193.1	114.8	307.9
1983	0.0	0.0	0.0	36.3	12.3	0.4	0.6	1.2	7.8	22.5	0.0	48.0	106.8	115.1	221.9
1984	0.1	0.0	0.1	34.4	12.1	1.1	0.6	1.1	5.2	20.1	0.0	54.6	109.3	127.2	236.5
1985	0.0	0.0	0.0	31.4	21.8	0.4	0.6	1.2	3.6	27.7	0.0	56.5	115.5	132.7	248.1
1986	0.0	(s)	(s)	29.1	23.5	0.1	0.7	1.3	1.5	27.0	0.0	56.5	112.5	129.9	242.4
1987	0.0	0.0	0.0	28.9	10.9	0.1	0.7	1.3	1.7	14.7	0.0	55.2	98.9	126.2	225.0
1988	0.0	(s)	(s)	28.6	7.6	0.6	0.6	1.2	1.3	11.4	0.0	55.7	95.7	125.9	221.5
1989	0.0	0.0	0.0	28.3	4.9	0.2	0.6	1.2	1.6	8.5	0.0	56.5	93.3	R 126.9	R 220.2
1990	0.0	0.0	0.0	26.0	6.4	0.1	0.5	1.7	0.3	8.9	e NA	56.4	R 91.3	R 123.3	R 214.6
1991	0.0	(s)	(s)	26.7	5.2	0.1	0.5	1.4	0.8	8.0	NA	56.4	91.1	R 122.8	R 214.0
1992	0.0	0.0	0.0	29.7	3.5	0.1	0.7	1.3	(s)	5.6	NA	56.1	R 90.0	119.8	211.2
1993	0.0	(s)	(s)	26.1	5.0	0.1	0.5	0.2	(s)	5.9	0.5	57.6	R 91.5	121.7	R 211.7
1994	0.0	0.0	0.0	25.1	5.0	0.1	0.4	0.2	0.0	5.8	0.5	60.2	R 88.2	125.5	R 217.1
1995	0.1	0.0	0.1	24.6	1.2	(s)	0.4	0.2	0.0	1.9	0.1	61.5	R 91.5	128.0	R 216.2
1996	0.0	0.0	0.0	26.9	0.7	(s)	0.5	0.2	(s)	1.5	0.1	62.8	91.2	130.7	222.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 128. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Louisiana**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	0	739	2,201	3,383	764	19,606	559	562	485	16,736	44,296	0	0	0	4,326	-	10,761	-
1965	0	797	2,539	3,129	484	28,451	821	548	353	22,547	58,873	0	0	0	5,905	-	14,100	-
1970	0	1,281	2,210	4,241	2,044	44,017	1,052	302	819	32,167	86,852	0	0	0	11,637	-	28,201	-
1975	0	1,224	2,812	6,391	1,931	50,191	1,299	173	4,046	54,576	121,419	0	0	0	14,969	-	36,108	-
1980	107	1,182	1,946	8,543	5,162	51,364	1,278	62	12,363	91,100	171,819	0	0	0	23,233	-	56,495	-
1981	286	1,166	2,746	14,541	4,307	72,226	1,226	89	13,265	59,731	168,131	0	0	0	26,318	-	62,723	-
1982	323	1,019	2,970	14,994	5,344	87,206	1,118	786	10,352	52,442	175,211	0	0	0	24,694	-	59,311	-
1983	314	966	2,616	9,274	1,015	87,486	1,170	525	18,333	51,640	172,059	0	0	0	23,835	-	57,103	-
1984	382	1,142	2,019	9,108	923	R 61,901	1,248	346	12,254	55,711	R 143,512	0	0	0	25,816	-	60,089	-
1985	457	968	1,835	9,540	104	69,158	1,163	486	6,806	53,471	142,563	0	0	0	23,952	-	56,274	-
1986	263	1,039	1,792	11,931	189	59,345	1,137	393	1,747	67,716	144,249	0	0	0	22,474	-	51,696	-
1987	362	1,113	2,275	13,422	41	R 52,014	1,286	R 374	2,183	72,876	144,472	0	0	0	22,986	-	52,521	-
1988	547	1,052	2,398	14,068	136	51,355	1,240	R 344	2,872	79,515	151,929	0	0	0	23,559	-	53,261	-
1989	702	1,159	2,315	11,903	101	49,482	1,272	292	1,423	79,668	146,455	0	0	0	24,762	-	R 55,621	-
1990	799	1,168	1,672	13,455	47	R 46,519	1,309	R 337	1,146	86,024	R 150,509	f NA	f NA	f NA	25,862	-	R 56,564	-
1991	559	1,120	1,498	12,826	52	50,912	1,171	356	1,125	73,338	141,278	NA	NA	NA	26,584	-	R 57,861	-
1992	597	1,153	1,689	11,390	27	R 52,948	1,194	345	1,003	82,381	150,976	NA	NA	NA	27,466	-	R 58,667	-
1993	586	1,196	1,860	12,251	29	R 54,735	1,216	656	311	79,170	R 150,228	NA	NA	NA	28,439	-	R 60,086	-
1994	621	1,206	1,682	13,525	31	66,667	1,271	796	232	83,141	167,344	NA	NA	NA	29,870	-	R 62,324	-
1995	422	1,254	1,652	9,383	22	66,176	1,249	771	388	80,401	160,042	NA	NA	NA	30,692	-	R 63,933	-
1996	84	1,262	1,720	10,995	30	67,406	1,212	773	757	89,318	172,211	NA	NA	NA	32,544	-	R 67,735	-

**Trillion Btu**

1960	0.0	764.9	14.6	19.7	4.3	78.6	3.4	3.0	3.0	100.3	226.9	0.0	0.0	0.0	14.8	1,006.6	36.7	1,043.3
1965	0.0	830.0	16.8	18.2	2.7	114.1	5.0	2.9	2.2	134.1	296.1	0.0	0.0	0.0	20.1	1,146.3	48.1	1,194.4
1970	0.0	1,318.4	14.7	24.7	11.6	166.3	6.4	1.6	5.1	189.7	420.1	0.0	0.0	0.0	39.7	1,778.2	96.2	1,874.5
1975	0.0	1,263.1	18.7	37.2	10.9	186.5	7.9	0.9	25.4	318.3	605.8	0.0	0.0	0.0	51.1	1,920.0	123.2	2,043.2
1980	2.4	1,225.4	12.9	49.8	29.3	188.7	7.8	0.3	77.7	521.2	887.6	0.0	0.0	0.0	79.3	2,194.7	192.8	2,387.5
1981	6.3	1,207.8	18.2	84.7	24.4	263.1	7.4	0.5	83.4	346.7	828.5	0.0	0.0	0.0	89.8	2,132.4	214.0	2,346.4
1982	7.4	1,067.1	19.7	87.3	30.3	315.2	6.8	4.1	65.1	306.1	834.7	0.0	0.0	0.0	84.3	1,993.5	202.4	2,195.9
1983	7.1	1,004.9	17.4	54.0	5.8	316.2	7.1	2.8	115.3	304.6	823.0	0.0	0.0	0.0	81.3	1,916.3	194.8	2,111.1
1984	8.9	1,188.0	13.4	53.1	5.2	222.8	7.6	1.8	77.0	322.5	703.4	0.0	0.0	0.0	88.1	1,988.3	205.0	2,193.3
1985	11.0	1,005.1	12.2	55.6	0.6	249.2	7.1	2.6	42.8	313.0	682.9	0.0	0.0	0.0	81.7	1,780.7	192.0	1,972.7
1986	6.3	1,079.1	11.9	69.5	1.1	216.0	6.9	2.1	11.0	393.1	711.6	0.0	0.0	0.0	76.7	1,873.7	176.4	2,050.1
1987	8.7	1,157.0	15.1	78.2	0.2	190.3	7.8	2.0	13.7	419.2	726.6	0.0	0.0	0.0	78.4	1,970.7	179.2	2,149.9
1988	10.5	1,095.1	15.9	81.9	0.8	187.5	7.5	1.8	18.1	457.9	771.4	0.0	0.0	0.0	80.4	1,957.5	181.7	2,139.2
1989	14.2	1,208.4	15.4	69.3	0.6	182.2	7.7	1.5	8.9	456.4	742.1	0.0	0.0	0.0	84.5	2,049.2	R 189.8	R 2,239.0
1990	16.0	1,216.4	11.1	78.4	0.3	168.6	7.9	1.8	7.2	492.4	767.7	f 6.9	f 92.3	f 0.0	88.2	f 2,187.5	R 193.0	R f 2,380.5
1991	10.3	1,174.0	9.9	74.7	0.3	184.0	7.1	1.9	7.1	422.5	707.5	6.9	94.1	0.0	90.7	2,083.4	R 197.4	R 2,280.8
1992	11.1	1,204.1	11.2	66.3	0.2	191.9	7.2	1.8	6.3	471.8	756.8	6.8	96.5	0.0	93.7	2,169.0	R 200.2	R 2,369.2
1993	10.8	1,239.4	12.3	71.4	0.2	197.4	7.4	3.4	2.0	454.5	748.5	12.8	98.0	0.0	97.0	2,206.6	R 205.0	R 2,411.6
1994	11.4	1,253.0	11.2	78.8	0.2	242.3	7.7	4.2	1.5	476.4	822.2	10.1	R 94.1	0.0	101.9	R 2,292.7	R 212.6	R 2,505.3
1995	R 7.7	1,295.4	11.0	54.7	0.1	239.8	7.6	4.1	2.4	460.9	780.5	9.9	R 91.9	0.0	104.7	R 2,290.0	R 218.1	R 2,508.1
1996	2.1	1,317.9	11.4	64.0	0.2	243.5	7.4	4.1	4.8	511.1	846.5	10.0	98.7	0.0	111.0	2,386.2	231.1	2,617.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 129. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Louisiana**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	0	32	847	5,690	3,207	197	700	21,729	7,944	40,314	0	26	-	64	-
1965	0	54	1,055	4,387	6,097	159	661	26,557	7,297	46,213	0	7	-	17	-
1970	0	71	447	6,655	5,879	350	539	34,167	9,699	57,736	0	3	-	7	-
1975	0	61	295	13,554	6,082	307	527	42,554	16,835	80,154	0	3	-	7	-
1980	0	74	255	12,457	8,644	159	721	46,927	31,159	100,321	0	3	-	7	-
1981	0	79	379	21,432	7,812	211	691	48,667	23,700	102,892	0	3	-	8	-
1982	0	62	255	15,056	8,195	250	630	49,442	18,460	92,287	0	3	-	7	-
1983	0	47	224	19,374	10,935	297	660	49,711	17,322	98,523	0	2	-	5	-
1984	0	49	187	20,036	12,705	R 352	704	49,837	16,844	R 100,664	0	2	-	6	-
1985	0	42	171	20,179	12,803	109	656	R 48,581	17,277	R 99,777	0	3	-	6	-
1986	0	46	166	18,913	17,838	94	641	R 49,290	23,908	R 110,850	0	3	-	6	-
1987	0	51	132	21,269	18,874	91	725	R 47,594	21,593	R 110,278	0	2	-	6	-
1988	0	57	122	23,395	21,424	81	699	R 48,236	23,192	R 117,150	0	3	-	6	-
1989	0	50	115	23,997	22,321	71	717	R 46,372	24,174	R 117,767	0	2	-	4	-
1990	0	56	108	24,516	25,879	R 73	738	R 43,312	22,041	R 116,667	R e 8,633	2	-	5	-
1991	0	54	93	20,997	32,179	74	660	R 42,391	24,835	R 121,229	R 6,843	2	-	5	-
1992	0	54	87	19,475	26,950	64	673	R 44,527	29,226	R 121,001	R 8,317	3	-	5	-
1993	0	56	219	21,966	25,124	R 69	685	R 45,377	26,933	R 120,373	R 9,282	2	-	4	-
1994	0	63	132	24,261	32,225	115	716	R 44,791	23,987	R 126,226	R 12,980	3	-	5	-
1995	0	65	87	23,024	28,853	61	704	R 46,434	23,016	R 122,181	R 7,647	3	-	5	-
1996	0	68	81	27,976	29,030	48	683	50,057	25,922	133,796	1,840	3	-	5	-

**Trillion Btu**

1960	0.0	32.8	4.3	33.1	17.4	0.8	4.2	114.1	49.9	223.9	0.0	0.1	256.8	0.2	257.0
1965	0.0	56.4	5.3	25.6	33.8	0.6	4.0	139.5	45.9	254.7	0.0	(s)	311.1	0.1	311.1
1970	0.0	73.4	2.3	38.8	32.6	1.3	3.3	179.5	61.0	318.7	0.0	(s)	392.1	(s)	392.1
1975	0.0	63.0	1.5	79.0	33.9	1.1	3.2	223.5	105.8	448.0	0.0	(s)	511.0	(s)	511.1
1980	0.0	77.0	1.3	72.6	48.4	0.6	4.4	246.5	195.9	569.6	0.0	(s)	646.6	(s)	646.7
1981	0.0	81.6	1.9	124.8	43.7	0.8	4.2	255.6	149.0	580.1	0.0	(s)	661.7	(s)	661.7
1982	0.0	65.2	1.3	87.7	45.8	0.9	3.8	259.7	116.1	515.3	0.0	(s)	580.6	(s)	580.6
1983	0.0	49.1	1.1	112.9	61.4	1.1	4.0	261.1	108.9	550.5	0.0	(s)	599.5	(s)	599.6
1984	0.0	51.2	0.9	116.7	71.4	1.3	4.3	261.8	105.9	R 562.2	0.0	(s)	613.5	(s)	613.5
1985	0.0	43.9	0.9	117.5	72.0	0.4	4.0	R 255.2	108.6	R 558.6	0.0	(s)	R 602.5	(s)	R 602.5
1986	0.0	47.8	0.8	110.2	100.5	0.3	3.9	258.9	150.3	625.0	0.0	(s)	672.9	(s)	672.9
1987	0.0	53.5	0.7	123.9	106.3	0.3	4.4	R 250.0	135.8	R 621.4	0.0	(s)	R 674.9	(s)	R 674.9
1988	0.0	58.9	0.6	136.3	120.7	0.3	4.2	R 253.4	145.8	R 661.4	0.0	(s)	R 720.3	(s)	R 720.3
1989	0.0	52.0	0.6	139.8	125.8	0.3	4.3	R 243.6	152.0	R 666.4	0.0	(s)	R 718.4	(s)	R 718.4
1990	0.0	58.1	0.5	142.8	146.1	0.3	4.5	R 227.5	138.6	R 660.3	e 0.7	(s)	R e 718.4	(s)	R e 718.4
1991	0.0	56.2	0.5	122.3	181.9	0.3	4.0	R 222.7	156.1	687.7	0.5	(s)	743.9	(s)	R 744.0
1992	0.0	56.4	0.4	113.4	152.3	0.2	4.1	R 233.9	183.7	R 688.1	R 0.6	(s)	R 744.5	(s)	744.6
1993	0.0	58.2	1.1	128.0	142.0	0.2	4.2	R 238.4	169.3	R 683.2	0.7	(s)	R 741.4	(s)	R 741.4
1994	0.0	65.7	0.7	141.3	182.6	0.4	4.3	R 235.3	150.8	R 715.4	R 1.0	(s)	R 781.1	(s)	781.2
1995	0.0	66.9	0.4	134.1	163.6	0.2	4.3	243.9	144.7	691.2	R 0.6	(s)	758.1	(s)	758.2
1996	0.0	70.8	0.4	163.0	164.6	0.2	4.1	263.0	163.0	758.2	0.1	(s)	829.0	(s)	829.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 130. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Louisiana**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	120	36	22	0	58	0	0	0	0	0	--
1965	(s)	0	(s)	176	34	20	0	54	0	0	0	0	0	--
1970	0	0	0	332	98	58	0	156	0	0	0	0	0	--
1975	0	0	0	356	5,699	88	0	5,787	0	0	0	0	0	--
1980	0	0	0	425	7,096	1,174	0	8,270	0	0	0	0	0	--
1981	1,077	0	1,077	416	3,119	1,433	0	4,552	0	0	0	0	0	--
1982	3,398	0	3,398	373	1,280	391	0	1,670	0	0	0	0	0	--
1983	5,840	0	5,840	296	323	349	0	672	0	0	0	0	0	--
1984	6,463	0	6,463	301	131	141	0	272	0	0	0	0	0	--
1985	8,760	0	8,760	285	59	132	0	191	2,457	0	0	0	0	--
1986	10,196	0	10,196	288	631	77	0	709	10,637	0	0	0	0	--
1987	10,029	0	10,029	247	49	69	0	118	12,324	0	0	0	0	--
1988	12,301	0	12,301	250	396	147	0	543	13,785	0	0	0	0	--
1989	11,770	0	11,770	245	225	297	0	521	12,391	0	0	0	0	--
1990	11,748	0	11,748	269	75	159	0	234	14,197	0	0	0	0	--
1991	12,406	0	12,406	254	16	73	0	89	13,956	0	0	0	0	--
1992	13,077	0	13,077	255	18	75	873	966	10,356	0	0	0	0	--
1993	13,089	0	13,089	244	634	69	2,749	3,452	14,398	0	0	0	0	--
1994	13,479	0	13,479	277	336	98	911	1,345	12,779	0	0	0	0	--
1995	12,930	0	12,930	323	13	78	0	91	15,686	0	0	0	0	--
1996	12,450	0	12,450	252	308	198	0	507	15,765	0	0	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	124.0	0.2	0.1	0.0	0.4	0.0	0.0	0.0	0.0	0.0	124.4
1965	(s)	0.0	(s)	182.9	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	183.3
1970	0.0	0.0	0.0	341.4	0.6	0.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	342.3
1975	0.0	0.0	0.0	377.1	35.8	0.5	0.0	36.3	0.0	0.0	0.0	0.0	0.0	413.5
1980	0.0	0.0	0.0	442.4	44.6	6.8	0.0	51.5	0.0	0.0	0.0	0.0	0.0	493.9
1981	17.4	0.0	17.4	433.0	19.6	8.3	0.0	28.0	0.0	0.0	0.0	0.0	0.0	478.4
1982	56.8	0.0	56.8	389.8	8.0	2.3	0.0	10.3	0.0	0.0	0.0	0.0	0.0	456.9
1983	99.6	0.0	99.6	311.0	2.0	2.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	414.7
1984	110.0	0.0	110.0	315.3	0.8	0.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	426.9
1985	148.1	0.0	148.1	298.4	0.4	0.8	0.0	1.1	26.6	0.0	0.0	0.0	0.0	474.3
1986	165.6	0.0	165.6	279.6	4.0	0.5	0.0	4.4	114.9	0.0	0.0	0.0	0.0	564.5
1987	163.7	0.0	163.7	257.5	0.3	0.4	0.0	0.7	132.8	0.0	0.0	0.0	0.0	554.7
1988	201.5	0.0	201.5	261.6	2.5	0.9	0.0	3.3	148.1	0.0	0.0	0.0	0.0	614.6
1989	192.7	0.0	192.7	255.8	1.4	1.7	0.0	3.1	132.9	0.0	0.0	0.0	0.0	584.5
1990	192.5	0.0	192.5	280.8	0.5	0.9	0.0	1.4	151.6	0.0	0.0	0.0	0.0	626.4
1991	204.0	0.0	204.0	264.9	0.1	0.4	0.0	0.5	149.9	0.0	0.0	0.0	0.0	619.4
1992	212.4	0.0	212.4	265.9	0.1	0.4	5.3	5.8	110.6	0.0	0.0	0.0	0.0	594.7
1993	211.8	0.0	211.8	254.5	4.0	0.4	16.6	20.9	153.8	0.0	0.0	0.0	0.0	641.1
1994	219.3	0.0	219.3	289.9	2.1	0.6	5.5	8.2	136.4	0.0	0.0	0.0	0.0	653.8
1995	209.7	0.0	209.7	336.8	0.1	0.5	0.0	0.5	167.2	0.0	0.0	0.0	0.0	714.2
1996	203.5	0.0	203.5	263.0	1.9	1.2	0.0	3.1	167.5	0.0	0.0	0.0	0.0	637.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

-- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 131. Energy Consumption Estimates by Source, Selected Years 1960-1996, Maine**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>							Total
			Thousand Barrels																Million Kilowatthours
1960	794	0	729	57	7,415	1,904	2,294	442	175	8,378	5,408	10	26,811	0	2,993	0	0	-489	-
1965	316	0	745	89	9,220	1,812	2,052	550	169	9,131	6,340	25	30,132	0	2,290	0	0	-360	-
1970	91	1	701	93	11,822	2,300	1,783	635	169	11,025	11,605	72	40,206	0	3,369	0	0	928	-
1975	56	2	696	71	11,505	1,988	1,036	963	167	12,645	9,929	0	39,001	4,502	4,100	0	0	-7,464	-
1980	124	2	435	82	10,628	1,875	504	874	196	11,768	8,557	0	34,919	4,404	6,176	0	0	-8,605	-
1981	130	2	478	47	9,248	1,547	290	714	188	11,569	9,978	0	34,060	5,212	5,864	0	0	-10,884	-
1982	283	3	466	37	9,164	1,595	316	837	172	11,807	15,448	0	39,843	4,524	5,895	0	0	-9,598	-
1983	239	2	585	45	7,351	1,505	354	842	180	12,089	8,419	0	31,370	5,730	8,013	0	0	-14,443	-
1984	200	2	1,114	43	8,391	1,520	327	605	192	12,281	10,328	0	34,802	5,123	8,666	0	0	-14,423	-
1985	206	3	2,185	41	9,581	1,639	1,042	674	179	R 12,548	7,900	0	R 35,789	5,354	3,379	0	0	2,200	-
1986	375	2	734	58	11,495	1,615	669	1,038	175	R 13,436	12,812	0	42,031	6,242	5,582	0	0	-8,279	-
1987	273	3	852	53	11,961	1,813	710	1,303	197	R 14,105	9,252	0	R 40,246	4,043	6,421	0	0	-2,208	-
1988	277	3	1,586	66	13,714	2,103	999	1,608	190	R 15,368	12,129	0	R 47,764	5,017	5,930	0	0	-3,098	-
1989	271	4	1,000	68	12,269	2,249	946	1,570	195	R 14,194	11,888	0	R 44,379	6,942	4,736	0	0	R -5,535	-
1990	265	4	645	62	11,993	2,528	657	1,391	201	R 14,126	10,709	0	R 42,312	4,861	i NA	i NA	i NA	R 1,423	-
1991	374	5	988	42	10,366	2,374	743	1,475	180	R 14,125	10,196	145	R 40,634	6,264	NA	NA	NA	R -294	-
1992	856	5	1,064	41	10,899	1,904	553	1,234	183	R 14,123	9,647	151	R 39,800	5,358	NA	NA	NA	R 3,491	-
1993	449	5	1,083	37	12,767	1,488	967	1,368	187	R 14,391	9,353	153	R 41,794	5,740	NA	NA	NA	R 5,422	-
1994	464	5	480	35	13,581	992	982	1,383	195	R 14,512	11,486	158	R 43,805	6,632	NA	NA	NA	R -1,827	-
1995	282	5	482	35	14,513	841	1,281	1,545	192	14,368	9,537	153	42,946	198	NA	NA	NA	R 13,062	-
1996	234	6	379	28	15,221	891	1,536	1,792	186	14,959	9,717	163	44,872	5,062	NA	NA	NA	12	-
Trillion Btu																			
1960	20.4	0.0	4.8	0.3	43.2	10.2	13.0	1.8	1.1	44.0	34.0	0.1	152.4	0.0	32.2	0.0	0.0	-1.7	203.4
1965	8.0	0.0	4.9	0.4	53.7	9.7	11.6	2.2	1.0	48.0	39.9	0.1	171.6	0.0	23.9	0.0	0.0	-1.2	202.3
1970	2.2	1.3	4.7	0.5	68.9	12.5	10.1	2.4	1.0	57.9	73.0	0.4	231.3	0.0	35.4	0.0	0.0	3.2	273.3
1975	1.3	2.0	4.6	0.4	67.0	10.8	5.9	3.6	1.0	66.4	62.4	0.0	222.1	49.6	42.7	0.0	0.0	-25.5	292.2
1980	3.0	2.3	2.9	0.4	61.9	10.2	2.9	3.2	1.2	61.8	53.8	0.0	198.3	48.0	64.2	0.0	0.0	-29.4	286.5
1981	3.1	2.4	3.2	0.2	53.9	8.4	1.6	2.6	1.1	60.8	62.7	0.0	194.6	57.5	61.3	0.0	0.0	-37.1	281.8
1982	6.9	2.8	3.1	0.2	53.4	8.7	1.8	3.0	1.0	62.0	97.1	0.0	230.3	50.1	61.6	0.0	0.0	-20.3	331.4
1983	5.9	2.5	3.9	0.2	42.8	8.2	2.0	3.0	1.1	63.5	52.9	0.0	177.7	62.5	84.3	0.0	0.0	-49.3	283.6
1984	5.0	2.5	7.4	0.2	48.9	8.3	1.9	2.2	1.2	64.5	64.9	0.0	199.4	55.6	90.5	0.0	0.0	-49.2	303.7
1985	5.1	2.6	14.5	0.2	55.8	8.9	5.9	2.4	1.1	65.9	49.7	0.0	R 204.5	57.9	35.3	0.0	0.0	7.5	312.9
1986	9.3	2.5	4.9	0.3	67.0	8.8	3.8	3.8	1.1	70.6	80.5	0.0	240.7	67.4	58.3	0.0	0.0	-28.2	350.0
1987	6.8	2.7	5.7	0.3	69.7	9.9	4.0	4.8	1.2	R 74.1	58.2	0.0	R 227.7	43.6	66.9	0.0	0.0	-7.5	R 340.3
1988	6.9	3.3	10.5	0.3	79.9	11.6	5.7	5.9	1.2	R 80.7	76.3	0.0	R 272.0	53.9	61.2	0.0	0.0	-10.6	R 386.7
1989	6.8	3.7	6.6	0.3	71.5	12.4	5.4	5.8	1.2	R 74.6	74.7	0.0	252.5	74.4	R 49.3	0.0	0.0	R -18.9	R 367.8
1990	6.6	4.4	4.3	0.3	69.9	14.0	3.7	5.0	1.2	R 74.2	67.3	0.0	R 240.0	51.9	R i 64.5	i 135.8	i 0.1	R 4.9	R i 510.1
1991	9.4	4.8	6.6	0.2	60.4	13.2	4.2	5.3	1.1	74.2	64.1	0.8	230.0	67.3	R 60.7	136.7	0.1	R -1.0	R 509.4
1992	21.5	5.2	7.1	0.2	63.5	10.5	3.1	4.5	1.1	74.2	60.7	0.8	225.7	57.2	R 56.2	142.3	0.1	R 11.9	R 522.2
1993	11.2	5.0	7.2	0.2	74.4	8.3	5.5	4.9	1.1	R 75.6	58.8	0.8	236.8	61.3	R 55.1	R 146.7	0.1	R 18.5	R 535.3
1994	11.6	5.1	3.2	0.2	79.1	5.6	5.6	5.0	1.2	R 76.2	72.2	0.9	249.2	70.8	R 58.6	R 135.3	0.1	R -6.2	R 534.5
1995	7.1	5.5	3.2	0.2	84.5	4.8	7.3	5.6	1.2	75.5	60.0	0.8	243.0	2.1	66.4	R 131.8	0.1	44.6	R 517.4
1996	5.9	5.8	2.5	0.1	88.7	5.1	8.7	6.5	1.1	78.6	61.1	0.9	253.2	53.8	76.3	135.1	0.1	(s)	538.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 132. Residential Energy Consumption Estimates, Selected Years 1960-1996, Maine**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	41	54	95	0	4,727	2,091	342	7,160	0	0	993	—	2,471	—
1965	24	34	58	0	6,139	1,691	381	8,210	0	0	1,224	—	2,922	—
1970	3	21	24	1	7,877	1,649	383	9,909	0	0	1,723	—	4,175	—
1975	2	11	13	1	7,646	932	604	9,182	0	0	2,487	—	5,999	—
1980	4	8	12	1	6,372	405	395	7,173	0	0	2,998	—	7,290	—
1981	2	20	22	1	5,222	233	345	5,800	0	0	3,033	—	7,229	—
1982	10	15	25	1	4,941	272	404	5,617	0	0	3,182	—	7,642	—
1983	8	11	19	1	3,241	266	480	3,988	0	0	3,218	—	7,709	—
1984	10	13	23	1	3,324	273	231	3,828	0	0	3,369	—	7,841	—
1985	12	10	21	1	4,881	910	348	6,139	0	0	3,419	—	8,033	—
1986	17	8	25	1	5,683	625	510	6,817	0	0	3,578	—	8,230	—
1987	12	8	21	1	5,462	630	805	6,898	0	0	3,726	—	8,513	—
1988	10	5	16	1	5,970	785	905	7,659	0	0	3,904	—	8,825	—
1989	6	5	11	1	5,678	804	921	7,403	0	0	4,009	—	R 9,006	—
1990	11	7	18	1	5,039	563	863	6,464	e 215	e 22	3,932	—	R 8,600	—
1991	(s)	7	7	1	5,157	593	939	6,689	226	23	3,817	—	R 8,308	—
1992	9	6	15	1	5,282	473	767	6,522	238	24	3,830	—	R 8,180	—
1993	6	5	11	1	5,722	741	952	7,414	247	25	3,872	—	R 8,181	—
1994	0	4	4	1	5,642	758	985	7,385	242	29	3,692	—	R 7,703	—
1995	0	2	2	1	7,384	1,089	1,120	9,593	269	31	3,629	—	7,559	—
1996	0	2	2	1	7,657	1,370	1,253	10,281	268	31	3,679	—	7,658	—

  

Trillion Btu														
1960	1.0	1.3	2.4	0.0	27.5	11.9	1.4	40.8	0.0	0.0	3.4	46.5	8.4	54.9
1965	0.6	0.8	1.4	0.0	35.8	9.6	1.5	46.9	0.0	0.0	4.2	52.5	10.0	62.4
1970	0.1	0.5	0.6	0.5	45.9	9.4	1.4	56.7	0.0	0.0	5.9	63.6	14.2	77.9
1975	(s)	0.2	0.3	0.7	44.5	5.3	2.2	52.1	0.0	0.0	8.5	61.6	20.5	82.1
1980	0.1	0.2	0.3	0.6	37.1	2.3	1.5	40.9	0.0	0.0	10.2	51.9	24.9	76.8
1981	(s)	0.5	0.5	0.6	30.4	1.3	1.3	33.0	0.0	0.0	10.3	44.4	24.7	69.1
1982	0.2	0.4	0.6	0.6	28.8	1.5	1.5	31.8	0.0	0.0	10.9	43.9	26.1	69.9
1983	0.2	0.3	0.5	0.6	18.9	1.5	1.7	22.1	0.0	0.0	11.0	34.1	26.3	60.4
1984	0.3	0.3	0.6	0.6	19.4	1.5	0.8	21.7	0.0	0.0	11.5	34.4	26.8	61.1
1985	0.3	0.2	0.5	0.5	28.4	5.2	1.3	34.8	0.0	0.0	11.7	47.6	27.4	75.0
1986	0.4	0.2	0.6	0.6	33.1	3.5	1.9	38.5	0.0	0.0	12.2	51.9	28.1	80.0
1987	0.3	0.2	0.5	0.5	31.8	3.6	2.9	38.3	0.0	0.0	12.7	52.1	29.0	81.2
1988	0.3	0.1	0.4	0.6	34.8	4.4	3.3	42.5	0.0	0.0	13.3	56.8	30.1	86.9
1989	0.2	0.1	0.3	0.6	33.1	4.6	3.4	41.0	0.0	0.0	13.7	55.6	30.7	86.4
1990	0.3	0.2	0.5	0.7	29.3	3.2	3.1	35.7	e 4.3	e 0.1	13.4	e 54.6	29.3	e 83.9
1991	(s)	0.2	0.2	0.7	30.0	3.4	3.4	36.8	4.5	0.1	13.0	55.3	28.3	83.7
1992	0.2	0.1	0.4	0.9	30.8	2.7	2.8	36.2	4.8	0.1	13.1	55.4	27.9	83.3
1993	0.1	0.1	0.3	0.9	33.3	4.2	3.4	41.0	4.9	0.1	13.2	60.4	27.9	88.3
1994	0.0	0.1	0.1	0.9	32.9	4.3	3.6	40.7	4.8	0.1	12.6	59.3	26.3	85.6
1995	0.0	(s)	(s)	0.9	43.0	6.2	4.1	53.2	5.4	0.1	12.4	72.1	25.8	97.9
1996	0.0	0.1	0.1	1.0	44.6	7.8	4.5	56.9	5.4	0.1	12.6	76.0	26.1	102.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 133. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Maine**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	76	36	111	0	996	100	60	29	145	1,331	0	542	-	1,349	-
1965	44	23	67	0	1,294	81	67	34	72	1,549	0	819	-	1,956	-
1970	6	14	19	(s)	1,660	79	68	40	292	2,139	0	975	-	2,364	-
1975	4	7	11	1	1,611	45	107	40	334	2,136	0	1,568	-	3,781	-
1980	8	5	13	1	1,840	70	70	48	682	2,710	0	1,717	-	4,175	-
1981	3	13	16	1	1,741	45	61	53	360	2,260	0	1,787	-	4,259	-
1982	19	10	29	1	1,417	22	71	55	641	2,206	0	1,831	-	4,398	-
1983	15	8	23	1	1,401	68	85	99	742	2,394	0	1,917	-	4,592	-
1984	19	8	27	1	1,436	43	41	114	1,013	2,647	0	2,276	-	5,298	-
1985	21	6	28	1	969	99	61	104	1,040	2,273	0	2,338	-	5,493	-
1986	32	5	38	1	1,562	26	90	105	1,461	3,243	0	2,490	-	5,728	-
1987	23	6	28	1	1,484	41	142	93	707	R 2,467	0	2,642	-	6,036	-
1988	19	4	22	1	1,788	159	160	104	1,880	4,091	0	2,744	-	6,204	-
1989	11	3	14	2	1,621	94	162	R 116	1,914	3,907	0	2,826	-	R 6,348	-
1990	20	5	25	2	1,688	68	152	R 101	2,166	R 4,176	e NA	2,847	-	R 6,226	-
1991	1	5	6	2	1,444	125	166	54	2,464	4,252	NA	2,857	-	R 6,218	-
1992	17	4	21	2	1,715	66	135	50	1,257	3,223	NA	2,900	-	R 6,195	-
1993	11	4	15	2	2,262	174	168	12	740	3,355	63	3,040	-	R 6,424	-
1994	0	2	2	2	2,292	152	174	12	772	3,401	65	2,962	-	R 6,181	-
1995	0	1	1	2	2,212	161	198	12	375	2,958	63	2,973	-	6,193	-
1996	0	2	2	3	2,458	148	221	12	516	3,356	74	3,276	-	6,817	-

  

Trillion Btu															
1960	1.9	0.9	2.8	0.0	5.8	0.6	0.2	0.2	0.9	7.7	0.0	1.9	12.3	4.6	16.9
1965	1.1	0.5	1.7	0.0	7.5	0.5	0.3	0.2	0.5	8.9	0.0	2.8	13.4	6.7	20.0
1970	0.1	0.3	0.5	0.4	9.7	0.4	0.3	0.2	1.8	12.4	0.0	3.3	16.6	8.1	24.7
1975	0.1	0.2	0.3	0.5	9.4	0.3	0.4	0.2	2.1	12.3	0.0	5.3	18.5	12.9	31.4
1980	0.2	0.1	0.3	0.9	10.7	0.4	0.3	0.3	4.3	15.9	0.0	5.9	23.0	14.2	37.2
1981	0.1	0.3	0.4	1.1	10.1	0.3	0.2	0.3	2.3	13.2	0.0	6.1	20.7	14.5	35.3
1982	0.5	0.2	0.7	1.2	8.3	0.1	0.3	0.3	4.0	13.0	0.0	6.2	21.1	15.0	36.1
1983	0.4	0.2	0.6	1.2	8.2	0.4	0.3	0.5	4.7	14.0	0.0	6.5	22.3	15.7	38.0
1984	0.5	0.2	0.7	1.2	8.4	0.2	0.1	0.6	6.4	15.7	0.0	7.8	25.3	18.1	43.4
1985	0.5	0.1	0.7	1.2	5.6	0.6	0.2	0.5	6.5	13.5	0.0	8.0	23.3	18.7	42.1
1986	0.8	0.1	0.9	1.3	9.1	0.1	0.3	0.6	9.2	19.3	0.0	8.5	30.0	19.5	49.5
1987	0.6	0.1	0.7	1.3	8.6	0.2	0.5	0.5	4.4	14.3	0.0	9.0	25.4	20.6	46.0
1988	0.5	0.1	0.6	1.5	10.4	0.9	0.6	0.5	11.8	24.3	0.0	9.4	35.7	21.2	56.9
1989	0.3	0.1	0.4	1.7	9.4	0.5	0.6	0.6	12.0	23.2	0.0	9.6	34.9	R 21.7	56.5
1990	0.5	0.1	0.6	1.7	9.8	0.4	0.6	0.5	13.6	24.9	e NA	9.7	36.9	21.2	58.2
1991	(s)	0.1	0.1	1.9	8.4	0.7	0.6	0.3	15.5	25.5	NA	9.7	37.2	21.2	R 58.5
1992	0.4	0.1	0.5	2.2	10.0	0.4	0.5	0.3	7.9	19.0	NA	9.9	31.7	21.1	52.8
1993	0.3	0.1	0.4	2.3	13.2	1.0	0.6	0.1	4.6	19.5	1.3	10.4	R 33.8	21.9	R 55.7
1994	0.0	0.1	0.1	2.4	13.4	0.9	0.6	0.1	4.9	19.8	1.3	10.1	R 33.6	21.1	R 54.7
1995	0.0	(s)	(s)	2.5	12.9	0.9	0.7	0.1	2.4	16.9	1.3	10.1	R 30.8	21.1	R 52.0
1996	0.0	(s)	(s)	2.6	14.3	0.8	0.8	0.1	3.2	19.3	1.5	11.2	34.6	23.3	57.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 134. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Maine**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	562	0	729	402	103	38	42	166	2,639	10	4,130	906	0	0	1,246	-	3,100	-
1965	191	0	745	500	280	100	54	145	1,270	25	3,117	697	0	0	1,715	-	4,094	-
1970	48	(s)	701	805	54	182	55	137	5,128	72	7,134	940	0	0	2,370	-	5,743	-
1975	32	1	696	682	59	250	59	79	5,848	0	7,674	832	0	0	2,477	-	5,976	-
1980	99	1	435	762	29	400	65	76	4,047	0	5,812	974	0	0	3,470	-	8,438	-
1981	92	1	478	745	12	304	62	40	5,260	0	6,901	974	0	0	3,419	-	8,149	-
1982	229	1	466	915	22	350	56	59	11,027	0	12,897	974	0	0	3,714	-	8,920	-
1983	197	1	585	636	19	263	59	41	4,206	0	5,809	974	0	0	4,302	-	10,307	-
1984	150	1	1,114	652	11	312	63	91	5,742	0	7,985	974	0	0	3,978	-	9,259	-
1985	157	1	2,185	456	34	249	59	124	3,407	0	6,514	974	0	0	4,067	-	9,555	-
1986	312	1	734	555	19	416	57	131	6,920	0	8,831	974	0	0	4,135	-	9,512	-
1987	224	1	852	918	39	340	65	137	4,175	0	6,526	974	0	0	4,351	-	9,942	-
1988	239	1	1,586	1,236	55	514	63	132	4,976	0	8,562	974	0	0	4,616	-	10,436	-
1989	246	1	1,000	1,077	49	456	64	140	4,751	0	7,536	974	0	0	4,599	-	10,330	-
1990	222	2	645	708	27	358	66	R 94	4,856	0	6,754	f NA	f NA	f NA	4,750	-	R 10,389	-
1991	361	2	988	778	26	353	59	100	5,330	145	7,780	NA	NA	NA	4,709	-	R 10,249	-
1992	820	2	1,064	752	14	316	60	102	6,021	151	8,480	NA	NA	NA	4,753	-	R 10,152	-
1993	423	2	1,083	1,258	52	235	61	146	6,952	153	9,942	NA	NA	NA	5,040	-	R 10,648	-
1994	458	2	480	1,415	72	202	64	163	9,202	158	11,758	NA	NA	NA	4,952	-	R 10,332	-
1995	279	2	482	1,163	31	216	63	169	7,493	153	9,770	NA	NA	NA	4,959	-	R 10,331	-
1996	230	2	379	1,355	17	310	61	176	7,853	163	10,315	NA	NA	NA	4,772	-	9,931	-

**Trillion Btu**

1960	14.5	0.0	4.8	2.3	0.6	0.2	0.3	0.9	16.6	0.1	25.7	9.7	0.0	0.0	4.3	54.2	10.6	64.8
1965	4.9	0.0	4.9	2.9	1.6	0.4	0.3	0.8	8.0	0.1	19.0	7.3	0.0	0.0	5.9	37.1	14.0	51.0
1970	1.2	0.4	4.7	4.7	0.3	0.7	0.3	0.7	32.2	0.4	44.0	9.9	0.0	0.0	8.1	63.5	19.6	83.1
1975	0.8	0.7	4.6	4.0	0.3	0.9	0.4	0.4	36.8	0.0	47.4	8.7	0.0	0.0	8.5	66.0	20.4	86.4
1980	2.4	0.8	2.9	4.4	0.2	1.5	0.4	0.4	25.4	0.0	35.2	10.1	0.0	0.0	11.8	60.3	28.8	89.1
1981	2.2	0.7	3.2	4.3	0.1	1.1	0.4	0.2	33.1	0.0	42.3	10.2	0.0	0.0	11.7	67.1	27.8	94.9
1982	5.6	0.9	3.1	5.3	0.1	1.3	0.3	0.3	69.3	0.0	79.8	10.2	0.0	0.0	12.7	109.1	30.4	139.6
1983	4.9	0.8	3.9	3.7	0.1	0.9	0.4	0.2	26.4	0.0	35.7	10.2	0.0	0.0	14.7	66.2	35.2	101.4
1984	3.7	0.8	7.4	3.8	0.1	1.1	0.4	0.5	36.1	0.0	49.3	10.2	0.0	0.0	13.6	77.6	31.6	109.2
1985	3.9	0.9	14.5	2.7	0.2	0.9	0.4	0.7	21.4	0.0	40.7	10.2	0.0	0.0	13.9	69.5	32.6	102.1
1986	7.7	0.7	4.9	3.2	0.1	1.5	0.3	0.7	43.5	0.0	54.3	10.2	0.0	0.0	14.1	87.0	32.5	119.5
1987	5.6	0.9	5.7	5.3	0.2	1.2	0.4	0.7	26.3	0.0	39.8	10.1	0.0	0.0	14.8	71.3	33.9	105.2
1988	5.9	1.2	10.5	7.2	0.3	1.9	0.4	0.7	31.3	0.0	52.3	10.1	0.0	0.0	15.7	85.2	35.6	120.8
1989	6.1	1.4	6.6	6.3	0.3	1.7	0.4	0.7	29.9	0.0	45.9	10.0	0.0	0.0	15.7	79.1	35.2	114.3
1990	5.5	2.0	4.3	4.1	0.2	1.3	0.4	0.5	30.5	0.0	41.3	f 20.2	f 131.5	f 0.0	16.2	f 216.8	35.4	R f 252.3
1991	9.0	2.2	6.6	4.5	0.1	1.3	0.4	0.5	33.5	0.8	47.7	19.5	132.2	0.0	16.1	226.7	R 35.0	261.7
1992	20.6	2.1	7.1	4.4	0.1	1.1	0.4	0.5	37.9	0.8	52.2	18.7	137.6	0.0	16.2	R 247.3	34.6	R 281.9
1993	10.6	1.8	7.2	7.3	0.3	0.8	0.4	0.8	43.7	0.8	61.3	17.3	140.5	0.0	17.2	248.7	36.3	285.0
1994	11.4	1.8	3.2	8.2	0.4	0.7	0.4	0.9	57.9	0.9	72.5	19.1	R 129.2	0.0	16.9	R 250.9	R 35.3	R 286.2
1995	7.0	2.0	3.2	6.8	0.2	0.8	0.4	0.9	47.1	0.8	60.1	R 17.7	R 125.2	0.0	16.9	R 229.0	35.2	R 264.2
1996	5.8	2.2	2.5	7.9	0.1	1.1	0.4	0.9	49.4	0.9	63.2	22.3	128.2	0.0	16.3	238.0	33.9	271.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 135. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Maine**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	10	0	57	1,251	1,904	1	133	8,183	776	12,305	0	0	-	0	-
1965	1	0	89	1,199	1,812	2	116	8,952	625	12,794	0	0	-	0	-
1970	(s)	0	93	1,385	2,300	3	114	10,848	1,415	16,158	0	0	-	0	-
1975	(s)	0	71	1,524	1,988	3	108	12,526	934	17,155	0	0	-	0	-
1980	0	(s)	82	1,593	1,875	9	132	11,644	209	15,544	0	0	-	0	-
1981	0	(s)	47	1,500	1,547	4	126	11,476	634	15,336	0	0	-	0	-
1982	0	(s)	37	1,835	1,595	12	115	11,693	638	15,925	0	0	-	0	-
1983	0	(s)	45	2,011	1,505	15	121	11,949	17	15,663	0	0	-	0	-
1984	0	(s)	43	2,936	1,520	21	129	12,075	18	16,742	0	0	-	0	-
1985	0	(s)	41	3,247	1,639	15	120	R 12,320	21	R 17,403	0	0	-	0	-
1986	0	(s)	58	3,662	1,615	23	117	13,201	72	18,748	0	0	-	0	-
1987	0	(s)	53	4,063	1,813	15	133	R 13,875	53	R 20,005	0	0	-	0	-
1988	0	(s)	66	4,670	2,103	30	128	15,132	418	R 22,547	0	0	-	0	-
1989	0	(s)	68	3,848	2,249	30	131	R 13,939	199	R 20,465	0	0	-	0	-
1990	0	(s)	62	4,539	2,528	17	135	R 13,931	149	R 21,362	e 0	0	-	0	-
1991	0	(s)	42	2,965	2,374	17	121	R 13,971	116	R 19,606	0	0	-	0	-
1992	0	(s)	41	3,126	1,904	15	123	R 13,971	156	R 19,337	0	0	-	0	-
1993	0	(s)	37	3,510	1,488	13	125	R 14,233	285	R 19,691	0	0	-	0	-
1994	0	(s)	35	4,213	992	22	131	R 14,337	236	R 19,967	0	0	-	0	-
1995	0	(s)	35	3,725	841	11	129	14,187	207	19,135	0	0	-	0	-
1996	0	0	28	3,738	891	7	125	14,771	205	19,766	0	(s)	-	(s)	-

  

Trillion Btu															
1960	0.3	0.0	0.3	7.3	10.2	(s)	0.8	43.0	4.9	66.4	0.0	0.0	66.7	0.0	66.7
1965	(s)	0.0	0.4	7.0	9.7	(s)	0.7	47.0	3.9	68.8	0.0	0.0	68.8	0.0	68.8
1970	(s)	0.0	0.5	8.1	12.5	(s)	0.7	57.0	8.9	87.6	0.0	0.0	87.6	0.0	87.6
1975	(s)	0.0	0.4	8.9	10.8	(s)	0.7	65.8	5.9	92.4	0.0	0.0	92.4	0.0	92.4
1980	0.0	0.1	0.4	9.3	10.2	(s)	0.8	61.2	1.3	83.2	0.0	0.0	83.3	0.0	83.3
1981	0.0	(s)	0.2	8.7	8.4	(s)	0.8	60.3	4.0	82.5	0.0	0.0	82.5	0.0	82.5
1982	0.0	0.1	0.2	10.7	8.7	(s)	0.7	61.4	4.0	85.7	0.0	0.0	85.8	0.0	85.8
1983	0.0	(s)	0.2	11.7	8.2	0.1	0.7	62.8	0.1	83.8	0.0	0.0	83.8	0.0	83.8
1984	0.0	(s)	0.2	17.1	8.3	0.1	0.8	63.4	0.1	90.0	0.0	0.0	90.0	0.0	90.0
1985	0.0	(s)	0.2	18.9	8.9	0.1	0.7	64.7	0.1	93.7	0.0	0.0	93.7	0.0	93.7
1986	0.0	(s)	0.3	21.3	8.8	0.1	0.7	69.3	0.5	101.0	0.0	0.0	101.0	0.0	101.0
1987	0.0	(s)	0.3	23.7	9.9	0.1	0.8	R 72.9	0.3	R 107.9	0.0	0.0	R 107.9	0.0	R 107.9
1988	0.0	(s)	0.3	27.2	11.6	0.1	0.8	R 79.5	2.6	R 122.1	0.0	0.0	R 122.1	0.0	R 122.1
1989	0.0	(s)	0.3	22.4	12.4	0.1	0.8	73.2	1.3	R 110.6	0.0	0.0	R 110.6	0.0	R 110.6
1990	0.0	(s)	0.3	26.4	14.0	0.1	0.8	R 73.2	0.9	R 115.8	e 0.0	0.0	R e 115.8	0.0	R e 115.8
1991	0.0	(s)	0.2	17.3	13.2	0.1	0.7	73.4	0.7	R 105.6	0.0	0.0	R 105.6	0.0	R 105.6
1992	0.0	(s)	0.2	18.2	10.5	0.1	0.7	73.4	1.0	R 104.1	0.0	0.0	R 104.1	0.0	R 104.1
1993	0.0	(s)	0.2	20.4	8.3	(s)	0.8	R 74.8	1.8	R 106.3	0.0	0.0	R 106.3	0.0	R 106.3
1994	0.0	(s)	0.2	24.5	5.6	0.1	0.8	75.3	1.5	108.0	0.0	0.0	108.0	0.0	108.0
1995	0.0	0.1	0.2	21.7	4.8	(s)	0.8	74.5	1.3	103.3	0.0	0.0	103.4	0.0	103.4
1996	0.0	0.0	0.1	21.8	5.1	(s)	0.8	77.6	1.3	106.6	0.0	(s)	106.6	(s)	106.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 136. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Maine**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	17	0	17	0	1,847	38	0	1,885	0	2,087	0	0	0	--
1965	0	0	0	0	4,373	89	0	4,462	0	1,593	0	0	0	--
1970	0	0	0	0	4,770	95	0	4,865	0	2,429	0	0	0	--
1975	0	0	0	0	2,812	42	0	2,854	4,502	3,268	0	0	0	--
1980	0	0	0	0	3,620	61	0	3,680	4,404	5,203	0	0	0	--
1981	0	0	0	0	3,724	40	0	3,764	5,212	4,890	0	0	0	--
1982	0	0	0	0	3,142	56	0	3,198	4,524	4,921	0	0	0	--
1983	0	0	0	0	3,454	62	0	3,516	5,730	7,039	0	0	0	--
1984	0	0	0	0	3,556	43	0	3,599	5,123	7,692	0	0	0	--
1985	0	0	0	0	3,432	28	0	3,461	5,354	2,405	0	0	0	--
1986	0	0	0	0	4,359	33	0	4,392	6,242	4,608	0	0	0	--
1987	0	0	0	0	4,317	35	0	4,351	4,043	5,448	0	0	0	--
1988	0	0	0	0	4,855	51	0	4,906	5,017	4,956	0	0	0	--
1989	0	0	0	0	5,023	46	0	5,069	6,942	3,762	0	0	0	--
1990	0	0	0	0	3,537	19	0	3,557	4,861	4,259	0	0	0	--
1991	0	0	0	0	2,286	22	0	2,307	6,264	3,948	0	0	0	--
1992	0	0	0	0	2,213	24	0	2,237	5,358	3,636	0	0	0	--
1993	0	0	0	0	1,377	16	0	1,392	5,740	3,661	0	0	0	--
1994	0	0	0	0	1,275	18	0	1,294	6,632	3,831	0	0	0	--
1995	0	0	0	0	1,462	29	0	1,490	198	4,720	(s)	0	0	--
1996	0	0	0	0	1,142	12	0	1,154	5,062	5,221	1	0	0	--

**Trillion Btu**

1960	0.5	0.0	0.5	0.0	11.6	0.2	0.0	11.8	0.0	22.5	0.0	0.0	0.0	34.8
1965	0.0	0.0	0.0	0.0	27.5	0.5	0.0	28.0	0.0	16.7	0.0	0.0	0.0	44.7
1970	0.0	0.0	0.0	0.0	30.0	0.6	0.0	30.5	0.0	25.5	0.0	0.0	0.0	56.0
1975	0.0	0.0	0.0	0.0	17.7	0.2	0.0	17.9	49.6	34.0	0.0	0.0	0.0	101.5
1980	0.0	0.0	0.0	0.0	22.8	0.4	0.0	23.1	48.0	54.0	0.0	0.0	0.0	125.2
1981	0.0	0.0	0.0	0.0	23.4	0.2	0.0	23.6	57.5	51.1	0.0	0.0	0.0	132.3
1982	0.0	0.0	0.0	0.0	19.8	0.3	0.0	20.1	50.1	51.4	0.0	0.0	0.0	121.6
1983	0.0	0.0	0.0	0.0	21.7	0.4	0.0	22.1	62.5	74.1	0.0	0.0	0.0	158.6
1984	0.0	0.0	0.0	0.0	22.4	0.2	0.0	22.6	55.6	80.3	0.0	0.0	0.0	158.5
1985	0.0	0.0	0.0	0.0	21.6	0.2	0.0	21.7	57.9	25.1	0.0	0.0	0.0	104.8
1986	0.0	0.0	0.0	0.0	27.4	0.2	0.0	27.6	67.4	48.1	0.0	0.0	0.0	143.1
1987	0.0	0.0	0.0	0.0	27.1	0.2	0.0	27.3	43.6	56.8	0.0	0.0	0.0	127.7
1988	0.0	0.0	0.0	0.0	30.5	0.3	0.0	30.8	53.9	51.2	0.0	0.0	0.0	135.9
1989	0.0	0.0	0.0	0.0	31.6	0.3	0.0	31.8	74.4	R 39.2	0.0	0.0	0.0	R 145.5
1990	0.0	0.0	0.0	0.0	22.2	0.1	0.0	22.4	51.9	R 44.3	0.0	0.0	0.0	R 120.5
1991	0.0	0.0	0.0	0.0	14.4	0.1	0.0	14.5	67.3	R 41.2	0.0	0.0	0.0	R 124.4
1992	0.0	0.0	0.0	0.0	13.9	0.1	0.0	14.1	57.2	R 37.6	0.0	0.0	0.0	R 111.0
1993	0.0	0.0	0.0	0.0	8.7	0.1	0.0	8.7	61.3	R 37.7	0.0	0.0	0.0	R 108.4
1994	0.0	0.0	0.0	0.0	8.0	0.1	0.0	8.1	70.8	R 39.5	0.0	0.0	0.0	R 128.5
1995	0.0	0.0	0.0	0.0	9.2	0.2	0.0	9.4	2.1	48.6	(s)	0.0	0.0	77.0
1996	0.0	0.0	0.0	0.0	7.2	0.1	0.0	7.3	53.8	54.0	(s)	0.0	0.0	123.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 137. Energy Consumption Estimates by Source, Selected Years 1960-1996, Maryland**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	8,530	71	1,813	279	12,870	2,457	2,445	1,051	565	22,552	16,835	978	61,844	0	1,358	0	0	1,813	-	
1965	12,372	99	3,289	474	16,967	2,856	2,371	1,473	627	27,510	15,510	1,697	72,774	0	1,141	0	0	-5,190	-	
1970	12,216	156	2,798	309	19,817	4,477	2,331	1,841	624	37,159	22,046	2,895	94,297	0	1,907	0	0	4,900	-	
1975	7,761	140	3,246	205	21,034	3,049	1,193	2,395	763	43,688	26,941	2,166	104,680	4,386	2,311	0	0	9,915	-	
1980	9,312	160	2,638	173	21,908	3,522	1,168	2,060	724	44,003	16,480	2,504	95,181	10,947	1,270	0	0	18,497	-	
1981	8,376	175	3,014	128	18,609	3,537	879	2,015	695	44,412	13,134	2,717	89,140	11,523	1,426	0	0	26,139	-	
1982	8,597	158	3,123	74	16,314	3,573	805	2,039	633	44,193	11,966	2,277	84,997	10,345	1,341	0	0	26,749	-	
1983	9,083	146	4,312	72	18,472	3,797	658	2,050	663	44,252	10,937	2,163	87,377	11,676	1,765	0	0	23,249	-	
1984	10,595	159	5,016	67	18,657	3,658	409	2,405	707	45,428	11,479	2,811	90,638	11,651	2,022	41	0	17,974	-	
1985	10,012	151	4,520	76	17,717	3,901	1,247	1,805	659	45,632	7,916	2,640	86,112	9,926	1,524	16	0	31,970	-	
1986	10,750	153	5,211	101	17,385	3,889	936	1,428	644	46,914	7,282	3,552	87,343	12,828	1,876	38	0	23,020	-	
1987	11,311	169	4,823	87	18,077	3,771	1,209	1,741	729	48,215	9,077	4,432	92,161	10,070	1,612	51	0	36,495	-	
1988	11,757	173	4,350	94	18,551	4,481	1,526	1,695	703	49,125	10,417	4,288	95,229	11,734	1,328	57	0	32,515	-	
1989	11,541	190	4,500	83	20,581	4,384	1,006	2,135	721	49,629	15,112	3,486	101,638	2,719	1,778	14	0	51,150	-	
1990	11,193	172	5,008	74	17,003	3,637	466	1,965	742	47,415	9,881	4,027	90,218	1,251	1,778	i NA	i NA	62,316	-	
1991	10,709	173	3,703	75	17,313	3,293	476	2,018	663	48,448	9,368	3,814	89,173	9,036	NA	NA	NA	45,938	-	
1992	9,713	181	3,509	96	18,355	3,061	378	2,635	676	49,044	7,836	4,559	90,150	10,664	NA	NA	NA	40,868	-	
1993	10,268	181	4,684	102	19,724	3,000	621	2,479	689	49,602	9,703	4,025	94,629	12,301	NA	NA	NA	36,450	-	
1994	10,491	184	4,363	71	19,463	3,229	672	2,835	720	50,699	9,039	4,133	95,222	11,235	NA	NA	NA	36,933	-	
1995	11,198	194	4,236	48	19,189	3,430	801	2,687	708	51,475	3,921	4,057	90,553	12,938	NA	NA	NA	40,516	-	
1996	11,366	193	3,610	35	22,124	3,897	802	2,930	687	51,800	4,383	4,283	94,551	12,093	NA	NA	NA	43,142	-	
Trillion Btu																				
1960	226.6	73.3	12.0	1.4	75.0	13.5	13.9	4.2	3.4	118.5	105.8	5.7	353.4	0.0	14.6	0.0	0.0	6.2	674.1	
1965	327.4	101.0	21.8	2.4	98.8	15.7	13.4	5.9	3.8	144.5	97.5	9.4	413.4	0.0	11.9	0.0	0.0	-17.7	836.0	
1970	311.3	159.6	18.6	1.6	115.4	25.0	13.2	7.0	3.8	195.2	138.6	16.2	534.4	0.0	20.0	0.0	0.0	16.7	1,042.1	
1975	197.2	141.9	21.5	1.0	122.5	16.9	6.8	8.9	4.6	229.5	169.4	12.4	593.6	48.3	24.0	0.0	0.0	33.8	1,038.8	
1980	235.7	163.4	17.5	0.9	127.6	19.5	6.6	7.6	4.4	231.1	103.6	14.1	533.0	119.4	13.2	0.0	0.0	63.1	1,127.8	
1981	210.4	177.7	20.0	0.6	108.4	19.7	5.0	7.3	4.2	233.3	82.6	15.4	496.6	127.1	14.9	0.0	0.0	89.2	1,115.8	
1982	217.3	160.8	20.7	0.4	95.0	19.9	4.6	7.4	3.8	232.1	75.2	12.9	472.0	114.6	14.0	0.0	0.0	91.3	1,070.0	
1983	232.6	148.7	28.6	0.4	107.6	21.1	3.7	7.4	4.0	232.5	68.8	12.1	486.1	127.3	18.6	0.0	0.0	79.3	1,092.6	
1984	270.2	163.1	33.3	0.3	108.7	20.3	2.3	8.7	4.3	238.6	72.2	15.7	504.4	126.3	21.1	0.4	0.0	61.3	1,146.9	
1985	256.2	156.0	30.0	0.4	103.2	21.7	7.1	6.5	4.0	239.7	49.8	14.9	477.2	107.3	15.9	0.2	0.0	109.1	1,121.9	
1986	275.0	158.0	34.6	0.5	101.3	21.6	5.3	5.2	3.9	246.4	45.8	19.9	484.6	138.5	19.6	0.4	0.0	78.5	1,154.7	
1987	288.9	174.3	32.0	0.4	105.3	21.0	6.9	6.4	4.4	253.3	57.1	25.1	511.8	108.5	16.8	0.5	0.0	124.5	1,225.3	
1988	301.2	178.4	28.9	0.5	108.1	25.0	8.7	6.2	4.3	258.1	65.5	24.4	529.4	126.1	13.7	0.6	0.0	110.9	1,260.4	
1989	295.1	195.8	29.9	0.4	119.9	24.5	5.7	7.9	4.4	260.7	95.0	19.6	567.9	29.2	18.5	0.1	0.0	174.5	1,281.1	
1990	286.4	177.1	33.2	0.4	99.0	20.3	2.6	7.1	4.5	249.1	62.1	22.8	501.2	13.4	23.9	i 30.0	i (s)	212.6	1,244.6	
1991	274.8	177.8	24.6	0.4	100.9	18.4	2.7	7.3	4.0	254.5	58.9	21.5	493.1	97.0	14.7	29.7	(s)	156.7	1,243.9	
1992	247.5	186.4	23.3	0.5	106.9	17.1	2.1	9.6	4.1	257.6	49.3	25.8	496.3	113.9	18.9	31.1	(s)	139.4	1,233.6	
1993	261.7	185.7	31.1	0.5	114.9	16.8	3.5	8.9	4.2	260.6	61.0	22.6	524.1	131.4	17.1	33.4	(s)	124.4	1,277.8	
1994	268.9	189.4	28.9	0.4	113.4	18.2	3.8	10.3	4.4	266.3	56.8	23.3	525.9	119.9	20.7	34.9	(s)	126.0	1,285.8	
1995	289.6	199.1	28.1	0.2	111.8	19.4	4.5	9.7	4.3	270.4	24.7	22.9	496.1	137.9	14.9	37.6	(s)	138.2	1,313.3	
1996	292.2	198.1	24.0	0.2	128.9	22.1	4.5	10.6	4.2	272.1	27.6	24.1	518.2	128.5	25.4	39.6	(s)	147.2	1,349.1	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 138. Residential Energy Consumption Estimates, Selected Years 1960-1996, Maryland

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	78	37	116	46	6,053	2,234	617	8,903	0	0	2,772	-	6,895	-
1965	68	23	91	57	7,191	2,177	893	10,261	0	0	4,384	-	10,466	-
1970	20	14	35	73	8,234	2,166	1,007	11,407	0	0	7,690	-	18,635	-
1975	7	8	15	69	8,453	1,014	1,242	10,708	0	0	9,660	-	23,300	-
1980	10	5	15	68	8,797	830	740	10,367	0	0	12,119	-	29,469	-
1981	7	11	19	70	6,789	614	912	8,315	0	0	12,309	-	29,335	-
1982	32	7	38	68	6,166	664	794	7,624	0	0	12,472	-	29,955	-
1983	33	4	36	65	6,064	548	944	7,556	0	0	13,490	-	32,319	-
1984	26	4	30	73	6,218	364	1,041	7,623	0	0	13,974	-	32,526	-
1985	40	4	44	68	5,023	1,113	987	7,123	0	0	14,319	-	33,642	-
1986	42	4	46	72	4,818	828	758	6,404	0	0	15,819	-	36,388	-
1987	59	4	64	71	5,521	1,136	949	7,605	0	0	17,218	-	39,342	-
1988	40	5	45	75	5,921	1,316	897	8,134	0	0	18,483	-	41,787	-
1989	18	2	20	75	5,139	813	1,101	7,053	0	0	19,069	-	42,833	R
1990	16	2	18	66	4,284	385	1,088	5,757	e 518	e 11	19,102	-	41,778	R
1991	14	2	16	69	4,181	396	1,215	5,792	546	11	20,295	-	44,174	R
1992	4	1	5	75	4,458	316	1,365	6,139	575	12	19,762	-	42,211	R
1993	4	3	6	77	5,230	509	1,404	7,143	620	13	21,546	-	45,523	R
1994	11	3	14	77	4,985	393	1,431	6,809	607	13	21,666	-	45,207	R
1995	100	7	107	77	4,766	535	1,647	6,948	674	14	22,234	-	46,314	R
1996	14	1	15	86	5,895	593	1,766	8,254	673	14	22,986	-	47,841	-

  

Trillion Btu														
1960	2.0	0.9	2.9	47.5	35.3	12.7	2.5	50.4	0.0	0.0	9.5	110.2	23.5	133.8
1965	1.7	0.6	2.3	58.1	41.9	12.3	3.6	57.8	0.0	0.0	15.0	133.1	35.7	168.8
1970	0.5	0.3	0.8	74.5	48.0	12.3	3.8	64.0	0.0	0.0	26.2	165.6	63.6	229.2
1975	0.2	0.2	0.3	70.1	49.2	5.7	4.6	59.6	0.0	0.0	33.0	163.0	79.5	242.5
1980	0.2	0.1	0.4	69.4	51.2	4.7	2.7	58.7	0.0	0.0	41.4	169.8	100.5	270.4
1981	0.2	0.3	0.4	71.4	39.5	3.5	3.3	46.3	0.0	0.0	42.0	160.2	100.1	260.3
1982	0.8	0.2	0.9	68.7	35.9	3.8	2.9	42.6	0.0	0.0	42.6	154.8	102.2	257.0
1983	0.8	0.1	0.9	66.1	35.3	3.1	3.4	41.8	0.0	0.0	46.0	154.8	110.3	265.1
1984	0.6	0.1	0.7	74.9	36.2	2.1	3.7	42.0	0.0	0.0	47.7	165.4	111.0	276.3
1985	1.0	0.1	1.1	70.7	29.3	6.3	3.6	39.1	0.0	0.0	48.9	159.8	114.8	274.6
1986	1.0	0.1	1.1	74.5	28.1	4.7	2.8	35.5	0.0	0.0	54.0	165.1	124.2	289.2
1987	1.5	0.1	1.6	73.0	32.2	6.4	3.5	42.1	0.0	0.0	58.7	175.4	134.2	309.7
1988	1.0	0.1	1.1	77.3	34.5	7.5	3.3	45.2	0.0	0.0	63.1	186.7	142.6	329.3
1989	0.4	(s)	0.5	77.4	29.9	4.6	4.1	38.6	0.0	0.0	65.1	181.6	146.1	327.7
1990	0.4	0.1	0.4	68.2	25.0	2.2	3.9	31.1	e 10.4	e (s)	65.2	e 175.3	142.5	317.8
1991	0.3	(s)	0.4	71.0	24.4	2.2	4.4	31.0	10.9	(s)	69.2	182.6	150.7	333.3
1992	0.1	(s)	0.1	77.1	26.0	1.8	4.9	32.7	11.5	(s)	67.4	188.9	144.0	333.0
1993	0.1	0.1	0.2	79.0	30.5	2.9	5.1	38.4	12.4	(s)	73.5	203.5	155.3	358.8
1994	0.3	0.1	0.3	79.0	29.0	2.2	5.2	36.5	12.1	(s)	73.9	201.9	154.2	356.2
1995	2.5	0.2	2.7	78.4	27.8	3.0	6.0	36.8	13.5	(s)	75.9	207.2	158.0	365.3
1996	0.4	(s)	0.4	88.0	34.3	3.4	6.4	44.1	13.5	(s)	78.4	224.4	163.2	387.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 139. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Maryland**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	146	25	170	8	2,357	72	109	72	2,442	5,052	0	2,695	-	6,705	-
1965	126	16	142	13	2,800	70	158	90	1,920	5,039	0	3,937	-	9,401	-
1970	38	10	48	26	3,206	70	178	103	1,498	5,054	0	6,347	-	15,380	-
1975	14	5	19	25	3,291	33	219	120	1,169	4,833	0	8,573	-	20,680	-
1980	18	4	22	29	2,865	20	131	121	1,159	4,296	0	9,388	-	22,829	-
1981	14	8	21	32	1,568	16	161	137	208	2,090	0	9,578	-	22,827	-
1982	59	4	64	31	1,770	88	140	137	452	2,587	0	9,696	-	23,289	-
1983	61	2	63	31	2,789	41	167	164	561	3,721	0	10,121	-	24,247	-
1984	47	3	50	25	2,860	20	184	151	765	3,980	0	9,463	-	22,026	-
1985	74	3	77	24	1,942	89	174	170	252	2,628	0	9,627	-	22,618	-
1986	78	2	80	24	1,541	49	134	174	867	2,766	0	10,265	-	23,612	-
1987	110	3	113	26	1,935	23	167	R 181	1,829	4,134	0	10,875	-	24,849	-
1988	74	4	78	26	1,862	63	158	R 169	719	2,972	0	11,549	-	26,111	-
1989	33	1	34	27	2,004	89	194	R 197	1,293	R 3,778	0	10,656	-	R 23,936	-
1990	29	1	30	24	2,095	48	192	R 231	556	R 3,122	e NA	11,035	-	R 24,135	-
1991	25	1	26	38	2,297	52	214	118	133	2,816	NA	11,274	-	R 24,538	-
1992	7	1	8	42	2,575	42	241	103	478	3,439	NA	11,370	-	R 24,286	-
1993	7	2	9	44	2,689	85	248	31	193	3,246	75	12,028	-	R 25,414	-
1994	20	2	22	44	3,063	213	253	31	217	3,776	87	13,941	-	R 29,089	-
1995	185	5	190	47	2,999	210	291	32	121	3,652	86	23,761	-	R 49,496	-
1996	26	1	27	46	3,317	151	312	32	109	3,920	100	23,807	-	49,550	-

  

Trillion Btu															
1960	3.7	0.6	4.3	8.3	13.7	0.4	0.4	0.4	15.4	30.3	0.0	9.2	52.1	22.9	75.0
1965	3.1	0.4	3.5	13.3	16.3	0.4	0.6	0.5	12.1	29.9	0.0	13.4	60.2	32.1	92.2
1970	0.9	0.2	1.1	26.5	18.7	0.4	0.7	0.5	9.4	29.7	0.0	21.7	79.0	52.5	131.4
1975	0.3	0.1	0.4	25.5	19.2	0.2	0.8	0.6	7.4	28.2	0.0	29.3	83.4	70.6	153.9
1980	0.4	0.1	0.5	29.1	16.7	0.1	0.5	0.6	7.3	25.2	0.0	32.0	86.9	77.9	164.8
1981	0.3	0.2	0.5	32.5	9.1	0.1	0.6	0.7	1.3	11.8	0.0	32.7	77.5	77.9	155.4
1982	1.5	0.1	1.6	31.4	10.3	0.5	0.5	0.7	2.8	14.9	0.0	33.1	80.9	79.5	160.4
1983	1.5	0.1	1.6	31.4	16.2	0.2	0.6	0.9	3.5	21.5	0.0	34.5	89.0	82.7	171.7
1984	1.2	0.1	1.2	26.0	16.7	0.1	0.7	0.8	4.8	23.0	0.0	32.3	82.5	75.2	157.7
1985	1.8	0.1	1.9	25.0	11.3	0.5	0.6	0.9	1.6	14.9	0.0	32.8	74.6	77.2	151.8
1986	1.9	0.1	2.0	24.7	9.0	0.3	0.5	0.9	5.5	16.1	0.0	35.0	77.8	80.6	158.4
1987	2.7	0.1	2.8	26.4	11.3	0.1	0.6	0.9	11.5	24.5	0.0	37.1	90.8	84.8	175.6
1988	1.8	0.1	1.9	26.7	10.8	0.4	0.6	0.9	4.5	17.2	0.0	39.4	85.2	89.1	174.3
1989	0.8	(s)	0.9	27.7	11.7	0.5	0.7	1.0	8.1	22.1	0.0	36.4	87.0	R 81.7	R 168.7
1990	0.7	(s)	0.8	24.7	12.2	0.3	0.7	1.2	3.5	17.9	e NA	37.7	81.0	R 82.3	R 163.3
1991	0.6	(s)	0.7	39.1	13.4	0.3	0.8	0.6	0.8	15.9	NA	38.5	94.1	R 83.7	R 177.8
1992	0.2	(s)	0.2	43.6	15.0	0.2	0.9	0.5	3.0	19.7	NA	38.8	102.3	R 82.9	R 185.1
1993	0.2	(s)	0.2	44.8	15.7	0.5	0.9	0.2	1.2	18.4	1.5	41.0	R 106.0	R 86.7	R 192.7
1994	0.5	(s)	0.6	45.5	17.8	1.2	0.9	0.2	1.4	21.5	1.7	47.6	R 116.8	R 99.3	R 216.1
1995	4.6	0.1	4.7	48.0	17.5	1.2	1.1	0.2	0.8	20.6	1.7	81.1	R 156.2	R 168.9	R 325.1
1996	0.7	(s)	0.7	47.1	19.3	0.9	1.1	0.2	0.7	22.2	2.0	81.2	153.2	169.1	322.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 140. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Maryland

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	5,067	16	1,813	2,093	138	317	247	670	10,333	978	16,589	1	0	0	3,269	-	8,131	-
1965	6,101	28	3,289	3,177	124	412	316	439	8,296	1,697	17,750	1	0	0	5,073	-	12,113	-
1970	6,174	44	2,798	3,248	95	624	325	261	6,672	2,895	16,918	(s)	0	0	8,469	-	20,524	-
1975	3,854	43	3,246	3,434	146	888	456	293	4,983	2,166	15,614	0	0	0	9,069	-	21,875	-
1980	3,367	54	2,638	3,297	318	1,163	414	145	2,669	2,504	13,148	0	0	0	13,057	-	31,750	-
1981	3,139	64	3,014	3,093	249	865	397	148	1,619	2,717	12,102	0	0	0	13,670	-	32,580	-
1982	2,729	56	3,123	2,336	53	1,056	362	110	1,391	2,277	10,708	0	0	0	12,754	-	30,634	-
1983	2,762	46	4,312	2,337	69	882	379	117	2,955	2,163	13,213	0	0	0	13,048	-	31,260	-
1984	3,013	57	5,016	2,396	25	1,096	404	273	4,034	2,811	16,057	0	0	0	14,895	-	34,669	-
1985	2,846	55	4,520	2,547	44	584	377	299	1,022	2,640	12,032	0	0	0	15,312	-	35,974	-
1986	2,864	53	5,211	2,087	58	501	368	322	949	3,552	13,049	0	0	0	15,808	-	36,362	-
1987	2,906	58	4,823	1,663	50	593	417	R 333	803	4,432	R 13,114	0	0	0	16,745	-	38,262	-
1988	2,614	64	4,350	1,718	146	583	402	R 352	1,060	4,288	R 12,898	0	0	0	17,446	-	39,441	-
1989	2,414	66	4,500	2,105	104	782	412	R 343	985	3,486	R 12,718	0	0	0	19,456	-	R 43,702	-
1990	2,200	62	5,008	1,733	33	R 633	424	R 297	1,241	4,027	R 13,396	f NA	f NA	f NA	19,308	-	R 42,230	-
1991	2,034	47	3,703	1,556	28	547	379	285	777	3,814	11,089	NA	NA	NA	19,448	-	R 42,329	-
1992	706	50	3,509	1,408	19	928	387	275	1,073	4,559	12,159	NA	NA	NA	19,768	-	R 42,223	-
1993	732	49	4,684	1,787	27	713	394	290	1,244	4,025	R 13,163	NA	NA	NA	20,201	-	R 42,680	-
1994	738	48	4,363	1,697	66	1,055	412	294	1,252	4,133	R 13,271	NA	NA	NA	19,037	-	R 39,722	-
1995	760	49	4,236	1,682	57	701	405	328	740	4,057	R 12,207	NA	NA	NA	10,057	-	R 20,950	-
1996	785	50	3,610	2,087	58	803	393	343	1,384	4,283	12,960	NA	NA	NA	10,098	-	21,018	-

Trillion Btu

1960	135.0	16.6	12.0	12.2	0.8	1.3	1.5	3.5	65.0	5.7	102.0	(s)	0.0	0.0	11.2	264.7	27.7	292.4
1965	162.4	28.3	21.8	18.5	0.7	1.7	1.9	2.3	52.2	9.4	108.5	(s)	0.0	0.0	17.3	316.5	41.3	357.8
1970	162.7	44.9	18.6	18.9	0.5	2.4	2.0	1.4	41.9	16.2	101.8	(s)	0.0	0.0	28.9	338.2	70.0	408.3
1975	102.2	43.6	21.5	20.0	0.8	3.3	2.8	1.5	31.3	12.4	93.7	0.0	0.0	0.0	30.9	270.4	74.6	345.1
1980	88.6	55.5	17.5	19.2	1.8	4.3	2.5	0.8	16.8	14.1	76.9	0.0	0.0	0.0	44.6	265.5	108.3	373.9
1981	82.0	65.3	20.0	18.0	1.4	3.2	2.4	0.8	10.2	15.4	71.4	0.0	0.0	0.0	46.6	265.4	111.2	376.5
1982	71.6	57.2	20.7	13.6	0.3	3.8	2.2	0.6	8.7	12.9	62.9	0.0	0.0	0.0	43.5	235.2	104.5	339.8
1983	72.5	47.2	28.6	13.6	0.4	3.2	2.3	0.6	18.6	12.1	79.3	0.0	0.0	0.0	44.5	243.6	106.7	350.2
1984	78.9	58.8	33.3	14.0	0.1	3.9	2.5	1.4	25.4	15.7	96.3	0.0	0.0	0.0	50.8	284.8	118.3	403.1
1985	74.8	56.5	30.0	14.8	0.2	2.1	2.3	1.6	6.4	14.9	72.4	0.0	0.0	0.0	52.2	255.9	122.7	378.7
1986	69.9	54.4	34.6	12.2	0.3	1.8	2.2	1.7	6.0	19.9	78.7	0.0	0.0	0.0	53.9	257.0	124.1	381.1
1987	75.9	60.4	32.0	9.7	0.3	2.2	2.5	R 1.8	5.0	25.1	78.6	0.0	0.0	0.0	57.1	272.0	130.5	402.6
1988	68.6	66.2	28.9	10.0	0.8	2.1	2.4	R 1.8	6.7	24.4	77.2	0.0	0.0	0.0	59.5	271.5	134.6	406.1
1989	63.3	68.3	29.9	12.3	0.6	2.9	2.5	R 1.8	6.2	19.6	75.7	f 0.0	f 0.0	f 0.0	66.4	273.6	R 149.1	R 422.8
1990	57.4	63.5	33.2	10.1	0.2	2.3	2.6	R 1.6	7.8	22.8	R 80.6	f 0.0	f 0.0	f 0.0	65.9	f 286.9	R 144.1	R f 431.0
1991	52.8	48.3	24.6	9.1	0.2	2.0	-2.3	1.5	4.9	21.5	66.0	0.0	18.8	0.0	66.4	252.3	R 144.4	R 396.7
1992	17.8	51.1	23.3	8.2	0.1	3.4	2.3	1.4	6.7	25.8	71.3	0.0	19.6	0.0	67.4	227.3	R 144.1	R 371.4
1993	18.5	50.2	31.1	10.4	0.2	2.6	2.4	1.5	7.8	22.6	78.6	0.0	19.6	0.0	68.9	235.7	145.6	381.3
1994	R 18.8	49.1	28.9	9.9	0.4	3.8	2.5	1.5	7.9	23.3	78.3	0.0	R 21.0	0.0	65.0	R 232.1	135.5	R 367.7
1995	R 19.2	50.2	28.1	9.8	0.3	2.5	2.5	1.7	4.7	22.9	72.5	0.0	R 22.2	0.0	34.3	R 198.4	71.5	R 269.9
1996	19.7	51.4	24.0	12.2	0.3	2.9	2.4	1.8	8.7	24.1	76.4	0.0	24.0	0.0	34.5	206.0	71.7	277.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 141. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Maryland**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	89	1	279	2,352	2,457	9	318	21,810	3,893	31,117	0	20	-	49	-
1965	20	1	474	3,774	2,856	10	310	26,981	5,024	39,429	0	0	-	0	-
1970	10	2	309	4,184	4,477	32	299	36,795	3,931	50,027	0	0	-	0	-
1975	1	2	205	5,244	2,973	46	307	43,275	2,807	54,856	0	0	-	0	-
1980	0	4	173	5,848	3,512	26	310	43,737	4,514	58,121	0	22	-	53	-
1981	0	2	128	6,342	3,524	76	297	44,127	4,745	59,239	0	26	-	62	-
1982	0	2	74	5,291	3,573	49	271	43,946	4,184	57,388	0	25	-	60	-
1983	0	2	72	6,365	3,797	58	284	43,972	1,862	56,411	0	23	-	55	-
1984	0	2	67	6,217	3,658	84	303	45,004	1,871	57,203	0	42	-	99	-
1985	0	2	76	7,375	3,901	60	282	R 45,163	1,511	R 58,368	0	69	-	161	-
1986	0	2	101	8,191	3,889	35	276	R 46,419	1,211	R 60,122	0	69	-	159	-
1987	0	2	87	8,152	3,771	32	312	R 47,702	2,082	R 62,137	0	69	-	158	-
1988	0	3	94	8,193	4,481	56	301	R 48,603	2,629	R 64,358	0	85	-	193	-
1989	0	2	83	10,078	4,384	57	309	R 49,088	2,427	R 66,427	0	77	-	173	-
1990	0	2	74	8,293	3,637	52	318	R 46,887	1,850	R 61,111	e 0	89	-	194	-
1991	0	3	75	8,727	3,293	42	284	R 48,045	1,373	R 61,840	0	90	-	197	-
1992	0	2	96	9,457	3,061	R 101	290	R 48,665	1,631	R 63,301	0	88	-	189	-
1993	0	2	102	9,425	3,000	R 115	295	R 49,281	1,291	R 63,509	0	97	-	205	-
1994	0	3	71	8,678	3,229	97	308	R 50,374	988	R 63,745	0	107	-	223	-
1995	0	3	48	9,068	3,430	48	303	R 51,115	946	64,958	R 3,146	106	-	221	-
1996	0	3	35	10,044	3,897	49	294	51,425	768	66,513	2,658	106	-	221	-

**Trillion Btu**

1960	2.3	0.9	1.4	13.7	13.5	(s)	1.9	114.6	24.5	169.6	0.0	0.1	172.8	0.2	173.0
1965	0.5	1.2	2.4	22.0	15.7	(s)	1.9	141.7	31.6	215.4	0.0	0.0	217.1	0.0	217.1
1970	0.2	2.1	1.6	24.4	25.0	0.1	1.8	193.3	24.7	270.8	0.0	0.0	273.1	0.0	273.1
1975	(s)	2.2	1.0	30.5	16.5	0.2	1.9	227.3	17.6	295.1	0.0	0.0	297.3	0.0	297.3
1980	0.0	4.0	0.9	34.1	19.5	0.1	1.9	229.8	28.4	314.5	0.0	0.1	318.6	0.2	318.8
1981	0.0	2.4	0.6	36.9	19.6	0.3	1.8	231.8	29.8	320.9	0.0	0.1	323.4	0.2	323.6
1982	0.0	2.5	0.4	30.8	19.9	0.2	1.6	230.8	26.3	310.0	0.0	0.1	312.6	0.2	312.8
1983	0.0	2.1	0.4	37.1	21.1	0.2	1.7	231.0	11.7	303.2	0.0	0.1	305.4	0.2	305.6
1984	0.0	2.2	0.3	36.2	20.3	0.3	1.8	236.4	11.8	R 307.1	0.0	0.1	309.5	0.3	309.8
1985	0.0	2.3	0.4	43.0	21.7	0.2	1.7	237.2	9.5	R 313.7	0.0	0.2	316.2	0.5	R 316.8
1986	0.0	2.1	0.5	47.7	21.6	0.1	1.7	243.8	7.6	323.1	0.0	0.2	325.5	0.5	326.0
1987	0.0	2.2	0.4	47.5	21.0	0.1	1.9	R 250.6	13.1	R 334.6	0.0	0.2	R 337.0	0.5	R 337.5
1988	0.0	2.7	0.5	47.7	25.0	0.2	1.8	R 255.3	16.5	R 347.1	0.0	0.3	R 350.0	0.7	R 350.7
1989	0.0	2.3	0.4	58.7	24.5	0.2	1.9	R 257.9	15.3	R 358.8	0.0	0.3	R 361.3	0.6	R 361.9
1990	0.0	2.5	0.4	48.3	20.3	0.2	1.9	R 246.3	11.6	R 329.0	e 0.0	0.3	R e 331.8	0.7	R e 332.5
1991	0.0	2.6	0.4	50.8	18.4	0.2	1.7	R 252.4	8.6	R 332.5	0.0	0.3	R 335.4	0.7	336.0
1992	0.0	2.5	0.5	55.1	17.1	0.4	1.8	R 255.6	10.3	R 340.7	0.0	0.3	343.5	0.6	R 344.1
1993	0.0	2.5	0.5	54.9	16.8	0.4	1.8	R 258.9	8.1	R 341.4	0.0	0.3	R 344.3	0.7	R 345.0
1994	0.0	2.6	0.4	50.6	18.2	0.4	1.9	R 264.6	6.2	R 342.2	0.0	0.4	R 345.1	0.8	R 345.9
1995	0.0	2.9	0.2	52.8	19.4	0.2	1.8	268.5	5.9	349.0	0.2	0.4	352.3	0.8	353.0
1996	0.0	2.7	0.2	58.5	22.1	0.2	1.8	270.1	4.8	357.7	0.2	0.4	360.8	0.8	361.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 142. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Maryland**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	3,088	0	3,088	(s)	166	16	0	182	0	1,356	0	0	0	--
1965	6,018	0	6,018	(s)	269	26	0	295	0	1,140	0	0	0	--
1970	5,950	0	5,950	11	9,946	945	0	10,891	0	1,906	0	0	0	--
1975	3,873	0	3,873	(s)	17,982	688	0	18,669	4,386	2,311	0	0	0	--
1980	5,908	0	5,908	5	8,139	1,111	0	9,250	10,947	1,270	0	0	0	--
1981	5,197	0	5,197	6	6,563	831	0	7,394	11,523	1,426	0	0	0	--
1982	5,766	0	5,766	1	5,940	751	0	6,690	10,345	1,341	0	0	0	--
1983	6,221	0	6,221	2	5,559	918	0	6,477	11,676	1,765	0	0	0	--
1984	7,501	0	7,501	1	4,809	966	0	5,774	11,651	2,022	41	0	0	--
1985	7,046	0	7,046	1	5,131	830	0	5,961	9,926	1,524	16	0	0	--
1986	7,961	0	7,961	2	4,254	748	0	5,002	12,828	1,876	38	0	0	--
1987	8,228	0	8,228	12	4,363	807	0	5,170	10,070	1,612	51	0	0	--
1988	9,020	0	9,020	5	6,009	857	0	6,866	11,734	1,328	57	0	0	--
1989	9,074	0	9,074	19	10,407	1,255	0	11,662	2,719	1,778	14	0	0	--
1990	8,945	0	8,945	18	6,234	598	0	6,832	1,251	2,299	0	0	0	--
1991	8,632	0	8,632	16	7,084	552	0	7,637	9,036	1,407	0	0	0	--
1992	8,993	0	8,993	12	4,654	458	0	5,111	10,664	1,825	0	0	0	--
1993	9,521	0	9,521	9	6,975	592	0	7,567	12,301	1,658	0	0	0	--
1994	9,717	0	9,717	13	6,581	1,040	0	7,621	11,235	2,010	0	0	0	--
1995	10,141	0	10,141	19	2,115	674	0	2,789	12,938	1,442	0	0	0	--
1996	10,540	0	10,540	8	2,121	782	0	2,903	12,093	2,457	0	0	0	--

**Trillion Btu**

1960	82.2	0.0	82.2	0.1	1.0	0.1	0.0	1.1	0.0	14.6	0.0	0.0	0.0	98.0
1965	158.7	0.0	158.7	0.1	1.7	0.1	0.0	1.8	0.0	11.9	0.0	0.0	0.0	172.5
1970	146.4	0.0	146.4	11.7	62.5	5.5	0.0	68.0	0.0	20.0	0.0	0.0	0.0	246.2
1975	94.2	0.0	94.2	0.4	113.0	4.0	0.0	117.0	48.3	24.0	0.0	0.0	0.0	284.0
1980	146.3	0.0	146.3	5.4	51.2	6.5	0.0	57.6	119.4	13.2	0.0	0.0	0.0	341.8
1981	127.4	0.0	127.4	6.1	41.3	4.8	0.0	46.1	127.1	14.9	0.0	0.0	0.0	321.6
1982	143.1	0.0	143.1	1.0	37.3	4.4	0.0	41.7	114.6	14.0	0.0	0.0	0.0	314.4
1983	157.6	0.0	157.6	1.8	34.9	5.3	0.0	40.3	127.3	18.6	0.0	0.0	0.0	345.7
1984	189.3	0.0	189.3	1.3	30.2	5.6	0.0	35.9	126.3	21.1	0.4	0.0	0.0	374.4
1985	178.4	0.0	178.4	1.4	32.3	4.8	0.0	37.1	107.3	15.9	0.2	0.0	0.0	340.4
1986	202.0	0.0	202.0	2.3	26.7	4.4	0.0	31.1	138.5	19.6	0.4	0.0	0.0	394.0
1987	208.6	0.0	208.6	12.3	27.4	4.7	0.0	32.1	108.5	16.8	0.5	0.0	0.0	378.8
1988	229.6	0.0	229.6	5.6	37.8	5.0	0.0	42.8	126.1	13.7	0.6	0.0	0.0	418.2
1989	230.4	0.0	230.4	20.0	65.4	7.3	0.0	72.7	29.2	R 18.5	0.1	0.0	0.0	R 371.1
1990	227.8	0.0	227.8	18.3	39.2	3.5	0.0	42.7	13.4	R 23.9	0.0	0.0	0.0	R 326.0
1991	220.9	0.0	220.9	16.8	44.5	3.2	0.0	47.8	97.0	R 14.7	0.0	0.0	0.0	R 397.2
1992	229.4	0.0	229.4	12.1	29.3	2.7	0.0	31.9	113.9	R 18.9	0.0	0.0	0.0	406.1
1993	242.8	0.0	242.8	9.2	43.9	3.5	0.0	47.3	131.4	R 17.1	0.0	0.0	0.0	447.8
1994	249.2	0.0	249.2	13.3	41.4	6.1	0.0	47.4	119.9	R 20.7	0.0	0.0	0.0	R 450.6
1995	263.0	0.0	263.0	19.6	13.3	3.9	0.0	17.2	137.9	14.9	0.0	0.0	0.0	452.5
1996	271.5	0.0	271.5	8.8	13.3	4.6	0.0	17.9	128.5	25.4	0.0	0.0	0.0	452.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 143. Energy Consumption Estimates by Source, Selected Years 1960-1996, Massachusetts**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	4,559	78	2,270	968	51,240	1,209	5,718	1,148	799	34,993	39,108	1,067	138,520	34	982	0	0	-711	-
1965	4,932	114	2,867	1,702	55,825	3,166	3,496	1,511	915	39,752	54,207	1,120	164,561	966	664	0	0	-6,364	-
1970	910	147	2,843	276	59,239	7,864	2,103	1,820	947	49,527	86,130	1,121	211,870	1,209	753	0	0	-7,191	-
1975	1,016	154	1,832	228	58,665	8,009	867	2,315	786	54,630	65,975	1,127	194,432	3,781	417	0	0	6,757	-
1980	874	183	1,231	274	37,613	8,573	698	2,125	841	51,443	54,143	2,312	159,253	3,232	158	0	0	11,452	-
1981	1,035	185	1,390	209	32,035	7,992	430	2,572	806	52,079	49,418	2,749	149,682	4,331	430	0	0	16,876	-
1982	3,422	195	1,522	166	31,906	7,360	768	2,157	735	51,956	42,111	2,219	140,900	4,173	252	0	0	16,200	-
1983	3,660	192	1,131	164	31,557	7,280	239	2,169	770	52,559	35,005	2,115	132,990	6,063	278	0	0	17,340	-
1984	4,403	209	1,098	138	33,517	6,899	247	1,721	821	53,880	37,554	2,543	138,417	1,035	297	0	0	27,226	-
1985	4,176	219	1,051	134	33,072	6,984	737	1,719	765	R 54,847	36,075	2,268	R 137,652	6,133	4,574	0	0	5,631	-
1986	3,785	186	1,114	145	35,559	6,913	826	2,279	748	R 56,380	49,646	2,178	R 155,789	2,420	4,020	0	0	19,222	-
1987	4,487	227	1,479	123	37,791	7,850	623	2,634	846	R 57,692	38,070	2,247	R 149,356	1,136	5,155	0	0	22,363	-
1988	4,463	211	1,763	127	36,766	9,320	418	2,373	816	R 59,344	38,420	2,167	R 151,514	1,117	3,084	0	0	35,337	-
1989	4,641	249	1,426	118	40,378	10,005	392	2,567	837	R 58,290	38,087	2,116	R 154,215	3,015	2,349	0	0	R 25,425	-
1990	4,337	258	1,339	97	33,697	9,806	308	2,631	861	R 56,125	32,066	2,337	R 139,265	5,070	i NA	i NA	i NA	R 28,420	-
1991	4,451	252	1,976	45	33,188	9,398	369	1,919	770	R 54,488	30,533	2,277	R 134,964	4,417	NA	NA	NA	R 31,297	-
1992	4,257	295	1,567	45	35,150	7,880	424	1,869	785	R 55,436	27,386	2,426	R 132,967	4,742	NA	NA	NA	R 38,678	-
1993	3,811	312	1,454	85	36,629	7,728	378	2,102	800	R 56,065	24,361	2,444	R 132,046	4,339	NA	NA	NA	R 51,750	-
1994	3,932	337	886	73	35,313	7,433	336	2,056	836	R 56,871	21,079	2,397	R 127,278	3,859	NA	NA	NA	R 48,449	-
1995	4,113	362	1,249	84	36,635	6,636	275	2,143	821	R 58,775	13,942	2,270	R 122,831	4,486	NA	NA	NA	R 57,736	-
1996	4,477	358	1,270	90	34,929	6,873	209	2,507	797	59,794	15,500	2,381	124,350	5,324	NA	NA	NA	59,676	-
Trillion Btu																			
1960	118.8	80.6	15.1	4.9	298.5	6.7	32.4	4.6	4.8	183.8	245.9	6.3	803.0	0.4	10.6	0.0	0.0	-2.4	1,011.0
1965	127.9	115.7	19.0	8.6	325.2	17.8	19.8	6.1	5.6	208.8	340.8	6.0	957.7	11.4	6.9	0.0	0.0	-21.7	1,197.9
1970	21.4	149.1	18.9	1.4	345.1	44.5	11.9	6.9	5.7	260.2	541.5	6.0	1,242.0	13.3	7.9	0.0	0.0	-24.5	1,409.1
1975	24.5	154.6	12.2	1.2	341.7	45.3	4.9	8.6	4.8	287.0	414.8	6.1	1,126.5	41.6	4.3	0.0	0.0	23.1	1,374.6
1980	22.8	185.5	8.2	1.4	219.1	48.5	4.0	7.8	5.1	270.2	340.4	12.6	917.2	35.3	1.6	0.0	0.0	39.1	1,201.5
1981	26.6	187.5	9.2	1.1	186.6	45.2	2.4	9.4	4.9	273.6	310.7	14.9	858.0	47.8	4.5	0.0	0.0	57.6	1,182.0
1982	89.6	199.8	10.1	0.8	185.9	41.6	4.4	7.8	4.5	272.9	264.8	12.0	804.7	46.2	2.6	0.0	0.0	55.3	1,198.3
1983	96.9	196.6	7.5	0.8	183.8	41.2	1.4	7.8	4.7	276.1	220.1	11.5	754.9	66.1	2.9	0.0	0.0	59.2	1,176.6
1984	116.0	215.0	7.3	0.7	195.2	39.0	1.4	6.2	5.0	283.0	236.1	13.6	787.5	11.2	3.1	0.0	0.0	92.9	1,225.8
1985	110.2	224.8	7.0	0.7	192.6	39.5	4.2	6.2	4.6	R 288.1	226.8	12.2	R 781.9	66.3	47.8	0.0	0.0	19.2	1,250.2
1986	99.8	191.2	7.4	0.7	207.1	39.1	4.7	8.3	4.5	296.2	312.1	11.8	891.9	26.1	42.0	0.0	0.0	65.6	1,316.6
1987	117.6	233.4	9.8	0.6	220.1	44.4	3.5	9.6	5.1	R 303.1	239.3	12.1	R 847.8	12.2	53.7	0.0	0.0	76.3	R 1,341.1
1988	116.9	217.3	11.7	0.6	214.2	52.7	2.4	8.7	4.9	R 311.7	241.5	11.7	R 860.2	12.0	31.8	0.0	0.0	120.6	R 1,358.8
1989	120.7	258.9	9.5	0.6	235.2	56.6	2.2	9.5	5.1	R 306.2	239.5	11.4	R 875.7	32.3	R 24.5	0.0	0.0	R 86.7	R 1,398.9
1990	113.1	268.0	8.9	0.5	196.3	55.5	1.7	9.5	5.2	R 294.8	201.6	12.7	R 786.7	54.1	R i 22.7	i 67.7	i 0.2	R i 97.0	R i 1,414.0
1991	116.8	261.3	13.1	0.2	193.3	52.8	2.1	6.9	4.7	R 286.2	192.0	12.3	R 763.7	47.4	R 20.1	68.3	0.2	R 106.8	R 1,389.1
1992	111.0	305.9	10.4	0.2	204.7	44.5	2.4	6.8	4.8	R 291.2	172.2	13.0	R 750.3	50.6	17.3	70.9	0.2	R 132.0	R 1,442.4
1993	98.5	324.2	9.6	0.4	213.4	43.7	2.1	7.6	4.8	R 294.5	153.2	13.2	R 742.5	46.3	16.7	R 78.3	0.2	R 176.6	R 1,487.7
1994	100.7	346.1	5.9	0.4	205.7	42.1	1.9	7.5	5.1	R 298.7	132.5	12.9	R 712.7	41.2	R 28.6	R 77.2	0.2	165.3	R 1,488.5
1995	104.4	371.7	8.3	0.4	213.4	37.6	1.6	7.8	5.0	308.7	87.7	12.2	682.7	47.8	11.0	R 78.4	0.2	197.0	R 1,498.9
1996	113.1	367.5	8.4	0.5	203.5	39.0	1.2	9.1	4.8	314.1	97.4	12.7	690.7	56.6	16.8	81.1	0.2	203.6	1,533.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 144. Residential Energy Consumption Estimates, Selected Years 1960-1996, Massachusetts**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	141	253	394	45	34,305	4,858	752	39,915	0	0	4,190	-	10,423	-
1965	37	159	195	65	37,082	2,682	926	40,689	0	0	5,766	-	13,767	-
1970	9	97	105	83	38,530	1,434	933	40,897	0	0	9,335	-	22,621	-
1975	6	51	57	90	37,860	591	1,006	39,456	0	0	10,648	-	25,684	-
1980	14	37	50	94	22,712	323	675	23,710	0	0	11,571	-	28,137	-
1981	14	55	68	97	18,702	181	713	19,596	0	0	11,684	-	27,847	-
1982	26	47	73	98	18,086	510	713	19,309	0	0	11,986	-	28,788	-
1983	22	44	66	92	17,563	164	848	18,575	0	0	12,436	-	29,794	-
1984	46	52	97	97	18,012	210	860	19,081	0	0	12,702	-	29,566	-
1985	17	52	70	98	17,968	577	1,021	19,566	0	0	12,907	-	30,324	-
1986	9	31	40	102	18,492	501	1,137	20,129	0	0	13,608	-	31,302	-
1987	3	28	31	105	18,576	530	1,359	20,465	0	0	14,475	-	33,075	-
1988	9	22	31	109	18,536	300	1,336	20,171	0	0	15,511	-	35,067	-
1989	9	17	26	112	20,531	270	1,587	22,388	0	0	15,772	-	35,428	R
1990	12	18	29	107	17,287	163	1,358	18,808	<sup>e</sup> 904	<sup>e</sup> 49	15,581	-	34,078	R
1991	2	13	15	103	16,640	151	1,229	18,020	952	50	15,379	-	33,474	R
1992	14	11	25	120	18,812	259	1,219	20,291	1,002	51	15,560	-	33,235	R
1993	6	16	22	121	20,527	250	1,344	22,120	1,030	52	15,785	-	33,351	R
1994	1	12	13	120	19,764	218	1,389	21,372	1,010	56	16,049	-	33,487	R
1995	3	10	14	106	19,425	130	1,451	21,006	1,121	58	15,993	-	33,314	R
1996	5	11	16	114	18,625	148	1,640	20,413	1,119	59	16,256	-	33,833	-
<b>Trillion Btu</b>														
1960	3.5	6.2	9.8	46.6	199.8	27.5	3.0	230.4	0.0	0.0	14.3	301.1	35.6	336.6
1965	0.9	3.9	4.8	65.7	216.0	15.2	3.7	234.9	0.0	0.0	19.7	325.1	47.0	372.0
1970	0.2	2.3	2.5	83.6	224.4	8.1	3.5	236.1	0.0	0.0	31.8	354.1	77.2	431.2
1975	0.1	1.1	1.3	90.6	220.5	3.3	3.7	227.6	0.0	0.0	36.3	355.8	87.6	443.4
1980	0.3	0.8	1.2	96.0	132.3	1.8	2.5	136.6	0.0	0.0	39.5	273.2	96.0	369.2
1981	0.3	1.3	1.6	98.3	108.9	1.0	2.6	112.6	0.0	0.0	39.9	252.4	95.0	347.4
1982	0.6	1.2	1.8	99.8	105.4	2.9	2.6	110.8	0.0	0.0	40.9	253.3	98.2	351.5
1983	0.5	1.1	1.6	93.7	102.3	0.9	3.1	106.3	0.0	0.0	42.4	244.0	101.7	345.7
1984	1.1	1.3	2.4	99.2	104.9	1.2	3.1	109.2	0.0	0.0	43.3	254.2	100.9	355.0
1985	0.4	1.2	1.6	100.1	104.7	3.3	3.7	111.6	0.0	0.0	44.0	257.4	103.5	360.9
1986	0.2	0.7	1.0	104.9	107.7	2.8	4.1	114.7	0.0	0.0	46.4	267.0	106.8	373.8
1987	0.1	0.7	0.8	108.0	108.2	3.0	5.0	116.2	0.0	0.0	49.4	274.3	112.9	387.2
1988	0.2	0.6	0.8	111.9	108.0	1.7	4.9	114.5	0.0	0.0	52.9	280.2	119.6	399.8
1989	0.2	0.5	0.7	115.6	119.6	1.5	5.8	127.0	0.0	0.0	53.8	297.1	120.9	418.0
1990	0.3	0.4	0.7	110.5	100.7	0.9	4.9	106.5	<sup>e</sup> 18.1	<sup>e</sup> 0.2	53.2	<sup>e</sup> 289.2	116.3	<sup>R e</sup> 405.4
1991	(s)	0.3	0.4	106.9	96.9	0.9	4.4	102.2	19.0	0.2	52.5	281.2	114.2	<sup>R</sup> 395.4
1992	0.3	0.3	0.6	124.2	109.6	1.5	4.4	115.5	20.0	0.2	53.1	313.6	113.4	<sup>R</sup> 427.0
1993	0.1	0.4	0.5	125.9	119.6	1.4	4.8	125.8	20.6	0.2	53.9	326.9	113.8	<sup>R</sup> 440.7
1994	(s)	0.3	0.3	122.6	115.1	1.2	5.0	121.4	20.2	0.2	54.8	319.5	114.3	433.7
1995	0.1	0.3	0.3	108.5	113.2	0.7	5.3	119.1	22.4	0.2	54.6	305.2	113.7	418.9
1996	0.1	0.3	0.4	117.3	108.5	0.8	5.9	115.3	22.4	0.2	55.5	311.0	115.4	426.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 145. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Massachusetts**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	263	168	431	10	11,965	404	133	135	10,036	22,672	0	3,008	-	7,482	-
1965	68	106	174	16	12,933	223	163	92	14,503	27,914	0	4,306	-	10,282	-
1970	16	65	81	35	13,438	119	165	102	14,872	28,696	0	7,802	-	18,908	-
1975	11	34	45	38	13,204	49	178	109	9,122	22,662	0	11,395	-	27,487	-
1980	25	24	50	53	7,510	30	119	191	4,854	12,704	0	13,054	-	31,742	-
1981	25	36	62	50	5,759	9	126	206	3,149	9,249	0	13,387	-	31,904	-
1982	47	32	79	61	5,509	28	126	213	4,227	10,103	0	13,692	-	32,886	-
1983	40	29	70	40	5,444	36	150	193	2,440	8,262	0	14,391	-	34,477	-
1984	85	34	120	41	5,583	18	152	168	3,331	9,251	0	14,912	-	34,709	-
1985	32	35	67	41	5,703	108	180	188	3,157	9,336	0	15,582	-	36,608	-
1986	17	20	37	44	6,676	290	201	189	3,426	10,781	0	16,584	-	38,149	-
1987	6	18	24	47	6,072	50	240	R 194	2,851	9,406	0	17,701	-	40,446	-
1988	18	14	32	49	6,363	71	236	R 183	3,426	10,278	0	18,767	-	42,427	-
1989	17	11	28	52	7,750	64	280	R 188	3,859	R 12,142	0	19,363	-	R 43,492	-
1990	22	12	34	51	6,236	127	240	R 69	4,535	R 11,207	e NA	19,544	-	R 42,746	-
1991	3	9	12	53	7,610	200	217	182	4,562	12,772	NA	19,450	-	R 42,333	-
1992	26	7	33	64	6,685	73	215	164	3,711	10,847	NA	19,595	-	R 41,854	-
1993	11	11	22	65	6,334	113	237	53	2,592	9,330	176	19,712	-	R 41,647	-
1994	1	8	9	85	5,548	100	245	57	2,998	8,948	157	20,152	-	R 42,048	-
1995	6	7	13	82	6,272	110	256	65	3,117	9,820	179	20,308	-	R 42,303	-
1996	10	7	17	96	5,718	47	289	65	2,472	8,591	172	20,760	-	43,208	-

  

Trillion Btu															
1960	6.6	4.2	10.7	10.6	69.7	2.3	0.5	0.7	63.1	136.3	0.0	10.3	167.9	25.5	193.5
1965	1.7	2.6	4.3	16.5	75.3	1.3	0.7	0.5	91.2	168.9	0.0	14.7	204.4	35.1	239.5
1970	0.4	1.5	1.9	35.8	78.3	0.7	0.6	0.5	93.5	173.6	0.0	26.6	237.9	64.5	302.4
1975	0.3	0.8	1.0	38.0	76.9	0.3	0.7	0.6	57.4	135.8	0.0	38.9	213.6	93.8	307.4
1980	0.6	0.6	1.2	54.3	43.7	0.2	0.4	1.0	30.5	75.9	0.0	44.5	175.9	108.3	284.2
1981	0.6	0.9	1.5	51.0	33.5	0.1	0.5	1.1	19.8	54.9	0.0	45.7	153.1	108.9	261.9
1982	1.2	0.8	2.0	62.6	32.1	0.2	0.5	1.1	26.6	60.4	0.0	46.7	171.7	112.2	283.9
1983	1.0	0.7	1.7	40.5	31.7	0.2	0.5	1.0	15.3	48.8	0.0	49.1	140.1	117.6	257.7
1984	2.1	0.9	3.0	42.3	32.5	0.1	0.5	0.9	20.9	55.0	0.0	50.9	151.1	118.4	269.6
1985	0.8	0.8	1.6	42.4	33.2	0.6	0.6	1.0	19.8	55.3	0.0	53.2	152.5	124.9	277.4
1986	0.4	0.5	0.9	44.8	38.9	1.6	0.7	1.0	21.5	63.8	0.0	56.6	166.1	130.2	296.2
1987	0.1	0.5	0.6	47.9	35.4	0.3	0.9	1.0	17.9	55.5	0.0	60.4	164.4	138.0	302.4
1988	0.5	0.4	0.8	50.4	37.1	0.4	0.9	1.0	21.5	60.8	0.0	64.0	176.1	144.8	320.8
1989	0.4	0.3	0.7	53.3	45.1	0.4	1.0	1.0	24.3	71.8	0.0	66.1	191.9	R 148.4	R 340.3
1990	0.5	0.3	0.8	52.3	36.3	0.7	0.9	0.4	28.5	66.8	e NA	66.7	186.7	R 145.8	R 332.5
1991	0.1	0.2	0.3	55.2	44.3	1.1	0.8	1.0	28.7	75.9	NA	66.4	197.8	R 144.4	R 342.2
1992	0.6	0.2	0.8	66.8	38.9	0.4	0.8	0.9	23.3	64.3	NA	66.9	198.8	R 142.8	R 341.6
1993	0.3	0.3	0.5	67.9	36.9	0.6	0.9	0.3	16.3	55.0	3.5	67.3	R 194.2	R 142.1	R 336.3
1994	(s)	0.2	0.2	86.6	32.3	0.6	0.9	0.3	18.9	52.9	3.1	68.8	R 211.7	R 143.5	R 355.1
1995	0.2	0.2	0.3	84.4	36.5	0.6	0.9	0.3	19.6	58.0	3.6	69.3	R 215.6	144.3	R 360.0
1996	0.2	0.2	0.4	98.6	33.3	0.3	1.0	0.3	15.5	50.5	3.4	70.8	223.8	147.4	371.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 146. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Massachusetts**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	1,266	12	2,270	2,322	456	260	356	133	17,875	1,067	24,739	117	0	0	5,075	-	12,625	-
1965	496	20	2,867	2,841	590	401	507	206	25,076	1,120	33,607	100	0	0	6,546	-	15,630	-
1970	149	23	2,843	2,897	549	693	506	111	25,742	1,121	34,463	72	0	0	7,418	-	17,975	-
1975	110	24	1,832	2,654	227	1,099	353	81	15,891	1,127	23,264	67	0	0	7,330	-	17,680	-
1980	98	29	1,231	1,886	345	1,305	377	91	2,663	2,312	10,209	63	0	0	8,486	-	20,635	-
1981	60	30	1,390	2,322	240	1,676	362	75	4,719	2,749	13,534	63	0	0	8,956	-	21,344	-
1982	88	19	1,522	2,101	230	1,270	330	97	5,524	2,219	13,292	63	0	0	8,655	-	20,787	-
1983	112	35	1,131	1,332	39	1,114	346	42	5,351	2,115	11,469	63	0	0	9,046	-	21,672	-
1984	106	37	1,098	1,366	20	R 607	368	109	7,305	2,543	R 13,416	63	0	0	9,476	-	22,057	-
1985	176	33	1,051	1,044	52	448	343	367	8,399	2,268	R 13,973	63	0	0	9,454	-	22,210	-
1986	112	24	1,114	1,564	36	879	336	379	13,565	2,178	20,051	63	0	0	9,682	-	22,272	-
1987	165	34	1,479	3,865	43	984	380	R 391	7,144	2,247	R 16,533	63	0	0	10,043	-	22,947	-
1988	140	32	1,763	2,451	48	740	366	417	3,655	2,167	R 11,607	63	0	0	10,243	-	23,157	-
1989	113	36	1,426	2,538	57	639	375	475	3,419	2,116	11,046	63	0	0	10,381	-	R 23,318	-
1990	73	44	1,339	2,176	18	973	386	R 414	2,640	2,337	R 10,284	f NA	f NA	f NA	10,157	-	R 22,215	-
1991	85	55	1,976	1,195	18	404	346	332	1,406	2,277	7,955	NA	NA	NA	9,794	-	R 21,316	-
1992	155	71	1,567	1,855	92	372	352	334	2,180	2,426	9,178	NA	NA	NA	9,663	-	R 20,639	-
1993	115	95	1,454	1,402	15	R 460	359	175	3,537	2,444	9,846	NA	NA	NA	9,605	-	R 20,293	-
1994	65	93	886	1,121	17	R 333	375	R 347	2,731	2,397	8,209	NA	NA	NA	9,710	-	R 20,261	-
1995	42	108	1,249	1,237	35	387	369	373	1,481	2,270	7,400	NA	NA	NA	10,026	-	R 20,885	-
1996	38	100	1,270	1,237	14	533	358	372	1,719	2,381	7,883	NA	NA	NA	10,085	-	20,990	-

  

Trillion Btu																		
1960	33.2	12.0	15.1	13.5	2.6	1.0	2.2	0.7	112.4	6.3	153.8	1.3	0.0	0.0	17.3	217.5	43.1	260.6
1965	12.8	20.0	19.0	16.5	3.3	1.6	3.1	1.1	157.6	6.0	208.3	1.0	0.0	0.0	22.3	264.5	53.3	317.9
1970	3.6	22.8	18.9	16.9	3.1	2.6	3.1	0.6	161.8	6.0	213.0	0.8	0.0	0.0	25.3	265.5	61.3	326.8
1975	2.6	24.1	12.2	15.5	1.3	4.1	2.1	0.4	99.9	6.1	141.6	0.7	0.0	0.0	25.0	194.0	60.3	254.3
1980	2.4	29.4	8.2	11.0	2.0	4.8	2.3	0.5	16.7	12.6	58.0	0.7	0.0	0.0	29.0	119.4	70.4	189.8
1981	1.5	30.7	9.2	13.5	1.4	6.1	2.2	0.4	29.7	14.9	77.4	0.7	0.0	0.0	30.6	140.7	72.8	213.6
1982	2.2	19.7	10.1	12.2	1.3	4.6	2.0	0.5	34.7	12.0	77.4	0.7	0.0	0.0	29.5	129.5	70.9	200.5
1983	2.8	35.7	7.5	7.8	0.2	4.0	2.1	0.2	33.6	11.5	67.0	0.7	0.0	0.0	30.9	137.0	73.9	210.9
1984	2.6	38.3	7.3	8.0	0.1	2.2	2.2	0.6	45.9	13.6	R 79.9	0.7	0.0	0.0	32.3	153.7	75.3	229.0
1985	4.4	33.9	7.0	6.1	0.3	1.6	2.1	1.9	52.8	12.2	84.0	0.7	0.0	0.0	32.3	155.2	75.8	231.0
1986	2.8	24.5	7.4	9.1	0.2	3.2	2.0	2.0	85.3	11.8	121.0	0.7	0.0	0.0	33.0	182.0	76.0	258.0
1987	4.2	35.2	9.8	22.5	0.2	3.6	2.3	R 2.1	44.9	12.1	97.5	0.7	0.0	0.0	34.3	171.7	78.3	250.0
1988	3.5	32.5	11.7	14.3	0.3	2.7	2.2	2.2	23.0	11.7	R 68.0	0.6	0.0	0.0	34.9	139.7	79.0	218.7
1989	2.8	36.9	9.5	14.8	0.3	2.4	2.3	2.5	21.5	11.4	64.6	0.6	0.0	0.0	35.4	140.4	R 79.6	R 219.9
1990	1.8	45.8	8.9	12.7	0.1	3.5	2.3	2.2	16.6	12.7	R 59.0	f 2.6	f 49.7	f 0.0	34.7	f 193.5	R 75.8	R f 269.3
1991	2.1	56.9	13.1	7.0	0.1	1.5	2.1	1.7	8.8	12.3	46.6	2.4	49.2	0.0	33.4	190.7	72.7	R 263.4
1992	3.9	73.5	10.4	10.8	0.5	1.3	2.1	1.8	13.7	13.0	53.7	2.6	50.9	0.0	33.0	217.6	70.4	288.0
1993	2.9	98.3	9.6	8.2	0.1	1.7	2.2	0.9	22.2	13.2	58.0	2.1	R 54.2	0.0	32.8	248.2	69.2	317.5
1994	R 1.6	95.1	5.9	6.5	0.1	1.2	2.3	1.8	17.2	12.9	47.9	2.0	R 53.8	0.0	33.1	R 233.6	69.1	R 302.7
1995	R 1.1	110.5	8.3	7.2	0.2	1.4	2.2	2.0	9.3	12.2	42.8	2.3	R 52.4	0.0	34.2	R 243.3	71.3	R 314.5
1996	0.9	102.6	8.4	7.2	0.1	1.9	2.2	2.0	10.8	12.7	45.3	2.8	55.3	0.0	34.4	241.3	71.6	312.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 147. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Massachusetts**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	22	(s)	968	2,371	1,209	4	443	34,725	1,207	40,927	0	108	-	268	-
1965	2	(s)	1,702	2,632	3,166	22	408	39,454	2,472	49,856	0	101	-	240	-
1970	(s)	1	276	3,198	7,864	29	441	49,314	3,215	64,336	0	85	-	205	-
1975	(s)	1	228	4,485	7,967	33	433	54,440	1,049	68,634	0	106	-	256	-
1980	0	1	274	4,900	8,563	26	463	51,161	900	66,287	0	160	-	390	-
1981	0	1	209	4,970	7,982	58	444	51,798	1,062	66,523	0	137	-	327	-
1982	0	2	166	5,803	7,358	49	405	51,647	1,459	66,887	0	117	-	281	-
1983	0	1	164	6,707	7,280	58	424	52,325	152	67,110	0	130	-	311	-
1984	0	1	138	7,540	6,899	103	453	53,603	146	68,881	0	151	-	352	-
1985	0	1	134	7,536	6,984	70	422	R 54,292	874	R 70,311	0	177	-	415	-
1986	0	2	145	7,801	6,913	62	412	R 55,812	606	R 71,752	0	168	-	386	-
1987	0	1	123	8,155	7,850	51	466	R 57,108	459	R 74,212	0	164	-	374	-
1988	0	2	127	7,882	9,320	62	450	R 58,744	675	R 77,260	0	206	-	466	-
1989	0	2	118	7,904	10,005	62	461	R 57,627	1,184	R 77,361	0	167	-	R 376	-
1990	0	1	97	7,510	9,806	R 59	475	R 55,642	1,385	R 74,973	R e 1	159	-	348	-
1991	0	2	45	7,270	9,398	69	425	R 53,974	443	R 71,623	R 1	174	-	379	-
1992	0	2	45	7,404	7,880	R 63	433	R 54,938	434	R 71,197	R 1	180	-	385	-
1993	0	2	85	7,980	7,728	R 62	441	R 55,837	349	R 72,482	R 1	179	-	378	-
1994	0	2	73	8,346	7,433	88	461	R 56,466	369	R 73,236	0	180	-	376	-
1995	0	2	84	9,088	6,636	50	453	R 58,337	202	R 74,850	0	183	-	381	-
1996	0	2	90	8,896	6,873	46	439	59,356	2,036	77,737	0	193	-	402	-

**Trillion Btu**

1960	0.6	0.3	4.9	13.8	6.7	(s)	2.7	182.4	7.6	218.1	0.0	0.4	219.4	0.9	220.3
1965	(s)	0.2	8.6	15.3	17.8	0.1	2.5	207.3	15.5	267.1	0.0	0.3	267.7	0.8	268.6
1970	(s)	1.1	1.4	18.6	44.5	0.1	2.7	259.0	20.2	346.5	0.0	0.3	347.9	0.7	348.6
1975	(s)	0.5	1.2	26.1	45.1	0.1	2.6	286.0	6.6	367.7	0.0	0.4	368.5	0.9	369.4
1980	0.0	0.7	1.4	28.5	48.4	0.1	2.8	268.7	5.7	355.7	0.0	0.5	356.9	1.3	358.2
1981	0.0	0.7	1.1	29.0	45.2	0.2	2.7	272.1	6.7	356.8	0.0	0.5	358.0	1.1	359.1
1982	0.0	1.6	0.8	33.8	41.6	0.2	2.5	271.3	9.2	359.4	0.0	0.4	361.4	1.0	362.4
1983	0.0	1.1	0.8	39.1	41.2	0.2	2.6	274.9	1.0	359.7	0.0	0.4	361.2	1.1	362.2
1984	0.0	1.2	0.7	43.9	39.0	0.4	2.7	281.6	0.9	369.2	0.0	0.5	371.0	1.2	372.2
1985	0.0	1.4	0.7	43.9	39.5	0.3	2.6	R 285.2	5.5	R 377.6	0.0	0.6	R 379.6	1.4	R 381.0
1986	0.0	1.7	0.7	45.4	39.1	0.2	2.5	293.2	3.8	385.0	0.0	0.6	387.2	1.3	R 388.5
1987	0.0	1.2	0.6	47.5	44.4	0.2	2.8	R 300.0	2.9	R 398.4	0.0	0.6	R 400.1	1.3	R 401.4
1988	0.0	2.0	0.6	45.9	52.7	0.2	2.7	R 308.6	4.2	R 415.1	0.0	0.7	R 417.8	1.6	R 419.4
1989	0.0	2.3	0.6	46.0	56.6	0.2	2.8	R 302.7	7.4	R 416.4	0.0	0.6	R 419.3	1.3	R 420.6
1990	0.0	1.3	0.5	43.7	55.5	0.2	2.9	R 292.3	8.7	R 403.8	R e (s)	0.5	R e 405.6	1.2	R e 406.8
1991	0.0	1.6	0.2	42.3	52.8	0.2	2.6	R 283.5	2.8	R 384.6	R (s)	0.6	R 386.7	1.3	R 388.0
1992	0.0	1.8	0.2	43.1	44.5	0.2	2.6	R 288.6	2.7	382.1	R (s)	0.6	R 384.5	1.3	R 385.8
1993	0.0	2.3	0.4	46.5	43.7	0.2	2.7	R 293.3	2.2	R 389.0	R (s)	0.6	R 391.9	1.3	R 393.2
1994	0.0	1.9	0.4	48.6	42.1	0.3	2.8	R 296.6	2.3	R 393.1	0.0	0.6	R 395.6	1.3	R 396.9
1995	0.0	1.9	0.4	52.9	37.6	0.2	2.7	306.4	1.3	401.6	0.0	0.6	404.2	1.3	405.5
1996	0.0	2.2	0.5	51.8	39.0	0.2	2.7	311.8	12.8	418.7	0.0	0.7	421.5	1.4	422.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 148. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Massachusetts**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	2,446	0	2,446	11	9,990	277	0	10,267	34	865	0	0	0	--
1965	4,066	0	4,066	13	12,157	337	0	12,494	966	564	0	0	0	--
1970	575	0	575	6	42,301	1,176	0	43,477	1,209	682	0	0	0	--
1975	804	0	804	1	39,912	503	0	40,415	3,781	350	0	0	0	--
1980	676	0	676	5	45,726	616	0	46,342	3,232	96	0	0	0	--
1981	845	0	845	7	40,488	291	0	40,779	4,331	368	0	0	0	--
1982	3,182	0	3,182	15	30,900	409	0	31,309	4,173	189	0	0	0	--
1983	3,413	0	3,413	24	27,063	511	0	27,574	6,063	215	0	0	0	--
1984	4,080	0	4,080	32	26,772	1,016	0	27,789	1,035	234	0	0	0	--
1985	3,863	0	3,863	45	23,645	822	0	24,467	6,133	4,511	0	0	0	--
1986	3,596	0	3,596	15	32,050	1,026	0	33,076	2,420	3,957	0	0	0	--
1987	4,267	0	4,267	40	27,616	1,124	0	28,739	1,136	5,092	0	0	0	--
1988	4,260	0	4,260	20	30,664	1,534	0	32,198	1,117	3,021	0	0	0	--
1989	4,474	0	4,474	48	29,625	1,654	0	31,279	3,015	2,286	0	0	0	--
1990	4,201	0	4,201	55	23,505	488	0	23,993	5,070	1,937	0	0	0	--
1991	4,339	0	4,339	39	24,121	473	0	24,594	4,417	1,701	0	0	0	--
1992	4,044	0	4,044	38	21,061	394	0	21,455	4,742	1,426	0	0	0	--
1993	3,652	0	3,652	29	17,883	386	0	18,269	4,339	1,416	0	0	0	--
1994	3,845	0	3,845	39	14,981	533	0	15,514	3,859	2,576	0	0	0	--
1995	4,044	0	4,044	65	9,143	612	0	9,755	4,486	850	0	0	0	--
1996	4,406	0	4,406	45	9,273	453	0	9,727	5,324	1,353	0	0	0	--

**Trillion Btu**

1960	64.5	0.0	64.5	11.2	62.8	1.6	0.0	64.4	0.4	9.3	0.0	0.0	0.0	149.8
1965	106.0	0.0	106.0	13.3	76.4	2.0	0.0	78.4	11.4	5.9	0.0	0.0	0.0	215.0
1970	13.4	0.0	13.4	5.7	265.9	6.8	0.0	272.8	13.3	7.2	0.0	0.0	0.0	312.3
1975	19.6	0.0	19.6	1.4	250.9	2.9	0.0	253.8	41.6	3.6	0.0	0.0	0.0	320.1
1980	18.1	0.0	18.1	5.1	287.5	3.6	0.0	291.1	35.3	1.0	0.0	0.0	0.0	350.5
1981	22.1	0.0	22.1	6.9	254.5	1.7	0.0	256.2	47.8	3.8	0.0	0.0	0.0	336.8
1982	83.7	0.0	83.7	16.0	194.3	2.4	0.0	196.7	46.2	2.0	0.0	0.0	0.0	344.6
1983	90.8	0.0	90.8	25.7	170.1	3.0	0.0	173.1	66.1	2.3	0.0	0.0	0.0	358.0
1984	108.0	0.0	108.0	34.1	168.3	5.9	0.0	174.2	11.2	2.4	0.0	0.0	0.0	329.9
1985	102.6	0.0	102.6	46.9	148.7	4.8	0.0	153.4	66.3	47.1	0.0	0.0	0.0	416.4
1986	95.1	0.0	95.1	15.3	201.5	6.0	0.0	207.5	26.1	41.3	0.0	0.0	0.0	385.3
1987	112.0	0.0	112.0	41.2	173.6	6.5	0.0	180.2	12.2	53.1	0.0	0.0	0.0	398.7
1988	111.7	0.0	111.7	20.5	192.8	8.9	0.0	201.7	12.0	31.2	0.0	0.0	0.0	377.1
1989	116.4	0.0	116.4	50.8	186.3	9.6	0.0	195.9	32.3	R 23.8	0.0	0.0	0.0	R 419.2
1990	109.7	0.0	109.7	58.1	147.8	2.8	0.0	150.6	54.1	R 20.1	0.0	0.0	0.0	R 397.2
1991	114.0	0.0	114.0	40.7	151.7	2.8	0.0	154.4	47.4	R 17.7	0.0	0.0	0.0	R 378.7
1992	105.7	0.0	105.7	39.6	132.4	2.3	0.0	134.7	50.6	14.7	0.0	0.0	0.0	R 349.5
1993	94.6	0.0	94.6	29.8	112.4	2.2	0.0	114.7	46.3	14.6	0.0	0.0	0.0	R 304.4
1994	98.5	0.0	98.5	40.0	94.2	3.1	0.0	97.3	41.2	R 26.6	0.0	0.0	0.0	R 320.1
1995	102.7	0.0	102.7	66.3	57.5	3.6	0.0	61.0	47.8	8.8	0.0	0.0	0.0	292.3
1996	111.3	0.0	111.3	46.8	58.3	2.6	0.0	60.9	56.6	14.0	0.0	0.0	0.0	293.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 149. Energy Consumption Estimates by Source, Selected Years 1960-1996, Michigan**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	25,934	370	2,936	1,312	30,235	3,369	4,072	2,827	2,497	65,782	11,840	4,629	129,498	0	3,280	0	0	9,080	-
1965	33,132	556	2,264	2,619	30,287	4,377	5,880	3,716	3,025	78,044	8,594	8,738	147,543	181	1,400	0	0	11,513	-
1970	34,066	809	3,881	718	38,141	7,365	3,124	6,202	3,157	96,831	10,056	10,304	179,778	375	1,303	0	0	12,620	-
1975	31,198	884	3,886	347	42,170	5,776	1,349	7,475	2,751	108,255	18,291	10,478	200,779	7,176	1,430	0	0	4,840	-
1980	31,110	865	3,507	488	27,643	6,646	1,233	6,736	3,274	97,025	13,289	17,373	177,214	15,891	6,885	0	0	-13,005	-
1981	31,610	801	3,550	250	26,630	6,131	992	5,572	3,140	92,783	7,825	9,999	156,871	17,066	5,682	0	0	-13,900	-
1982	29,280	748	2,602	157	22,943	5,706	743	7,107	2,863	88,179	4,891	8,234	143,425	15,003	3,351	0	0	4,848	-
1983	29,647	696	2,739	324	22,176	5,892	557	7,150	2,998	88,646	4,464	7,926	142,872	16,383	2,499	0	0	15,682	-
1984	31,412	718	2,790	181	23,882	5,983	536	7,523	3,197	92,952	3,116	9,130	149,290	14,078	1,627	0	0	23,014	-
1985	32,793	709	2,779	201	25,411	6,570	507	14,225	2,979	R 93,447	3,109	8,329	R 157,556	13,452	1,388	0	0	21,789	-
1986	33,999	671	3,384	250	26,499	7,129	419	15,690	2,913	R 96,015	3,761	9,167	R 165,228	12,257	1,408	0	0	18,866	-
1987	35,865	657	3,506	242	25,320	8,371	421	17,656	3,293	R 99,154	3,316	9,570	R 170,849	14,389	1,251	0	0	-2,630	-
1988	35,332	749	2,876	241	27,630	8,585	474	17,302	3,176	R 102,367	4,793	9,642	R 177,088	17,808	764	0	0	1,050	-
1989	34,885	774	3,863	268	24,873	9,235	517	19,053	3,257	R 101,143	4,514	9,572	R 176,296	21,312	-4,560	0	0	R 12,334	-
1990	34,713	817	3,950	215	23,312	10,057	270	14,901	3,352	R 99,913	2,750	10,456	R 169,175	21,611	i NA	i NA	i NA	R 27,556	-
1991	33,879	828	3,464	206	24,978	10,234	360	16,017	2,999	R 101,375	1,750	12,735	R 174,117	27,021	NA	NA	NA	R -16,485	-
1992	31,554	891	3,546	182	25,311	10,125	251	16,666	3,057	R 101,370	1,706	13,589	R 175,803	18,849	NA	NA	NA	R -14,778	-
1993	32,217	913	4,453	198	28,719	10,305	452	13,077	3,113	R 105,003	2,094	13,496	R 180,911	28,525	NA	NA	NA	R -9,591	-
1994	35,674	926	3,596	237	29,347	10,281	415	14,287	3,254	R 105,744	2,188	13,756	R 183,105	14,144	NA	NA	NA	R -9,916	-
1995	R 35,802	971	4,955	231	29,118	8,818	366	14,497	3,198	R 110,546	1,610	13,200	R 186,540	24,448	NA	NA	NA	R -5,667	-
1996	36,694	1,015	3,703	215	29,502	9,045	421	16,655	3,104	110,520	1,787	13,981	188,930	26,829	NA	NA	NA	1,439	-
Trillion Btu																			
1960	653.2	383.0	19.5	6.6	176.1	18.2	23.1	11.3	15.1	345.6	74.4	27.4	717.3	0.0	35.3	0.0	0.0	31.0	1,819.8
1965	830.2	563.6	15.0	13.2	176.4	24.0	33.3	14.9	18.3	410.0	54.0	49.4	808.6	2.1	14.6	0.0	0.0	39.3	2,258.5
1970	828.9	821.3	25.8	3.6	222.2	41.0	17.7	23.4	19.1	508.7	63.2	57.6	982.3	4.1	13.7	0.0	0.0	43.1	2,693.3
1975	751.0	894.8	25.8	1.7	245.6	32.1	7.6	27.8	16.7	568.7	115.0	59.2	1,100.3	79.0	14.9	0.0	0.0	16.5	2,856.5
1980	759.0	874.7	23.3	2.5	161.0	37.1	7.0	24.7	19.9	509.7	83.6	95.8	964.5	173.3	71.5	0.0	0.0	-44.4	2,798.7
1981	757.5	814.5	23.6	1.3	155.1	34.3	5.6	20.3	19.0	487.4	49.2	55.4	851.1	188.2	59.4	0.0	0.0	-47.4	2,623.3
1982	711.4	764.6	17.3	0.8	133.6	31.8	4.2	25.7	17.4	463.2	30.7	45.6	770.4	166.1	35.0	0.0	0.0	16.5	2,464.1
1983	706.6	713.2	18.2	1.6	129.2	32.9	3.2	25.8	18.2	465.7	28.1	44.5	767.3	178.7	26.3	0.0	0.0	53.5	2,445.5
1984	747.6	730.3	18.5	0.9	139.1	33.4	3.0	27.1	19.4	488.3	19.6	50.1	799.4	152.7	17.0	0.0	0.0	78.5	2,525.5
1985	781.9	719.9	18.4	1.0	148.0	36.7	2.9	51.3	18.1	R 490.9	19.5	46.0	R 832.8	145.5	14.5	0.0	0.0	74.3	R 2,568.9
1986	811.9	689.4	22.5	1.3	154.4	39.9	2.4	57.1	17.7	504.4	23.6	50.8	874.0	132.4	14.7	0.0	0.0	64.4	2,588.8
1987	840.2	671.2	23.3	1.2	147.5	46.9	2.4	64.6	20.0	R 520.9	20.8	52.7	R 900.3	155.1	13.0	0.0	0.0	-9.0	R 2,570.8
1988	830.9	765.7	19.1	1.2	160.9	48.1	2.7	63.2	19.3	R 537.7	30.1	53.4	R 935.8	191.3	7.9	0.0	0.0	3.6	R 2,735.2
1989	799.3	796.9	25.6	1.4	144.9	51.8	2.9	70.2	19.8	R 531.3	28.4	52.9	R 929.2	228.6	R -47.6	0.0	0.0	42.1	R 2,748.4
1990	786.3	835.4	26.2	1.1	135.8	56.6	1.5	54.0	20.3	R 524.8	17.3	57.9	R 895.6	230.8	i 9.8	R i 113.9	i 0.2	R 94.0	R i 2,847.4
1991	759.8	844.2	23.0	1.0	145.5	57.5	2.0	57.9	18.2	R 532.5	11.0	70.4	R 919.0	290.2	R 11.2	R 113.4	0.2	R -56.2	R 2,872.5
1992	702.0	909.0	23.5	0.9	147.4	57.0	1.4	60.4	18.5	R 532.5	10.7	74.6	R 927.1	201.3	R 11.7	R 117.7	0.2	R 50.4	R 2,911.8
1993	708.1	932.2	29.6	1.0	167.3	58.1	2.6	47.2	18.9	R 551.6	13.2	74.2	R 963.5	304.7	R 18.0	R 109.3	0.2	R -32.7	R 3,000.1
1994	794.0	945.5	23.9	1.2	170.9	58.2	2.4	51.9	19.7	R 555.5	13.8	75.6	R 973.0	151.0	R 52.6	R 110.8	0.2	33.8	R 3,083.1
1995	R 780.9	987.4	32.9	1.2	169.6	50.0	2.1	52.5	19.4	580.7	10.1	72.5	991.0	260.6	R 110.7	R 110.7	0.2	-19.3	R 3,176.1
1996	789.3	1,026.7	24.6	1.1	171.8	51.3	2.4	60.2	18.8	580.6	11.2	76.5	998.4	285.0	26.2	116.3	0.2	4.9	3,249.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.  
<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.  
<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.  
<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
R=Revised data. --=Not applicable. NA=Not available.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 150. Residential Energy Consumption Estimates, Selected Years 1960-1996, Michigan**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	834	8	842	202	17,380	765	1,940	20,084	0	0	8,728	-	21,709	-
1965	615	5	620	271	16,334	1,279	2,346	19,959	0	0	11,309	-	27,002	-
1970	299	3	302	340	18,839	545	4,493	23,877	0	0	17,103	-	41,446	-
1975	138	2	140	335	19,420	302	5,219	24,942	0	0	20,886	-	50,380	-
1980	107	1	108	387	9,195	83	3,375	12,653	0	0	22,260	-	54,129	-
1981	63	1	64	362	7,894	206	2,961	11,061	0	0	21,530	-	51,312	-
1982	81	1	82	359	6,312	559	3,276	10,148	0	0	21,276	-	51,103	-
1983	57	1	58	341	4,942	440	3,897	9,279	0	0	21,946	-	52,579	-
1984	101	1	102	339	5,337	459	4,423	10,219	0	0	22,309	-	51,927	-
1985	88	1	89	341	5,964	425	4,427	10,817	0	0	22,302	-	52,396	-
1986	90	0	90	330	5,883	346	5,039	11,268	0	0	23,025	-	52,964	-
1987	42	0	42	314	5,214	325	6,209	11,748	0	0	24,032	-	54,911	-
1988	61	(s)	61	349	5,820	400	6,495	12,714	0	0	25,316	-	57,235	-
1989	61	(s)	62	362	4,771	392	7,151	12,314	0	0	25,319	-	R 56,872	-
1990	94	0	94	327	4,167	217	6,538	10,922	e 1,373	e 58	25,319	-	R 55,376	-
1991	92	1	93	337	4,558	279	7,248	12,085	1,447	58	26,760	-	R 58,243	-
1992	66	(s)	66	358	4,232	205	7,331	11,767	1,522	59	25,671	-	R 54,831	-
1993	83	(s)	83	370	4,149	355	7,976	12,480	781	59	26,770	-	R 56,560	-
1994	101	1	102	365	4,032	322	7,896	12,250	766	67	27,174	-	R 56,700	-
1995	R 89	1	89	380	4,123	233	8,015	12,370	850	71	28,623	-	R 59,623	-
1996	94	1	95	400	3,912	230	9,538	13,680	848	73	28,901	-	60,153	-

  

Trillion Btu														
1960	20.6	0.2	20.8	209.0	101.2	4.3	7.8	113.4	0.0	0.0	29.8	373.0	74.1	447.1
1965	15.2	0.1	15.3	274.8	95.1	7.3	9.4	111.8	0.0	0.0	38.6	440.5	92.1	532.6
1970	7.1	0.1	7.2	345.1	109.7	3.1	17.0	129.8	0.0	0.0	58.4	540.5	141.4	681.9
1975	3.2	(s)	3.3	343.0	113.1	1.7	19.4	134.2	0.0	0.0	71.3	551.7	171.9	723.6
1980	2.6	(s)	2.6	394.9	53.6	0.5	12.4	66.4	0.0	0.0	76.0	539.9	184.7	724.6
1981	1.5	(s)	1.5	371.1	46.0	1.2	10.8	57.9	0.0	0.0	73.5	504.1	175.1	679.2
1982	2.0	(s)	2.0	368.9	36.8	3.2	11.8	51.8	0.0	0.0	72.6	495.3	174.4	669.6
1983	1.4	(s)	1.4	354.0	28.8	2.5	14.1	45.4	0.0	0.0	74.9	475.7	179.4	655.1
1984	2.5	(s)	2.5	346.7	31.1	2.6	15.9	49.6	0.0	0.0	76.1	475.0	177.2	652.1
1985	2.1	(s)	2.2	348.9	34.7	2.4	16.0	53.1	0.0	0.0	76.1	480.3	178.8	659.0
1986	2.2	0.0	2.2	342.9	34.3	2.0	18.3	54.6	0.0	0.0	78.6	478.3	180.7	659.0
1987	1.0	0.0	1.0	324.1	30.4	1.8	22.7	54.9	0.0	0.0	82.0	462.1	187.4	649.4
1988	1.5	(s)	1.5	362.3	33.9	2.3	23.7	59.9	0.0	0.0	86.4	510.1	195.3	705.4
1989	1.5	(s)	1.5	380.4	27.8	2.2	26.3	56.4	0.0	0.0	86.4	524.7	R 194.0	R 718.8
1990	2.3	0.0	2.3	342.2	24.3	1.2	23.7	49.2	e 27.5	e 0.2	86.4	e 507.7	R 188.9	R e 696.7
1991	2.3	(s)	2.3	350.2	26.5	1.6	26.2	54.3	28.9	0.2	91.3	527.3	R 198.7	R 726.0
1992	1.6	(s)	1.7	371.5	24.7	1.2	26.6	52.4	30.4	0.2	87.6	543.8	R 187.1	R 730.8
1993	2.0	(s)	2.1	382.6	24.2	2.0	28.8	54.9	15.6	0.2	91.3	546.7	R 193.0	R 739.7
1994	2.5	(s)	2.5	376.8	23.5	1.8	28.7	54.0	15.3	0.2	92.7	541.5	R 193.5	R 735.0
1995	2.2	(s)	2.2	396.0	24.0	1.3	29.0	54.4	17.0	0.2	97.7	567.4	203.4	770.9
1996	2.3	(s)	2.4	414.0	22.8	1.3	34.5	58.6	17.0	0.2	98.6	590.7	205.2	795.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 151. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Michigan**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	1,549	6	1,554	43	3,212	566	342	324	1,175	5,619	0	6,381	-	15,872	-
1965	1,143	3	1,146	85	3,019	946	414	536	839	5,754	0	9,124	-	21,785	-
1970	555	2	557	133	3,482	403	793	804	558	6,040	0	13,021	-	31,553	-
1975	257	1	258	182	3,589	224	921	954	390	6,078	0	14,596	-	35,207	-
1980	199	1	200	190	3,123	15	596	823	225	4,781	0	16,765	-	40,767	-
1981	118	(s)	118	175	2,367	19	522	884	113	3,906	0	16,822	-	40,091	-
1982	151	(s)	151	170	2,131	18	578	889	217	3,832	0	16,760	-	40,255	-
1983	107	(s)	107	160	2,489	17	688	844	63	4,100	0	17,176	-	41,151	-
1984	188	(s)	189	161	2,688	14	781	1,024	42	4,549	0	17,933	-	41,742	-
1985	163	1	164	158	2,359	11	781	699	274	R 4,126	0	18,421	-	43,279	-
1986	167	0	167	136	2,955	13	889	706	230	4,794	0	19,137	-	44,020	-
1987	77	0	77	186	1,747	15	1,096	R 727	134	R 3,718	0	19,850	-	45,355	-
1988	114	(s)	114	168	2,430	19	1,146	R 754	192	R 4,541	0	20,876	-	47,197	-
1989	114	(s)	114	176	2,078	56	1,262	670	90	4,156	0	21,480	-	R 48,247	-
1990	174	0	174	159	1,730	18	1,154	R 770	72	R 3,744	e NA	21,986	-	R 48,086	-
1991	171	NA	171	166	1,938	17	1,279	586	5	3,825	NA	22,748	-	R 49,513	-
1992	122	(s)	123	174	1,767	5	1,294	553	12	3,631	NA	22,509	-	R 48,078	-
1993	154	(s)	154	180	1,472	25	1,407	R 77	8	2,990	41	30,243	-	R 63,897	-
1994	187	1	188	183	1,437	33	1,393	363	3	3,229	41	31,265	-	R 65,235	-
1995	164	(s)	165	194	1,770	102	1,414	77	5	3,369	51	32,154	-	R 66,979	-
1996	175	1	175	201	1,790	149	1,683	77	5	3,705	54	32,897	-	68,468	-

  

Trillion Btu															
1960	38.3	0.1	38.5	44.5	18.7	3.2	1.4	1.7	7.4	32.4	0.0	21.8	137.1	54.2	191.3
1965	28.1	0.1	28.2	86.0	17.6	5.4	1.7	2.8	5.3	32.7	0.0	31.1	178.1	74.3	252.4
1970	13.2	(s)	13.3	134.7	20.3	2.3	3.0	4.2	3.5	33.3	0.0	44.4	225.7	107.7	333.3
1975	6.0	(s)	6.1	186.4	20.9	1.3	3.4	5.0	2.4	33.1	0.0	49.8	275.3	120.1	395.4
1980	4.8	(s)	4.9	194.0	18.2	0.1	2.2	4.3	1.4	26.2	0.0	57.2	282.3	139.1	421.4
1981	2.9	(s)	2.9	179.3	13.8	0.1	1.9	4.6	0.7	21.2	0.0	57.4	260.7	136.8	397.5
1982	3.7	(s)	3.7	175.1	12.4	0.1	2.1	4.7	1.4	20.6	0.0	57.2	256.6	137.4	393.9
1983	2.6	(s)	2.6	166.1	14.5	0.1	2.5	4.4	0.4	21.9	0.0	58.6	249.3	140.4	389.7
1984	4.6	(s)	4.6	164.6	15.7	0.1	2.8	5.4	0.3	24.2	0.0	61.2	254.6	142.4	397.0
1985	4.0	(s)	4.0	161.4	13.7	0.1	2.8	3.7	1.7	22.0	0.0	62.9	250.3	147.7	397.9
1986	4.2	0.0	4.2	140.8	17.2	0.1	3.2	3.7	1.4	25.7	0.0	65.3	235.9	150.2	386.1
1987	1.9	0.0	1.9	191.8	10.2	0.1	4.0	3.8	0.8	18.9	0.0	67.7	280.3	154.8	435.1
1988	2.8	(s)	2.8	174.6	14.2	0.1	4.2	4.0	1.2	23.6	0.0	71.2	272.2	161.0	433.3
1989	2.8	(s)	2.8	185.3	12.1	0.3	4.6	3.5	0.6	21.2	0.0	73.3	282.6	R 164.6	R 447.2
1990	4.3	0.0	4.3	166.6	10.1	0.1	4.2	4.0	0.5	R 18.9	e NA	75.0	264.8	R 164.1	R 428.9
1991	4.3	(s)	4.3	172.0	11.3	0.1	4.6	3.1	(s)	19.1	NA	77.6	273.0	R 168.9	R 441.9
1992	3.0	(s)	3.1	180.3	10.3	(s)	4.7	2.9	0.1	18.0	NA	76.8	278.2	164.0	R 442.2
1993	3.8	(s)	3.8	186.5	8.6	0.1	5.1	0.4	0.1	14.2	0.8	103.2	R 308.5	R 218.0	R 526.5
1994	4.6	(s)	4.6	189.2	8.4	0.2	5.1	1.9	(s)	15.5	0.8	106.7	R 316.8	R 222.6	R 539.4
1995	4.1	(s)	4.1	202.2	10.3	0.6	5.1	0.4	(s)	16.5	1.0	109.7	R 333.5	228.5	R 562.0
1996	4.3	(s)	4.4	208.7	10.4	0.8	6.1	0.4	(s)	17.8	1.1	112.2	344.1	233.6	577.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 152. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Michigan**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	13,011	117	2,936	7,091	2,741	524	1,221	3,151	9,574	4,629	31,866	212	0	0	12,482	-	31,046	-
1965	15,193	192	2,264	7,518	3,655	923	1,898	2,694	6,660	8,738	34,350	146	0	0	19,350	-	46,201	-
1970	13,061	262	3,881	8,502	2,175	854	1,834	2,758	4,557	10,304	34,864	123	0	0	25,169	-	60,992	-
1975	9,885	300	3,886	8,749	823	1,239	1,430	1,889	3,343	10,478	31,837	121	0	0	28,866	-	69,627	-
1980	8,652	249	3,507	4,804	1,135	2,637	1,796	967	3,213	17,373	35,433	117	0	0	30,656	-	74,545	-
1981	8,020	232	3,550	5,347	767	1,788	1,723	890	2,021	9,999	26,085	117	0	0	30,858	-	73,543	-
1982	7,242	193	2,602	4,425	166	2,982	1,571	822	2,592	8,234	23,394	117	0	0	27,599	-	66,288	-
1983	6,610	175	2,739	3,703	100	2,244	1,645	595	3,359	7,926	22,311	117	0	0	30,153	-	72,241	-
1984	6,630	198	2,790	3,999	64	R 1,886	1,754	831	2,241	9,130	R 22,695	117	0	0	33,070	-	76,975	-
1985	6,645	190	2,779	4,246	70	8,725	1,635	R 1,192	2,213	8,329	29,190	117	0	0	33,704	-	79,184	-
1986	6,681	180	3,384	4,608	60	9,479	1,598	1,151	2,343	9,167	31,790	117	0	0	34,091	-	78,418	-
1987	4,892	134	3,506	4,264	82	R 10,011	1,807	R 1,145	2,015	9,570	R 32,400	117	0	0	35,098	-	80,197	-
1988	5,189	199	2,876	4,992	56	R 9,316	1,743	R 1,065	2,152	9,642	R 31,842	117	0	0	36,324	-	82,121	-
1989	4,738	201	3,863	3,772	69	R 10,356	1,787	R 1,074	1,775	9,572	32,267	117	0	0	36,131	-	R 81,156	-
1990	4,719	290	3,950	3,406	34	R 6,926	1,839	R 976	1,435	10,456	R 29,023	f NA	f NA	f NA	35,062	-	R 76,686	-
1991	3,718	282	3,464	4,576	64	R 7,228	1,646	R 1,111	751	12,735	31,573	NA	NA	NA	35,007	-	R 76,193	-
1992	3,127	313	3,546	4,628	41	R 7,791	1,678	950	763	13,589	32,986	NA	NA	NA	35,657	-	R 76,161	-
1993	3,231	320	4,453	4,487	72	R 3,420	1,708	R 1,034	965	13,496	R 29,636	NA	NA	NA	30,572	-	R 64,592	-
1994	4,278	338	3,596	4,729	60	4,528	1,786	R 1,166	972	13,756	R 30,592	NA	NA	NA	32,717	-	R 68,265	-
1995	R 4,383	336	4,955	3,736	32	4,826	1,755	1,310	408	13,200	30,222	NA	NA	NA	33,921	-	R 70,658	-
1996	4,248	356	3,703	3,943	42	5,224	1,703	1,418	422	13,978	30,432	NA	NA	NA	34,499	-	71,804	-

**Trillion Btu**

1960	332.0	121.3	19.5	41.3	15.5	2.1	7.4	16.5	60.2	27.4	189.9	2.3	0.0	0.0	42.6	688.1	105.9	794.1
1965	385.6	195.1	15.0	43.8	20.7	3.7	11.5	14.2	41.9	49.4	200.2	1.5	0.0	0.0	66.0	848.4	157.6	1,006.1
1970	320.9	265.7	25.8	49.5	12.3	3.2	11.1	14.5	28.7	57.6	202.7	1.3	0.0	0.0	85.9	876.5	208.1	1,084.6
1975	246.7	307.7	25.8	51.0	4.7	4.6	8.7	9.9	21.0	59.2	184.9	1.3	0.0	0.0	98.5	839.1	237.6	1,076.6
1980	219.4	253.7	23.3	28.0	6.4	9.7	10.9	5.1	20.2	95.8	199.4	1.2	0.0	0.0	104.6	778.3	254.3	1,032.6
1981	203.3	237.5	23.6	31.1	4.3	6.5	10.4	4.7	12.7	55.4	148.8	1.2	0.0	0.0	105.3	696.1	250.9	947.0
1982	184.4	198.4	17.3	25.8	0.9	10.8	9.5	4.3	16.3	45.6	130.6	1.2	0.0	0.0	94.2	608.8	226.2	834.9
1983	168.4	182.1	18.2	21.6	0.6	8.1	10.0	3.1	21.1	44.5	127.2	1.2	0.0	0.0	102.9	581.8	246.5	828.3
1984	168.9	202.2	18.5	23.3	0.4	6.8	10.6	4.4	14.1	50.1	128.1	1.2	0.0	0.0	112.8	613.4	262.6	876.0
1985	169.9	194.2	18.4	24.7	0.4	31.4	9.9	6.3	13.9	46.0	151.1	1.2	0.0	0.0	115.0	631.4	270.2	901.6
1986	171.2	186.7	22.5	26.8	0.3	34.5	9.7	6.0	14.7	50.8	165.4	1.2	0.0	0.0	116.3	640.8	267.6	908.4
1987	123.7	138.4	23.3	24.8	0.5	36.6	11.0	6.0	12.7	52.7	167.5	1.2	0.0	0.0	119.8	550.5	273.6	824.2
1988	130.6	207.3	19.1	29.1	0.3	34.0	10.6	5.6	13.5	53.4	165.6	1.2	0.0	0.0	123.9	628.6	280.2	908.8
1989	118.9	211.4	25.6	22.0	0.4	38.1	10.8	5.6	11.2	52.9	166.7	1.2	0.0	0.0	123.3	621.4	R 276.9	R 898.3
1990	117.9	302.8	26.2	19.8	0.2	25.1	11.2	5.1	9.0	57.9	R 154.6	f 1.2	f 81.7	f 0.0	119.6	f 777.7	R 261.7	R f 1,039.4
1991	92.5	292.5	23.0	26.7	0.4	26.1	10.0	5.8	4.7	70.4	167.0	1.2	80.7	0.0	119.4	753.3	R 260.0	R 1,013.3
1992	76.3	324.4	23.5	27.0	0.2	28.2	10.2	5.0	4.8	74.6	173.6	1.6	82.6	0.0	121.7	780.1	R 259.9	R 1,040.0
1993	78.2	331.3	29.6	26.1	0.4	12.3	10.4	5.4	6.1	74.2	164.5	1.4	R 87.7	0.0	104.3	767.4	R 220.4	R 987.8
1994	107.2	348.9	23.9	27.5	0.3	16.5	10.8	6.1	6.1	75.6	166.8	1.5	R 88.7	0.0	111.6	R 824.8	R 232.9	R 1,057.7
1995	R 109.2	350.2	32.9	21.8	0.2	17.5	10.6	6.9	2.6	72.5	164.9	1.3	R 88.9	0.0	115.7	R 830.2	241.1	R 1,071.3
1996	106.7	368.4	24.6	23.0	0.2	18.9	10.3	7.4	2.7	76.5	163.5	1.5	96.6	0.0	117.7	854.5	245.0	1,099.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 153. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Michigan**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	227	3	1,312	2,475	3,369	21	1,277	62,307	728	71,489	0	9	-	23	-
1965	50	5	2,619	3,348	4,377	34	1,126	74,814	779	87,097	0	0	-	0	-
1970	21	10	718	6,353	7,365	62	1,324	93,269	427	109,518	0	0	-	0	-
1975	2	10	347	8,949	5,700	95	1,321	105,412	423	122,248	0	0	-	0	-
1980	0	12	488	9,741	6,646	128	1,477	95,235	232	113,946	0	0	-	0	-
1981	0	14	250	10,382	6,131	301	1,417	91,008	299	109,789	0	0	-	0	-
1982	0	13	157	9,568	5,706	270	1,292	86,469	65	103,527	0	0	-	0	-
1983	0	8	324	10,585	5,892	321	1,353	87,207	100	105,784	0	0	-	0	-
1984	0	11	181	11,310	5,983	R 434	1,442	91,097	55	R 110,502	0	0	-	0	-
1985	0	11	201	12,196	6,570	291	1,344	R 91,556	99	R 112,256	0	0	-	0	-
1986	0	15	250	12,542	7,129	283	1,314	R 94,158	34	R 115,709	0	0	-	0	-
1987	0	12	242	13,689	8,371	R 340	1,486	R 97,282	51	R 121,461	0	0	-	0	-
1988	0	18	241	13,893	8,585	345	1,433	R 100,548	30	R 125,076	0	0	-	0	-
1989	0	17	268	13,795	9,235	284	1,470	R 99,399	115	R 124,567	0	0	-	0	-
1990	0	18	215	13,670	10,057	R 283	1,513	R 98,167	93	R 123,997	R e 63,023	0	-	0	-
1991	0	20	206	13,620	10,234	262	1,353	R 99,679	50	R 125,403	R 49,957	4	-	9	-
1992	0	22	182	14,391	10,125	R 251	1,380	R 99,868	98	R 126,294	R 60,717	4	-	8	-
1993	0	24	198	18,269	10,305	R 275	1,405	R 103,892	74	R 134,418	R 67,759	4	-	9	-
1994	0	23	237	18,831	10,281	470	1,468	R 104,215	98	R 135,601	R 77,559	4	-	8	-
1995	0	25	231	19,082	8,818	241	1,443	109,159	95	139,070	R 50,170	3	-	7	-
1996	0	26	215	19,567	9,045	210	1,401	109,025	125	139,587	21,192	4	-	8	-

**Trillion Btu**

1960	5.6	2.7	6.6	14.4	18.2	0.1	7.7	327.3	4.6	378.9	0.0	(s)	387.3	0.1	387.4
1965	1.2	4.6	13.2	19.5	24.0	0.1	6.8	393.0	4.9	461.5	0.0	0.0	467.4	0.0	467.4
1970	0.5	10.5	3.6	37.0	41.0	0.2	8.0	489.9	2.7	582.5	0.0	0.0	593.5	0.0	593.5
1975	(s)	10.5	1.7	52.1	31.6	0.4	8.0	553.7	2.7	650.3	0.0	0.0	660.8	0.0	660.8
1980	0.0	12.6	2.5	56.7	37.1	0.5	9.0	500.3	1.5	607.5	0.0	0.0	620.1	0.0	620.1
1981	0.0	14.0	1.3	60.5	34.3	1.1	8.6	478.1	1.9	585.6	0.0	0.0	599.6	0.0	599.6
1982	0.0	13.8	0.8	55.7	31.8	1.0	7.8	454.2	0.4	551.8	0.0	0.0	565.6	0.0	565.6
1983	0.0	8.2	1.6	61.7	32.9	1.2	8.2	458.1	0.6	564.3	0.0	0.0	572.4	0.0	572.4
1984	0.0	11.0	0.9	65.9	33.4	1.6	8.7	478.5	0.3	589.4	0.0	0.0	600.3	0.0	600.3
1985	0.0	10.8	1.0	71.0	36.7	1.0	8.2	R 480.9	0.6	R 599.5	0.0	0.0	R 610.3	0.0	R 610.3
1986	0.0	15.3	1.3	73.1	39.9	1.0	8.0	494.6	0.2	618.1	0.0	0.0	633.4	0.0	633.4
1987	0.0	12.6	1.2	79.7	46.9	1.2	9.0	R 511.0	0.3	R 649.5	0.0	0.0	R 662.1	0.0	R 662.1
1988	0.0	19.1	1.2	80.9	48.1	1.3	8.7	R 528.2	0.2	R 668.6	0.0	0.0	R 687.7	0.0	R 687.7
1989	0.0	17.7	1.4	80.4	51.8	1.0	8.9	R 522.1	0.7	R 666.4	0.0	0.0	R 684.1	0.0	R 684.1
1990	0.0	18.7	1.1	79.6	56.6	1.0	9.2	R 515.7	0.6	R 663.7	R e 4.8	0.0	R e 682.5	0.0	R e 682.5
1991	0.0	20.3	1.0	79.3	57.5	0.9	8.2	R 523.6	0.3	R 670.9	R 3.8	(s)	R 691.3	(s)	R 691.3
1992	0.0	22.5	0.9	83.8	57.0	0.9	8.4	R 524.6	0.6	R 676.2	R 4.6	(s)	R 698.8	(s)	R 698.8
1993	0.0	24.7	1.0	106.4	58.1	1.0	8.5	R 545.7	0.5	R 721.3	R 5.2	(s)	R 746.0	(s)	R 746.0
1994	0.0	23.3	1.2	109.7	58.2	1.7	8.9	R 547.4	0.6	R 727.7	R 5.9	(s)	R 751.0	(s)	R 751.0
1995	0.0	25.9	1.2	111.2	50.0	0.9	8.8	573.4	0.6	746.0	R 3.8	(s)	771.9	(s)	771.9
1996	0.0	26.9	1.1	114.0	51.3	0.8	8.5	572.7	0.8	749.1	1.6	(s)	776.0	(s)	776.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 154. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Michigan**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	10,300	0	10,300	5	362	77	0	440	0	3,067	0	0	0	--
1965	16,123	0	16,123	3	316	68	0	384	181	1,254	0	0	0	--
1970	20,124	0	20,124	64	4,514	965	0	5,479	375	1,181	0	0	0	--
1975	20,914	0	20,914	57	14,136	1,538	0	15,674	7,176	1,309	0	0	0	--
1980	22,150	0	22,150	26	9,621	780	0	10,400	15,891	6,768	0	0	0	--
1981	23,407	0	23,407	19	5,392	639	0	6,031	17,066	5,566	0	0	0	--
1982	21,806	0	21,806	13	2,018	507	0	2,524	15,003	3,235	0	0	0	--
1983	22,872	0	22,872	13	941	456	0	1,397	16,383	2,383	0	0	0	--
1984	24,491	0	24,491	10	778	547	0	1,325	14,078	1,510	0	0	0	--
1985	25,896	0	25,896	10	522	646	0	1,168	13,452	1,272	0	0	0	--
1986	27,061	0	27,061	11	1,155	511	0	1,666	12,257	1,292	0	0	0	--
1987	30,854	0	30,854	11	1,116	406	0	1,522	14,389	1,134	0	0	0	--
1988	29,968	0	29,968	15	2,419	496	0	2,915	17,808	648	0	0	0	--
1989	29,972	0	29,972	19	2,534	457	0	2,991	21,312	-4,677	0	0	0	--
1990	29,726	0	29,726	23	1,149	339	0	1,488	21,611	828	0	0	0	--
1991	29,896	0	29,896	24	944	286	0	1,230	27,021	952	0	0	0	--
1992	28,238	0	28,238	25	833	292	0	1,125	18,849	976	0	0	0	--
1993	28,749	0	28,749	19	1,047	341	0	1,388	28,525	1,605	0	0	0	--
1994	31,106	0	31,106	18	1,114	319	0	1,433	14,144	4,955	0	0	0	--
1995	31,165	0	31,165	36	1,101	408	0	1,509	24,448	4,511	0	0	0	--
1996	32,175	0	32,175	32	1,235	289	3	1,527	26,829	2,395	0	0	0	--

**Trillion Btu**

1960	256.3	0.0	256.3	5.4	2.3	0.5	0.0	2.7	0.0	33.0	0.0	0.0	0.0	297.4
1965	399.9	0.0	399.9	3.0	2.0	0.4	0.0	2.4	2.1	13.1	0.0	0.0	0.0	420.6
1970	487.0	0.0	487.0	65.2	28.4	5.6	0.0	34.0	4.1	12.4	0.0	0.0	0.0	602.8
1975	494.9	0.0	494.9	47.3	88.9	8.9	0.0	97.8	79.0	13.6	0.0	0.0	0.0	732.6
1980	532.2	0.0	532.2	19.4	60.5	4.5	0.0	65.0	173.3	70.3	0.0	0.0	0.0	860.3
1981	549.8	0.0	549.8	12.6	33.9	3.7	0.0	37.6	188.2	58.2	0.0	0.0	0.0	846.4
1982	521.3	0.0	521.3	8.4	12.7	3.0	0.0	15.6	166.1	33.8	0.0	0.0	0.0	745.3
1983	534.2	0.0	534.2	2.7	5.9	2.7	0.0	8.6	178.7	25.1	0.0	0.0	0.0	749.2
1984	571.6	0.0	571.6	5.7	4.9	3.2	0.0	8.1	152.7	15.8	0.0	0.0	0.0	753.9
1985	605.8	0.0	605.8	4.7	3.3	3.8	0.0	7.0	145.5	13.3	0.0	0.0	0.0	776.2
1986	634.4	0.0	634.4	3.8	7.3	3.0	0.0	10.2	132.4	13.5	0.0	0.0	0.0	794.3
1987	713.6	0.0	713.6	4.3	7.0	2.4	0.0	9.4	155.1	11.8	0.0	0.0	0.0	894.2
1988	696.0	0.0	696.0	2.4	15.2	2.9	0.0	18.1	191.3	6.7	0.0	0.0	0.0	914.5
1989	676.1	0.0	676.1	2.0	15.9	2.7	0.0	18.6	228.6	R -48.8	0.0	0.0	0.0	R 876.4
1990	661.8	0.0	661.8	5.2	7.2	2.0	0.0	9.2	230.8	8.6	0.0	0.0	0.0	R 801.7
1991	660.8	0.0	660.8	9.2	5.9	1.7	0.0	7.6	290.2	9.9	0.0	0.0	0.0	972.3
1992	621.0	0.0	621.0	10.3	5.2	1.7	0.0	6.9	201.3	10.1	0.0	0.0	0.0	R 846.7
1993	624.0	0.0	624.0	7.2	6.6	2.0	0.0	8.6	304.7	16.5	0.0	0.0	0.0	R 963.0
1994	679.7	0.0	679.7	7.3	7.0	1.9	0.0	8.9	151.0	R 51.1	0.0	0.0	0.0	R 926.2
1995	665.5	0.0	665.5	13.1	6.9	2.4	0.0	9.3	260.6	46.5	0.0	0.0	0.0	1,015.5
1996	675.9	0.0	675.9	8.8	7.8	1.7	(s)	9.5	285.0	24.8	0.0	0.0	0.0	1,007.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 155. Energy Consumption Estimates by Source, Selected Years 1960-1996, Minnesota**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	5,977	180	3,004	1,199	16,151	472	2,570	4,525	960	32,583	6,658	1,334	69,455	0	977	15	0	-3,263	-
1965	7,260	249	3,791	803	18,960	2,624	2,313	5,781	759	35,278	4,980	2,334	77,622	143	1,204	14	0	-1,370	-
1970	8,787	342	4,413	277	22,356	3,491	1,685	8,887	924	44,122	5,159	3,159	94,472	0	1,020	19	0	11,382	-
1975	10,120	331	4,628	215	24,369	5,629	856	9,187	1,003	48,253	4,326	4,111	102,577	9,750	1,101	4	0	6,217	-
1980	13,810	286	3,565	193	21,382	5,142	212	7,697	1,120	46,211	3,183	3,756	92,460	10,027	1,739	2	0	8,135	-
1981	13,894	266	3,890	163	18,698	4,516	149	5,956	1,074	45,024	1,576	2,206	83,252	10,187	1,029	0	0	15,343	-
1982	12,115	262	3,878	119	20,900	4,261	231	7,492	979	44,877	1,693	2,393	86,822	10,197	1,257	4	0	21,773	-
1983	11,984	241	4,718	117	17,388	4,044	136	7,538	1,025	46,061	1,567	3,043	85,636	11,753	1,482	1	0	24,134	-
1984	13,258	256	4,669	125	18,188	7,331	272	4,983	1,093	48,051	1,109	3,146	88,967	8,328	1,963	(s)	0	33,545	-
1985	12,744	257	4,989	154	19,399	7,781	184	5,353	1,019	R 45,285	859	3,017	R 88,040	11,572	3,642	(s)	0	22,856	-
1986	11,327	245	5,480	225	18,886	7,801	124	6,280	996	R 45,776	1,797	3,061	90,427	11,052	7,941	0	0	16,359	-
1987	14,504	240	5,860	178	18,265	5,656	91	5,418	1,126	R 47,018	1,208	3,487	R 88,306	11,554	2,806	41	0	21,498	-
1988	17,285	284	4,897	166	19,910	5,142	153	5,621	1,086	R 48,813	1,277	4,551	R 91,617	12,288	-992	153	(s)	28,054	-
1989	18,279	300	4,923	158	19,194	4,663	324	6,088	1,114	R 48,576	1,071	5,194	R 91,305	10,926	370	247	(s)	23,008	-
1990	18,377	291	6,039	214	18,481	5,099	42	5,966	1,146	R 47,760	974	5,510	R 91,231	12,139	i NA	i NA	i NA	R 18,724	-
1991	16,993	314	5,040	188	21,227	4,978	54	6,595	1,026	R 48,578	1,053	6,001	R 94,739	12,059	NA	NA	NA	R 20,032	-
1992	16,924	309	5,343	134	21,630	6,621	53	8,008	1,046	R 49,693	1,189	6,982	R 100,699	11,166	NA	NA	NA	R 9,743	-
1993	18,321	328	4,793	132	21,073	9,438	60	8,926	1,065	R 51,348	1,251	6,877	R 104,963	11,986	NA	NA	NA	R 2,066	-
1994	18,729	324	4,745	125	23,698	9,780	134	9,445	1,113	R 52,540	1,102	7,384	R 110,067	12,224	NA	NA	NA	R 2,754	-
1995	18,947	353	6,403	129	24,574	9,969	104	9,758	1,094	R 54,303	657	6,908	113,899	13,243	NA	NA	NA	13,265	-
1996	19,264	368	6,674	124	24,575	10,625	123	10,932	1,061	54,866	796	8,507	118,284	12,095	NA	NA	NA	2,663	-
Trillion Btu																			
1960	131.3	186.1	19.9	6.1	94.1	2.6	14.6	18.1	5.8	171.2	41.9	8.0	382.2	0.0	10.5	0.2	0.0	-11.1	699.2
1965	160.0	248.2	25.2	4.1	110.4	14.8	13.1	23.2	4.6	185.3	31.3	13.8	425.8	1.7	12.6	0.1	0.0	-4.7	843.8
1970	179.7	343.0	29.3	1.4	130.2	19.7	9.6	33.6	5.6	231.8	32.4	18.8	512.4	0.0	10.7	0.2	0.0	38.8	1,084.9
1975	191.5	331.5	30.7	1.1	141.9	31.9	4.9	34.1	6.1	253.5	27.2	24.4	555.8	107.4	11.5	(s)	0.0	21.2	1,218.9
1980	242.4	285.0	23.7	1.0	124.5	29.1	1.2	28.3	6.8	242.7	20.0	22.4	499.7	109.4	18.1	(s)	0.0	27.8	1,182.3
1981	244.2	265.0	25.8	0.8	108.9	25.5	0.8	21.7	6.5	236.5	9.9	13.6	450.2	112.4	10.8	0.0	0.0	52.4	1,134.8
1982	212.5	263.3	25.7	0.6	121.7	24.1	1.3	27.1	5.9	235.7	10.6	14.8	467.6	112.9	13.1	(s)	0.0	74.3	1,143.9
1983	211.2	246.3	31.3	0.6	101.3	22.9	0.8	27.2	6.2	242.0	9.9	18.5	460.6	128.2	15.6	(s)	0.0	82.3	1,144.2
1984	231.4	256.4	31.0	0.6	105.9	41.5	1.5	17.9	6.6	252.4	7.0	19.0	483.5	90.3	20.5	(s)	0.0	114.5	1,196.6
1985	226.1	258.5	33.1	0.8	113.0	44.1	1.0	19.3	6.2	R 237.9	5.4	18.5	R 479.3	125.1	38.0	(s)	0.0	78.0	R 1,205.1
1986	201.4	244.5	36.4	1.1	110.0	44.2	0.7	22.9	6.0	240.5	11.3	19.0	492.0	119.4	83.0	0.0	0.0	55.8	R 1,196.0
1987	256.0	239.8	38.9	0.9	106.4	32.0	0.5	19.8	6.8	R 247.0	7.6	21.2	R 481.1	124.5	29.2	0.4	0.0	73.4	R 1,204.4
1988	303.6	285.8	32.5	0.8	116.0	29.1	0.9	20.5	6.6	R 256.4	8.0	27.5	R 498.3	132.0	-10.2	1.6	(s)	95.7	R 1,306.8
1989	323.0	301.7	32.7	0.8	111.8	26.4	1.8	22.4	6.8	R 255.2	6.7	31.1	R 495.7	117.2	3.8	R 2.6	(s)	R 78.5	R 1,322.4
1990	324.3	291.7	40.1	1.1	107.7	28.9	0.2	21.6	7.0	R 250.9	6.1	33.0	R 496.5	129.6	R i 27.8	R i 81.1	i 0.3	R 63.9	R i 1,387.7
1991	300.6	318.3	33.4	0.9	123.6	28.2	0.3	23.8	6.2	R 255.2	6.6	35.8	R 514.1	129.5	R 36.3	R 77.2	0.3	R 68.4	R 1,433.8
1992	300.1	312.2	35.5	0.7	126.0	37.5	0.3	29.0	6.3	R 261.0	7.5	41.3	R 545.1	119.2	R 62.8	R 82.9	0.3	R 33.2	R 1,445.8
1993	324.7	331.5	31.8	0.7	122.7	53.5	0.3	32.2	6.5	R 269.7	7.9	40.9	R 566.2	128.0	R 82.9	R 83.7	0.3	R 7.1	R 1,508.9
1994	332.1	327.4	31.5	0.6	138.0	55.4	0.8	34.3	6.7	R 276.0	6.9	43.8	R 594.2	130.5	R 60.1	R 84.1	0.7	R 9.4	R 1,551.2
1995	337.2	357.7	42.5	0.7	143.1	56.5	0.6	35.4	6.6	285.3	4.1	41.0	615.8	141.1	46.0	R 85.3	0.9	45.3	R 1,631.6
1996	345.5	375.1	44.3	0.6	143.1	60.2	0.7	39.5	6.4	288.2	5.0	50.4	638.6	128.5	92.9	85.2	0.9	9.1	1,688.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 156. Residential Energy Consumption Estimates, Selected Years 1960-1996, Minnesota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	330	0	330	61	5,414	1,748	3,108	10,270	0	0	4,186	—	10,411	—
1965	216	0	216	86	6,309	1,556	4,043	11,908	0	0	6,063	—	14,476	—
1970	200	0	200	102	7,197	1,195	6,390	14,782	0	0	9,031	—	21,886	—
1975	81	0	81	114	7,242	558	6,040	13,840	0	0	10,189	—	24,578	—
1980	50	0	50	103	5,946	114	2,929	8,989	0	0	11,749	—	28,570	—
1981	46	0	46	96	4,818	115	2,666	7,599	0	0	12,281	—	29,269	—
1982	57	0	57	108	6,206	191	2,816	9,213	0	0	12,773	—	30,679	—
1983	62	0	62	98	3,131	91	3,349	6,571	0	0	13,392	—	32,085	—
1984	83	0	83	102	3,381	220	2,399	6,000	0	0	13,028	—	30,325	—
1985	77	0	77	107	3,826	137	2,400	6,363	0	0	13,261	—	31,156	—
1986	68	0	68	103	3,998	88	2,796	6,881	0	0	13,259	—	30,500	—
1987	60	0	60	90	3,887	75	2,704	6,666	0	0	13,834	—	31,609	—
1988	82	(s)	82	110	4,376	115	2,844	7,334	0	0	14,996	—	33,903	—
1989	88	(s)	88	117	4,495	270	3,124	7,888	0	0	14,778	—	R 33,193	—
1990	63	0	63	107	3,222	30	2,933	6,185	<sup>e</sup> 562	<sup>e</sup> 87	14,858	—	R 32,496	—
1991	33	(s)	33	117	4,098	41	3,186	7,324	592	88	15,655	—	R 34,074	—
1992	9	(s)	9	114	3,426	38	3,560	7,024	623	89	14,848	—	R 31,714	—
1993	37	(s)	38	123	3,210	36	4,379	7,624	524	89	15,597	—	R 32,953	—
1994	80	(s)	80	122	3,384	45	4,305	7,735	514	90	16,007	—	R 33,398	—
1995	92	0	92	129	3,334	50	4,447	7,831	571	100	16,974	—	R 35,359	—
1996	55	0	55	142	3,499	61	5,292	8,852	570	102	17,157	—	35,709	—
<b>Trillion Btu</b>														
1960	7.3	0.0	7.3	63.6	31.5	9.9	12.5	53.9	0.0	0.0	14.3	139.0	35.5	174.5
1965	4.7	0.0	4.7	86.3	36.7	8.8	16.2	61.8	0.0	0.0	20.7	173.5	49.4	222.9
1970	4.2	0.0	4.2	102.0	41.9	6.8	24.1	72.8	0.0	0.0	30.8	209.9	74.7	284.5
1975	1.6	0.0	1.6	114.7	42.2	3.2	22.4	67.8	0.0	0.0	34.8	218.8	83.9	302.7
1980	1.0	0.0	1.0	103.1	34.6	0.6	10.8	46.0	0.0	0.0	40.1	190.3	97.5	287.7
1981	0.9	0.0	0.9	95.5	28.1	0.7	9.7	38.4	0.0	0.0	41.9	176.7	99.9	276.5
1982	1.0	0.0	1.0	108.2	36.1	1.1	10.2	47.4	0.0	0.0	43.6	200.2	104.7	304.9
1983	1.2	0.0	1.2	99.9	18.2	0.5	12.1	30.9	0.0	0.0	45.7	177.6	109.5	287.1
1984	1.5	0.0	1.5	102.2	19.7	1.2	8.6	29.6	0.0	0.0	44.5	177.8	103.5	281.3
1985	1.5	0.0	1.5	107.1	22.3	0.8	8.6	31.7	0.0	0.0	45.2	185.5	106.3	291.8
1986	1.3	0.0	1.3	103.2	23.3	0.5	10.2	34.0	0.0	0.0	45.2	183.7	104.1	287.8
1987	1.1	0.0	1.1	89.9	22.6	0.4	9.9	33.0	0.0	0.0	47.2	171.1	107.8	278.9
1988	1.5	(s)	1.5	110.4	25.5	0.7	10.4	36.5	0.0	0.0	51.2	199.6	115.7	315.3
1989	1.7	(s)	1.7	117.6	26.2	1.5	11.5	39.2	0.0	0.0	50.4	208.9	R 113.3	R 322.2
1990	1.1	0.0	1.1	107.4	18.8	0.2	10.6	29.6	<sup>e</sup> 11.2	<sup>e</sup> 0.3	50.7	<sup>e</sup> 200.3	R 110.9	R <sup>e</sup> 311.2
1991	0.6	(s)	0.6	118.6	23.9	0.2	11.5	35.6	11.8	0.3	53.4	220.3	R 116.3	R 336.6
1992	0.2	(s)	0.2	114.8	20.0	0.2	12.9	33.1	12.5	0.3	50.7	211.5	108.2	R 319.7
1993	0.7	(s)	0.7	124.8	18.7	0.2	15.8	34.7	10.5	0.3	53.2	224.2	R 112.4	R 336.6
1994	1.6	(s)	1.6	123.6	19.7	0.3	15.6	35.6	10.3	0.3	54.6	226.0	R 114.0	R 340.0
1995	1.9	0.0	1.9	130.4	19.4	0.3	16.1	35.8	11.4	0.3	57.9	237.8	120.6	358.4
1996	1.0	0.0	1.0	144.9	20.4	0.3	19.1	39.8	11.4	0.3	58.5	256.0	121.8	377.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 157. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Minnesota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	614	0	614	20	1,323	378	548	142	634	3,026	0	1,540	-	3,831	-
1965	401	0	401	27	1,542	337	713	158	414	3,164	0	2,026	-	4,838	-
1970	372	0	372	77	1,759	259	1,128	235	393	3,774	0	3,178	-	7,701	-
1975	151	0	151	90	1,770	121	1,066	355	223	3,536	0	4,845	-	11,686	-
1980	93	0	93	64	1,443	0	517	340	32	2,331	0	5,724	-	13,919	-
1981	86	0	86	67	835	5	470	352	19	1,682	0	6,456	-	15,387	-
1982	106	0	106	74	988	4	497	361	173	2,023	0	6,856	-	16,466	-
1983	115	0	115	71	2,738	2	591	350	141	3,822	0	6,707	-	16,069	-
1984	154	0	154	75	2,956	2	423	633	94	4,109	0	7,252	-	16,880	-
1985	143	0	143	77	2,740	24	424	335	223	3,746	0	7,469	-	17,548	-
1986	126	0	126	74	1,077	4	493	327	307	2,209	0	7,625	-	17,540	-
1987	111	0	111	66	1,008	5	477	R 240	129	R 1,860	0	8,031	-	18,350	-
1988	152	(s)	152	80	1,102	5	502	242	296	2,147	0	8,601	-	19,444	-
1989	163	(s)	163	85	1,033	4	551	R 191	268	R 2,048	0	8,454	-	R 18,990	-
1990	116	0	116	78	939	5	518	R 1,568	263	R 3,293	e NA	8,813	-	R 19,274	-
1991	61	(s)	61	86	910	3	562	198	295	1,969	NA	9,162	-	R 19,941	-
1992	16	(s)	16	82	760	7	628	117	197	1,709	NA	9,007	-	R 19,239	-
1993	70	(s)	70	87	653	9	773	49	134	1,618	18	9,229	-	R 19,500	-
1994	148	(s)	149	84	903	14	760	49	161	1,887	26	9,698	-	R 20,235	-
1995	171	0	171	91	931	23	785	50	113	1,903	27	10,407	-	R 21,679	-
1996	101	0	101	99	1,028	27	934	50	141	2,179	31	10,850	-	22,583	-

  

Trillion Btu															
1960	13.5	0.0	13.5	21.0	7.7	2.1	2.2	0.7	4.0	16.8	0.0	5.3	56.6	13.1	69.6
1965	8.8	0.0	8.8	26.8	9.0	1.9	2.9	0.8	2.6	17.2	0.0	6.9	59.7	16.5	76.2
1970	7.8	0.0	7.8	76.7	10.2	1.5	4.3	1.2	2.5	19.7	0.0	10.8	115.1	26.3	141.4
1975	2.9	0.0	2.9	89.9	10.3	0.7	4.0	1.9	1.4	18.2	0.0	16.5	127.5	39.9	167.4
1980	1.9	0.0	1.9	63.6	8.4	0.0	1.9	1.8	0.2	12.3	0.0	19.5	97.3	47.5	144.8
1981	1.6	0.0	1.6	66.4	4.9	(s)	1.7	1.9	0.1	8.6	0.0	22.0	98.6	52.5	151.1
1982	1.9	0.0	1.9	74.7	5.8	(s)	1.8	1.9	1.1	10.6	0.0	23.4	110.5	56.2	166.7
1983	2.2	0.0	2.2	72.3	15.9	(s)	2.1	1.8	0.9	20.8	0.0	22.9	118.3	54.8	173.1
1984	2.9	0.0	2.9	75.4	17.2	(s)	1.5	3.3	0.6	22.7	0.0	24.7	125.7	57.6	183.3
1985	2.7	0.0	2.7	77.3	16.0	0.1	1.5	1.8	1.4	20.8	0.0	25.5	126.3	59.9	186.2
1986	2.4	0.0	2.4	74.4	6.3	(s)	1.8	1.7	1.9	11.7	0.0	26.0	114.5	59.8	174.4
1987	2.0	0.0	2.0	65.9	5.9	(s)	1.7	1.3	0.8	9.7	0.0	27.4	105.0	62.6	167.6
1988	2.8	(s)	2.8	80.6	6.4	(s)	1.8	1.3	1.9	11.4	0.0	29.3	124.1	66.3	190.4
1989	3.1	(s)	3.1	85.7	6.0	(s)	2.0	1.0	1.7	10.8	0.0	28.8	128.5	R 64.8	R 193.2
1990	2.1	0.0	2.1	78.3	5.5	(s)	1.9	8.2	1.7	R 17.3	e NA	30.1	127.7	R 65.8	R 193.5
1991	1.1	(s)	1.1	86.9	5.3	(s)	2.0	1.0	1.9	10.2	NA	31.3	129.5	68.0	197.5
1992	0.3	(s)	0.3	83.3	4.4	(s)	2.3	0.6	1.2	8.6	NA	30.7	122.9	65.6	188.5
1993	1.3	(s)	1.3	87.6	3.8	(s)	2.8	0.3	0.8	7.7	0.4	31.5	R 128.5	66.5	R 195.0
1994	2.9	(s)	2.9	84.9	5.3	0.1	2.8	0.3	1.0	9.4	0.5	33.1	R 130.8	69.0	R 199.8
1995	3.5	0.0	3.5	91.9	5.4	0.1	2.8	0.3	0.7	9.4	0.5	35.5	R 140.7	74.0	R 214.7
1996	1.8	0.0	1.8	100.3	6.0	0.2	3.4	0.3	0.9	10.7	0.6	37.0	150.4	77.1	227.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 158. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Minnesota

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro- electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,555	49	3,004	6,062	444	841	263	4,266	5,690	1,334	21,904	156	0	0	3,095	-	7,699	-
1965	2,776	83	3,791	7,651	420	988	163	3,947	4,213	2,334	23,507	178	0	0	4,677	-	11,166	-
1970	2,020	98	4,413	7,784	231	1,275	296	3,608	3,894	3,016	24,517	168	0	0	8,506	-	20,613	-
1975	2,292	101	4,628	7,991	177	1,985	252	3,132	2,675	4,051	24,891	189	0	0	11,280	-	27,208	-
1980	1,057	101	3,565	5,708	98	4,183	324	1,336	1,818	3,756	20,789	145	0	0	15,525	-	37,752	-
1981	1,186	88	3,890	5,171	29	2,671	310	1,094	1,156	2,206	16,527	145	0	0	16,034	-	38,213	-
1982	1,134	68	3,878	5,299	36	4,054	283	2,715	1,400	2,393	20,059	145	0	0	14,269	-	34,273	-
1983	1,105	65	4,718	3,462	43	3,449	296	1,714	1,365	3,043	18,090	145	0	0	15,909	-	38,115	-
1984	1,006	70	4,669	3,739	51	R 1,983	316	1,413	911	3,146	16,227	145	0	0	17,995	-	41,885	-
1985	1,027	66	4,989	4,802	23	2,406	294	1,718	481	3,017	R 17,730	145	0	0	17,934	-	42,133	-
1986	964	58	5,480	5,664	31	2,865	288	1,590	1,456	3,061	20,436	145	0	0	17,849	-	41,058	-
1987	838	72	5,860	4,746	11	2,165	326	R 1,509	1,075	3,487	R 19,177	145	0	0	19,911	-	45,495	-
1988	792	78	4,897	5,287	34	2,202	314	R 1,272	968	4,387	R 19,360	145	0	0	22,131	-	50,033	-
1989	972	81	4,923	4,637	50	2,351	322	R 1,253	793	4,515	18,844	145	0	0	22,700	-	R 50,988	-
1990	1,283	88	6,039	4,719	7	R 2,459	331	R 1,117	710	4,782	R 20,165	f NA	f NA	f NA	23,497	-	R 51,391	-
1991	785	92	5,040	5,612	10	2,795	296	1,442	753	5,039	R 20,988	NA	NA	NA	23,938	-	R 52,101	-
1992	1,059	93	5,343	6,193	8	3,765	302	R 1,417	989	5,918	R 23,934	NA	NA	NA	23,557	-	R 50,316	-
1993	1,370	98	4,793	5,765	16	3,674	308	R 1,222	1,115	5,800	22,693	NA	NA	NA	24,384	-	R 51,519	-
1994	1,455	94	4,745	6,414	75	4,254	322	1,254	938	6,391	R 24,393	NA	NA	NA	25,451	-	R 53,104	-
1995	1,401	106	6,403	6,518	31	4,392	316	1,192	544	6,138	25,534	NA	NA	NA	26,577	-	R 55,361	-
1996	1,649	102	6,674	6,600	35	4,575	307	670	654	7,453	26,968	NA	NA	NA	26,934	-	56,059	-

## Trillion Btu

1960	55.2	51.0	19.9	35.3	2.5	3.4	1.6	22.4	35.8	8.0	128.9	1.7	0.0	0.0	10.6	247.3	26.3	273.6
1965	60.8	82.6	25.2	44.6	2.4	4.0	1.0	20.7	26.5	13.8	138.1	1.9	0.0	0.0	16.0	299.3	38.1	337.4
1970	42.1	97.8	29.3	45.3	1.3	4.8	1.8	19.0	24.5	18.0	143.9	1.8	0.0	0.0	29.0	314.5	70.3	384.9
1975	50.8	100.8	30.7	46.5	1.0	7.4	1.5	16.5	16.8	24.1	144.5	2.0	0.0	0.0	38.5	336.5	92.8	429.3
1980	18.1	101.2	23.7	33.3	0.6	15.4	2.0	7.0	11.4	22.4	115.6	1.5	0.0	0.0	53.0	289.3	128.8	418.2
1981	21.1	87.4	25.8	30.1	0.2	9.7	1.9	5.7	7.3	13.6	94.4	1.5	0.0	0.0	54.7	259.1	130.4	389.5
1982	19.0	68.5	25.7	30.9	0.2	14.7	1.7	14.3	8.8	14.8	111.0	1.5	0.0	0.0	48.7	248.7	116.9	365.7
1983	18.6	66.7	31.3	20.2	0.2	12.5	1.8	9.0	8.6	18.5	102.1	1.5	0.0	0.0	54.3	243.2	130.0	373.2
1984	18.5	70.2	31.0	21.8	0.3	7.1	1.9	7.4	5.7	19.0	94.2	1.5	0.0	0.0	61.4	245.8	142.9	388.7
1985	21.3	66.6	33.1	28.0	0.1	8.7	1.8	9.0	3.0	18.5	102.3	1.5	0.0	0.0	61.2	252.8	143.8	396.5
1986	20.2	57.8	36.4	33.0	0.2	10.4	1.7	8.4	9.2	19.0	118.2	1.5	0.0	0.0	60.9	258.6	140.1	398.7
1987	17.0	71.9	38.9	27.6	0.1	7.9	2.0	7.9	6.8	21.2	112.3	1.5	0.0	0.0	67.9	R 270.7	155.2	425.9
1988	15.2	78.3	32.5	30.8	0.2	8.0	1.9	6.7	6.1	26.5	112.7	1.5	0.0	0.0	75.5	283.1	170.7	453.8
1989	19.0	82.0	32.7	27.0	0.3	8.7	2.0	6.6	5.0	27.0	109.2	1.5	0.0	0.0	77.5	289.1	R 174.0	R 463.1
1990	23.8	88.7	40.1	27.5	(s)	8.9	2.0	R 5.9	4.5	28.6	117.5	f 2.1	f 56.0	f 0.0	80.2	f 368.3	R 175.3	R f 543.7
1991	15.2	93.4	33.4	32.7	0.1	10.1	1.8	7.6	4.7	30.0	120.4	2.7	53.5	0.0	81.7	366.8	R 177.8	R 544.6
1992	19.6	94.1	35.5	36.1	(s)	13.6	1.8	7.4	6.2	34.9	135.6	3.2	56.9	0.0	80.4	389.7	R 171.7	R 561.4
1993	24.9	98.9	31.8	33.6	0.1	13.2	1.9	6.4	7.0	34.4	128.4	3.3	58.2	0.0	83.2	396.9	R 175.8	572.6
1994	26.9	95.5	31.5	37.4	0.4	15.5	2.0	6.6	5.9	37.9	137.0	3.2	R 57.2	0.4	86.8	R 407.1	R 181.2	R 588.3
1995	26.7	107.6	42.5	38.0	0.2	15.9	1.9	6.3	3.4	36.4	144.5	2.9	R 56.5	R 0.6	90.7	R 429.5	R 188.9	R 618.4
1996	31.6	104.3	44.3	38.4	0.2	16.5	1.9	3.5	4.1	44.1	153.0	3.6	59.3	0.5	91.9	444.3	191.3	635.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 159. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Minnesota**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	45	(s)	1,199	3,194	472	27	697	28,176	95	33,860	0	0	-	0	-
1965	9	1	803	3,276	2,624	37	596	31,173	75	38,584	0	0	-	0	-
1970	3	7	277	5,064	3,491	95	628	40,279	29	49,863	0	0	-	0	-
1975	(s)	4	215	6,691	5,629	97	752	44,766	577	58,726	0	0	-	0	-
1980	0	9	193	8,117	5,142	68	796	44,535	971	59,822	0	0	-	0	-
1981	0	10	163	7,794	4,516	149	763	43,578	270	57,235	0	0	-	0	-
1982	0	9	119	8,318	4,261	125	696	41,800	80	55,398	0	0	-	0	-
1983	0	4	117	7,976	4,044	148	729	43,996	49	57,059	0	0	-	0	-
1984	0	7	125	8,057	7,331	178	777	46,004	101	62,574	0	0	-	0	-
1985	0	6	154	7,982	7,781	123	724	R 43,232	155	R 60,152	0	0	-	0	-
1986	0	7	225	8,087	7,801	126	708	R 43,859	34	R 60,841	0	0	-	0	-
1987	0	6	178	8,522	5,656	72	801	R 45,270	4	R 60,502	0	0	-	0	-
1988	0	11	166	9,015	5,142	74	772	R 47,299	7	R 62,475	0	0	-	0	-
1989	0	12	158	8,949	4,663	R 62	792	R 47,132	2	R 61,757	0	0	-	0	-
1990	0	12	214	9,509	5,099	57	815	R 45,075	0	R 60,768	R e 126,279	0	-	0	-
1991	0	13	188	10,518	4,978	52	729	R 46,937	3	R 63,404	R 100,099	0	-	0	-
1992	0	15	134	11,190	6,621	54	743	R 48,159	3	R 66,904	R 121,659	0	-	0	-
1993	0	16	132	11,355	9,438	R 100	757	(s)	R 50,077	R 71,859	R 135,768	0	-	0	-
1994	0	17	125	12,889	9,780	126	791	R 51,237	2	R 74,951	R 153,941	0	-	0	-
1995	0	19	129	13,657	9,969	134	778	R 53,061	0	R 77,728	R 163,306	0	-	0	-
1996	0	20	124	13,308	10,625	132	755	54,146	0	79,090	124,660	0	-	0	-

**Trillion Btu**

1960	0.9	0.3	6.1	18.6	2.6	0.1	4.2	148.0	0.6	180.2	0.0	0.0	181.4	0.0	181.4
1965	0.2	1.2	4.1	19.1	14.8	0.1	3.6	163.8	0.5	205.9	0.0	0.0	207.3	0.0	207.3
1970	0.1	7.5	1.4	29.5	19.7	0.4	3.8	211.6	0.2	266.6	0.0	0.0	274.1	0.0	274.1
1975	(s)	3.9	1.1	39.0	31.9	0.4	4.6	235.2	3.6	315.6	0.0	0.0	319.5	0.0	319.5
1980	0.0	9.1	1.0	47.3	29.1	0.2	4.8	233.9	6.1	322.5	0.0	0.0	331.6	0.0	331.6
1981	0.0	10.1	0.8	45.4	25.5	0.5	4.6	228.9	1.7	307.6	0.0	0.0	317.7	0.0	317.7
1982	0.0	8.7	0.6	48.4	24.1	0.5	4.2	219.6	0.5	297.9	0.0	0.0	306.6	0.0	306.6
1983	0.0	4.5	0.6	46.5	22.9	0.5	4.4	231.1	0.3	306.3	0.0	0.0	310.8	0.0	310.8
1984	0.0	6.6	0.6	46.9	41.5	0.6	4.7	241.7	0.6	336.7	0.0	0.0	343.3	0.0	343.3
1985	0.0	6.3	0.8	46.5	44.1	0.4	4.4	R 227.1	1.0	R 324.2	0.0	0.0	R 330.5	0.0	R 330.5
1986	0.0	7.4	1.1	47.1	44.2	0.5	4.3	230.4	0.2	327.8	0.0	0.0	335.2	0.0	335.2
1987	0.0	6.5	0.9	49.6	32.0	0.3	4.9	R 237.8	(s)	R 325.5	0.0	0.0	R 332.0	0.0	R 332.0
1988	0.0	11.3	0.8	52.5	29.1	0.3	4.7	R 248.5	(s)	R 335.9	0.0	0.0	R 347.2	0.0	R 347.2
1989	0.0	12.0	0.8	52.1	26.4	0.2	4.8	R 247.6	(s)	R 331.9	0.0	0.0	R 343.9	0.0	R 343.9
1990	0.0	12.1	1.1	55.4	28.9	0.2	4.9	R 236.8	0.0	R 327.3	R e 9.6	0.0	R e 339.3	0.0	R e 339.3
1991	0.0	13.5	0.9	61.3	28.2	0.2	4.4	R 246.6	(s)	R 341.6	R 7.6	0.0	R 355.1	0.0	R 355.1
1992	0.0	15.1	0.7	65.2	37.5	0.2	4.5	253.0	(s)	R 361.0	R 9.3	0.0	376.2	0.0	376.2
1993	0.0	16.4	0.7	66.1	53.5	0.4	4.6	R 263.1	(s)	R 388.3	R 10.4	0.0	R 404.7	0.0	R 404.7
1994	0.0	17.5	0.6	75.1	55.4	0.5	4.8	R 269.1	(s)	R 405.5	R 11.8	0.0	R 423.1	0.0	R 423.1
1995	0.0	19.5	0.7	79.6	56.5	0.5	4.7	278.7	0.0	420.7	R 12.5	0.0	440.1	0.0	440.1
1996	0.0	20.2	0.6	77.5	60.2	0.5	4.6	284.4	0.0	427.9	9.5	0.0	448.0	0.0	448.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 160. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Minnesota

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	2,433	0	2,433	49	239	156	0	395	0	822	15	0	0	--
1965	3,857	0	3,857	51	278	182	0	460	143	1,026	14	0	0	--
1970	6,192	0	6,192	59	842	551	143	1,537	0	853	19	0	0	--
1975	7,595	0	7,595	23	851	674	59	1,584	9,750	913	4	0	0	--
1980	12,610	0	12,610	8	361	167	0	529	10,027	1,594	2	0	0	--
1981	12,576	0	12,576	6	130	80	0	210	10,187	884	0	0	0	--
1982	10,818	0	10,818	3	40	89	0	129	10,197	1,112	4	0	0	--
1983	10,703	0	10,703	3	12	81	0	93	11,753	1,337	1	0	0	--
1984	12,015	0	12,015	2	3	54	0	57	8,328	1,818	(s)	0	0	--
1985	11,498	0	11,498	1	(s)	49	0	49	11,572	3,497	(s)	0	0	--
1986	10,170	0	10,170	2	0	60	0	60	11,052	7,796	0	0	0	--
1987	13,495	0	13,495	6	(s)	101	0	101	11,554	2,662	41	0	0	--
1988	16,259	0	16,259	5	6	131	164	301	12,288	-1,137	153	0	(s)	--
1989	17,056	0	17,056	4	9	81	678	768	10,926	2,272	247	0	(s)	--
1990	16,916	0	16,916	5	1	91	727	820	12,139	2,472	398	0	(s)	--
1991	16,114	0	16,114	6	2	90	962	1,054	12,059	3,219	402	0	(s)	--
1992	15,841	0	15,841	5	(s)	62	1,064	1,127	11,166	5,769	407	0	(s)	--
1993	16,844	0	16,844	4	1	90	1,077	1,168	11,986	7,723	414	0	(s)	--
1994	17,046	0	17,046	6	0	108	993	1,101	12,224	5,517	414	0	(s)	--
1995	17,282	0	17,282	8	0	133	770	903	13,243	4,190	429	0	(s)	--
1996	17,459	0	17,459	5	2	140	1,055	1,196	12,095	8,634	422	0	(s)	--

  

Trillion Btu														
1960	54.5	0.0	54.5	50.2	1.5	0.9	0.0	2.4	0.0	8.8	0.2	0.0	0.0	116.1
1965	85.5	0.0	85.5	51.3	1.7	1.1	0.0	2.8	1.7	10.7	0.1	0.0	0.0	152.2
1970	125.5	0.0	125.5	59.1	5.3	3.2	0.9	9.4	0.0	8.9	0.2	0.0	0.0	203.1
1975	136.3	0.0	136.3	22.3	5.4	3.9	0.4	9.6	107.4	9.5	(s)	0.0	0.0	285.1
1980	221.4	0.0	221.4	8.0	2.3	1.0	0.0	3.2	109.4	16.6	(s)	0.0	0.0	358.6
1981	220.6	0.0	220.6	5.5	0.8	0.5	0.0	1.3	112.4	9.2	0.0	0.0	0.0	349.0
1982	190.5	0.0	190.5	3.3	0.3	0.5	0.0	0.8	112.9	11.6	(s)	0.0	0.0	319.2
1983	189.2	0.0	189.2	2.9	0.1	0.5	0.0	0.5	128.2	14.1	(s)	0.0	0.0	334.9
1984	208.5	0.0	208.5	2.0	(s)	0.3	0.0	0.3	90.3	19.0	(s)	0.0	0.0	320.1
1985	200.6	0.0	200.6	1.3	(s)	0.3	0.0	0.3	125.1	36.5	(s)	0.0	0.0	363.9
1986	177.5	0.0	177.5	1.7	0.0	0.3	0.0	0.3	119.4	81.4	0.0	0.0	0.0	380.3
1987	235.9	0.0	235.9	5.7	(s)	0.6	0.0	0.6	124.5	27.7	0.4	0.0	0.0	394.9
1988	284.2	0.0	284.2	5.2	(s)	0.8	1.0	1.8	132.0	-11.7	1.6	0.0	(s)	413.0
1989	299.1	0.0	299.1	4.4	0.1	0.5	4.1	4.6	117.2	R 2.4	R 2.6	0.0	(s)	430.2
1990	297.3	0.0	297.3	5.2	(s)	0.5	4.4	4.9	129.6	R 25.7	4.1	0.0	(s)	449.0
1991	283.7	0.0	283.7	5.9	(s)	0.5	5.8	6.3	129.5	R 33.6	4.2	0.0	(s)	R 460.1
1992	280.0	0.0	280.0	4.9	(s)	0.4	6.4	6.8	119.2	R 59.7	4.2	0.0	(s)	R 474.1
1993	297.9	0.0	297.9	3.9	(s)	0.5	6.5	7.0	128.0	R 79.6	4.3	0.0	(s)	R 515.6
1994	300.7	0.0	300.7	5.9	0.0	0.6	6.0	6.6	130.5	R 56.9	4.3	0.0	(s)	R 529.3
1995	305.1	0.0	305.1	8.3	0.0	0.8	4.6	5.4	141.1	43.2	4.4	0.0	(s)	R 522.4
1996	311.2	0.0	311.2	5.3	(s)	0.8	6.4	7.2	128.5	89.3	4.4	0.0	(s)	568.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 161. Energy Consumption Estimates by Source, Selected Years 1960-1996, Mississippi**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum												Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	
1960	30	182	762	170	2,375	1,465	398	4,220	391	16,096	311	444	26,633	0	0	0	0	8,132	-	
1965	40	244	1,144	463	2,796	1,460	346	4,720	469	18,539	489	2,404	32,831	0	0	0	0	14,061	-	
1970	549	360	1,748	318	5,991	1,614	2,646	8,645	525	24,316	703	4,986	51,491	0	0	0	0	17,089	-	
1975	1,440	230	2,589	203	9,852	1,475	1,434	8,180	681	27,811	12,063	5,185	69,473	0	0	0	0	27,909	-	
1980	3,127	264	2,036	206	9,648	1,530	242	5,694	655	26,781	16,010	5,276	68,078	0	0	0	0	20,395	-	
1981	3,446	243	1,770	142	13,444	1,734	100	4,541	628	27,658	10,404	3,275	63,696	0	0	0	0	28,051	-	
1982	4,158	269	1,718	106	11,830	3,336	330	4,481	573	26,436	5,461	3,255	57,526	0	0	0	0	23,726	-	
1983	3,962	238	1,704	113	13,152	2,963	359	4,507	600	26,691	2,361	4,352	56,801	0	0	0	0	38,043	-	
1984	4,297	269	3,561	121	13,999	2,334	535	4,524	640	26,900	2,134	4,713	59,460	165	0	0	0	34,561	-	
1985	4,519	227	2,054	108	15,914	4,111	86	4,672	596	R 27,586	1,319	4,160	R 60,605	4,332	0	0	0	25,490	-	
1986	4,454	215	1,904	137	14,818	4,914	85	3,663	583	R 28,548	4,461	4,400	63,514	4,087	0	0	0	27,371	-	
1987	4,846	209	2,174	113	16,743	7,657	78	3,694	659	R 29,365	2,051	5,122	R 67,656	7,717	0	0	0	18,313	-	
1988	5,136	213	2,627	129	19,020	8,006	88	3,927	636	R 29,479	3,547	6,144	R 73,602	9,582	0	0	0	13,179	-	
1989	3,831	226	1,975	153	17,112	6,567	65	4,915	652	R 29,023	3,569	6,264	R 70,295	7,826	0	0	0	28,963	-	
1990	4,159	254	2,509	132	16,133	6,922	53	7,093	671	R 29,080	3,692	6,335	R 72,620	7,422	i NA	i NA	i NA	28,534	-	
1991	3,812	250	2,531	110	15,450	8,080	61	6,103	600	R 29,794	4,778	6,246	R 73,753	9,133	NA	NA	NA	29,876	-	
1992	3,485	239	2,171	94	15,313	11,006	38	6,203	612	R 30,535	3,433	7,437	R 76,843	8,174	NA	NA	NA	37,393	-	
1993	4,030	230	1,945	85	14,691	8,328	66	6,214	623	R 31,907	8,999	6,948	R 79,806	7,904	NA	NA	NA	34,029	-	
1994	4,285	258	2,110	72	15,486	6,750	51	6,505	651	R 32,868	5,444	6,563	R 76,501	9,615	NA	NA	NA	28,101	-	
1995	4,606	288	2,430	100	13,530	7,573	47	6,810	640	34,017	2,648	6,274	74,068	8,013	NA	NA	NA	29,358	-	
1996	5,791	269	2,608	61	14,489	7,157	49	9,178	621	34,178	3,521	7,216	79,077	9,225	NA	NA	NA	28,840	-	
Trillion Btu																				
1960	0.8	187.9	5.1	0.9	13.8	7.8	2.3	16.9	2.4	84.6	2.0	2.7	138.3	0.0	0.0	0.0	0.0	27.7	354.7	
1965	1.0	250.6	7.6	2.3	16.3	7.8	2.0	18.9	2.8	97.4	3.1	14.4	172.7	0.0	0.0	0.0	0.0	48.0	472.3	
1970	13.2	369.4	11.6	1.6	34.9	8.7	15.0	32.7	3.2	127.7	4.4	29.9	269.8	0.0	0.0	0.0	0.0	58.3	710.7	
1975	33.4	235.3	17.2	1.0	57.4	8.0	8.1	30.4	4.1	146.1	75.8	31.1	379.3	0.0	0.0	0.0	0.0	95.2	743.2	
1980	75.0	270.9	13.5	1.0	56.2	8.3	1.4	20.9	4.0	140.7	100.7	31.6	378.3	0.0	0.0	0.0	0.0	69.6	793.8	
1981	82.9	249.1	11.7	0.7	78.3	9.5	0.6	16.5	3.8	145.3	65.4	20.5	352.4	0.0	0.0	0.0	0.0	95.7	780.1	
1982	100.5	276.7	11.4	0.5	68.9	18.5	1.9	16.2	3.5	138.9	34.3	20.3	314.4	0.0	0.0	0.0	0.0	81.0	772.5	
1983	96.1	244.3	11.3	0.6	76.6	16.4	2.0	16.3	3.6	140.2	14.8	26.6	308.5	0.0	0.0	0.0	0.0	129.8	778.7	
1984	103.9	276.6	23.6	0.6	81.5	12.8	3.0	16.3	3.9	141.3	13.4	28.6	325.1	1.8	0.0	0.0	0.0	117.9	825.4	
1985	109.4	233.0	13.6	0.5	92.7	22.9	0.5	16.8	3.6	144.9	8.3	25.8	329.7	46.8	0.0	0.0	0.0	87.0	805.9	
1986	108.8	220.2	12.6	0.7	86.3	27.5	0.5	13.3	3.5	150.0	28.0	27.4	349.9	44.1	0.0	0.0	0.0	93.4	816.4	
1987	122.4	212.3	14.4	0.6	97.5	43.1	0.4	13.5	4.0	R 154.3	12.9	31.2	R 371.9	83.2	0.0	0.0	0.0	62.5	R 852.2	
1988	129.6	216.4	17.4	0.7	110.8	45.0	0.5	14.3	3.9	R 154.9	22.3	37.1	R 406.8	102.9	0.0	0.0	0.0	45.0	R 900.7	
1989	96.4	232.4	13.1	0.8	99.7	36.9	0.4	18.1	4.0	R 152.5	22.4	37.4	385.2	83.9	0.0	0.0	0.0	98.8	R 896.8	
1990	103.8	261.9	16.7	0.7	94.0	39.0	0.3	25.7	4.1	R 152.8	23.2	37.8	R 394.1	79.3	i 0.0	R i 69.8	i (s)	R i 97.4	R i 1,005.9	
1991	95.3	257.0	16.8	0.6	90.0	45.5	0.3	22.1	3.6	156.5	30.0	37.3	402.7	98.1	0.0	R 70.4	(s)	R 101.9	R 1,025.1	
1992	86.8	250.7	14.4	0.5	89.2	62.2	0.2	22.5	3.7	160.4	21.6	43.9	418.6	87.3	0.0	R 73.5	(s)	R 127.6	R 1,044.0	
1993	99.3	235.2	12.9	0.4	85.6	47.0	0.4	22.4	3.8	167.6	56.6	41.3	437.9	84.4	0.0	R 71.5	(s)	R 116.1	R 1,044.0	
1994	97.3	266.1	14.0	0.4	90.2	38.2	0.3	23.6	4.0	172.7	34.2	38.8	R 416.3	102.6	0.0	R 71.8	(s)	R 95.9	R 1,049.8	
1995	103.8	295.6	16.0	0.5	78.8	42.9	0.3	24.7	3.9	178.7	16.6	37.1	399.6	85.4	0.0	R 71.7	(s)	100.2	R 1,056.2	
1996	128.1	277.4	17.3	0.3	84.4	40.6	0.3	33.2	3.8	179.5	22.1	42.5	424.0	98.0	0.0	72.6	(s)	98.4	1,098.4	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 162. Residential Energy Consumption Estimates, Selected Years 1960-1996, Mississippi**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	0	0	24	23	13	2,450	2,486	0	0	2,089	-	5,196	-
1965	0	0	0	24	32	27	2,865	2,923	0	0	3,705	-	8,847	-
1970	0	0	0	37	89	75	5,129	5,293	0	0	6,880	-	16,673	-
1975	0	0	0	30	196	127	4,231	4,554	0	0	8,091	-	19,517	-
1980	1	0	1	29	7	44	2,201	2,252	0	0	9,964	-	24,229	-
1981	0	0	0	28	2	29	2,091	2,122	0	0	9,611	-	22,906	-
1982	0	0	0	28	0	51	1,989	2,040	0	0	9,677	-	23,242	-
1983	2	0	2	28	5	112	2,366	2,482	0	0	9,659	-	23,140	-
1984	1	0	1	29	4	180	1,604	1,789	0	0	10,124	-	23,566	-
1985	(s)	0	(s)	26	2	27	1,915	1,943	0	0	10,447	-	24,545	-
1986	1	0	1	25	3	38	1,696	1,737	0	0	10,868	-	25,000	-
1987	2	0	2	27	16	28	2,006	2,050	0	0	11,129	-	25,428	-
1988	5	0	5	27	4	28	2,081	2,113	0	0	11,415	-	25,806	-
1989	1	(s)	1	26	7	23	2,271	2,300	0	0	11,516	-	25,867	-
1990	(s)	0	(s)	25	1	12	2,158	2,171	<sup>e</sup> 458	<sup>e</sup> 1	12,266	-	26,827	-
1991	0	(s)	(s)	26	2	23	1,862	1,887	482	1	12,518	-	27,245	-
1992	0	(s)	(s)	26	1	14	1,744	1,759	507	1	12,422	-	26,534	-
1993	0	(s)	(s)	28	3	25	2,200	2,227	379	1	13,200	-	27,889	-
1994	0	0	0	27	1	20	2,159	2,181	372	2	13,642	-	28,464	-
1995	0	0	0	27	(s)	20	1,946	1,966	413	2	14,181	-	29,540	-
1996	0	0	0	30	1	22	2,397	2,420	412	2	14,965	-	31,146	-
<b>Trillion Btu</b>														
1960	0.0	0.0	0.0	24.9	0.1	0.1	9.8	10.0	0.0	0.0	7.1	42.0	17.7	59.8
1965	0.0	0.0	0.0	24.8	0.2	0.2	11.5	11.8	0.0	0.0	12.6	49.3	30.2	79.5
1970	0.0	0.0	0.0	37.6	0.5	0.4	19.4	20.3	0.0	0.0	23.5	81.4	56.9	138.2
1975	0.0	0.0	0.0	30.2	1.1	0.7	15.7	17.6	0.0	0.0	27.6	75.4	66.6	142.0
1980	(s)	0.0	(s)	30.5	(s)	0.2	8.1	8.4	0.0	0.0	34.0	72.9	82.7	155.6
1981	0.0	0.0	0.0	29.1	(s)	0.2	7.6	7.8	0.0	0.0	32.8	69.7	78.2	147.9
1982	0.0	0.0	0.0	28.4	0.0	0.3	7.2	7.5	0.0	0.0	33.0	68.9	79.3	148.2
1983	0.1	0.0	0.1	28.3	(s)	0.6	8.6	9.2	0.0	0.0	33.0	70.5	79.0	149.5
1984	(s)	0.0	(s)	29.6	(s)	1.0	5.8	6.8	0.0	0.0	34.5	71.0	80.4	151.4
1985	(s)	0.0	(s)	26.3	(s)	0.2	6.9	7.1	0.0	0.0	35.6	69.1	83.7	152.8
1986	(s)	0.0	(s)	25.8	(s)	0.2	6.2	6.4	0.0	0.0	37.1	69.3	85.3	154.6
1987	(s)	0.0	(s)	27.0	0.1	0.2	7.3	7.6	0.0	0.0	38.0	72.6	86.8	159.4
1988	0.1	0.0	0.1	27.3	(s)	0.2	7.6	7.8	0.0	0.0	38.9	74.1	88.0	162.2
1989	(s)	(s)	(s)	27.1	(s)	0.1	8.4	8.5	0.0	0.0	39.3	75.0	88.3	163.2
1990	(s)	0.0	(s)	25.8	(s)	0.1	7.8	7.9	<sup>e</sup> 9.2	<sup>e</sup> (s)	41.9	<sup>e</sup> 84.7	91.5	<sup>R e</sup> 176.3
1991	0.0	(s)	(s)	26.5	(s)	0.1	6.7	6.9	9.6	(s)	42.7	85.8	<sup>R</sup> 93.0	<sup>R</sup> 178.7
1992	0.0	(s)	(s)	27.9	(s)	0.1	6.3	6.4	10.1	(s)	42.4	86.8	90.5	177.3
1993	0.0	(s)	(s)	29.0	(s)	0.1	7.9	8.1	7.6	(s)	45.0	89.7	<sup>R</sup> 95.2	<sup>R</sup> 184.9
1994	0.0	0.0	0.0	27.9	(s)	0.1	7.8	8.0	7.4	(s)	46.5	89.8	97.1	186.9
1995	0.0	0.0	0.0	27.4	(s)	0.1	7.0	7.2	8.3	(s)	48.4	91.3	100.8	192.0
1996	0.0	0.0	0.0	31.0	(s)	0.1	8.7	8.8	8.2	(s)	51.1	99.0	106.3	205.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 163. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Mississippi**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	0	0	0	15	28	0	432	79	18	557	0	1,278	-	3,179	-
1965	0	0	0	12	39	0	506	88	33	665	0	1,968	-	4,700	-
1970	0	0	0	24	108	0	905	91	45	1,149	0	3,019	-	7,317	-
1975	0	0	0	24	239	0	747	105	898	1,988	0	3,982	-	9,604	-
1980	1	0	1	21	24	0	388	122	3,405	3,940	0	5,110	-	12,426	-
1981	0	0	0	19	138	14	369	131	2,747	3,398	0	5,838	-	13,914	-
1982	0	0	0	17	114	127	351	135	28	755	0	5,923	-	14,226	-
1983	5	0	5	17	896	102	418	173	0	1,588	0	5,989	-	14,348	-
1984	1	0	1	18	880	115	283	152	0	1,430	0	5,864	-	13,649	-
1985	1	0	1	17	1,067	39	338	134	11	1,589	0	6,131	-	14,405	-
1986	1	0	1	17	442	19	299	217	91	1,067	0	6,335	-	14,572	-
1987	3	0	3	18	795	6	354	R 266	23	R 1,444	0	6,374	-	14,564	-
1988	8	0	8	18	600	4	367	187	16	R 1,173	0	6,550	-	14,808	-
1989	1	(s)	1	18	855	5	401	160	13	1,434	0	7,101	-	R 15,949	-
1990	(s)	0	(s)	18	589	6	381	R 165	0	R 1,141	e NA	7,407	-	R 16,200	-
1991	0	(s)	(s)	18	607	6	329	81	1	1,024	NA	7,478	-	R 16,275	-
1992	0	(s)	(s)	18	511	9	308	172	(s)	1,000	NA	7,328	-	R 15,652	-
1993	0	(s)	(s)	19	329	6	388	49	0	773	9	7,320	-	R 15,466	-
1994	0	0	0	19	432	3	381	149	0	965	12	7,729	-	R 16,127	-
1995	0	0	0	20	263	7	343	49	0	662	8	8,210	-	R 17,102	-
1996	0	0	0	22	349	6	423	57	0	835	10	8,615	-	17,931	-

**Trillion Btu**

1960	0.0	0.0	0.0	15.7	0.2	0.0	1.7	0.4	0.1	2.4	0.0	4.4	22.5	10.8	33.3
1965	0.0	0.0	0.0	12.8	0.2	0.0	2.0	0.5	0.2	2.9	0.0	6.7	22.4	16.0	38.4
1970	0.0	0.0	0.0	24.4	0.6	0.0	3.4	0.5	0.3	4.8	0.0	10.3	39.6	25.0	64.5
1975	0.0	0.0	0.0	24.4	1.4	0.0	2.8	0.6	5.6	10.4	0.0	13.6	48.4	32.8	81.2
1980	(s)	0.0	(s)	21.6	0.1	0.0	1.4	0.6	21.4	23.6	0.0	17.4	62.7	42.4	105.1
1981	0.0	0.0	0.0	19.8	0.8	0.1	1.3	0.7	17.3	20.2	0.0	19.9	59.9	47.5	107.4
1982	0.0	0.0	0.0	17.7	0.7	0.7	1.3	0.7	0.2	3.5	0.0	20.2	41.5	48.5	90.0
1983	0.1	0.0	0.1	17.6	5.2	0.6	1.5	0.9	0.0	8.2	0.0	20.4	46.4	49.0	95.3
1984	(s)	0.0	(s)	18.4	5.1	0.7	1.0	0.8	0.0	7.6	0.0	20.0	46.0	46.6	92.6
1985	(s)	0.0	(s)	17.0	6.2	0.2	1.2	0.7	0.1	8.4	0.0	20.9	46.4	49.1	95.5
1986	(s)	0.0	(s)	17.3	2.6	0.1	1.1	1.1	0.6	5.5	0.0	21.6	44.4	49.7	94.1
1987	0.1	0.0	0.1	18.2	4.6	(s)	1.3	R 1.4	0.1	R 7.5	0.0	21.7	R 47.5	49.7	R 97.2
1988	0.2	0.0	0.2	18.4	3.5	(s)	1.3	1.0	0.1	5.9	0.0	22.3	46.9	50.5	97.4
1989	(s)	(s)	(s)	18.1	5.0	(s)	1.5	0.8	0.1	7.4	0.0	24.2	49.8	R 54.4	R 104.2
1990	(s)	0.0	(s)	18.1	3.4	(s)	1.4	0.9	0.0	5.7	e NA	25.3	49.1	R 55.3	R 104.4
1991	0.0	(s)	(s)	18.3	3.5	(s)	1.2	0.4	(s)	5.2	NA	25.5	49.0	55.5	104.5
1992	0.0	(s)	(s)	18.9	3.0	(s)	1.1	0.9	(s)	5.0	NA	25.0	48.9	53.4	102.3
1993	0.0	(s)	(s)	19.6	1.9	(s)	1.4	0.3	0.0	3.6	0.2	25.0	R 48.4	R 52.8	R 101.2
1994	0.0	0.0	0.0	19.8	2.5	(s)	1.4	0.8	0.0	4.7	0.2	26.4	R 51.1	55.0	R 106.1
1995	0.0	0.0	0.0	20.3	1.5	(s)	1.2	0.3	0.0	3.1	0.2	28.0	R 51.5	R 58.4	R 109.8
1996	0.0	0.0	0.0	22.8	2.0	(s)	1.5	0.3	0.0	3.9	0.2	29.4	56.3	61.2	117.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 164. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Mississippi**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	21	77	762	1,441	385	1,118	99	738	218	444	5,206	0	0	0	2,004	-	4,985	-
1965	31	105	1,144	1,590	319	1,117	157	610	149	2,404	7,490	0	0	0	3,517	-	8,398	-
1970	48	141	1,748	3,100	2,571	2,139	242	311	240	4,986	15,335	0	0	0	5,101	-	12,361	-
1975	24	107	2,589	4,455	1,307	2,739	374	218	778	5,185	17,645	0	0	0	6,814	-	16,437	-
1980	53	79	2,036	3,527	198	2,952	341	73	2,172	5,276	16,574	0	0	0	8,184	-	19,901	-
1981	112	80	1,770	6,387	57	1,898	327	73	1,781	3,275	15,567	0	0	0	7,928	-	18,894	-
1982	103	104	1,718	4,878	152	1,881	298	0	2,656	3,255	14,838	0	0	0	7,374	-	17,711	-
1983	153	115	1,704	4,934	145	1,416	312	0	4,352	13,287	0	0	0	8,052	-	19,290	-	
1984	219	127	3,561	4,845	239	R 2,347	333	448	284	4,713	R 16,770	0	0	0	9,015	-	20,982	-
1985	251	105	2,054	5,392	20	2,187	310	751	89	4,160	14,963	0	0	0	9,147	-	21,490	-
1986	244	96	1,904	4,469	29	1,476	303	628	1,233	4,400	14,442	0	0	0	9,329	-	21,459	-
1987	280	91	2,174	5,531	44	1,176	343	R 629	64	5,122	R 15,082	0	0	0	9,683	-	22,125	-
1988	264	100	2,627	5,508	57	1,344	330	R 633	672	6,144	R 17,315	0	0	0	10,115	-	22,868	-
1989	263	103	1,975	4,977	37	2,131	339	562	1,075	6,264	17,361	0	0	0	10,958	-	R 24,613	-
1990	271	108	2,509	5,667	35	R 4,423	349	R 578	960	6,335	R 20,855	f NA	f NA	f NA	12,454	-	R 27,240	-
1991	242	109	2,531	4,830	33	3,803	312	669	238	6,246	R 18,662	NA	NA	NA	13,024	-	R 28,348	-
1992	247	108	2,171	4,344	15	R 4,060	318	638	192	7,437	R 19,174	NA	NA	NA	13,491	-	R 28,815	-
1993	263	105	1,945	3,756	35	R 3,520	324	383	258	6,948	R 17,169	NA	NA	NA	14,229	-	R 30,064	-
1994	296	90	2,110	4,128	29	3,807	339	418	173	6,563	R 17,567	NA	NA	NA	15,256	-	R 31,832	-
1995	287	88	2,430	3,209	19	4,448	333	427	82	6,274	17,222	NA	NA	NA	15,477	-	R 32,240	-
1996	233	84	2,608	3,387	21	6,291	323	430	114	7,216	20,389	NA	NA	NA	16,043	-	33,390	-

  

Trillion Btu																			
1960	0.5	79.3	5.1	8.4	2.2	4.5	0.6	3.9	1.4	28.6	0.0	0.0	0.0	6.8	115.3	17.0	132.3		
1965	0.8	108.5	7.6	9.3	1.8	4.5	1.0	3.2	0.9	14.4	42.7	0.0	0.0	0.0	12.0	163.9	28.7	192.6	
1970	1.2	144.4	11.6	18.1	14.6	8.1	1.5	1.6	1.5	29.9	86.9	0.0	0.0	0.0	17.4	249.8	42.2	292.0	
1975	0.6	109.1	17.2	26.0	7.4	10.2	2.3	1.1	4.9	31.1	100.1	0.0	0.0	0.0	23.3	233.0	56.1	289.1	
1980	1.2	81.5	13.5	20.5	1.1	10.8	2.1	0.4	13.7	31.6	93.7	0.0	0.0	0.0	27.9	204.4	67.9	272.3	
1981	2.6	82.6	11.7	37.2	0.3	6.9	2.0	0.4	11.2	20.5	90.3	0.0	0.0	0.0	27.0	202.5	64.5	266.9	
1982	2.5	107.4	11.4	28.4	0.9	6.8	1.8	0.0	16.7	20.3	86.2	0.0	0.0	0.0	25.2	221.3	60.4	281.7	
1983	3.6	118.4	11.3	28.7	0.8	5.1	1.9	0.0	2.7	26.6	77.1	0.0	0.0	0.0	27.5	226.7	65.8	292.5	
1984	5.1	130.7	23.6	28.2	1.4	8.4	2.0	2.4	1.8	28.6	96.4	0.0	0.0	0.0	30.8	263.0	71.6	R 334.6	
1985	5.9	108.1	13.6	31.4	0.1	7.9	1.9	3.9	0.6	25.8	85.2	0.0	0.0	0.0	31.2	230.4	73.3	303.7	
1986	5.8	98.4	12.6	26.0	0.2	5.4	1.8	3.3	7.8	27.4	84.5	0.0	0.0	0.0	31.8	220.6	73.2	293.8	
1987	6.6	91.9	14.4	32.2	0.2	4.3	2.1	3.3	0.4	31.2	88.2	0.0	0.0	0.0	33.0	219.8	75.5	295.3	
1988	6.2	101.5	17.4	32.1	0.3	4.9	2.0	3.3	4.2	37.1	101.4	0.0	0.0	0.0	34.5	243.7	78.0	321.7	
1989	6.1	106.0	13.1	29.0	0.2	R 7.8	2.1	3.0	6.8	37.4	99.4	0.0	0.0	0.0	37.4	248.9	R 84.0	R 332.9	
1990	6.3	111.5	16.7	33.0	0.2	16.0	2.1	3.0	6.0	37.8	114.9	f 0.0	f 60.3	f 0.0	42.5	f 335.5	R 92.9	R 428.4	
1991	5.6	112.5	16.8	28.1	0.2	13.7	1.9	3.5	1.5	37.3	103.0	0.0	60.4	0.0	44.4	326.0	R 96.7	R 422.8	
1992	5.8	113.2	14.4	25.3	0.1	14.7	1.9	3.3	1.2	43.9	104.9	0.0	63.0	0.0	46.0	332.9	R 98.3	R 431.2	
1993	6.3	107.4	12.9	21.9	0.2	12.7	2.0	2.0	1.6	41.3	94.6	0.0	R 63.2	0.0	48.6	320.1	R 102.6	R 422.7	
1994	7.1	92.2	14.0	24.0	0.2	13.8	2.1	2.2	1.1	38.8	96.2	0.0	R 63.8	0.0	52.1	R 311.3	108.6	R 419.9	
1995	6.9	89.6	16.1	18.7	0.1	16.1	2.0	2.2	0.5	37.1	92.9	0.0	R 63.2	0.0	52.8	R 305.4	110.0	R 415.4	
1996	5.6	86.7	17.3	19.7	0.1	22.7	2.0	2.3	0.7	42.5	107.4	0.0	64.1	0.0	54.7	318.5	113.9	432.4	

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 165. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Mississippi**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	(s)	31	170	882	1,465	220	292	15,279	11	18,320	0	0	-	0	-
1965	(s)	45	463	1,136	1,460	233	312	17,842	301	21,747	0	0	-	0	-
1970	(s)	59	318	2,690	1,614	472	283	23,914	3	29,293	0	0	-	0	-
1975	(s)	38	203	4,696	1,475	464	307	27,489	1,184	35,817	0	0	-	0	-
1980	0	39	206	6,020	1,530	152	315	26,585	5,355	40,163	0	0	-	0	-
1981	0	41	142	6,836	1,734	184	302	27,454	3,086	39,737	0	0	-	0	-
1982	0	37	106	6,779	3,336	259	275	26,301	2,410	39,466	0	0	-	0	-
1983	0	28	113	7,279	2,963	307	288	26,517	1,768	39,237	0	0	-	0	-
1984	0	33	121	8,225	2,334	R 289	307	26,300	1,729	39,306	0	0	-	0	-
1985	0	25	108	9,392	4,111	232	286	R 26,701	1,110	R 41,941	0	0	-	0	-
1986	0	29	137	9,858	4,914	192	280	27,703	1,763	44,848	0	0	-	0	-
1987	0	32	113	10,364	7,657	158	317	R 28,470	1,813	R 48,892	0	0	-	0	-
1988	0	35	129	12,851	8,006	135	305	R 28,658	1,750	R 51,835	0	0	-	0	-
1989	0	34	153	11,187	6,567	112	313	R 28,301	1,204	R 47,837	0	0	-	0	-
1990	0	38	132	9,826	6,922	R 131	322	R 28,337	1,554	R 47,224	R e 5,461	0	-	0	-
1991	0	35	110	9,932	8,080	109	288	R 29,043	3,938	R 51,500	R 4,329	0	-	0	-
1992	0	33	94	10,429	11,006	92	294	R 29,725	2,618	R 54,258	R 5,261	0	-	0	-
1993	0	38	85	10,568	8,328	R 106	299	R 31,475	3,238	R 54,099	R 5,871	0	-	0	-
1994	0	39	72	10,875	6,750	158	313	R 32,301	3,588	R 54,056	R 4,108	0	-	0	-
1995	0	42	100	10,018	7,573	72	307	R 33,540	2,558	54,169	R 2,264	0	-	0	-
1996	0	49	61	10,664	7,157	67	298	33,690	1,703	53,641	233	0	-	0	-

**Trillion Btu**

1960	(s)	32.5	0.9	5.1	7.8	0.9	1.8	80.3	0.1	96.8	0.0	0.0	129.3	0.0	129.3
1965	(s)	46.6	2.3	6.6	7.8	0.9	1.9	93.7	1.9	115.2	0.0	0.0	161.8	0.0	161.8
1970	(s)	60.8	1.6	15.7	8.7	1.8	1.7	125.6	(s)	155.2	0.0	0.0	216.0	0.0	216.0
1975	(s)	39.2	1.0	27.4	8.0	1.7	1.9	144.4	7.4	191.8	0.0	0.0	231.0	0.0	231.0
1980	0.0	40.6	1.0	35.1	8.3	0.6	1.9	139.7	33.7	220.2	0.0	0.0	260.8	0.0	260.8
1981	0.0	41.7	0.7	39.8	9.5	0.7	1.8	144.2	19.4	216.1	0.0	0.0	257.9	0.0	257.9
1982	0.0	38.2	0.5	39.5	18.5	0.9	1.7	138.2	15.2	214.5	0.0	0.0	252.6	0.0	252.6
1983	0.0	28.7	0.6	42.4	16.4	1.1	1.7	139.3	11.1	212.7	0.0	0.0	241.4	0.0	241.4
1984	0.0	33.5	0.6	47.9	12.8	1.0	1.9	138.2	10.9	213.3	0.0	0.0	246.8	0.0	246.8
1985	0.0	25.9	0.5	54.7	22.9	0.8	1.7	R 140.3	7.0	228.0	0.0	0.0	253.9	0.0	253.9
1986	0.0	29.3	0.7	57.4	27.5	0.7	1.7	145.5	11.1	244.6	0.0	0.0	273.9	0.0	273.9
1987	0.0	32.9	0.6	60.4	43.1	0.6	1.9	R 149.6	11.4	R 267.4	0.0	0.0	R 300.4	0.0	R 300.4
1988	0.0	35.0	0.7	74.9	45.0	0.5	1.9	R 150.5	11.0	R 284.4	0.0	0.0	R 319.5	0.0	R 319.5
1989	0.0	35.1	0.8	65.2	36.9	0.4	1.9	R 148.7	7.6	R 261.4	0.0	0.0	R 296.5	0.0	R 296.5
1990	0.0	38.9	0.7	57.2	39.0	0.5	2.0	R 148.9	9.8	R 257.9	R e 0.4	0.0	R e 296.9	0.0	R e 296.9
1991	0.0	35.7	0.6	57.9	45.5	0.4	1.7	R 152.6	24.8	R 283.4	R 0.3	0.0	R 319.1	0.0	R 319.1
1992	0.0	35.0	0.5	60.8	62.2	0.3	1.8	R 156.1	16.5	R 298.1	R 0.4	0.0	R 333.1	0.0	R 333.1
1993	0.0	38.4	0.4	61.6	47.0	0.4	1.8	165.3	20.4	R 296.9	R 0.4	0.0	R 335.3	0.0	R 335.3
1994	0.0	40.3	0.4	63.3	38.2	0.6	1.9	169.7	22.6	R 296.6	0.3	0.0	336.9	0.0	336.9
1995	0.0	42.7	0.5	58.4	42.9	0.3	1.9	176.2	16.1	296.2	0.2	0.0	338.9	0.0	338.9
1996	0.0	50.5	0.3	62.1	40.6	0.2	1.8	177.0	10.7	292.7	(s)	0.0	343.2	0.0	343.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 166. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Mississippi**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	8	0	8	34	64	1	0	65	0	0	0	0	0	--
1965	9	0	9	56	6	(s)	0	7	0	0	0	0	0	--
1970	500	0	500	100	415	5	0	420	0	0	0	0	0	--
1975	1,416	0	1,416	32	9,203	266	0	9,469	0	0	0	0	0	--
1980	3,072	0	3,072	95	5,078	70	0	5,149	0	0	0	0	0	--
1981	3,334	0	3,334	75	2,790	82	0	2,872	0	0	0	0	0	--
1982	4,055	0	4,055	83	366	60	0	426	0	0	0	0	0	--
1983	3,802	0	3,802	50	167	39	0	206	0	0	0	0	0	--
1984	4,076	0	4,076	63	121	45	0	166	165	0	0	0	0	--
1985	4,267	0	4,267	54	108	61	0	169	4,332	0	0	0	0	--
1986	4,208	0	4,208	48	1,374	45	0	1,420	4,087	0	0	0	0	--
1987	4,562	0	4,562	41	152	37	0	188	7,717	0	0	0	0	--
1988	4,859	0	4,859	33	1,109	57	0	1,166	9,582	0	0	0	0	--
1989	3,566	0	3,566	45	1,277	86	0	1,363	7,826	0	0	0	0	--
1990	3,888	0	3,888	65	1,179	50	0	1,228	7,422	0	0	0	0	--
1991	3,570	0	3,570	62	602	79	0	681	9,133	0	0	0	0	--
1992	3,237	0	3,237	54	623	28	0	651	8,174	0	0	0	0	--
1993	3,767	0	3,767	40	5,503	35	0	5,538	7,904	0	0	0	0	--
1994	3,989	0	3,989	83	1,683	50	0	1,733	9,615	0	0	0	0	--
1995	4,319	0	4,319	111	7	41	0	48	8,013	0	0	0	0	--
1996	5,558	0	5,558	83	1,703	89	0	1,792	9,225	0	0	0	0	--

**Trillion Btu**

1960	0.2	0.0	0.2	35.6	0.4	(s)	0.0	0.4	0.0	0.0	0.0	0.0	0.0	36.2
1965	0.2	0.0	0.2	58.0	(s)	(s)	0.0	(s)	0.0	0.0	0.0	0.0	0.0	58.3
1970	12.1	0.0	12.1	102.2	2.6	(s)	0.0	2.6	0.0	0.0	0.0	0.0	0.0	116.9
1975	32.8	0.0	32.8	32.5	57.9	1.5	0.0	59.4	0.0	0.0	0.0	0.0	0.0	124.7
1980	73.7	0.0	73.7	96.7	31.9	0.4	0.0	32.3	0.0	0.0	0.0	0.0	0.0	202.7
1981	80.4	0.0	80.4	75.8	17.5	0.5	0.0	18.0	0.0	0.0	0.0	0.0	0.0	174.1
1982	98.0	0.0	98.0	85.0	2.3	0.3	0.0	2.7	0.0	0.0	0.0	0.0	0.0	185.7
1983	92.3	0.0	92.3	51.2	1.1	0.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0	144.8
1984	98.8	0.0	98.8	64.4	0.8	0.3	0.0	1.0	1.8	0.0	0.0	0.0	0.0	166.0
1985	103.5	0.0	103.5	55.7	0.7	0.4	0.0	1.0	46.8	0.0	0.0	0.0	0.0	207.0
1986	102.9	0.0	102.9	49.4	8.6	0.3	0.0	8.9	44.1	0.0	0.0	0.0	0.0	205.4
1987	115.6	0.0	115.6	42.3	1.0	0.2	0.0	1.2	83.2	0.0	0.0	0.0	0.0	242.2
1988	123.1	0.0	123.1	34.1	7.0	0.3	0.0	7.3	102.9	0.0	0.0	0.0	0.0	267.4
1989	90.2	0.0	90.2	46.0	8.0	0.5	0.0	8.5	83.9	0.0	0.0	0.0	0.0	228.7
1990	97.5	0.0	97.5	67.5	7.4	0.3	0.0	7.7	79.3	0.0	0.0	0.0	0.0	252.0
1991	89.6	0.0	89.6	64.0	3.8	0.5	0.0	4.2	98.1	0.0	0.0	0.0	0.0	255.9
1992	81.0	0.0	81.0	55.8	3.9	0.2	0.0	4.1	87.3	0.0	0.0	0.0	0.0	228.1
1993	93.0	0.0	93.0	40.8	34.6	0.2	0.0	34.8	84.4	0.0	0.0	0.0	0.0	253.0
1994	90.2	0.0	90.2	86.1	10.6	0.3	0.0	10.9	102.6	0.0	0.0	0.0	0.0	289.8
1995	96.9	0.0	96.9	115.6	(s)	0.2	0.0	0.3	85.4	0.0	0.0	0.0	0.0	298.2
1996	122.5	0.0	122.5	86.4	10.7	0.5	0.0	11.2	98.0	0.0	0.0	0.0	0.0	318.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

-- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 167. Energy Consumption Estimates by Source, Selected Years 1960-1996, Missouri**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	7,510	261	3,725	1,844	12,817	1,249	2,087	5,994	953	40,807	3,179	2,104	74,757	0	726	0	0	4,227	-	
1965	8,534	341	4,401	2,323	13,803	3,625	1,162	7,692	1,029	45,015	3,449	4,299	86,798	0	802	0	0	2,382	-	
1970	12,863	430	5,657	179	16,235	8,074	643	11,771	1,150	56,041	3,570	5,306	108,628	0	927	0	0	-2,103	-	
1975	19,955	370	5,401	184	17,819	8,311	282	12,995	1,284	62,342	2,521	4,714	115,852	0	1,280	0	0	-12,225	-	
1980	24,845	318	4,002	162	18,390	6,268	315	9,121	1,603	58,966	1,427	11,696	111,950	0	558	0	0	-5,550	-	
1981	25,199	284	3,175	209	18,221	4,741	546	7,391	1,537	58,581	667	10,923	105,992	0	669	0	0	-5,532	-	
1982	24,405	279	3,289	145	20,921	4,371	780	8,945	1,402	57,855	730	8,060	106,499	0	1,656	0	0	-7,854	-	
1983	26,267	259	3,419	142	16,952	5,457	136	9,000	1,468	58,742	598	6,891	102,805	0	1,716	0	0	-8,107	-	
1984	27,607	265	3,960	133	18,617	5,615	159	5,566	1,565	59,930	373	8,258	104,176	920	1,587	0	0	-19,515	-	
1985	24,733	260	4,295	135	19,593	5,889	149	5,583	1,459	R 60,036	732	7,660	R 105,531	8,030	2,993	0	0	-22,418	-	
1986	23,821	242	4,624	164	18,327	6,710	75	5,907	1,426	R 63,388	551	8,093	R 109,266	7,170	1,996	0	0	-8,257	-	
1987	24,764	232	4,351	134	19,273	7,463	73	6,226	1,612	R 63,758	680	8,850	R 112,421	6,284	1,447	0	0	-3,373	-	
1988	26,118	253	5,657	162	21,226	7,307	99	6,555	1,555	R 64,863	754	8,841	R 117,018	8,935	1,511	0	0	-11,934	-	
1989	26,348	253	4,545	200	22,131	7,277	114	8,306	1,595	R 63,715	561	8,632	R 117,076	8,344	1,094	0	0	R -9,537	-	
1990	25,836	239	4,468	126	20,743	6,647	45	6,874	1,641	R 63,994	629	9,864	R 115,031	7,998	1,094	i NA	i NA	R -8,871	-	
1991	25,773	256	4,062	117	20,310	7,506	65	8,633	1,468	R 63,908	548	4,639	R 111,256	9,979	NA	NA	NA	R -6,039	-	
1992	25,180	241	3,832	115	22,458	7,522	43	8,470	1,497	R 65,260	666	5,644	R 115,507	8,084	NA	NA	NA	R -4,191	-	
1993	23,381	280	4,055	93	22,784	9,034	56	9,586	1,524	R 66,109	1,079	6,030	R 120,350	8,381	NA	NA	NA	R 16,282	-	
1994	27,663	268	5,703	113	24,545	10,623	48	9,407	1,593	R 67,526	534	6,527	R 126,619	10,006	NA	NA	NA	R -6,794	-	
1995	31,753	279	5,296	109	25,540	11,425	53	11,085	1,566	R 68,930	359	6,369	R 130,732	8,242	NA	NA	NA	R -10,169	-	
1996	34,382	294	5,385	108	27,873	12,133	116	11,794	1,520	69,947	365	5,559	134,802	8,890	NA	NA	NA	-9,329	-	
Trillion Btu																				
1960	170.9	270.1	24.7	9.3	74.7	7.0	11.8	24.0	5.8	214.4	20.0	12.4	404.0	0.0	7.8	0.0	0.0	14.4	867.2	
1965	189.6	348.0	29.2	11.7	80.4	20.4	6.6	30.9	6.2	236.5	21.7	24.2	467.8	0.0	8.4	0.0	0.0	8.1	1,021.9	
1970	279.2	432.5	37.5	0.9	94.6	45.7	3.6	44.5	7.0	294.4	22.4	29.7	580.3	0.0	9.7	0.0	0.0	-7.2	1,294.7	
1975	430.2	371.8	35.8	0.9	103.8	47.0	1.6	48.3	7.8	327.5	15.9	26.9	615.0	0.0	13.3	0.0	0.0	-41.7	1,389.2	
1980	531.4	322.9	26.6	0.8	107.1	35.5	1.8	33.5	9.7	309.8	9.0	65.2	598.9	0.0	5.8	0.0	0.0	-18.9	1,440.1	
1981	536.0	287.8	21.1	1.1	106.1	26.8	3.1	26.9	9.3	307.7	4.2	61.0	567.3	0.0	7.0	0.0	0.0	-18.9	1,379.2	
1982	523.8	284.5	21.8	0.7	121.9	24.7	4.4	32.3	8.5	303.9	4.6	44.4	567.3	0.0	17.3	0.0	0.0	-26.8	1,366.1	
1983	564.4	265.5	22.7	0.7	98.7	30.9	0.8	32.5	8.9	308.6	3.8	38.2	545.8	0.0	18.0	0.0	0.0	-27.7	1,366.1	
1984	593.3	269.5	26.3	0.7	108.4	31.8	0.9	20.0	9.5	R 314.8	2.3	44.9	559.7	10.0	16.6	0.0	0.0	-66.6	1,382.4	
1985	529.7	264.3	28.5	0.7	114.1	33.3	0.8	20.1	8.8	R 315.4	4.6	41.9	R 568.3	86.8	31.3	0.0	0.0	-76.5	R 1,403.9	
1986	512.3	244.3	30.7	0.8	106.8	38.0	0.4	21.5	8.6	333.0	3.5	44.6	587.8	77.4	20.8	0.0	0.0	-28.2	1,414.6	
1987	528.0	234.5	28.9	0.7	112.3	42.2	0.4	22.8	9.8	R 334.9	4.3	48.8	R 605.0	67.7	15.1	0.0	0.0	-11.5	R 1,438.8	
1988	547.3	254.4	37.5	0.8	123.6	41.3	0.6	23.9	9.4	R 340.7	4.7	49.0	R 631.7	96.0	15.6	0.0	0.0	-40.7	R 1,504.3	
1989	549.9	254.5	30.2	1.0	128.9	41.2	0.6	30.6	9.7	R 334.7	3.5	47.7	R 628.1	89.5	R 11.4	0.0	0.0	R -32.5	R 1,500.9	
1990	540.6	241.3	29.6	0.6	120.8	37.6	0.3	24.9	10.0	R 336.2	4.0	54.8	R 618.8	85.4	R 19.7	i 0.1	i 0.1	R -30.3	R 1,495.8	
1991	534.5	258.6	27.0	0.6	118.3	42.5	0.4	31.2	8.9	R 335.7	3.4	26.2	R 594.2	107.2	R 11.2	R 19.8	0.1	R -20.6	R 1,503.1	
1992	523.2	241.2	25.4	0.6	130.8	42.6	0.2	30.7	9.1	R 342.8	4.2	32.1	R 618.5	86.3	R 15.0	R 21.0	0.1	R -14.3	R 1,488.9	
1993	466.3	280.7	26.9	0.5	132.7	51.2	0.3	34.6	9.2	R 347.3	6.8	34.4	R 643.8	89.5	R 32.1	R 19.5	0.1	R 55.6	R 1,585.1	
1994	542.3	269.2	37.8	0.6	143.0	60.2	0.3	34.2	9.7	R 354.7	3.4	37.4	R 681.2	106.8	R 19.0	R 21.7	0.1	R -23.2	R 1,614.3	
1995	591.4	281.0	35.1	0.5	148.8	64.8	0.3	40.2	9.5	362.1	2.3	36.5	700.1	87.8	19.1	R 22.1	0.1	-34.7	R 1,665.1	
1996	629.7	297.5	35.7	0.5	162.4	68.8	0.7	42.6	9.2	367.4	2.3	31.5	721.1	94.4	12.8	21.8	0.1	-31.8	1,744.7	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.  
<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.  
<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.  
<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
R=Revised data. --=Not applicable. NA=Not available.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 168. Residential Energy Consumption Estimates, Selected Years 1960-1996, Missouri**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	415	0	415	111	1,330	240	4,687	6,257	0	0	4,223	-	10,505	-
1965	105	0	105	130	1,056	138	6,139	7,332	0	0	5,977	-	14,271	-
1970	32	0	32	157	1,312	69	8,934	10,315	0	0	9,672	-	23,438	-
1975	54	0	54	155	1,435	28	9,528	10,992	0	0	13,654	-	32,935	-
1980	29	0	29	143	1,246	57	4,991	6,294	0	0	18,648	-	45,346	-
1981	37	0	37	129	1,407	76	4,654	6,137	0	0	16,437	-	39,173	-
1982	31	0	31	136	1,125	123	4,824	6,072	0	0	16,708	-	40,131	-
1983	45	0	45	127	702	69	5,738	6,509	0	0	19,003	-	45,526	-
1984	44	0	44	131	758	101	3,167	4,026	0	0	18,490	-	43,036	-
1985	55	0	55	128	815	95	3,496	4,406	0	0	18,483	-	43,425	-
1986	37	0	37	121	820	58	3,907	4,784	0	0	19,468	-	44,783	-
1987	86	0	86	116	654	53	4,098	4,805	0	0	20,312	-	46,412	-
1988	78	(s)	78	128	634	58	3,866	4,559	0	0	21,348	-	48,262	-
1989	87	0	87	129	474	69	4,989	5,531	0	0	21,057	-	47,298	-
1990	99	0	99	116	355	29	4,193	4,577	<sup>e</sup> 669	<sup>e</sup> 42	21,652	-	47,357	-
1991	88	0	88	121	430	37	5,489	5,956	704	42	23,386	-	50,901	-
1992	79	0	79	117	358	21	5,545	5,923	741	42	21,294	-	45,482	-
1993	90	1	91	134	414	37	5,863	6,314	617	42	24,182	-	51,092	-
1994	76	(s)	77	123	353	24	5,771	6,148	605	43	24,057	-	50,195	-
1995	74	<sup>R</sup> 0	74	125	472	32	5,841	6,344	672	43	25,409	-	52,928	-
1996	72	0	72	137	335	56	6,950	7,342	671	43	26,448	-	55,046	-
<b>Trillion Btu</b>														
1960	9.5	0.0	9.5	115.0	7.7	1.4	18.8	27.9	0.0	0.0	14.4	166.8	35.8	202.7
1965	2.4	0.0	2.4	132.1	6.1	0.8	24.6	31.6	0.0	0.0	20.4	186.5	48.7	235.2
1970	0.7	0.0	0.7	157.7	7.6	0.4	33.8	41.8	0.0	0.0	33.0	233.2	80.0	313.1
1975	1.2	0.0	1.2	156.5	8.4	0.2	35.4	43.9	0.0	0.0	46.6	248.1	112.4	360.5
1980	0.6	0.0	0.6	145.7	7.3	0.3	18.3	25.9	0.0	0.0	63.6	235.9	154.7	390.6
1981	0.8	0.0	0.8	130.6	8.2	0.4	17.0	25.6	0.0	0.0	56.1	213.1	133.7	346.7
1982	0.7	0.0	0.7	138.4	6.6	0.7	17.4	24.7	0.0	0.0	57.0	220.8	136.9	357.7
1983	1.0	0.0	1.0	130.1	4.1	0.4	20.7	25.2	0.0	0.0	64.8	221.1	155.3	376.4
1984	1.0	0.0	1.0	132.9	4.4	0.6	11.4	16.4	0.0	0.0	63.1	213.4	146.8	360.2
1985	1.2	0.0	1.2	130.3	4.8	0.5	12.6	17.9	0.0	0.0	63.1	212.5	148.2	360.7
1986	0.8	0.0	0.8	121.9	4.8	0.3	14.2	19.3	0.0	0.0	66.4	208.5	152.8	361.3
1987	1.9	0.0	1.9	117.3	3.8	0.3	15.0	19.1	0.0	0.0	69.3	207.6	158.4	366.0
1988	1.7	(s)	1.7	129.1	3.7	0.3	14.1	18.1	0.0	0.0	72.8	221.8	164.7	386.5
1989	1.9	0.0	1.9	130.2	2.8	0.4	18.4	21.5	0.0	0.0	71.8	225.5	161.4	386.9
1990	2.2	0.0	2.2	117.2	2.1	0.2	15.2	17.4	<sup>e</sup> 13.4	<sup>e</sup> 0.1	73.9	<sup>e</sup> 224.2	161.6	<sup>R e</sup> 385.8
1991	1.9	0.0	1.9	121.7	2.5	0.2	19.8	22.6	14.1	0.1	79.8	240.2	173.7	<sup>R</sup> 413.9
1992	1.7	0.0	1.7	116.9	2.1	0.1	20.1	22.3	14.8	0.1	72.7	228.5	155.2	383.7
1993	2.0	(s)	2.0	134.7	2.4	0.2	21.1	23.8	12.3	0.1	82.5	255.5	174.3	429.8
1994	1.7	(s)	1.8	123.3	2.1	0.1	21.0	23.2	12.1	0.1	82.1	242.6	171.3	<sup>R</sup> 413.8
1995	1.7	<sup>R</sup> 0.0	1.7	126.0	2.7	0.2	21.2	24.1	13.4	0.1	86.7	252.0	180.6	432.6
1996	1.6	0.0	1.6	138.7	2.0	0.3	25.1	27.4	13.4	0.1	90.2	271.5	187.8	459.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
- =Not applicable.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 169. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Missouri**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	770	0	770	33	1,101	1,507	827	113	1,366	4,914	0	3,314	-	8,243	-
1965	196	0	196	41	873	865	1,083	133	1,508	4,463	0	4,473	-	10,681	-
1970	60	0	60	88	1,085	433	1,577	153	1,654	4,901	0	6,168	-	14,948	-
1975	101	0	101	91	1,187	179	1,681	159	764	3,971	0	7,639	-	18,425	-
1980	53	0	53	76	1,001	171	881	223	554	2,830	0	12,986	-	31,578	-
1981	70	0	70	68	773	398	821	298	29	2,319	0	12,371	-	29,484	-
1982	57	0	57	70	1,048	584	851	226	31	2,740	0	12,767	-	30,664	-
1983	84	0	84	66	1,622	35	1,013	210	235	3,114	0	13,247	-	31,736	-
1984	83	0	83	67	1,751	28	559	288	157	2,784	0	14,576	-	33,927	-
1985	101	0	101	60	1,465	33	617	262	121	2,498	0	15,205	-	35,724	-
1986	68	0	68	62	1,482	10	689	323	129	2,633	0	16,083	-	36,996	-
1987	160	0	160	58	1,857	6	723	313	119	R 3,019	0	17,254	-	39,424	-
1988	145	(s)	145	64	1,663	16	682	R 248	101	2,711	0	18,343	-	41,470	-
1989	162	0	162	63	926	12	880	R 213	35	2,066	0	18,753	-	R 42,124	-
1990	185	0	185	59	883	8	740	R 239	60	R 1,931	e NA	19,335	-	R 42,288	-
1991	164	0	164	63	1,111	4	969	128	30	2,241	NA	20,014	-	R 43,561	-
1992	148	0	148	61	1,174	16	978	121	3	2,293	NA	19,677	-	R 42,029	-
1993	168	(s)	168	70	1,148	13	1,035	112	8	2,315	32	20,822	-	R 43,993	-
1994	142	(s)	142	66	1,194	14	1,018	102	20	2,348	34	21,520	-	R 44,903	-
1995	137	R 0	137	65	1,286	10	1,031	99	1	2,427	37	22,517	-	R 46,904	-
1996	133	0	133	73	1,327	27	1,227	116	6	2,702	40	23,466	-	48,840	-

  

Trillion Btu															
1960	17.7	0.0	17.7	33.8	6.4	8.5	3.3	0.6	8.6	27.5	0.0	11.3	90.3	28.1	118.4
1965	4.5	0.0	4.5	41.8	5.1	4.9	4.3	0.7	9.5	24.5	0.0	15.3	86.1	36.4	122.5
1970	1.3	0.0	1.3	88.3	6.3	2.5	6.0	0.8	10.4	25.9	0.0	21.0	136.6	51.0	187.6
1975	2.2	0.0	2.2	91.5	6.9	1.0	6.2	0.8	4.8	19.8	0.0	26.1	139.5	62.9	202.4
1980	1.2	0.0	1.2	77.3	5.8	1.0	3.2	1.2	3.5	14.7	0.0	44.3	137.4	107.7	245.2
1981	1.5	0.0	1.5	69.5	4.5	2.3	3.0	1.6	0.2	11.5	0.0	42.2	124.7	100.6	225.3
1982	1.2	0.0	1.2	71.2	6.1	3.3	3.1	1.2	0.2	13.9	0.0	43.6	129.8	104.6	234.5
1983	1.8	0.0	1.8	67.9	9.4	0.2	3.7	1.1	1.5	15.9	0.0	45.2	130.8	108.3	239.1
1984	1.8	0.0	1.8	68.4	10.2	0.2	2.0	1.5	1.0	14.9	0.0	49.7	134.8	115.8	250.5
1985	2.3	0.0	2.3	61.4	8.5	0.2	2.2	1.4	0.8	13.1	0.0	51.9	128.7	121.9	250.5
1986	1.5	0.0	1.5	62.6	8.6	0.1	2.5	1.7	0.8	13.7	0.0	54.9	132.7	126.2	258.9
1987	3.5	0.0	3.5	58.9	10.8	(s)	2.6	1.6	0.8	15.9	0.0	58.9	137.1	134.5	271.6
1988	3.2	(s)	3.2	64.2	9.7	0.1	2.5	1.3	0.6	14.2	0.0	62.6	144.2	141.5	285.7
1989	3.6	0.0	3.6	63.5	5.4	0.1	3.2	1.1	0.2	10.0	0.0	64.0	141.2	R 143.7	R 284.9
1990	4.0	0.0	4.0	60.0	5.1	(s)	2.7	R 1.3	0.4	9.5	e NA	66.0	139.6	R 144.3	R 283.8
1991	3.6	0.0	3.6	63.7	6.5	(s)	3.5	0.7	0.2	10.9	NA	68.3	146.5	R 148.6	R 295.1
1992	3.2	0.0	3.2	61.1	6.8	0.1	3.5	0.6	(s)	11.1	NA	67.1	142.6	R 143.4	R 286.0
1993	3.8	(s)	3.8	69.9	6.7	0.1	3.7	0.6	(s)	11.1	0.6	71.0	R 156.5	R 150.1	R 306.6
1994	3.2	(s)	3.2	66.6	7.0	0.1	3.7	0.5	0.1	11.4	0.7	73.4	R 155.3	R 153.2	R 308.6
1995	3.1	R 0.0	3.1	65.5	7.5	0.1	3.7	0.5	(s)	11.8	0.7	76.8	R 158.0	160.0	R 318.1
1996	3.0	0.0	3.0	73.6	7.7	0.2	4.4	0.6	(s)	13.0	0.8	80.1	170.4	166.6	337.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 170. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Missouri

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,605	79	3,725	5,722	340	437	284	3,074	1,630	2,104	17,316	0	0	0	3,890	-	9,675	-
1965	2,534	114	4,401	5,097	160	423	328	3,224	1,710	4,299	19,643	0	0	0	5,872	-	14,020	-
1970	1,921	110	5,657	5,689	141	1,175	415	2,767	1,620	5,306	22,771	0	0	0	9,939	-	24,084	-
1975	2,065	90	5,401	5,765	75	1,712	491	2,707	1,242	4,699	22,091	0	0	0	11,782	-	28,421	-
1980	1,595	78	4,002	4,782	87	3,182	671	1,866	703	11,595	26,887	0	0	0	11,018	-	26,792	-
1981	1,715	73	3,175	5,209	72	1,768	643	1,491	615	10,923	23,896	0	0	0	13,878	-	33,075	-
1982	1,454	65	3,289	6,002	73	3,152	586	1,199	563	8,060	22,925	0	0	0	12,441	-	29,882	-
1983	1,524	59	3,419	2,941	32	2,109	614	920	277	6,882	17,195	0	0	0	12,908	-	30,925	-
1984	1,717	60	3,960	3,177	30	R 1,656	655	1,140	185	8,258	19,059	0	0	0	12,342	-	28,728	-
1985	1,798	66	4,295	3,993	22	1,333	610	R 1,076	557	7,660	19,546	0	0	0	12,625	-	29,661	-
1986	1,687	55	4,624	2,736	8	1,155	597	960	375	8,093	18,547	0	0	0	12,722	-	29,264	-
1987	1,505	54	4,351	3,149	13	R 1,273	674	R 959	535	8,850	R 19,804	0	0	0	12,554	-	28,685	-
1988	1,539	54	5,657	3,763	24	1,903	650	R 890	531	8,839	R 22,258	0	0	0	12,556	-	28,386	-
1989	1,436	54	4,545	3,232	33	2,320	667	776	420	8,615	20,609	0	0	0	12,792	-	R 28,733	-
1990	1,321	55	4,468	3,007	8	R 1,823	687	R 663	526	9,864	R 21,046	f NA	f NA	f NA	12,937	-	R 28,296	-
1991	1,235	57	4,062	2,947	23	2,046	614	758	476	4,639	R 15,565	NA	NA	NA	13,114	-	R 28,543	-
1992	1,137	58	3,832	3,258	6	R 1,859	626	669	621	5,644	16,515	NA	NA	NA	13,440	-	R 28,708	-
1993	1,177	61	4,055	2,803	5	2,597	638	R 1,469	1,015	5,115	17,696	NA	NA	NA	13,618	-	R 28,772	-
1994	1,070	72	5,703	3,482	10	2,416	666	R 1,623	465	5,323	R 19,688	NA	NA	NA	14,106	-	R 29,433	-
1995	1,102	69	5,296	3,261	11	4,102	655	1,676	324	5,254	20,580	NA	NA	NA	14,321	-	R 29,831	-
1996	1,118	72	5,385	3,225	33	3,525	636	1,677	314	5,559	20,354	NA	NA	NA	14,915	-	31,043	-

## Trillion Btu

1960	62.2	81.7	24.7	33.3	1.9	1.8	1.7	16.1	10.2	12.4	102.2	0.0	0.0	0.0	13.3	259.3	33.0	292.4
1965	59.9	116.4	29.2	29.7	0.9	1.7	2.0	16.9	10.8	24.2	115.4	0.0	0.0	0.0	20.0	311.8	47.8	359.6
1970	43.8	110.4	37.5	33.1	0.8	4.4	2.5	14.5	10.2	29.7	132.9	0.0	0.0	0.0	33.9	320.9	82.2	403.1
1975	45.7	90.7	35.8	33.6	0.4	6.4	3.0	14.2	7.8	26.8	128.0	0.0	0.0	0.0	40.2	304.6	97.0	401.6
1980	36.0	79.3	26.6	27.9	0.5	11.7	4.1	9.8	4.4	64.6	149.5	0.0	0.0	0.0	37.6	302.4	91.4	393.8
1981	38.5	74.4	21.1	30.3	0.4	6.4	3.9	7.8	3.9	61.0	134.8	0.0	0.0	0.0	47.4	295.1	112.9	408.0
1982	32.7	65.7	21.8	35.0	0.4	11.4	3.6	6.3	3.5	44.4	126.4	0.0	0.0	0.0	42.4	267.3	102.0	369.2
1983	34.2	60.9	22.7	17.1	0.2	7.6	3.7	4.8	1.7	38.2	96.1	0.0	0.0	0.0	44.0	235.3	105.5	340.8
1984	38.9	60.5	26.3	18.5	0.2	6.0	4.0	6.0	1.2	44.9	107.0	0.0	0.0	0.0	42.1	248.4	98.0	346.5
1985	41.2	66.8	28.5	23.3	0.1	4.8	3.7	R 5.7	3.5	41.9	111.4	0.0	0.0	0.0	43.1	262.5	101.2	363.7
1986	39.0	55.1	30.7	15.9	(s)	4.2	3.6	5.0	2.4	44.6	106.5	0.0	0.0	0.0	43.4	244.0	99.8	343.9
1987	34.9	54.9	28.9	18.3	0.1	4.7	4.1	5.0	3.4	48.8	113.2	0.0	0.0	0.0	42.8	245.9	97.9	343.8
1988	35.6	54.6	37.5	21.9	0.1	7.0	3.9	4.7	3.3	49.0	127.5	0.0	0.0	0.0	42.8	260.4	R 96.9	R 357.3
1989	33.0	54.4	30.2	18.8	0.2	8.5	4.0	4.1	2.6	47.6	116.1	0.0	0.0	0.0	43.6	247.1	R 98.0	R 345.1
1990	30.4	55.1	29.6	17.5	(s)	6.6	4.2	3.5	3.3	54.8	R 119.6	f 0.0	f 4.0	f 0.0	44.1	f 253.2	R 96.5	R f 349.8
1991	28.7	57.7	27.0	17.2	0.1	7.4	3.7	4.0	3.0	26.2	88.6	0.0	3.8	0.0	44.7	223.6	R 97.4	R 321.0
1992	26.6	58.6	25.4	19.0	(s)	6.7	3.8	3.5	3.9	32.1	94.5	0.0	4.0	0.0	45.9	229.5	R 98.0	R 327.5
1993	27.8	61.2	26.9	16.3	(s)	9.4	3.9	7.7	6.4	28.9	99.5	0.0	4.0	0.0	46.5	238.9	R 98.2	R 337.1
1994	24.6	72.0	37.8	20.3	0.1	8.8	4.0	8.5	2.9	30.1	112.6	0.0	R 6.1	0.0	48.1	R 263.4	100.4	R 363.8
1995	25.5	69.4	35.1	19.0	0.1	14.9	4.0	8.8	2.0	29.8	113.7	0.0	R 5.8	0.0	48.9	R 263.3	101.8	R 365.1
1996	25.9	72.3	35.7	18.8	0.2	12.7	3.9	8.8	2.0	31.5	113.5	0.0	6.3	0.0	50.9	268.9	105.9	374.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 171. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Missouri**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	46	8	1,844	4,485	1,249	43	669	37,620	34	45,943	0	2	-	6	-
1965	8	9	2,323	6,685	3,625	47	701	41,658	154	55,191	0	0	-	0	-
1970	3	13	179	7,990	8,074	85	735	53,122	163	70,349	0	0	-	0	-
1975	(s)	7	184	8,721	8,311	74	793	59,476	141	77,698	0	0	-	0	-
1980	0	6	162	10,824	6,268	68	932	56,877	142	75,272	0	0	-	0	-
1981	0	6	209	10,527	4,741	147	894	56,792	6	73,316	0	0	-	0	-
1982	0	5	145	12,387	4,371	118	815	56,430	113	74,379	0	0	-	0	-
1983	0	4	142	11,296	5,457	140	854	57,612	23	75,523	0	0	-	0	-
1984	0	5	133	12,712	5,615	184	910	58,502	12	78,068	0	0	-	0	-
1985	0	4	135	13,116	5,889	138	848	R 58,698	38	R 78,863	0	0	-	0	-
1986	0	4	164	13,070	6,710	157	830	R 62,106	28	R 83,062	0	0	-	0	-
1987	0	2	134	13,408	7,463	132	938	R 62,486	0	R 84,560	0	0	-	0	-
1988	0	5	162	14,861	7,307	103	904	R 63,724	87	R 87,149	0	0	-	0	-
1989	0	5	200	17,278	7,277	116	928	R 62,726	70	R 88,595	0	0	-	0	-
1990	0	5	126	16,291	6,647	R 117	955	R 63,092	34	R 87,263	R e 30,069	0	-	0	-
1991	0	3	117	15,577	7,506	130	854	R 63,022	0	R 87,206	R 23,835	0	-	0	-
1992	0	2	115	17,483	7,522	88	871	R 64,471	17	R 90,567	R 28,969	0	-	0	-
1993	0	10	93	18,052	9,034	91	887	R 64,527	34	R 92,719	R 32,329	0	-	0	-
1994	0	3	113	19,260	10,623	202	927	R 65,801	22	R 96,949	R 35,929	9	-	19	-
1995	0	7	109	20,237	11,425	112	911	R 67,155	21	R 99,971	R 23,708	12	-	26	-
1996	0	7	108	22,759	12,133	92	884	68,154	18	104,148	12,495	15	-	31	-

**Trillion Btu**

1960	1.1	8.2	9.3	26.1	7.0	0.2	4.1	197.6	0.2	244.5	0.0	(s)	253.8	(s)	253.8
1965	0.2	9.1	11.7	38.9	20.4	0.2	4.3	218.8	1.0	295.3	0.0	0.0	304.6	0.0	304.6
1970	0.1	12.8	0.9	46.5	45.7	0.3	4.5	279.0	1.0	378.0	0.0	0.0	390.9	0.0	390.9
1975	(s)	7.6	0.9	50.8	47.0	0.3	4.8	312.4	0.9	417.2	0.0	0.0	424.7	0.0	424.7
1980	0.0	5.7	0.8	63.0	35.5	0.2	5.7	298.8	0.9	404.9	0.0	0.0	410.6	0.0	410.6
1981	0.0	5.7	1.1	61.3	26.8	0.5	5.4	298.3	(s)	393.5	0.0	0.0	399.2	0.0	399.2
1982	0.0	4.6	0.7	72.2	24.7	0.4	4.9	296.4	0.7	400.1	0.0	0.0	404.7	0.0	404.7
1983	0.0	3.8	0.7	65.8	30.9	0.5	5.2	302.6	0.1	405.9	0.0	0.0	409.7	0.0	409.7
1984	0.0	5.1	0.7	74.0	31.8	0.7	5.5	307.3	0.1	420.0	0.0	0.0	425.2	0.0	425.2
1985	0.0	4.3	0.7	76.4	33.3	0.5	5.1	308.3	0.2	R 424.6	0.0	0.0	R 429.0	0.0	R 429.0
1986	0.0	3.6	0.8	76.1	38.0	0.6	5.0	326.2	0.2	446.9	0.0	0.0	450.5	0.0	450.5
1987	0.0	2.0	0.7	78.1	42.2	0.5	5.7	R 328.2	0.0	R 455.4	0.0	0.0	R 457.4	0.0	R 457.4
1988	0.0	4.9	0.8	86.6	41.3	0.4	5.5	R 334.7	0.5	R 469.9	0.0	0.0	R 474.8	0.0	R 474.8
1989	0.0	5.2	1.0	100.6	41.2	0.4	5.6	R 329.5	0.4	R 478.8	0.0	0.0	R 484.0	0.0	R 484.0
1990	0.0	5.4	0.6	94.9	37.6	0.4	5.8	R 331.4	0.2	R 471.0	R e 2.3	0.0	R e 476.4	0.0	R e 476.4
1991	0.0	2.6	0.6	90.7	42.5	0.5	5.2	R 331.1	0.0	R 470.5	R 1.8	0.0	R 473.1	0.0	R 473.1
1992	0.0	2.3	0.6	101.8	42.6	0.3	5.3	338.7	0.1	R 489.4	R 2.2	0.0	R 491.7	0.0	R 491.7
1993	0.0	9.9	0.5	105.2	51.2	0.3	5.4	R 339.0	0.2	R 501.7	R 2.5	0.0	R 511.6	0.0	R 511.6
1994	0.0	2.9	0.6	112.2	60.2	0.7	5.6	R 345.7	0.1	R 525.1	R 2.7	(s)	R 528.0	0.1	R 528.1
1995	0.0	7.2	0.5	117.9	64.8	0.4	5.5	352.8	0.1	542.0	R 1.8	(s)	549.3	0.1	549.3
1996	0.0	7.6	0.5	132.6	68.8	0.3	5.4	358.0	0.1	565.7	1.0	0.1	573.3	0.1	573.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 172. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Missouri**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	3,674	0	3,674	30	150	178	0	328	0	726	0	0	0	--
1965	5,690	0	5,690	48	77	92	0	168	0	802	0	0	0	--
1970	10,846	0	10,846	63	133	159	0	291	0	927	0	0	0	--
1975	17,734	0	17,734	26	375	710	15	1,100	0	1,280	0	0	0	--
1980	23,168	0	23,168	15	29	538	101	668	0	558	0	0	0	--
1981	23,376	0	23,376	8	18	305	0	323	0	669	0	0	0	--
1982	22,863	0	22,863	4	24	360	0	383	0	1,656	0	0	0	--
1983	24,614	0	24,614	3	64	391	9	464	0	1,716	0	0	0	--
1984	25,763	0	25,763	3	20	219	0	239	920	1,587	0	0	0	--
1985	22,779	0	22,779	1	16	202	1	219	8,030	2,993	0	0	0	--
1986	22,029	0	22,029	1	20	220	0	240	7,170	1,996	0	0	0	--
1987	23,012	0	23,012	1	26	206	0	232	6,284	1,447	0	0	0	--
1988	24,356	0	24,356	2	35	304	2	341	8,935	1,511	0	0	0	--
1989	24,663	0	24,663	1	36	221	16	274	8,344	1,094	0	0	0	--
1990	24,231	0	24,231	4	8	207	0	215	7,998	2,156	0	0	0	--
1991	24,286	0	24,286	13	42	245	0	287	9,979	1,072	0	0	0	--
1992	23,815	0	23,815	2	24	185	0	209	8,084	1,450	0	0	0	--
1993	21,945	0	21,945	5	22	367	915	1,305	8,381	3,110	1	0	0	--
1994	26,375	0	26,375	4	27	255	1,204	1,486	10,006	1,844	7	0	0	--
1995	30,440	0	30,440	13	13	283	1,114	1,410	8,242	1,854	25	0	0	--
1996	33,059	0	33,059	5	28	228	0	256	8,890	1,239	31	0	0	--

**Trillion Btu**

1960	80.5	0.0	80.5	31.3	0.9	1.0	0.0	2.0	0.0	7.8	0.0	0.0	0.0	121.6
1965	122.6	0.0	122.6	48.5	0.5	0.5	0.0	1.0	0.0	8.4	0.0	0.0	0.0	180.5
1970	233.4	0.0	233.4	63.4	0.8	0.9	0.0	1.8	0.0	9.7	0.0	0.0	0.0	308.3
1975	381.2	0.0	381.2	25.7	2.4	4.1	0.1	6.6	0.0	13.3	0.0	0.0	0.0	426.8
1980	493.6	0.0	493.6	15.0	0.2	3.1	0.6	3.9	0.0	5.8	0.0	0.0	0.0	518.3
1981	495.2	0.0	495.2	7.6	0.1	1.8	0.0	1.9	0.0	7.0	0.0	0.0	0.0	511.6
1982	489.2	0.0	489.2	4.5	0.1	2.1	0.0	2.2	0.0	17.3	0.0	0.0	0.0	513.3
1983	527.3	0.0	527.3	2.8	0.4	2.3	0.1	2.7	0.0	18.0	0.0	0.0	0.0	550.9
1984	551.7	0.0	551.7	2.5	0.1	1.3	0.0	1.4	10.0	16.6	0.0	0.0	0.0	582.1
1985	484.9	0.0	484.9	1.5	0.1	1.2	(s)	1.3	86.8	31.3	0.0	0.0	0.0	605.8
1986	470.9	0.0	470.9	1.2	0.1	1.3	0.0	1.4	77.4	20.8	0.0	0.0	0.0	571.8
1987	487.7	0.0	487.7	1.4	0.2	1.2	0.0	1.4	67.7	15.1	0.0	0.0	0.0	573.3
1988	506.8	0.0	506.8	1.6	0.2	1.8	(s)	2.0	96.0	15.6	0.0	0.0	0.0	622.0
1989	511.4	0.0	511.4	1.3	0.2	1.3	0.1	1.6	89.5	R 11.4	0.0	0.0	0.0	R 615.2
1990	504.0	0.0	504.0	3.6	(s)	1.2	0.0	1.3	85.4	R 22.4	0.0	0.0	0.0	R 616.7
1991	500.2	0.0	500.2	12.9	0.3	1.4	0.0	1.7	107.2	R 11.2	0.0	0.0	0.0	R 633.1
1992	491.6	0.0	491.6	2.4	0.2	1.1	0.0	1.2	86.3	R 15.0	0.0	0.0	0.0	R 596.5
1993	432.7	0.0	432.7	4.9	0.1	2.1	5.5	7.8	89.5	R 32.1	(s)	0.0	0.0	R 567.1
1994	512.6	0.0	512.6	4.4	0.2	1.5	7.3	8.9	106.8	R 19.0	0.1	0.0	0.0	R 651.8
1995	561.1	0.0	561.1	12.9	0.1	1.7	6.7	8.4	87.8	19.1	0.3	0.0	0.0	689.6
1996	599.2	0.0	599.2	5.3	0.2	1.3	0.0	1.5	94.4	12.8	0.3	0.0	0.0	713.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 173. Energy Consumption Estimates by Source, Selected Years 1960-1996, Montana**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	254	56	865	1,006	4,898	265	477	737	161	6,922	2,063	1,635	19,028	0	5,800	0	0	-3,181	-	
1965	370	71	1,003	312	4,962	384	248	926	189	7,709	1,241	2,531	19,505	0	8,388	37	0	-6,938	-	
1970	763	88	1,347	43	4,827	649	376	1,326	200	9,262	1,268	3,155	22,452	0	8,744	73	0	-1,251	-	
1975	1,149	80	924	79	7,586	818	122	1,370	208	10,630	2,178	3,410	27,325	0	10,164	14	0	-6,056	-	
1980	3,520	61	1,020	159	7,509	920	0	1,806	247	10,416	4,025	3,007	29,110	0	9,963	17	0	-11,328	-	
1981	3,622	52	1,035	177	6,469	800	26	1,027	237	10,797	2,494	2,721	25,783	0	11,321	34	0	-15,153	-	
1982	2,826	52	884	92	5,828	625	0	1,446	216	10,429	1,608	2,534	23,661	0	10,918	28	0	-11,688	-	
1983	2,533	46	1,130	102	8,863	652	18	1,497	227	10,525	1,306	2,422	26,741	0	11,559	39	0	-14,133	-	
1984	5,283	47	1,215	77	9,446	642	19	1,032	242	10,451	798	2,691	26,614	0	11,110	57	(s)	-13,752	-	
1985	5,713	47	1,463	91	11,317	678	10	1,576	225	R 10,188	133	2,581	R 28,261	0	10,244	59	(s)	-13,692	-	
1986	7,780	41	1,989	105	7,004	867	22	1,505	220	10,158	47	2,657	R 24,574	0	10,855	61	(s)	-25,273	-	
1987	7,730	39	1,642	82	6,556	718	8	1,716	249	R 10,258	23	3,392	R 24,644	0	8,951	49	0	-24,830	-	
1988	10,634	42	1,473	107	6,308	809	4	1,515	240	R 10,441	221	3,801	R 24,920	0	8,240	55	0	-35,099	-	
1989	10,458	46	1,749	95	7,679	750	3	1,608	246	R 10,310	182	3,913	R 26,535	0	9,565	72	0	R -38,200	-	
1990	9,676	43	1,487	111	7,422	708	8	1,740	253	R 10,328	221	4,255	R 26,534	0	i NA	i NA	i NA	R -38,506	-	
1991	10,549	45	1,350	108	8,321	615	3	1,053	227	R 10,360	146	3,714	R 25,896	0	NA	NA	NA	R -45,336	-	
1992	11,040	46	1,309	75	7,716	864	1	1,018	231	R 10,727	89	4,725	R 26,755	0	NA	NA	NA	R -38,468	-	
1993	9,247	53	1,707	64	8,004	901	8	2,200	235	R 10,999	689	4,171	R 28,978	0	NA	NA	NA	R -33,274	-	
1994	11,089	52	1,964	75	8,254	855	7	1,055	246	R 11,097	374	4,497	R 28,424	0	NA	NA	NA	R -36,909	-	
1995	10,005	58	1,293	78	8,924	1,052	1	918	242	R 11,328	240	4,462	28,537	0	NA	NA	NA	R -38,087	-	
1996	8,032	61	1,702	99	9,818	999	1	1,660	235	11,753	184	5,050	31,500	0	NA	NA	NA	-38,468	-	
Trillion Btu																				
1960	4.0	57.6	5.7	5.1	28.5	1.4	2.7	3.0	1.0	36.4	13.0	9.8	106.6	0.0	62.4	0.0	0.0	-10.9	219.8	
1965	5.5	70.8	6.7	1.6	28.9	2.1	1.4	3.7	1.1	40.5	7.8	15.2	109.0	0.0	87.7	0.4	0.0	-23.7	249.7	
1970	12.0	90.6	8.9	0.2	28.1	3.6	2.1	5.0	1.2	48.7	8.0	19.0	124.8	0.0	91.8	0.8	0.0	-4.3	315.7	
1975	18.6	81.2	6.1	0.4	44.2	4.6	0.7	5.1	1.3	55.8	13.7	20.5	152.4	0.0	105.8	0.1	0.0	-20.7	337.4	
1980	60.2	61.5	6.8	0.8	43.7	5.2	0.0	6.6	1.5	54.7	25.3	18.1	162.7	0.0	103.5	0.2	0.0	-38.6	349.4	
1981	62.5	53.0	6.9	0.9	37.7	4.5	0.1	3.7	1.4	56.7	15.7	16.8	144.4	0.0	118.3	0.4	0.0	-51.7	327.0	
1982	48.6	52.8	5.9	0.5	33.9	3.5	0.0	5.2	1.3	54.8	10.1	15.6	130.8	0.0	114.1	0.3	0.0	-39.9	306.8	
1983	42.8	46.6	7.5	0.5	51.6	3.7	0.1	5.4	1.4	55.3	8.2	14.8	148.5	0.0	121.6	0.4	0.0	-48.2	311.7	
1984	90.3	47.1	8.1	0.4	55.0	3.6	0.1	3.7	1.5	54.9	5.0	16.4	148.6	0.0	116.0	0.6	(s)	-46.9	355.7	
1985	99.1	47.3	9.7	0.5	65.9	3.8	0.1	5.7	1.4	53.5	0.8	15.9	157.2	0.0	107.0	0.6	(s)	-46.7	364.5	
1986	133.2	41.1	13.2	0.5	40.8	4.8	0.1	5.5	1.3	53.4	0.3	16.4	136.4	0.0	113.4	0.6	(s)	-86.2	338.6	
1987	132.9	39.6	10.9	0.4	38.2	4.0	(s)	6.3	1.5	R 53.9	0.1	20.7	R 136.1	0.0	93.3	0.5	0.0	-84.7	R 317.6	
1988	181.5	42.9	9.8	0.5	36.7	4.5	(s)	5.5	1.5	R 54.8	1.4	23.0	R 137.8	0.0	85.1	0.6	0.0	-119.8	R 328.1	
1989	178.4	46.7	11.6	0.5	44.7	4.2	(s)	5.9	1.5	R 54.2	1.1	23.6	R 147.3	0.0	R 99.8	R 0.8	0.0	R -130.3	R 342.6	
1990	166.1	44.4	9.9	0.6	43.2	4.0	(s)	6.3	1.5	R 54.3	1.4	25.6	R 146.8	0.0	R i 111.8	i 7.7	(s)	R -131.4	R i 345.5	
1991	180.2	46.7	9.0	0.5	48.5	3.5	(s)	3.8	1.4	R 54.4	0.9	22.5	R 144.5	0.0	R 125.0	7.4	(s)	R -154.7	R 349.2	
1992	189.8	46.6	8.7	0.4	44.9	4.8	(s)	3.7	1.4	R 56.3	0.6	28.4	R 149.2	0.0	R 85.8	7.9	(s)	R -131.3	R 348.2	
1993	157.7	54.3	11.3	0.3	46.6	5.0	(s)	7.9	1.4	57.8	4.3	25.2	160.0	0.0	R 99.4	R 7.9	(s)	R -113.5	R 365.7	
1994	189.3	53.3	13.0	0.4	48.1	4.8	(s)	3.8	1.5	58.3	2.4	27.1	159.4	0.0	R 84.8	R 8.7	(s)	R -125.9	R 370.0	
1995	171.2	59.6	8.6	0.4	52.0	5.9	(s)	3.3	1.5	59.5	1.5	26.9	159.6	0.0	111.0	R 8.5	(s)	R -130.0	R 380.0	
1996	135.7	63.2	11.3	0.5	57.2	5.7	(s)	6.0	1.4	61.7	1.2	30.4	175.3	0.0	143.0	9.0	(s)	-131.3	395.1	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 174. Residential Energy Consumption Estimates, Selected Years 1960-1996, Montana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	11	0	11	17	262	0	506	768	0	0	935	—	2,327	—
1965	8	0	8	20	277	0	636	914	0	0	1,216	—	2,904	—
1970	4	0	4	25	249	0	887	1,137	0	0	1,534	—	3,717	—
1975	4	0	4	24	589	0	973	1,562	0	0	2,143	—	5,169	—
1980	5	0	5	19	421	0	829	1,250	0	0	2,916	—	7,091	—
1981	3	0	3	17	273	0	503	777	0	0	2,906	—	6,926	—
1982	3	0	3	20	352	0	736	1,088	0	0	3,178	—	7,633	—
1983	3	0	3	17	449	14	901	1,365	0	0	3,097	—	7,419	—
1984	2	0	2	18	459	16	428	902	0	0	3,375	—	7,856	—
1985	3	0	3	19	345	9	604	959	0	0	3,614	—	8,491	—
1986	8	0	8	17	351	14	641	1,006	0	0	3,214	—	7,393	—
1987	3	0	3	15	247	1	709	957	0	0	3,139	—	7,173	—
1988	3	0	3	17	235	1	715	951	0	0	3,301	—	7,463	—
1989	18	(s)	19	18	366	1	831	1,198	0	0	3,456	—	R 7,762	—
1990	20	0	20	17	288	1	813	1,102	e 89	e (s)	3,358	—	R 7,345	—
1991	16	0	16	18	356	1	703	1,060	94	(s)	3,459	—	R 7,528	—
1992	7	0	7	17	218	(s)	598	816	99	(s)	3,286	—	R 7,019	—
1993	4	0	4	20	267	7	548	822	91	(s)	3,598	—	R 7,602	—
1994	1	0	1	19	189	6	541	736	90	(s)	3,567	—	R 7,442	—
1995	R 4	0	R 4	20	252	1	473	726	99	(s)	3,640	—	7,582	—
1996	1	0	1	22	438	1	519	958	99	(s)	3,911	—	8,139	—

**Trillion Btu**

1960	0.2	0.0	0.2	17.5	1.5	0.0	2.0	3.6	0.0	0.0	3.2	24.5	7.9	32.4
1965	0.2	0.0	0.2	19.9	1.6	0.0	2.6	4.2	0.0	0.0	4.1	28.4	9.9	38.3
1970	0.1	0.0	0.1	25.6	1.5	0.0	3.4	4.8	0.0	0.0	5.2	35.7	12.7	48.4
1975	0.1	0.0	0.1	24.6	3.4	0.0	3.6	7.0	0.0	0.0	7.3	39.0	17.6	56.6
1980	0.1	0.0	0.1	19.5	2.5	0.0	3.0	5.5	0.0	0.0	9.9	35.0	24.2	59.2
1981	(s)	0.0	(s)	17.4	1.6	0.0	1.8	3.4	0.0	0.0	9.9	30.8	23.6	54.4
1982	0.1	0.0	0.1	20.2	2.1	0.0	2.7	4.7	0.0	0.0	10.8	35.8	26.0	61.8
1983	0.1	0.0	0.1	17.1	2.6	0.1	3.3	6.0	0.0	0.0	10.6	33.7	25.3	59.0
1984	(s)	0.0	(s)	18.5	2.7	0.1	1.5	4.3	0.0	0.0	11.5	34.4	26.8	61.2
1985	(s)	0.0	(s)	19.4	2.0	0.1	2.2	4.2	0.0	0.0	12.3	36.0	29.0	64.9
1986	0.1	0.0	0.1	16.8	2.0	0.1	2.3	4.5	0.0	0.0	11.0	32.3	25.2	57.6
1987	(s)	0.0	(s)	15.6	1.4	(s)	2.6	4.0	0.0	0.0	10.7	30.4	24.5	54.9
1988	0.1	0.0	0.1	17.3	1.4	(s)	2.6	4.0	0.0	0.0	11.3	32.6	25.5	58.1
1989	0.4	(s)	0.4	18.5	2.1	(s)	3.1	5.2	0.0	0.0	11.8	35.9	R 26.5	R 62.4
1990	0.4	0.0	0.4	17.3	1.7	(s)	2.9	4.6	e 1.8	e (s)	11.5	e 35.5	R 25.1	e 60.6
1991	0.3	0.0	0.3	18.9	2.1	(s)	2.5	4.6	1.9	(s)	11.8	37.5	25.7	63.2
1992	0.1	0.0	0.1	17.0	1.3	(s)	2.2	3.4	2.0	(s)	11.2	33.8	R 24.0	R 57.8
1993	0.1	0.0	0.1	20.7	1.6	(s)	2.0	3.6	1.8	(s)	12.3	38.5	25.9	64.4
1994	(s)	0.0	(s)	19.2	1.1	(s)	2.0	3.1	1.8	(s)	12.2	36.2	25.4	61.6
1995	0.1	0.0	0.1	20.2	1.5	(s)	1.7	3.2	2.0	(s)	12.4	37.9	25.9	63.8
1996	(s)	0.0	(s)	22.8	2.6	(s)	1.9	4.4	2.0	(s)	13.3	42.6	27.8	70.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 175. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Montana**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	20	0	20	12	297	466	89	135	2	989	0	688	-	1,711	-
1965	15	0	15	14	315	227	112	144	1	800	0	925	-	2,208	-
1970	8	0	8	19	283	94	157	220	1	755	0	1,187	-	2,877	-
1975	7	0	7	19	668	54	172	174	2	1,071	0	1,645	-	3,968	-
1980	9	0	9	14	346	0	146	92	7	591	0	2,094	-	5,092	-
1981	5	0	5	14	380	0	89	110	0	579	0	2,202	-	5,247	-
1982	6	0	6	16	183	0	130	127	5	445	0	2,339	-	5,618	-
1983	5	0	5	14	1,104	(s)	159	76	172	1,511	0	2,499	-	5,988	-
1984	4	0	4	14	1,128	(s)	75	61	105	1,370	0	4,874	-	11,344	-
1985	5	0	5	15	863	(s)	107	72	126	1,167	0	4,245	-	9,973	-
1986	14	0	14	13	403	7	113	76	37	636	0	4,456	-	10,250	-
1987	5	0	5	11	305	(s)	125	R 80	13	R 523	0	2,979	-	6,807	-
1988	6	0	6	12	199	(s)	126	76	9	410	0	3,202	-	7,239	-
1989	34	(s)	34	13	204	(s)	147	77	13	440	0	3,070	-	R 6,896	-
1990	37	0	37	12	153	(s)	143	R 84	11	R 391	e NA	3,237	-	R 7,079	-
1991	29	0	29	13	204	(s)	124	63	3	394	NA	3,326	-	R 7,238	-
1992	14	0	14	12	169	(s)	106	55	4	334	NA	3,396	-	R 7,253	-
1993	7	0	7	14	194	1	97	12	5	308	5	3,495	-	R 7,384	-
1994	3	0	3	13	189	1	95	15	3	304	5	3,657	-	R 7,630	-
1995	R 7	0	R 7	13	118	(s)	83	13	3	218	3	3,411	-	7,105	-
1996	3	0	3	15	308	(s)	92	19	3	422	9	3,603	-	7,500	-

**Trillion Btu**

1960	0.4	0.0	0.4	12.3	1.7	2.6	0.4	0.7	(s)	5.5	0.0	2.3	20.5	5.8	26.4
1965	0.3	0.0	0.3	14.1	1.8	1.3	0.5	0.8	(s)	4.3	0.0	3.2	21.9	7.5	29.5
1970	0.2	0.0	0.2	19.2	1.6	0.5	0.6	1.2	(s)	3.9	0.0	4.1	27.3	9.8	37.1
1975	0.1	0.0	0.1	19.0	3.9	0.3	0.6	0.9	(s)	5.8	0.0	5.6	30.5	13.5	44.1
1980	0.2	0.0	0.2	14.4	2.0	0.0	0.5	0.5	(s)	3.1	0.0	7.1	24.8	17.4	42.2
1981	0.1	0.0	0.1	13.8	2.2	0.0	0.3	0.6	0.0	3.1	0.0	7.5	24.6	17.9	42.5
1982	0.1	0.0	0.1	16.1	1.1	0.0	0.5	0.7	(s)	2.2	0.0	8.0	26.5	19.2	45.6
1983	0.1	0.0	0.1	13.6	6.4	(s)	0.6	0.4	1.1	8.5	0.0	8.5	30.7	20.4	51.2
1984	0.1	0.0	0.1	14.3	6.6	(s)	0.3	0.3	0.7	7.8	0.0	16.6	38.8	38.7	77.5
1985	0.1	0.0	0.1	14.8	5.0	(s)	0.4	0.4	0.8	6.6	0.0	14.5	36.0	34.0	70.0
1986	0.3	0.0	0.3	12.5	2.3	(s)	0.4	0.4	0.2	3.4	0.0	15.2	31.4	35.0	66.4
1987	0.1	0.0	0.1	11.2	1.8	(s)	0.5	0.4	0.1	2.7	0.0	10.2	24.2	23.2	47.4
1988	0.1	0.0	0.1	12.3	1.2	(s)	0.5	0.4	0.1	2.1	0.0	10.9	25.4	24.7	50.1
1989	0.7	(s)	0.7	13.4	1.2	(s)	0.5	0.4	0.1	2.2	0.0	10.5	26.8	23.5	R 50.3
1990	0.7	0.0	0.7	12.5	0.9	(s)	0.5	0.4	0.1	1.9	e NA	11.0	26.1	R 24.2	50.3
1991	0.5	0.0	0.5	13.2	1.2	(s)	0.4	0.3	(s)	2.0	NA	11.3	27.1	24.7	R 51.8
1992	0.2	0.0	0.2	11.8	1.0	(s)	0.4	0.3	(s)	1.7	NA	11.6	25.3	24.7	50.1
1993	0.1	0.0	0.1	14.1	1.1	(s)	0.3	0.1	(s)	1.6	0.1	11.9	R 27.9	25.2	R 53.1
1994	(s)	0.0	(s)	13.3	1.1	(s)	0.3	0.1	(s)	1.6	0.1	12.5	R 27.5	26.0	R 53.5
1995	0.1	0.0	0.1	13.9	0.7	(s)	0.3	0.1	(s)	1.1	0.1	11.6	R 26.8	24.2	R 51.1
1996	(s)	0.0	(s)	15.3	1.8	(s)	0.3	0.1	(s)	2.2	0.2	12.3	30.0	25.6	55.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 176. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Montana**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	36	26	865	1,500	11	112	23	816	1,684	1,635	6,647	0	0	0	2,951	-	7,341	-
1965	52	34	1,003	1,693	21	164	41	887	914	2,531	7,255	0	0	0	3,939	-	9,406	-
1970	28	41	1,347	1,274	282	246	46	635	1,123	3,155	8,107	0	0	0	6,029	-	14,610	-
1975	50	34	924	2,494	68	174	46	774	1,963	3,410	9,853	0	0	0	5,160	-	12,447	-
1980	154	20	1,020	1,925	0	786	51	619	4,018	3,007	11,426	0	0	0	5,815	-	14,140	-
1981	276	17	1,035	1,943	26	382	49	663	2,494	2,721	9,314	0	0	0	5,848	-	13,938	-
1982	222	14	884	1,396	0	551	45	632	1,603	2,534	7,644	0	0	0	4,759	-	11,431	-
1983	169	14	1,130	3,173	3	383	47	509	1,132	2,422	8,798	0	0	0	4,217	-	10,103	-
1984	164	12	1,215	3,241	3	R 461	50	558	692	2,691	R 8,911	0	0	0	5,631	-	13,107	-
1985	225	10	1,463	5,798	(s)	814	46	677	7	2,581	11,386	0	0	0	5,841	-	13,722	-
1986	319	9	1,989	2,124	2	696	45	637	10	2,657	8,160	0	0	0	6,150	-	14,147	-
1987	192	10	1,642	1,802	7	844	51	R 574	10	3,392	R 8,322	0	0	0	6,304	-	14,405	-
1988	215	10	1,473	1,619	2	626	50	R 575	212	3,801	R 8,359	0	0	0	6,438	-	14,555	-
1989	197	12	1,749	2,783	2	578	51	631	169	3,913	9,875	0	0	0	6,535	-	R 14,679	-
1990	220	12	1,487	2,749	7	R 717	52	R 615	209	4,255	R 10,092	f NA	f NA	f NA	6,529	-	R 14,281	-
1991	281	12	1,350	3,559	2	178	47	611	143	3,714	9,603	NA	NA	NA	6,622	-	R 14,413	-
1992	251	14	1,309	2,589	(s)	279	48	572	86	4,725	9,608	NA	NA	NA	6,414	-	R 13,701	-
1993	367	15	1,707	2,737	(s)	1,513	49	567	684	4,171	11,427	NA	NA	NA	5,837	-	R 12,332	-
1994	572	16	1,964	2,275	(s)	360	51	603	371	4,497	R 10,121	NA	NA	NA	5,961	-	R 12,437	-
1995	622	20	1,293	2,645	(s)	333	50	646	237	4,462	9,666	NA	NA	NA	6,368	-	13,264	-
1996	131	21	1,702	3,461	(s)	1,032	48	663	181	5,050	12,137	NA	NA	NA	6,306	-	13,124	-

**Trillion Btu**

1960	0.8	27.0	5.7	8.7	0.1	0.5	0.1	4.3	10.6	9.8	39.8	0.0	0.0	0.0	10.1	77.7	25.0	102.7
1965	1.2	34.3	6.7	9.9	0.1	0.7	0.3	4.7	5.7	15.2	43.2	0.0	0.0	0.0	13.4	92.1	32.1	124.2
1970	0.6	42.5	8.9	7.4	1.6	0.9	0.3	3.3	7.1	19.0	48.5	0.0	0.0	0.0	20.6	112.2	49.8	162.1
1975	1.0	34.6	6.1	14.5	0.4	0.6	0.3	4.1	12.3	20.5	58.9	0.0	0.0	0.0	17.6	112.1	42.5	154.6
1980	2.9	20.3	6.8	11.2	0.0	2.9	0.3	3.3	25.3	18.1	67.8	0.0	0.0	0.0	19.8	110.9	48.2	159.1
1981	5.4	17.5	6.9	11.3	0.1	1.4	0.3	3.5	15.7	16.8	56.0	0.0	0.0	0.0	20.0	98.7	47.6	146.3
1982	4.3	13.7	5.9	8.1	0.0	2.0	0.3	3.3	10.1	15.6	45.3	0.0	0.0	0.0	16.2	79.6	39.0	118.6
1983	3.3	13.9	7.5	18.5	(s)	1.4	0.3	2.7	7.1	14.8	52.3	0.0	0.0	0.0	14.4	83.8	34.5	118.3
1984	3.1	12.0	8.1	18.9	(s)	1.7	0.3	2.9	4.3	16.4	52.6	0.0	0.0	0.0	19.2	86.9	44.7	131.6
1985	4.1	10.3	9.7	33.8	(s)	2.9	0.3	3.6	(s)	15.9	66.2	0.0	0.0	0.0	19.9	100.5	46.8	147.3
1986	5.7	9.3	13.2	12.4	(s)	2.5	0.3	3.3	0.1	16.4	48.2	0.0	0.0	0.0	21.0	84.2	48.3	132.4
1987	3.4	10.1	10.9	10.5	(s)	3.1	0.3	3.0	0.1	20.7	48.6	0.0	0.0	0.0	21.5	83.6	49.1	132.8
1988	3.9	10.6	9.8	9.4	(s)	2.3	0.3	3.0	1.3	23.0	49.2	0.0	0.0	0.0	22.0	85.7	49.7	135.3
1989	3.6	11.9	11.6	16.2	(s)	2.1	0.3	3.3	1.1	23.6	58.2	0.0	0.0	0.0	22.3	96.0	R 50.1	R 146.1
1990	4.0	12.0	9.9	16.0	(s)	2.6	0.3	3.2	1.3	25.6	59.0	f 0.5	f 5.1	f 0.0	22.3	f 102.9	R 48.7	f 151.6
1991	5.2	11.9	9.0	20.7	(s)	0.6	0.3	3.2	0.9	22.5	57.2	0.5	4.9	0.0	22.6	102.3	R 49.2	R 151.5
1992	4.7	14.4	8.7	15.1	(s)	1.0	0.3	3.0	0.5	28.4	57.0	0.5	5.1	0.0	21.9	103.6	R 46.7	R 150.4
1993	6.8	15.3	11.3	15.9	(s)	5.5	0.3	3.0	4.3	25.2	65.5	0.7	5.1	0.0	19.9	113.3	42.1	155.4
1994	10.5	16.6	13.0	13.3	(s)	1.3	0.3	3.2	2.3	27.1	60.5	0.6	R 6.4	0.0	20.3	R 114.8	42.4	R 157.2
1995	11.2	21.0	8.6	15.4	(s)	1.2	0.3	3.4	1.5	26.9	57.3	0.5	R 6.4	0.0	21.7	R 118.1	45.3	R 163.4
1996	2.4	21.1	11.3	20.2	(s)	3.7	0.3	3.5	1.1	30.4	70.5	0.6	6.8	0.0	21.5	122.9	44.8	167.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 177. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Montana**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	1	(s)	1,006	2,839	265	29	137	5,972	377	10,624	0	0	-	0	-
1965	(s)	(s)	312	2,676	384	13	148	6,678	325	10,536	0	0	-	0	-
1970	(s)	1	43	3,020	649	36	154	8,407	119	12,428	0	0	-	0	-
1975	(s)	2	79	3,835	818	50	162	9,682	160	14,786	0	0	-	0	-
1980	0	3	159	4,759	920	45	196	9,705	0	15,786	0	0	-	0	-
1981	0	2	177	3,834	800	52	188	10,024	0	15,075	0	0	-	0	-
1982	0	2	92	3,866	625	29	172	9,671	0	14,454	0	0	-	0	-
1983	0	2	102	4,106	652	54	180	9,940	3	15,036	0	0	-	0	-
1984	0	2	77	4,540	642	69	192	9,831	2	15,352	0	0	-	0	-
1985	0	2	91	4,273	678	51	179	R 9,439	(s)	0	0	0	-	0	-
1986	0	2	105	4,101	867	55	175	9,445	0	14,748	0	0	-	0	-
1987	0	2	82	4,157	718	R 39	197	R 9,604	0	R 14,798	0	0	-	0	-
1988	0	2	107	4,192	809	48	190	R 9,789	0	R 15,137	0	0	-	0	-
1989	0	2	95	4,266	750	53	195	R 9,602	0	R 14,962	0	0	-	0	-
1990	0	2	111	4,169	708	67	201	R 9,630	0	R 14,885	R e 594	0	-	0	-
1991	0	2	108	4,161	615	48	180	R 9,687	0	R 14,798	R 471	0	-	0	-
1992	0	3	75	4,705	864	35	183	R 10,100	0	R 15,963	R 573	0	-	0	-
1993	0	4	64	4,758	901	43	187	R 10,421	0	R 16,373	R 639	0	-	0	-
1994	0	4	75	5,559	855	58	195	R 10,479	0	R 17,221	0	0	-	0	-
1995	0	4	78	5,856	1,052	28	192	10,669	0	17,875	R 698	0	-	0	-
1996	0	3	99	5,570	999	16	186	11,070	0	17,941	0	0	-	0	-

  

Trillion Btu															
1960	(s)	0.5	5.1	16.5	1.4	0.1	0.8	31.4	2.4	57.7	0.0	0.0	58.2	0.0	58.2
1965	(s)	0.4	1.6	15.6	2.1	0.1	0.9	35.1	2.0	57.3	0.0	0.0	57.8	0.0	57.8
1970	(s)	0.7	0.2	17.6	3.6	0.1	0.9	44.2	0.7	67.4	0.0	0.0	68.1	0.0	68.1
1975	(s)	1.8	0.4	22.3	4.6	0.2	1.0	50.9	1.0	80.4	0.0	0.0	82.1	0.0	82.1
1980	0.0	2.9	0.8	27.7	5.2	0.2	1.2	51.0	0.0	86.0	0.0	0.0	88.9	0.0	88.9
1981	0.0	2.1	0.9	22.3	4.5	0.2	1.1	52.7	0.0	81.7	0.0	0.0	83.8	0.0	83.8
1982	0.0	2.3	0.5	22.5	3.5	0.1	1.0	50.8	0.0	78.4	0.0	0.0	80.8	0.0	80.8
1983	0.0	1.7	0.5	23.9	3.7	0.2	1.1	52.2	(s)	81.6	0.0	0.0	83.3	0.0	83.3
1984	0.0	1.9	0.4	26.4	3.6	0.2	1.2	51.6	(s)	83.5	0.0	0.0	85.4	0.0	85.4
1985	0.0	2.2	0.5	24.9	3.8	0.2	1.1	49.6	(s)	80.0	0.0	0.0	82.2	0.0	82.2
1986	0.0	2.1	0.5	23.9	4.8	0.2	1.1	49.6	0.0	80.1	0.0	0.0	82.2	0.0	82.2
1987	0.0	2.0	0.4	24.2	4.0	0.1	1.2	R 50.4	0.0	R 80.5	0.0	0.0	R 82.5	0.0	R 82.5
1988	0.0	2.3	0.5	24.4	4.5	0.2	1.2	R 51.4	0.0	R 82.2	0.0	0.0	R 84.5	0.0	R 84.5
1989	0.0	2.5	0.5	24.8	4.2	0.2	1.2	50.4	0.0	81.3	0.0	0.0	83.8	0.0	83.8
1990	0.0	2.1	0.6	24.3	4.0	0.2	1.2	R 50.6	0.0	R 80.9	R e (s)	0.0	R e 83.0	0.0	R e 83.0
1991	0.0	2.4	0.5	24.2	3.5	0.2	1.1	50.9	0.0	80.4	R (s)	0.0	82.8	0.0	82.8
1992	0.0	3.1	0.4	27.4	4.8	0.1	1.1	53.1	0.0	86.9	R (s)	0.0	90.0	0.0	90.0
1993	0.0	3.8	0.3	27.7	5.0	0.2	1.1	54.7	0.0	89.1	R (s)	0.0	92.9	0.0	92.9
1994	0.0	3.6	0.4	32.4	4.8	0.2	1.2	R 55.0	0.0	94.0	0.0	0.0	97.6	0.0	97.6
1995	0.0	4.1	0.4	34.1	5.9	0.1	1.2	56.0	0.0	97.7	R 0.1	0.0	101.7	0.0	101.7
1996	0.0	3.5	0.5	32.4	5.7	0.1	1.1	58.2	0.0	97.9	0.0	0.0	101.5	0.0	101.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 178. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Montana**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	187	0	187	(s)	(s)	(s)	0	(s)	0	5,800	0	0	0	--
1965	296	0	296	2	1	(s)	0	1	0	8,388	37	0	0	--
1970	723	0	723	3	26	(s)	0	26	0	8,744	73	0	0	--
1975	1,089	0	1,089	1	53	1	0	54	0	10,164	14	0	0	--
1980	3,352	0	3,352	4	0	59	0	59	0	9,963	17	0	0	--
1981	3,338	0	3,338	2	0	39	0	39	0	11,321	34	0	0	--
1982	2,596	0	2,596	(s)	0	31	0	31	0	10,918	28	0	0	--
1983	2,356	0	2,356	(s)	0	31	0	31	0	11,559	39	0	0	--
1984	5,113	0	5,113	(s)	0	78	0	78	0	11,110	57	0	(s)	--
1985	5,480	0	5,480	(s)	0	38	0	38	0	10,244	59	0	(s)	--
1986	7,438	0	7,438	(s)	0	25	0	25	0	10,855	61	0	(s)	--
1987	7,530	0	7,530	(s)	0	44	0	44	0	8,951	49	0	0	--
1988	10,410	0	10,410	(s)	0	63	0	63	0	8,240	55	0	0	--
1989	10,208	0	10,208	(s)	0	60	0	60	0	9,565	72	0	0	--
1990	9,399	0	9,399	(s)	0	63	0	63	0	10,711	75	0	0	--
1991	10,223	0	10,223	(s)	0	41	0	41	0	11,944	62	0	0	--
1992	10,768	0	10,768	(s)	0	35	0	35	0	8,254	79	0	(s)	--
1993	8,869	0	8,869	(s)	0	48	0	48	0	9,575	78	0	0	--
1994	10,513	0	10,513	1	0	42	0	42	0	8,171	42	0	0	--
1995	9,373	0	9,373	(s)	0	53	0	53	0	10,727	0	0	0	--
1996	7,897	0	7,897	(s)	0	41	0	41	0	13,776	0	0	0	--

**Trillion Btu**

1960	2.5	0.0	2.5	0.4	(s)	(s)	0.0	(s)	0.0	62.4	0.0	0.0	0.0	65.3
1965	3.9	0.0	3.9	2.0	(s)	(s)	0.0	(s)	0.0	87.7	0.4	0.0	0.0	94.0
1970	11.2	0.0	11.2	2.6	0.2	(s)	0.0	0.2	0.0	91.8	0.8	0.0	0.0	106.5
1975	17.4	0.0	17.4	1.2	0.3	(s)	0.0	0.3	0.0	105.8	0.1	0.0	0.0	124.8
1980	57.0	0.0	57.0	4.4	0.0	0.3	0.0	0.3	0.0	103.5	0.2	0.0	0.0	165.4
1981	57.0	0.0	57.0	2.2	0.0	0.2	0.0	0.2	0.0	118.3	0.4	0.0	0.0	178.2
1982	44.2	0.0	44.2	0.4	0.0	0.2	0.0	0.2	0.0	114.1	0.3	0.0	0.0	159.2
1983	39.3	0.0	39.3	0.4	0.0	0.2	0.0	0.2	0.0	121.6	0.4	0.0	0.0	161.9
1984	87.0	0.0	87.0	0.4	0.0	0.5	0.0	0.5	0.0	116.0	0.6	0.0	(s)	204.5
1985	94.8	0.0	94.8	0.6	0.0	0.2	0.0	0.2	0.0	107.0	0.6	0.0	(s)	203.3
1986	127.2	0.0	127.2	0.5	0.0	0.1	0.0	0.1	0.0	113.4	0.6	0.0	(s)	241.9
1987	129.4	0.0	129.4	0.6	0.0	0.3	0.0	0.3	0.0	93.3	0.5	0.0	0.0	224.0
1988	177.4	0.0	177.4	0.3	0.0	0.4	0.0	0.4	0.0	85.1	0.6	0.0	0.0	263.7
1989	173.7	0.0	173.7	0.4	0.0	0.4	0.0	0.4	0.0	R 89.8	R 0.8	0.0	0.0	R 275.0
1990	161.0	0.0	161.0	0.5	0.0	0.4	0.0	0.4	0.0	R 111.4	0.8	0.0	0.0	R 274.1
1991	174.2	0.0	174.2	0.3	0.0	0.2	0.0	0.2	0.0	R 124.5	0.6	0.0	0.0	R 300.0
1992	184.7	0.0	184.7	0.3	0.0	0.2	0.0	0.2	0.0	R 85.3	0.8	0.0	(s)	R 271.4
1993	150.7	0.0	150.7	0.3	0.0	0.3	0.0	0.3	0.0	R 98.7	0.8	0.0	0.0	R 250.8
1994	178.7	0.0	178.7	0.7	0.0	0.2	0.0	0.2	0.0	R 84.2	0.4	0.0	0.0	R 264.8
1995	159.7	0.0	159.7	0.4	0.0	0.3	0.0	0.3	0.0	110.5	0.0	0.0	0.0	271.1
1996	133.3	0.0	133.3	0.5	0.0	0.2	0.0	0.2	0.0	142.4	0.0	0.0	0.0	276.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 179. Energy Consumption Estimates by Source, Selected Years 1960-1996, Nebraska**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	889	136	780	371	4,151	1,202	677	2,650	424	14,998	415	59	25,729	0	959	48	0	-536	-	
1965	896	166	655	410	3,689	1,371	790	3,407	425	15,745	332	50	26,875	-5	1,116	0	0	2,652	-	
1970	1,283	222	1,137	199	7,449	1,783	582	5,616	479	18,525	793	94	36,656	0	1,371	0	0	7,502	-	
1975	1,595	219	754	141	8,507	1,679	554	5,740	492	20,636	1,092	145	39,740	5,916	1,213	0	0	-3,822	-	
1980	4,990	163	719	213	9,149	1,588	62	4,499	389	19,100	228	146	36,093	5,783	1,336	0	0	-5,079	-	
1981	5,459	138	671	214	8,200	1,466	87	4,023	373	18,333	70	152	33,589	5,988	1,197	0	0	-3,810	-	
1982	5,399	138	736	123	9,253	1,453	93	4,788	340	18,261	191	68	35,308	8,753	1,212	0	0	-11,669	-	
1983	5,928	129	668	119	11,547	1,482	76	4,818	356	17,905	105	74	37,150	6,082	1,346	0	0	-2,394	-	
1984	6,939	134	631	107	11,986	1,385	109	2,118	380	17,871	70	74	34,729	5,780	1,345	0	0	-5,200	-	
1985	6,653	126	473	96	12,384	1,357	74	2,590	354	R 17,737	62	75	R 35,203	4,134	1,441	0	0	2,271	-	
1986	6,288	105	954	117	12,051	1,353	168	2,449	346	17,757	252	277	35,725	7,658	1,678	0	0	-8,000	-	
1987	6,744	109	1,241	90	12,299	1,373	104	3,218	391	R 17,885	265	282	R 37,149	8,589	1,567	0	0	-11,817	-	
1988	8,057	122	1,262	96	13,995	1,505	76	3,500	377	R 18,609	412	290	R 40,121	6,828	1,350	0	0	-9,257	-	
1989	7,587	120	1,130	93	12,432	1,488	22	3,622	387	R 18,427	376	286	R 38,263	8,077	1,158	0	0	R -9,917	-	
1990	8,266	111	1,388	83	12,455	1,501	41	2,912	398	R 18,451	260	316	R 37,806	7,511	i NA	i NA	i NA	R -11,416	-	
1991	8,859	116	1,418	84	13,022	1,192	17	3,167	356	R 17,801	200	26	R 37,285	8,048	NA	NA	NA	R -13,172	-	
1992	8,212	107	898	81	14,091	1,198	20	3,225	363	R 17,951	187	28	R 38,042	8,748	NA	NA	NA	R -14,971	-	
1993	9,666	126	797	72	14,049	1,157	24	2,984	370	R 18,029	278	30	R 37,791	6,805	NA	NA	NA	R -13,252	-	
1994	9,300	127	1,031	76	15,692	1,259	21	3,080	387	R 18,043	215	31	R 39,834	6,345	NA	NA	NA	R -8,076	-	
1995	10,396	136	929	77	15,558	1,001	17	3,020	380	19,302	123	31	R 40,435	7,485	NA	NA	NA	R -14,941	-	
1996	10,379	133	1,771	75	17,033	1,007	19	3,485	369	19,474	170	37	43,441	9,457	NA	NA	NA	-19,714	-	
Trillion Btu																				
1960	20.0	140.4	5.2	1.9	24.2	6.4	3.8	10.6	2.6	78.8	2.6	0.4	136.5	0.0	10.3	0.5	0.0	-1.8	305.9	
1965	20.8	164.7	4.3	2.1	21.5	7.4	4.5	13.7	2.6	82.7	2.1	0.3	141.1	-0.1	11.7	0.0	0.0	9.0	347.3	
1970	29.7	224.1	7.5	1.0	43.4	9.8	3.3	21.2	2.9	97.3	5.0	0.6	192.0	0.0	14.4	0.0	0.0	25.6	485.8	
1975	32.9	217.5	5.0	0.7	49.6	9.2	3.1	21.3	3.0	108.4	6.9	0.9	208.1	65.2	12.6	0.0	0.0	-13.0	523.2	
1980	93.9	159.5	4.8	1.1	53.3	8.7	0.4	16.5	2.4	100.3	1.4	0.9	189.7	63.1	13.9	0.0	0.0	-17.3	502.7	
1981	98.6	135.3	4.4	1.1	47.8	8.0	0.5	14.7	2.3	96.3	0.4	0.9	176.4	66.0	12.5	0.0	0.0	-13.0	475.8	
1982	96.7	135.6	4.9	0.6	53.9	7.9	0.5	17.3	2.1	95.9	1.2	0.4	184.8	96.9	12.7	0.0	0.0	-39.8	486.9	
1983	104.8	127.0	4.4	0.6	67.3	8.1	0.4	17.4	2.2	94.1	0.7	0.4	195.6	66.3	14.2	0.0	0.0	-8.2	499.6	
1984	124.3	131.9	4.2	0.5	69.8	7.6	0.6	7.6	2.3	93.9	0.4	0.4	187.4	62.7	14.0	0.0	0.0	-17.7	502.5	
1985	115.5	123.9	3.1	0.5	72.1	7.4	0.4	9.3	2.1	93.2	0.4	0.4	R 189.1	44.7	15.1	0.0	0.0	7.8	495.9	
1986	109.9	104.0	6.3	0.6	70.2	7.4	1.0	8.9	2.1	93.3	1.6	1.5	192.9	82.7	17.5	0.0	0.0	-27.3	479.7	
1987	116.5	107.7	8.2	0.5	71.6	7.5	0.6	11.8	2.4	R 94.0	1.7	1.5	R 199.7	92.6	16.3	0.0	0.0	-40.3	R 492.5	
1988	139.3	119.9	8.4	0.5	81.5	8.2	0.4	12.8	2.3	R 97.8	2.6	1.6	R 216.0	73.4	13.9	0.0	0.0	-31.6	R 531.0	
1989	132.0	118.7	7.5	0.5	72.4	8.2	0.1	13.3	2.3	96.8	2.4	1.6	R 205.1	86.6	R 12.1	0.0	0.0	R -33.8	R 520.6	
1990	142.0	109.2	9.2	0.4	72.6	8.3	0.2	10.6	2.4	R 96.9	1.6	1.7	R 204.0	80.2	R i 11.9	R i 7.4	i (s)	-39.0	R i 513.3	
1991	152.0	114.0	9.4	0.4	75.9	6.6	0.1	11.4	2.2	93.5	1.3	0.1	200.9	86.4	R 10.9	R 7.1	(s)	R -44.9	R 524.4	
1992	140.9	104.6	6.0	0.4	82.1	6.6	0.1	11.7	2.2	94.3	1.2	0.2	204.7	93.4	11.1	R 7.8	(s)	-51.1	R 509.2	
1993	166.1	123.0	5.3	0.4	81.8	6.4	0.1	10.8	2.2	94.7	1.7	0.2	R 203.7	72.7	10.3	R 7.5	(s)	-45.2	R 535.5	
1994	R 160.3	124.8	6.8	0.4	91.4	7.0	0.1	11.2	2.3	94.8	1.4	0.2	R 215.6	67.7	13.5	R 7.6	(s)	-27.6	R 560.3	
1995	R 179.4	133.7	6.2	0.4	90.6	5.7	0.1	10.9	2.3	101.4	0.8	0.2	218.5	79.8	14.7	R 8.2	(s)	-51.0	R 581.3	
1996	179.0	133.8	11.8	0.4	99.2	5.7	0.1	12.6	2.2	102.3	1.1	0.2	235.6	100.5	16.6	7.6	(s)	-67.3	604.4	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 180. Residential Energy Consumption Estimates, Selected Years 1960-1996, Nebraska**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	76	0	76	39	140	337	1,790	2,267	0	0	1,907	—	4,744	—
1965	21	0	21	48	111	453	2,545	3,110	0	0	2,816	—	6,723	—
1970	13	0	13	58	196	379	3,889	4,464	0	0	4,107	—	9,953	—
1975	3	0	3	54	173	372	3,143	3,688	0	0	4,693	—	11,321	—
1980	7	0	7	49	360	10	1,406	1,775	0	0	5,521	—	13,425	—
1981	6	0	6	44	385	29	1,312	1,726	0	0	5,601	—	13,350	—
1982	9	0	9	51	366	29	1,437	1,832	0	0	5,845	—	14,039	—
1983	19	1	20	47	248	46	1,709	2,003	0	0	6,438	—	15,425	—
1984	32	0	32	48	268	69	766	1,102	0	0	6,268	—	14,589	—
1985	4	0	4	47	340	40	998	1,379	0	0	6,195	—	14,554	—
1986	1	0	1	42	283	19	889	1,190	0	0	6,325	—	14,549	—
1987	1	0	1	39	202	13	1,221	1,436	0	0	6,378	—	14,574	—
1988	16	0	16	44	199	16	1,195	1,410	0	0	6,813	—	15,403	—
1989	2	0	2	45	249	8	1,210	1,467	0	0	6,723	—	15,102	R
1990	1	0	1	41	169	4	978	1,151	e 201	e 2	6,800	—	14,872	R
1991	3	2	5	45	197	5	1,227	1,430	212	2	7,138	—	15,537	R
1992	2	1	3	41	145	10	1,245	1,401	223	2	6,561	—	14,015	R
1993	2	0	2	48	168	11	1,171	1,349	186	3	7,226	—	15,267	R
1994	2	0	2	44	161	5	1,090	1,256	182	4	7,379	—	15,397	R
1995	3	0	3	45	95	4	1,173	1,272	202	4	7,597	—	15,824	—
1996	0	1	1	49	115	4	1,396	1,514	202	4	7,741	—	16,111	—

  

Trillion Btu														
1960	1.6	0.0	1.6	40.9	0.8	1.9	7.2	9.9	0.0	0.0	6.5	58.9	16.2	75.1
1965	0.4	0.0	0.4	47.2	0.6	2.6	10.2	13.4	0.0	0.0	9.6	70.7	22.9	93.6
1970	0.3	0.0	0.3	58.8	1.1	2.1	14.7	18.0	0.0	0.0	14.0	91.0	34.0	125.0
1975	0.1	0.0	0.1	53.6	1.0	2.1	11.7	14.8	0.0	0.0	16.0	84.5	38.6	123.1
1980	0.1	0.0	0.1	47.9	2.1	0.1	5.2	7.3	0.0	0.0	18.8	74.2	45.8	120.0
1981	0.1	0.0	0.1	43.0	2.2	0.2	4.8	7.2	0.0	0.0	19.1	69.4	45.5	114.9
1982	0.2	0.0	0.2	50.4	2.1	0.2	5.2	7.5	0.0	0.0	19.9	78.0	47.9	125.9
1983	0.4	(s)	0.4	46.4	1.4	0.3	6.2	7.9	0.0	0.0	22.0	76.7	52.6	129.3
1984	0.7	0.0	0.7	46.9	1.6	0.4	2.8	4.7	0.0	0.0	21.4	73.7	49.8	123.5
1985	0.1	0.0	0.1	45.8	2.0	0.2	3.6	5.8	0.0	0.0	21.1	72.9	49.7	122.5
1986	(s)	0.0	(s)	42.0	1.6	0.1	3.2	5.0	0.0	0.0	21.6	68.6	49.6	118.3
1987	(s)	0.0	(s)	38.3	1.2	0.1	4.5	5.7	0.0	0.0	21.8	65.8	49.7	115.5
1988	0.3	0.0	0.3	42.8	1.2	0.1	4.4	5.6	0.0	0.0	23.2	71.9	52.6	124.5
1989	(s)	0.0	(s)	44.2	1.5	(s)	4.5	6.0	0.0	0.0	22.9	73.2	51.5	124.7
1990	(s)	0.0	(s)	40.8	1.0	(s)	3.5	4.6	e 4.0	e (s)	23.2	e 72.7	50.7	e 123.4
1991	0.1	(s)	0.1	44.0	1.1	(s)	4.4	5.6	4.2	(s)	24.4	78.3	53.0	R 131.4
1992	(s)	(s)	0.1	40.6	0.8	0.1	4.5	5.4	4.5	(s)	22.4	72.9	47.8	120.7
1993	(s)	0.0	(s)	47.0	1.0	0.1	4.2	5.3	3.7	(s)	24.7	80.7	52.1	132.8
1994	0.1	0.0	0.1	43.7	0.9	(s)	4.0	4.9	3.6	(s)	25.2	77.5	52.5	130.1
1995	0.1	0.0	0.1	44.1	0.6	(s)	4.2	4.8	4.0	(s)	25.9	79.0	54.0	133.0
1996	0.0	(s)	(s)	49.3	0.7	(s)	5.0	5.7	4.0	(s)	26.4	85.5	55.0	140.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 181. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Nebraska**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	142	0	142	22	140	65	316	84	43	649	0	1,269	-	3,157	-
1965	39	0	39	26	112	87	449	95	84	827	0	2,025	-	4,835	-
1970	24	0	24	47	197	73	686	110	241	1,307	0	3,505	-	8,493	-
1975	6	0	6	43	174	71	555	120	159	1,079	0	3,660	-	8,829	-
1980	12	0	12	43	181	21	248	149	23	622	0	4,068	-	9,892	-
1981	10	0	10	41	339	10	231	154	17	751	0	4,524	-	10,782	-
1982	18	0	18	43	298	14	254	131	101	797	0	4,665	-	11,205	-
1983	36	(s)	36	39	832	6	302	120	0	1,260	0	4,886	-	11,705	-
1984	59	0	59	42	898	10	135	95	0	1,139	0	5,643	-	13,134	-
1985	8	0	8	39	800	12	176	158	0	1,146	0	5,714	-	13,425	-
1986	3	0	3	36	333	8	157	142	0	640	0	5,798	-	13,336	-
1987	3	0	3	34	354	4	216	139	(s)	713	0	5,956	-	13,608	-
1988	29	0	29	39	299	2	211	R 134	13	659	0	6,342	-	14,337	-
1989	3	0	3	37	228	3	214	R 126	43	613	0	6,473	-	R 14,540	-
1990	3	0	3	36	247	23	173	R 155	20	R 618	e NA	6,451	-	R 14,108	-
1991	5	1	6	40	183	3	217	100	27	529	NA	6,777	-	R 14,751	-
1992	3	1	3	34	270	1	220	92	41	624	NA	6,470	-	R 13,820	-
1993	3	0	3	35	306	4	207	21	19	557	8	6,560	-	R 13,861	-
1994	5	0	5	39	362	5	192	21	19	600	10	7,149	-	R 14,916	-
1995	6	0	6	40	175	4	207	21	1	408	5	7,494	-	R 15,611	-
1996	0	(s)	(s)	41	234	4	246	21	0	505	7	7,563	-	15,742	-

**Trillion Btu**

1960	3.0	0.0	3.0	22.7	0.8	0.4	1.3	0.4	0.3	3.2	0.0	4.3	33.2	10.8	43.9
1965	0.8	0.0	0.8	25.3	0.7	0.5	1.8	0.5	0.5	4.0	0.0	6.9	37.0	16.5	53.5
1970	0.5	0.0	0.5	47.2	1.1	0.4	2.6	0.6	1.5	6.2	0.0	12.0	65.9	29.0	94.9
1975	0.1	0.0	0.1	43.0	1.0	0.4	2.1	0.6	1.0	5.1	0.0	12.5	60.7	30.1	90.8
1980	0.2	0.0	0.2	42.5	1.1	0.1	0.9	0.8	0.1	3.0	0.0	13.9	59.6	33.8	93.4
1981	0.2	0.0	0.2	39.8	2.0	0.1	0.8	0.8	0.1	3.8	0.0	15.4	59.2	36.8	96.0
1982	0.3	0.0	0.3	42.2	1.7	0.1	0.9	0.7	0.6	4.1	0.0	15.9	62.5	38.2	100.7
1983	0.7	(s)	0.8	38.4	4.8	(s)	1.1	0.6	0.0	6.6	0.0	16.7	62.4	39.9	102.3
1984	1.3	0.0	1.3	41.1	5.2	0.1	0.5	0.5	0.0	6.3	0.0	19.3	67.9	44.8	112.7
1985	0.2	0.0	0.2	38.7	4.7	0.1	0.6	0.8	0.0	6.2	0.0	19.5	64.6	45.8	110.4
1986	0.1	0.0	0.1	36.1	1.9	(s)	0.6	0.7	0.0	3.3	0.0	19.8	59.3	45.5	104.8
1987	0.1	0.0	0.1	33.7	2.1	(s)	0.8	0.7	(s)	3.6	0.0	20.3	57.7	46.4	104.1
1988	0.5	0.0	0.5	38.7	1.7	(s)	0.8	0.7	0.1	3.3	0.0	21.6	64.2	48.9	113.1
1989	0.1	0.0	0.1	36.9	1.3	(s)	0.8	0.7	0.3	3.1	0.0	22.1	62.1	R 49.6	R 111.7
1990	0.1	0.0	0.1	35.9	1.4	0.1	0.6	0.8	0.1	3.1	e NA	22.0	61.1	R 48.1	R 109.3
1991	0.1	(s)	0.1	39.7	1.1	(s)	0.8	0.5	0.2	2.6	NA	23.1	65.5	R 50.3	R 115.9
1992	0.1	(s)	0.1	33.8	1.6	(s)	0.8	0.5	0.3	3.1	NA	22.1	59.0	R 47.2	106.2
1993	0.1	0.0	0.1	33.9	1.8	(s)	0.7	0.1	0.1	2.8	0.2	22.4	R 59.3	47.3	R 106.6
1994	0.1	0.0	0.1	38.4	2.1	(s)	0.7	0.1	0.1	3.1	0.2	24.4	R 66.1	50.9	R 117.0
1995	0.1	0.0	0.1	39.2	1.0	(s)	0.7	0.1	(s)	1.9	0.1	25.6	R 66.9	53.3	R 120.2
1996	0.0	(s)	(s)	41.1	1.4	(s)	0.9	0.1	0.0	2.4	0.1	25.8	69.5	53.7	123.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 182. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Nebraska**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	408	37	780	2,405	275	441	97	2,146	18	59	6,222	(s)	0	0	889	-	2,210	-
1965	349	48	655	1,956	250	314	130	1,790	32	50	5,177	(s)	0	0	1,182	-	2,821	-
1970	240	56	1,137	3,271	130	823	160	1,319	139	94	7,073	(s)	0	0	2,145	-	5,198	-
1975	308	74	754	3,234	111	1,811	193	1,644	137	145	8,030	0	0	0	3,200	-	7,718	-
1980	269	52	719	3,411	31	2,675	41	1,471	29	146	8,523	0	0	0	4,155	-	10,104	-
1981	376	43	671	3,068	48	2,271	40	1,356	37	152	7,642	0	0	0	3,881	-	9,249	-
1982	325	37	736	3,352	50	2,925	36	1,205	90	68	8,462	0	0	0	3,462	-	8,315	-
1983	216	37	668	3,550	23	2,601	38	1,094	104	74	8,153	0	0	0	3,665	-	8,780	-
1984	280	39	631	3,834	30	1,145	40	961	70	74	6,785	0	0	0	3,725	-	8,671	-
1985	261	33	473	4,292	22	1,359	38	1,392	62	75	R 7,713	0	0	0	3,794	-	8,913	-
1986	339	20	954	4,264	142	1,365	37	R 1,189	199	277	R 8,427	0	0	0	3,757	-	8,643	-
1987	312	30	1,241	3,880	87	1,732	41	R 1,248	206	282	R 8,717	0	0	0	3,851	-	8,799	-
1988	268	32	1,262	4,352	58	2,042	40	R 1,064	322	290	R 9,430	0	0	0	4,104	-	9,278	-
1989	279	31	1,130	3,996	11	2,133	41	R 1,059	271	286	R 8,927	0	0	0	4,370	-	R 9,816	-
1990	235	26	1,388	4,140	14	1,700	42	R 950	239	316	R 8,790	f NA	f NA	f NA	4,618	-	R 10,100	-
1991	324	25	1,418	4,654	9	R 1,659	38	940	170	26	8,915	NA	NA	NA	4,690	-	R 10,207	-
1992	325	26	898	4,915	8	R 1,713	39	825	146	28	8,571	NA	NA	NA	4,752	-	R 10,151	-
1993	364	39	797	4,922	9	1,559	39	696	259	30	8,312	NA	NA	NA	4,963	-	R 10,485	-
1994	414	37	1,031	5,884	10	1,726	41	734	196	31	R 9,652	NA	NA	NA	5,345	-	R 11,152	-
1995	339	45	929	5,131	9	1,617	40	759	122	31	8,638	NA	NA	NA	5,802	-	R 12,085	-
1996	287	36	1,771	4,668	12	1,823	39	773	170	37	9,292	NA	NA	NA	6,193	-	12,890	-

**Trillion Btu**

1960	9.0	38.3	5.2	14.0	1.6	1.8	0.6	11.3	0.1	0.4	34.8	(s)	0.0	0.0	3.0	85.1	7.5	92.7
1965	7.6	47.7	4.3	11.4	1.4	1.3	0.8	9.4	0.2	0.3	29.1	(s)	0.0	0.0	4.0	88.5	9.6	98.1
1970	4.9	56.9	7.5	19.1	0.7	3.1	1.0	6.9	0.9	0.6	39.8	(s)	0.0	0.0	7.3	108.9	17.7	126.7
1975	5.9	73.5	5.0	18.8	0.6	6.7	1.2	8.6	0.9	0.9	42.7	0.0	0.0	0.0	10.9	133.1	26.3	159.4
1980	5.2	50.9	4.8	19.9	0.2	9.8	0.3	7.7	0.2	0.9	43.7	0.0	0.0	0.0	14.2	113.9	34.5	148.4
1981	7.0	42.2	4.4	17.9	0.3	8.3	0.2	7.1	0.2	0.9	39.3	0.0	0.0	0.0	13.2	101.8	31.6	133.4
1982	6.1	36.4	4.9	19.5	0.3	10.6	0.2	6.3	0.6	0.4	42.8	0.0	0.0	0.0	11.8	97.1	28.4	125.4
1983	4.3	36.7	4.4	20.7	0.1	9.4	0.2	5.7	0.7	0.4	41.7	0.0	0.0	0.0	12.5	95.1	30.0	125.1
1984	5.4	37.9	4.2	22.3	0.2	4.1	0.2	5.0	0.4	0.4	37.0	0.0	0.0	0.0	12.7	93.0	29.6	122.6
1985	4.9	32.6	3.1	25.0	0.1	4.9	0.2	7.3	0.4	0.4	41.5	0.0	0.0	0.0	12.9	91.9	30.4	R 122.4
1986	6.3	20.3	6.3	24.8	0.8	5.0	0.2	6.2	1.3	1.5	46.2	0.0	0.0	0.0	12.8	85.6	29.5	115.1
1987	5.8	29.6	8.2	22.6	0.5	6.3	0.3	R 6.6	1.3	1.5	47.3	0.0	0.0	0.0	13.1	95.9	30.0	125.9
1988	5.0	31.8	8.4	25.3	0.3	7.5	0.2	5.6	2.0	1.6	51.0	0.0	0.0	0.0	14.0	101.8	31.7	133.4
1989	5.3	30.2	7.5	23.3	0.1	7.9	0.2	5.6	1.7	1.6	47.8	0.0	0.0	0.0	14.9	98.2	R 33.5	131.7
1990	4.5	25.4	9.2	24.1	0.1	6.2	0.3	5.0	1.5	1.7	48.0	f 0.0	f 1.0	f 0.0	15.8	f 94.6	R 34.5	R 129.1
1991	6.1	24.4	9.4	27.1	0.1	6.0	0.2	4.9	1.1	0.1	49.0	0.0	0.9	0.0	16.0	96.4	R 34.8	R 131.3
1992	6.0	25.9	6.0	28.6	(s)	6.2	0.2	4.3	0.9	0.2	46.5	0.0	0.9	0.0	16.2	95.6	34.6	130.2
1993	6.8	37.7	5.3	28.7	0.1	5.6	0.2	3.7	1.6	0.2	45.3	0.0	1.0	0.0	16.9	107.8	35.8	143.6
1994	7.9	36.5	6.8	34.3	0.1	6.3	0.2	3.9	1.2	0.2	53.0	0.0	R 1.9	0.0	18.2	R 117.5	R 38.1	R 155.5
1995	6.6	43.9	6.2	29.9	0.1	5.9	0.2	4.0	0.8	0.2	47.1	0.0	R 1.8	0.0	19.8	R 119.2	41.2	R 160.5
1996	5.4	36.4	11.8	27.2	0.1	6.6	0.2	4.1	1.1	0.2	51.2	0.0	2.0	0.0	21.1	116.1	44.0	160.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 183. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Nebraska**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	7	6	371	1,402	1,202	103	328	12,768	258	16,432	0	0	-	0	-
1965	1	9	410	1,439	1,371	99	295	13,861	109	17,583	0	0	-	0	-
1970	(s)	13	199	3,658	1,783	217	319	17,096	225	23,497	0	0	-	0	-
1975	(s)	10	141	4,618	1,679	231	299	18,871	138	25,976	0	0	-	0	-
1980	0	7	213	5,112	1,588	171	348	17,480	0	24,911	0	0	-	0	-
1981	0	6	214	4,329	1,466	210	334	16,823	3	23,377	0	0	-	0	-
1982	0	5	123	5,105	1,453	173	304	16,925	0	24,084	0	0	-	0	-
1983	0	4	119	6,838	1,482	206	318	16,691	0	25,654	0	0	-	0	-
1984	0	5	107	6,944	1,385	72	340	16,815	0	R 25,661	0	0	-	0	-
1985	0	6	96	6,890	1,357	57	317	R 16,187	0	R 24,903	0	0	-	0	-
1986	0	4	117	7,122	1,353	38	309	16,426	(s)	25,366	0	0	-	0	-
1987	0	4	90	7,831	1,373	50	350	R 16,498	(s)	R 26,191	0	0	-	0	-
1988	0	5	96	9,081	1,505	51	337	R 17,411	0	R 28,481	0	0	-	0	-
1989	0	5	93	7,911	1,488	R 66	346	R 17,242	0	R 27,145	0	0	-	0	-
1990	0	4	83	7,869	1,501	R 61	356	R 17,346	0	R 27,216	R e 31,603	0	-	0	-
1991	0	2	84	7,961	1,192	64	319	R 16,760	0	R 26,380	R 25,051	0	-	0	-
1992	0	3	81	8,737	1,198	R 47	325	R 17,034	0	R 27,422	R 30,447	0	-	0	-
1993	0	3	72	8,611	1,157	48	331	R 17,312	0	R 27,531	R 33,978	0	-	0	-
1994	0	3	76	9,240	1,259	72	346	R 17,288	0	R 28,281	R 22,719	0	-	0	-
1995	0	3	77	10,096	1,001	23	340	18,521	0	30,056	R 26,633	0	-	0	-
1996	0	5	75	11,970	1,007	20	330	18,679	0	32,082	17,267	0	-	0	-

  

Trillion Btu															
1960	0.2	6.5	1.9	8.2	6.4	0.4	2.0	67.1	1.6	87.6	0.0	0.0	94.2	0.0	94.2
1965	(s)	8.6	2.1	8.4	7.4	0.4	1.8	72.8	0.7	93.5	0.0	0.0	102.2	0.0	102.2
1970	(s)	13.2	1.0	21.3	9.8	0.8	1.9	89.8	1.4	126.1	0.0	0.0	139.3	0.0	139.3
1975	(s)	10.4	0.7	26.9	9.2	0.9	1.8	99.1	0.9	139.5	0.0	0.0	149.9	0.0	149.9
1980	0.0	6.9	1.1	29.8	8.7	0.6	2.1	91.8	0.0	134.1	0.0	0.0	141.0	0.0	141.0
1981	0.0	6.0	1.1	25.2	8.0	0.8	2.0	88.4	(s)	125.5	0.0	0.0	131.5	0.0	131.5
1982	0.0	5.1	0.6	29.7	7.9	0.6	1.8	88.9	0.0	129.7	0.0	0.0	134.8	0.0	134.8
1983	0.0	4.0	0.6	39.8	8.1	0.7	1.9	87.7	0.0	138.9	0.0	0.0	142.9	0.0	142.9
1984	0.0	4.5	0.5	40.5	7.6	0.3	2.1	88.3	0.0	139.2	0.0	0.0	143.8	0.0	143.8
1985	0.0	5.5	0.5	40.1	7.4	0.2	1.9	85.0	0.0	135.2	0.0	0.0	R 140.7	0.0	R 140.7
1986	0.0	3.9	0.6	41.5	7.4	0.1	1.9	86.3	(s)	137.8	0.0	0.0	141.7	0.0	141.7
1987	0.0	4.4	0.5	45.6	7.5	0.2	2.1	R 86.7	(s)	R 142.5	0.0	0.0	R 146.9	0.0	R 146.9
1988	0.0	4.6	0.5	52.9	8.2	0.2	2.0	R 91.5	0.0	R 155.3	0.0	0.0	R 159.9	0.0	R 159.9
1989	0.0	4.8	0.5	46.1	8.2	0.2	2.1	R 90.6	0.0	147.6	0.0	0.0	R 152.5	0.0	R 152.5
1990	0.0	3.5	0.4	45.8	8.3	0.2	2.2	R 91.1	0.0	R 148.0	R e 2.4	0.0	R e 151.5	0.0	R e 151.5
1991	0.0	2.3	0.4	46.4	6.6	0.2	1.9	88.0	0.0	143.6	R 1.9	0.0	145.9	0.0	145.9
1992	0.0	2.5	0.4	50.9	6.6	0.2	2.0	89.5	0.0	R 149.5	R 2.3	0.0	R 152.0	0.0	R 152.0
1993	0.0	2.5	0.4	50.2	6.4	0.2	2.0	90.9	0.0	R 150.1	R 2.6	0.0	152.5	0.0	152.5
1994	0.0	3.2	0.4	53.8	7.0	0.3	2.1	90.8	0.0	154.4	R 1.7	0.0	R 157.6	0.0	R 157.6
1995	0.0	3.3	0.4	58.8	5.7	0.1	2.1	97.3	0.0	164.3	R 2.0	0.0	167.6	0.0	167.6
1996	0.0	4.6	0.4	69.7	5.7	0.1	2.0	98.1	0.0	176.0	1.3	0.0	180.6	0.0	180.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 184. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Nebraska**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	256	0	256	31	96	64	0	160	0	959	48	0	0	--
1965	486	0	486	36	107	71	0	178	-5	1,115	0	0	0	--
1970	1,006	0	1,006	48	188	126	0	314	0	1,370	0	0	0	--
1975	1,278	0	1,278	38	658	308	0	967	5,916	1,213	0	0	0	--
1980	4,702	0	4,702	12	176	86	0	262	5,783	1,336	0	0	0	--
1981	5,067	0	5,067	5	13	80	0	93	5,988	1,197	0	0	0	--
1982	5,048	0	5,048	2	(s)	132	0	132	8,753	1,212	0	0	0	--
1983	5,656	0	5,656	2	(s)	80	0	80	6,082	1,346	0	0	0	--
1984	6,569	0	6,569	1	0	41	0	41	5,780	1,345	0	0	0	--
1985	6,380	0	6,380	1	0	62	0	62	4,134	1,441	0	0	0	--
1986	5,945	0	5,945	2	53	50	0	103	7,658	1,678	0	0	0	--
1987	6,428	0	6,428	2	59	33	0	92	8,589	1,567	0	0	0	--
1988	7,744	0	7,744	2	76	64	0	140	6,828	1,350	0	0	0	--
1989	7,303	0	7,303	3	61	49	0	110	8,077	1,158	0	0	0	--
1990	8,027	0	8,027	4	1	31	0	31	7,511	1,140	0	0	0	--
1991	8,524	0	8,524	4	3	27	0	30	8,048	1,045	0	0	0	--
1992	7,881	0	7,881	2	0	25	0	25	8,748	1,075	6	0	0	--
1993	9,297	0	9,297	2	0	42	0	42	6,805	1,002	6	0	0	--
1994	8,879	0	8,879	3	1	45	0	45	6,345	1,312	9	0	0	--
1995	10,048	0	10,048	3	0	61	0	61	7,485	1,426	16	0	0	--
1996	10,091	0	10,091	2	0	47	0	47	9,457	1,602	12	0	0	--

**Trillion Btu**

1960	6.3	0.0	6.3	32.1	0.6	0.4	0.0	1.0	0.0	10.3	0.5	0.0	0.0	50.2
1965	11.9	0.0	11.9	35.9	0.7	0.4	0.0	1.1	-0.1	11.7	0.0	0.0	0.0	60.6
1970	24.1	0.0	24.1	48.0	1.2	0.7	0.0	1.9	0.0	14.4	0.0	0.0	0.0	88.4
1975	26.8	0.0	26.8	37.0	4.1	1.8	0.0	5.9	65.2	12.6	0.0	0.0	0.0	147.5
1980	88.4	0.0	88.4	11.3	1.1	0.5	0.0	1.6	63.1	13.9	0.0	0.0	0.0	178.3
1981	91.3	0.0	91.3	4.3	0.1	0.5	0.0	0.5	66.0	12.5	0.0	0.0	0.0	174.7
1982	90.1	0.0	90.1	1.5	(s)	0.8	0.0	0.8	96.9	12.7	0.0	0.0	0.0	202.0
1983	99.4	0.0	99.4	1.5	(s)	0.5	0.0	0.5	66.3	14.2	0.0	0.0	0.0	181.8
1984	116.9	0.0	116.9	1.4	0.0	0.2	0.0	0.2	62.7	14.0	0.0	0.0	0.0	195.3
1985	110.4	0.0	110.4	1.2	0.0	0.4	0.0	0.4	44.7	15.1	0.0	0.0	0.0	171.7
1986	103.6	0.0	103.6	1.7	0.3	0.3	0.0	0.6	82.7	17.5	0.0	0.0	0.0	206.1
1987	110.6	0.0	110.6	1.7	0.4	0.2	0.0	0.6	92.6	16.3	0.0	0.0	0.0	221.7
1988	133.5	0.0	133.5	2.0	0.5	0.4	0.0	0.9	73.4	13.9	0.0	0.0	0.0	223.6
1989	126.5	0.0	126.5	2.5	0.4	0.3	0.0	0.7	86.6	R 12.1	0.0	0.0	0.0	R 228.4
1990	137.4	0.0	137.4	3.6	(s)	0.2	0.0	0.2	80.2	R 11.9	0.0	0.0	0.0	R 233.3
1991	145.6	0.0	145.6	3.5	(s)	0.2	0.0	0.2	86.4	R 10.9	0.0	0.0	0.0	R 246.6
1992	134.8	0.0	134.8	1.8	0.0	0.1	0.0	0.1	93.4	11.1	0.1	0.0	0.0	R 241.4
1993	159.2	0.0	159.2	1.8	0.0	0.2	0.0	0.2	72.7	10.3	0.1	0.0	0.0	244.3
1994	152.2	0.0	152.2	3.0	(s)	0.3	0.0	0.3	67.7	13.5	0.1	0.0	0.0	236.8
1995	172.7	0.0	172.7	3.1	0.0	0.4	0.0	0.4	79.8	14.7	0.2	0.0	0.0	270.8
1996	173.5	0.0	173.5	2.3	0.0	0.3	0.0	0.3	100.5	16.6	0.1	0.0	0.0	293.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 185. Energy Consumption Estimates by Source, Selected Years 1960-1996, Nevada**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>							Total
Thousand Barrels													Million Kilowatthours				Total <sup>h</sup>		
1960	151	12	247	281	2,409	2,462	3	773	92	3,621	246	0	10,134	0	1,967	0	0	-655	-
1965	309	28	367	335	2,775	2,999	5	720	121	5,504	137	0	12,963	0	1,595	0	0	1,603	-
1970	680	53	609	186	2,834	4,584	16	839	105	7,374	143	11	16,700	0	1,646	0	0	2,134	-
1975	4,521	61	837	197	2,565	5,859	29	493	120	9,633	1,339	0	21,070	0	1,690	0	0	-18,450	-
1980	4,215	58	614	206	3,966	7,223	0	880	108	11,224	2,439	53	26,715	0	2,372	0	0	-10,964	-
1981	5,076	73	498	186	3,490	7,030	72	835	104	11,559	285	28	24,088	0	1,729	0	0	-16,327	-
1982	6,617	47	663	122	3,525	6,722	18	976	95	11,311	236	32	23,699	0	1,420	0	0	-15,221	-
1983	6,289	42	751	110	5,292	6,748	57	975	99	11,288	104	43	25,467	0	4,094	0	0	-20,110	-
1984	6,948	42	750	98	5,565	5,927	52	793	106	11,558	219	43	25,112	0	5,613	0	0	-28,358	-
1985	5,539	39	844	105	5,410	5,715	53	1,043	99	R 11,627	165	36	R 25,097	0	4,374	0	0	-14,328	-
1986	7,195	34	567	124	5,517	5,952	52	924	97	R 12,211	641	36	R 26,120	0	4,584	0	0	-25,190	-
1987	6,920	41	864	101	6,507	6,431	35	938	109	R 13,075	525	44	R 28,630	0	2,545	0	0	-13,481	-
1988	8,276	48	931	120	6,809	6,416	28	1,098	105	R 14,059	1,004	56	R 30,627	0	2,091	0	0	-19,595	-
1989	7,667	64	1,398	118	7,450	6,105	26	1,762	108	R 14,570	667	58	R 32,263	0	1,931	0	0	R -14,312	-
1990	7,442	65	1,083	111	7,355	6,114	19	1,430	111	R 14,942	454	0	R 31,619	0	i NA	i NA	i NA	-8,888	-
1991	8,091	65	1,072	111	7,102	6,556	23	1,157	99	R 15,353	464	73	R 32,008	0	NA	NA	NA	R -13,202	-
1992	8,088	68	841	105	7,356	6,162	23	1,009	101	R 16,040	598	92	R 32,329	0	NA	NA	NA	R -10,282	-
1993	7,806	85	1,147	113	7,629	6,510	14	910	103	R 16,233	497	81	R 33,237	0	NA	NA	NA	R -4,771	-
1994	7,968	102	1,258	108	7,576	6,813	8	1,446	108	R 17,231	382	90	R 35,019	0	NA	NA	NA	R -5,553	-
1995	7,340	111	1,486	63	7,700	7,374	9	815	106	R 18,017	1,125	85	R 36,780	0	NA	NA	NA	R -433	-
1996	7,604	123	1,432	93	9,506	7,843	9	995	103	18,962	279	102	39,324	0	NA	NA	NA	161	-

  

Trillion Btu																			
1960	4.0	12.9	1.6	1.4	14.0	13.2	(s)	3.1	0.6	19.0	1.5	0.0	54.5	0.0	21.2	0.0	0.0	-2.2	90.3
1965	7.9	29.4	2.4	1.7	16.2	16.3	(s)	2.9	0.7	28.9	0.9	0.0	70.0	0.0	16.7	0.0	0.0	5.5	129.4
1970	17.3	56.9	4.0	0.9	16.5	25.3	0.1	3.2	0.6	38.7	0.9	0.1	90.4	0.0	17.3	0.0	0.0	7.3	189.1
1975	101.3	65.4	5.6	1.0	14.9	32.7	0.2	1.8	0.7	50.6	8.4	0.0	115.9	0.0	17.6	0.0	0.0	-63.0	237.2
1980	93.2	62.0	4.1	1.0	23.1	40.4	0.0	3.2	0.7	59.0	15.3	0.3	147.1	0.0	24.6	0.0	0.0	-37.4	289.6
1981	112.2	78.7	3.3	0.9	20.3	39.2	0.4	3.0	0.6	60.7	1.8	0.2	130.6	0.0	18.1	0.0	0.0	-55.7	283.9
1982	146.5	49.9	4.4	0.6	20.5	37.4	0.1	3.5	0.6	59.4	1.5	0.2	128.3	0.0	14.8	0.0	0.0	-51.9	287.6
1983	140.2	44.7	5.0	0.6	30.8	37.6	0.3	3.5	0.6	59.3	0.7	0.3	138.6	0.0	43.1	0.0	0.0	-68.6	298.0
1984	155.6	44.7	5.0	0.5	32.4	32.9	0.3	2.9	0.6	60.7	1.4	0.3	136.9	0.0	58.6	0.0	0.0	-96.8	299.1
1985	126.2	41.6	5.6	0.5	31.5	31.7	0.3	3.8	0.6	61.1	1.0	0.2	136.3	0.0	45.7	0.0	0.0	-48.9	300.9
1986	161.6	35.8	3.8	0.6	32.1	33.0	0.3	3.4	0.6	64.1	4.0	0.2	142.2	0.0	47.9	0.0	0.0	-85.9	301.5
1987	154.9	41.7	5.7	0.5	37.9	35.7	0.2	3.4	0.7	R 68.7	3.3	0.3	R 156.4	0.0	26.5	0.0	0.0	-46.0	R 333.5
1988	183.5	48.4	6.2	0.6	39.7	35.6	0.2	4.0	0.6	R 73.9	6.3	0.3	R 167.4	0.0	21.6	0.0	0.0	-66.9	R 354.0
1989	170.3	65.6	9.3	0.6	43.4	33.9	0.1	6.5	0.7	R 76.5	4.2	0.3	R 175.6	0.0	R 20.1	0.0	0.0	-48.8	R 382.7
1990	165.7	66.9	7.2	0.6	42.8	34.0	0.1	5.2	0.7	R 78.5	2.9	0.0	R 171.9	0.0	R i 18.0	R i 3.6	i 17.9	-30.3	R i 412.9
1991	180.1	66.9	7.1	0.6	41.4	36.5	0.1	4.2	0.6	80.6	2.9	0.4	R 174.5	0.0	R 24.6	R 3.5	20.9	-45.0	R 425.0
1992	178.9	70.5	5.6	0.5	42.9	34.4	0.1	3.7	0.6	84.3	3.8	0.6	R 176.3	0.0	R 20.8	R 3.8	25.5	-35.1	R 440.3
1993	172.2	87.8	7.6	0.6	44.4	36.5	0.1	3.3	0.6	R 85.3	3.1	0.5	182.0	0.0	R 20.6	R 4.3	33.3	-16.3	R 483.3
1994	180.1	105.4	8.3	0.5	44.1	38.6	(s)	5.3	0.7	90.5	2.4	0.5	191.1	0.0	R 19.4	R 3.8	34.3	R -18.9	R 515.1
1995	162.7	114.7	9.9	0.3	44.9	41.8	(s)	3.0	0.6	94.6	7.1	0.5	R 202.7	0.0	20.3	R 5.1	34.8	-1.5	R 538.1
1996	169.5	127.6	9.5	0.5	55.4	44.5	0.1	3.6	0.6	99.6	1.8	0.6	216.1	0.0	22.4	4.3	35.0	0.6	575.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 186. Residential Energy Consumption Estimates, Selected Years 1960-1996, Nevada**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	8	4	12	2	219	0	275	493	0	0	719	-	1,788	-
1965	22	3	25	4	286	0	519	805	0	0	1,268	-	3,029	-
1970	22	2	24	7	328	0	621	949	0	0	1,990	-	4,821	-
1975	3	1	3	11	265	0	316	581	0	0	2,803	-	6,762	-
1980	1	1	2	13	187	0	427	614	0	0	3,697	-	8,990	-
1981	2	1	3	13	151	36	404	590	0	0	3,501	-	8,344	-
1982	2	0	2	16	158	12	448	617	0	0	3,782	-	9,084	-
1983	1	0	1	11	218	43	529	790	0	0	3,662	-	8,772	-
1984	10	0	10	12	246	38	505	789	0	0	4,055	-	9,440	-
1985	1	0	1	13	284	47	650	982	0	0	4,126	-	9,693	-
1986	1	0	1	12	246	43	547	835	0	0	4,097	-	9,424	-
1987	1	0	1	14	325	20	523	869	0	0	4,537	-	10,366	-
1988	1	0	1	15	291	17	623	930	0	0	4,968	-	11,232	-
1989	1	0	1	17	252	14	852	1,119	0	0	5,169	-	R 11,610	-
1990	1	1	1	17	239	8	817	1,064	e 129	e 15	5,540	-	R 12,116	-
1991	1	0	1	19	221	10	733	965	135	17	5,782	-	R 12,584	-
1992	(s)	0	(s)	18	217	10	632	859	143	24	6,064	-	R 12,953	-
1993	1	0	1	21	179	11	623	813	148	25	6,281	-	R 13,270	-
1994	(s)	0	(s)	21	151	4	642	797	145	34	6,845	-	R 14,282	-
1995	(s)	0	(s)	21	130	6	509	644	161	45	6,655	-	R 13,863	-
1996	(s)	0	(s)	23	135	6	549	691	161	57	7,526	-	15,665	-

  

Trillion Btu														
1960	0.2	0.1	0.3	2.0	1.3	0.0	1.1	2.4	0.0	0.0	2.5	7.1	6.1	13.2
1965	0.6	0.1	0.6	4.4	1.7	0.0	2.1	3.7	0.0	0.0	4.3	13.1	10.3	23.4
1970	0.5	(s)	0.6	7.9	1.9	0.0	2.3	4.3	0.0	0.0	6.8	19.5	16.5	35.9
1975	0.1	(s)	0.1	11.8	1.5	0.0	1.2	2.7	0.0	0.0	9.6	24.2	23.1	47.3
1980	(s)	(s)	(s)	13.9	1.1	0.0	1.6	2.7	0.0	0.0	12.6	29.2	30.7	59.9
1981	(s)	(s)	0.1	14.1	0.9	0.2	1.5	2.6	0.0	0.0	11.9	28.7	28.5	57.2
1982	(s)	0.0	(s)	17.1	0.9	0.1	1.6	2.6	0.0	0.0	12.9	32.7	31.0	63.7
1983	(s)	0.0	(s)	12.2	1.3	0.2	1.9	3.4	0.0	0.0	12.5	28.1	29.9	58.1
1984	0.2	0.0	0.2	12.6	1.4	0.2	1.8	3.5	0.0	0.0	13.8	30.1	32.2	62.3
1985	(s)	0.0	(s)	13.4	1.7	0.3	2.3	4.3	0.0	0.0	14.1	31.7	33.1	64.8
1986	(s)	0.0	(s)	13.0	1.4	0.2	2.0	3.7	0.0	0.0	14.0	30.6	32.2	62.8
1987	(s)	0.0	(s)	14.2	1.9	0.1	1.9	3.9	0.0	0.0	15.5	33.6	35.4	69.0
1988	(s)	0.0	(s)	15.2	1.7	0.1	2.3	4.1	0.0	0.0	17.0	36.2	38.3	74.6
1989	(s)	0.0	(s)	17.3	1.5	0.1	3.1	4.7	0.0	0.0	17.6	39.6	39.6	R 79.3
1990	(s)	(s)	(s)	17.7	1.4	(s)	3.0	4.4	e 2.6	e 0.1	18.9	e 43.6	41.3	R e 85.0
1991	(s)	0.0	(s)	19.8	1.3	0.1	2.7	4.0	2.7	0.1	19.7	46.3	42.9	R 89.3
1992	(s)	0.0	(s)	18.8	1.3	0.1	2.3	3.6	2.9	0.1	20.7	46.0	44.2	90.2
1993	(s)	0.0	(s)	21.4	1.0	0.1	2.2	3.3	3.0	0.1	21.4	49.3	45.3	94.5
1994	(s)	0.0	(s)	22.0	0.9	(s)	2.3	3.2	2.9	0.1	23.4	51.6	48.7	100.4
1995	(s)	0.0	(s)	21.4	0.8	(s)	1.8	2.6	3.2	0.2	22.7	50.1	47.3	97.4
1996	(s)	0.0	(s)	23.5	0.8	(s)	2.0	2.8	3.2	0.2	25.7	55.4	53.4	108.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 187. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Nevada**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	15	3	18	1	107	0	48	29	86	271	0	655	-	1,629	-
1965	42	2	43	2	140	1	92	44	38	316	0	1,235	-	2,950	-
1970	41	1	42	10	161	10	110	49	29	358	0	2,069	-	5,013	-
1975	5	1	5	15	130	12	56	69	34	301	0	2,876	-	6,938	-
1980	2	(s)	2	10	353	0	75	61	7	496	0	1,775	-	4,316	-
1981	4	(s)	4	8	332	18	71	68	25	514	0	2,035	-	4,851	-
1982	3	0	3	8	77	6	79	73	11	245	0	1,906	-	4,578	-
1983	2	0	2	12	348	3	93	129	11	584	0	1,954	-	4,681	-
1984	18	0	18	12	393	4	89	202	27	716	0	3,183	-	7,410	-
1985	1	0	1	12	324	5	115	82	25	551	0	3,408	-	8,006	-
1986	1	0	1	11	492	5	96	83	14	690	0	3,454	-	7,945	-
1987	1	0	1	14	714	4	92	85	11	907	0	3,737	-	8,539	-
1988	1	0	1	15	455	8	110	81	5	R 659	0	4,032	-	9,114	-
1989	1	0	1	15	379	5	150	81	2	617	0	4,295	-	R 9,648	-
1990	1	(s)	2	15	349	4	144	84	2	R 583	e NA	4,550	-	R 9,951	-
1991	1	0	1	17	294	3	129	78	2	507	NA	4,671	-	R 10,167	-
1992	1	0	1	16	297	4	112	69	(s)	483	NA	4,909	-	R 10,485	-
1993	1	0	1	18	608	3	110	12	0	734	17	5,037	-	R 10,643	-
1994	1	0	1	19	528	2	113	12	0	656	15	5,417	-	R 11,302	-
1995	1	0	1	19	614	1	90	13	0	717	18	5,509	-	R 11,475	-
1996	1	0	1	20	672	2	97	13	0	783	20	5,973	-	12,432	-

  

Trillion Btu															
1960	0.4	0.1	0.4	0.9	0.6	0.0	0.2	0.2	0.5	1.5	0.0	2.2	5.1	5.6	10.7
1965	1.0	(s)	1.1	2.5	0.8	(s)	0.4	0.2	0.2	1.7	0.0	4.2	9.5	10.1	19.6
1970	1.0	(s)	1.0	10.4	0.9	0.1	0.4	0.3	0.2	1.8	0.0	7.1	20.3	17.1	37.4
1975	0.1	(s)	0.1	16.0	0.8	0.1	0.2	0.4	0.2	1.6	0.0	9.8	27.5	23.7	51.2
1980	(s)	(s)	0.1	10.7	2.1	0.0	0.3	0.3	(s)	2.7	0.0	6.1	19.5	14.7	34.3
1981	0.1	(s)	0.1	8.9	1.9	0.1	0.3	0.4	0.2	2.8	0.0	6.9	18.8	16.6	35.3
1982	0.1	0.0	0.1	9.0	0.4	(s)	0.3	0.4	0.1	1.2	0.0	6.5	16.8	15.6	32.5
1983	(s)	0.0	(s)	12.5	2.0	(s)	0.3	0.7	0.1	3.1	0.0	6.7	22.4	16.0	38.4
1984	0.4	0.0	0.4	12.7	2.3	(s)	0.3	1.1	0.2	3.9	0.0	10.9	27.8	25.3	53.1
1985	(s)	0.0	(s)	13.0	1.9	(s)	0.4	0.4	0.2	2.9	0.0	11.6	27.6	27.3	54.9
1986	(s)	0.0	(s)	12.1	2.9	(s)	0.4	0.4	0.1	3.8	0.0	11.8	27.7	27.1	54.8
1987	(s)	0.0	(s)	13.8	4.2	(s)	0.3	0.4	0.1	5.0	0.0	12.8	31.6	29.1	60.8
1988	(s)	0.0	(s)	14.8	2.7	(s)	0.4	0.4	(s)	3.6	0.0	13.8	32.2	31.1	63.3
1989	(s)	0.0	(s)	15.6	2.2	(s)	0.6	0.4	(s)	3.2	0.0	14.7	33.5	32.9	66.4
1990	(s)	(s)	(s)	15.5	2.0	(s)	0.5	0.4	(s)	3.0	e NA	15.5	34.1	R 34.0	68.1
1991	(s)	0.0	(s)	17.6	1.7	(s)	0.5	0.4	(s)	2.6	NA	15.9	36.2	34.7	70.8
1992	(s)	0.0	(s)	16.7	1.7	(s)	0.4	0.4	(s)	2.5	NA	16.7	35.9	35.8	71.7
1993	(s)	0.0	(s)	18.2	3.5	(s)	0.4	0.1	0.0	4.0	0.3	17.2	R 39.8	36.3	R 76.1
1994	(s)	0.0	(s)	19.4	3.1	(s)	0.4	0.1	0.0	3.6	0.3	18.5	R 41.7	38.6	R 80.3
1995	(s)	0.0	(s)	19.4	3.6	(s)	0.3	0.1	0.0	4.0	0.4	18.8	R 42.5	R 39.2	R 81.6
1996	(s)	0.0	(s)	21.2	3.9	(s)	0.4	0.1	0.0	4.3	0.4	20.4	46.4	42.4	88.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 188. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Nevada**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	119	3	247	575	3	445	18	120	118	0	1,527	(s)	0	0	793	-	1,974	-
1965	61	8	367	740	4	101	36	131	40	0	1,419	(s)	0	0	1,059	-	2,529	-
1970	70	10	609	840	6	99	23	166	34	11	1,788	(s)	0	0	1,635	-	3,963	-
1975	77	10	837	705	17	107	26	115	44	0	1,852	0	0	0	1,964	-	4,737	-
1980	147	7	614	651	0	374	25	111	1	53	1,830	0	0	0	4,936	-	12,003	-
1981	192	7	498	584	18	349	24	112	40	28	1,652	0	0	0	4,777	-	11,385	-
1982	209	6	663	539	0	428	22	141	21	32	1,847	0	0	0	4,880	-	11,721	-
1983	171	9	751	1,530	11	328	23	73	67	43	2,825	0	0	0	4,849	-	11,618	-
1984	109	9	750	1,729	9	157	25	65	169	43	2,947	0	0	0	3,737	-	8,698	-
1985	110	6	844	1,540	1	247	23	131	88	36	2,910	0	0	0	3,808	-	8,946	-
1986	107	3	567	1,555	4	259	22	138	123	36	2,703	0	0	0	4,103	-	9,439	-
1987	111	6	864	1,637	11	305	25	R 154	90	44	3,130	0	0	0	4,480	-	10,236	-
1988	121	7	931	2,355	3	344	24	145	124	56	3,981	0	0	0	4,685	-	10,591	-
1989	178	8	1,398	2,966	7	740	25	148	64	58	5,406	0	0	0	5,504	-	R 12,362	-
1990	169	8	1,083	3,257	7	446	26	R 170	8	0	R 4,997	f NA	f NA	f NA	6,263	-	R 13,698	-
1991	197	7	1,072	2,984	9	273	23	179	82	73	4,694	NA	NA	NA	6,173	-	R 13,435	-
1992	173	9	841	3,000	10	241	23	172	80	92	4,459	NA	NA	NA	6,723	-	R 14,360	-
1993	196	25	1,147	2,596	1	151	24	140	101	81	4,241	NA	NA	NA	7,181	-	R 15,172	-
1994	195	29	1,258	2,531	1	647	25	191	141	90	4,884	NA	NA	NA	7,775	-	R 16,222	-
1995	255	31	1,486	2,547	2	197	25	201	1,099	85	5,641	NA	NA	NA	8,496	-	R 17,697	-
1996	179	33	1,432	2,695	2	326	24	206	131	102	4,918	NA	NA	NA	9,075	-	18,887	-

**Trillion Btu**

1960	3.2	3.4	1.6	3.3	(s)	1.8	0.1	0.6	0.7	0.0	8.3	(s)	0.0	0.0	2.7	17.6	6.7	24.3
1965	1.6	8.4	2.4	4.3	(s)	0.4	0.2	0.7	0.3	0.0	8.3	(s)	0.0	0.0	3.6	21.9	8.6	30.5
1970	1.7	11.2	4.0	4.9	(s)	0.4	0.1	0.9	0.2	0.1	10.6	(s)	0.0	0.0	5.6	29.1	13.5	42.7
1975	1.8	10.7	5.6	4.1	0.1	0.4	0.2	0.6	0.3	0.0	11.2	0.0	0.0	0.0	6.7	30.4	16.2	46.6
1980	3.4	7.7	4.1	3.8	0.0	1.4	0.2	0.6	(s)	0.3	10.3	0.0	0.0	0.0	16.8	38.3	41.0	79.2
1981	4.4	7.6	3.3	3.4	0.1	1.3	0.1	0.6	0.2	0.2	9.2	0.0	0.0	0.0	16.3	37.6	38.8	76.5
1982	4.9	6.6	4.4	3.1	0.0	1.5	0.1	0.7	0.1	0.2	10.3	0.0	0.0	0.0	16.7	38.4	40.0	78.4
1983	3.9	9.7	5.0	8.9	0.1	1.2	0.1	0.4	0.4	0.3	16.4	0.0	0.0	0.0	16.5	46.5	39.6	86.2
1984	2.5	9.4	5.0	10.1	0.1	0.6	0.1	0.3	1.1	0.3	17.5	0.0	0.0	0.0	12.8	42.2	29.7	71.8
1985	2.6	6.6	5.6	9.0	(s)	0.9	0.1	0.7	0.6	0.2	17.1	0.0	0.0	0.0	13.0	39.2	30.5	69.7
1986	2.5	3.7	3.8	9.1	(s)	0.9	0.1	0.7	0.8	0.2	15.6	0.0	0.0	0.0	14.0	35.8	32.2	68.0
1987	2.6	6.2	5.7	9.5	0.1	1.1	0.2	0.8	0.6	0.3	18.2	0.0	0.0	0.0	15.3	42.4	34.9	77.3
1988	2.8	7.2	6.2	13.7	(s)	1.3	0.1	0.8	0.8	0.3	23.2	0.0	0.0	0.0	16.0	49.2	36.1	85.3
1989	3.8	8.1	9.3	17.3	(s)	2.7	0.2	0.8	0.4	0.3	31.0	0.0	0.0	0.0	18.8	61.7	R 42.2	103.8
1990	3.9	7.7	7.2	19.0	(s)	1.6	0.2	0.9	(s)	0.0	28.9	f 0.0	f 0.3	f 17.8	21.4	f 80.1	f 46.7	f 126.8
1991	4.6	6.9	7.1	17.4	0.1	1.0	0.1	0.9	0.5	0.4	27.6	0.0	0.3	20.8	21.1	81.2	45.8	127.0
1992	4.0	9.6	5.6	17.5	0.1	0.9	0.1	0.9	0.5	0.6	26.1	(s)	0.3	25.4	22.9	88.4	49.0	R 137.4
1993	4.5	25.6	7.6	15.1	(s)	0.5	0.1	0.7	0.6	0.5	25.3	0.1	0.3	33.2	24.5	113.6	R 51.8	165.4
1994	4.5	29.9	8.3	14.7	(s)	2.4	0.2	1.0	0.9	0.5	28.0	0.1	R 0.6	34.2	26.5	R 124.0	R 55.4	R 179.3
1995	5.8	31.7	9.9	14.8	(s)	0.7	0.1	1.1	6.9	0.5	34.0	0.2	R 0.6	34.7	29.0	R 136.0	60.4	R 196.4
1996	4.0	33.9	9.5	15.7	(s)	1.2	0.1	1.1	0.8	0.6	29.1	0.2	0.6	34.9	31.0	133.7	64.4	198.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 189. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Nevada**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	2	0	281	1,501	2,462	5	73	3,472	0	7,795	0	0	-	0	-
1965	(s)	0	335	1,599	2,999	9	86	5,329	7	10,364	0	0	-	0	-
1970	(s)	0	186	1,492	4,584	9	83	7,158	1	13,512	0	0	-	0	-
1975	(s)	0	197	1,407	5,859	13	94	9,449	5	17,023	0	0	-	0	-
1980	0	(s)	206	2,754	7,223	3	83	11,052	0	21,322	0	0	-	0	-
1981	0	(s)	186	2,399	7,030	12	80	11,379	0	21,086	0	0	-	0	-
1982	0	(s)	122	2,714	6,722	21	73	11,097	0	20,749	0	0	-	0	-
1983	0	(s)	110	3,152	6,748	25	76	11,086	3	21,201	0	0	-	0	-
1984	0	(s)	98	3,156	5,927	43	81	11,291	2	20,598	0	0	-	0	-
1985	0	(s)	105	3,209	5,715	31	76	R 11,414	0	R 20,549	0	0	-	0	-
1986	0	(s)	124	3,197	5,952	22	74	R 11,990	3	R 21,363	0	0	-	0	-
1987	0	(s)	101	3,796	6,431	18	84	R 12,836	0	R 23,265	0	0	-	0	-
1988	0	(s)	120	3,639	6,416	22	81	R 13,834	0	R 24,111	0	0	-	0	-
1989	0	1	118	3,786	6,105	20	83	R 14,341	0	R 24,452	0	0	-	0	-
1990	0	1	111	3,420	6,114	R 22	85	R 14,688	0	R 24,440	R e 8,926	0	-	0	-
1991	0	(s)	111	3,536	6,556	21	76	R 15,096	0	R 25,395	R 7,075	0	-	0	-
1992	0	(s)	105	3,776	6,162	24	78	R 15,799	0	R 25,944	R 8,599	0	-	0	-
1993	0	1	113	4,206	6,510	26	79	R 16,080	0	R 27,015	R 9,596	0	-	0	-
1994	0	1	108	4,320	6,813	43	83	R 17,028	0	R 28,395	0	0	-	0	-
1995	0	1	63	4,383	7,374	19	81	R 17,803	0	R 29,724	R 12,496	0	-	0	-
1996	0	1	93	5,974	7,843	23	79	18,743	0	32,755	0	0	-	0	-

**Trillion Btu**

1960	0.1	0.0	1.4	8.7	13.2	(s)	0.4	18.2	0.0	42.1	0.0	0.0	42.1	0.0	42.1
1965	(s)	0.0	1.7	9.3	16.3	(s)	0.5	28.0	(s)	55.9	0.0	0.0	55.9	0.0	55.9
1970	(s)	0.0	0.9	8.7	25.3	(s)	0.5	37.6	(s)	73.1	0.0	0.0	73.1	0.0	73.1
1975	(s)	0.0	1.0	8.2	32.7	(s)	0.6	49.6	(s)	92.1	0.0	0.0	92.1	0.0	92.1
1980	0.0	0.2	1.0	16.0	40.4	(s)	0.5	58.1	0.0	116.0	0.0	0.0	116.2	0.0	116.2
1981	0.0	0.5	0.9	14.0	39.2	(s)	0.5	59.8	0.0	114.5	0.0	0.0	114.9	0.0	114.9
1982	0.0	0.3	0.6	15.8	37.4	0.1	0.4	58.3	0.0	112.7	0.0	0.0	113.0	0.0	113.0
1983	0.0	0.1	0.6	18.4	37.6	0.1	0.5	58.2	(s)	115.3	0.0	0.0	115.4	0.0	115.4
1984	0.0	0.1	0.5	18.4	32.9	0.2	0.5	59.3	(s)	111.7	0.0	0.0	111.8	0.0	111.8
1985	0.0	0.1	0.5	18.7	31.7	0.1	0.5	R 60.0	0.0	111.4	0.0	0.0	111.5	0.0	111.5
1986	0.0	(s)	0.6	18.6	33.0	0.1	0.4	63.0	(s)	115.8	0.0	0.0	115.9	0.0	115.9
1987	0.0	0.2	0.5	22.1	35.7	0.1	0.5	R 67.4	0.0	R 126.3	0.0	0.0	R 126.5	0.0	R 126.5
1988	0.0	0.2	0.6	21.2	35.6	0.1	0.5	R 72.7	0.0	R 130.6	0.0	0.0	R 130.8	0.0	R 130.8
1989	0.0	0.7	0.6	22.1	33.9	0.1	0.5	75.3	0.0	R 132.5	0.0	0.0	133.2	0.0	133.2
1990	0.0	0.8	0.6	19.9	34.0	0.1	0.5	R 77.2	0.0	R 132.3	R e 0.7	0.0	R e 133.1	0.0	R e 133.1
1991	0.0	0.4	0.6	20.6	36.5	0.1	0.5	79.3	0.0	137.5	R 0.5	0.0	R 137.9	0.0	R 137.9
1992	0.0	0.5	0.5	22.0	34.4	0.1	0.5	83.0	0.0	140.5	R 0.7	0.0	141.0	0.0	141.0
1993	0.0	0.7	0.6	24.5	36.5	0.1	0.5	R 84.5	0.0	146.6	R 0.7	0.0	147.3	0.0	147.3
1994	0.0	0.7	0.5	25.2	38.6	0.2	0.5	R 89.4	0.0	R 154.4	0.0	0.0	155.2	0.0	155.2
1995	0.0	0.9	0.3	25.5	41.8	0.1	0.5	R 93.5	0.0	R 161.7	R 1.0	0.0	R 162.6	0.0	R 162.6
1996	0.0	0.8	0.5	34.8	44.5	0.1	0.5	98.5	0.0	178.8	0.0	0.0	179.5	0.0	179.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 190. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Nevada**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	0	0	0	6	41	7	0	48	0	1,967	0	0	0	--
1965	180	0	180	13	51	8	0	60	0	1,594	0	0	0	--
1970	544	0	544	25	80	13	0	93	0	1,645	0	0	0	--
1975	4,435	0	4,435	25	1,256	58	0	1,314	0	1,690	0	0	0	--
1980	4,064	0	4,064	28	2,431	22	0	2,453	0	2,372	0	0	0	--
1981	4,877	0	4,877	44	221	24	0	245	0	1,729	0	0	0	--
1982	6,403	0	6,403	16	204	37	0	241	0	1,420	0	0	0	--
1983	6,115	0	6,115	10	24	44	0	68	0	4,094	0	0	0	--
1984	6,811	0	6,811	9	21	41	0	62	0	5,613	0	0	0	--
1985	5,427	0	5,427	8	51	54	0	104	0	4,374	0	0	0	--
1986	7,086	0	7,086	7	501	26	0	527	0	4,584	0	0	0	--
1987	6,807	0	6,807	7	424	35	0	459	0	2,545	0	0	0	--
1988	8,153	0	8,153	11	875	69	0	945	0	2,091	0	0	0	--
1989	7,487	0	7,487	23	601	68	0	669	0	1,931	0	0	0	--
1990	7,270	0	7,270	24	444	91	0	535	0	1,732	0	0	0	--
1991	7,892	0	7,892	22	380	67	0	447	0	2,364	0	0	0	--
1992	7,914	0	7,914	24	518	67	0	584	0	2,012	0	0	0	--
1993	7,608	0	7,608	21	396	40	0	436	0	1,985	0	0	0	--
1994	7,772	0	7,772	32	241	46	0	287	0	1,873	0	0	0	--
1995	7,084	0	7,084	40	26	27	0	54	0	1,951	0	0	0	--
1996	7,424	0	7,424	47	147	30	0	177	0	2,143	0	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	6.6	0.3	(s)	0.0	0.3	0.0	21.2	0.0	0.0	0.0	28.0
1965	4.6	0.0	4.6	14.1	0.3	(s)	0.0	0.4	0.0	16.7	0.0	0.0	0.0	35.7
1970	14.0	0.0	14.0	27.4	0.5	0.1	0.0	0.6	0.0	17.3	0.0	0.0	0.0	59.2
1975	99.3	0.0	99.3	26.8	7.9	0.3	0.0	8.2	0.0	17.6	0.0	0.0	0.0	151.9
1980	89.7	0.0	89.7	29.5	15.3	0.1	0.0	15.4	0.0	24.6	0.0	0.0	0.0	159.3
1981	107.6	0.0	107.6	47.6	1.4	0.1	0.0	1.5	0.0	18.1	0.0	0.0	0.0	174.8
1982	141.5	0.0	141.5	16.8	1.3	0.2	0.0	1.5	0.0	14.8	0.0	0.0	0.0	174.6
1983	136.2	0.0	136.2	10.2	0.1	0.3	0.0	0.4	0.0	43.1	0.0	0.0	0.0	189.9
1984	152.4	0.0	152.4	10.0	0.1	0.2	0.0	0.4	0.0	58.6	0.0	0.0	0.0	221.4
1985	123.6	0.0	123.6	8.6	0.3	0.3	0.0	0.6	0.0	45.7	0.0	0.0	0.0	178.5
1986	159.1	0.0	159.1	6.9	3.1	0.2	0.0	3.3	0.0	47.9	0.0	0.0	0.0	217.2
1987	152.2	0.0	152.2	7.3	2.7	0.2	0.0	2.9	0.0	26.5	0.0	0.0	0.0	188.9
1988	180.7	0.0	180.7	10.9	5.5	0.4	0.0	5.9	0.0	21.6	0.0	0.0	0.0	219.1
1989	166.5	0.0	166.5	23.8	3.8	0.4	0.0	4.2	0.0	R 20.1	0.0	0.0	0.0	R 214.6
1990	161.7	0.0	161.7	25.1	2.8	0.5	0.0	3.3	0.0	R 18.0	0.0	0.0	0.0	R 208.1
1991	175.5	0.0	175.5	22.3	2.4	0.4	0.0	2.8	0.0	R 24.6	0.0	0.0	0.0	R 225.2
1992	174.9	0.0	174.9	25.0	3.3	0.4	0.0	3.6	0.0	R 20.8	0.0	0.0	0.0	224.4
1993	167.6	0.0	167.6	21.9	2.5	0.2	0.0	2.7	0.0	R 20.5	0.0	0.0	0.0	R 212.8
1994	175.5	0.0	175.5	33.3	1.5	0.3	0.0	1.8	0.0	R 19.3	0.0	0.0	0.0	R 230.0
1995	156.9	0.0	156.9	41.3	0.2	0.2	0.0	0.3	0.0	20.1	0.0	0.0	0.0	218.8
1996	165.4	0.0	165.4	48.1	0.9	0.2	0.0	1.1	0.0	22.2	0.0	0.0	0.0	236.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 191. Energy Consumption Estimates by Source, Selected Years 1960-1996, New Hampshire**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	216	3	470	18	4,590	1,151	843	532	97	4,940	2,195	22	14,856	0	1,373	0	0	-1,500	-	
1965	407	4	424	46	5,912	1,097	758	657	84	5,773	2,416	29	17,195	0	1,053	0	0	-692	-	
1970	992	7	541	38	7,681	1,053	777	829	72	8,122	5,520	170	24,802	0	1,239	0	0	-3,659	-	
1975	982	8	431	33	7,194	916	463	1,436	70	9,373	4,611	181	24,707	0	1,251	0	0	1,442	-	
1980	1,093	9	253	40	5,820	777	340	1,280	83	9,382	5,692	434	24,103	0	1,027	0	0	1,383	-	
1981	900	10	350	30	5,301	585	215	1,216	80	9,256	4,919	199	22,150	0	1,361	0	0	2,443	-	
1982	1,028	10	368	25	5,072	637	248	1,318	73	9,151	3,837	153	20,882	0	1,250	0	0	4,743	-	
1983	1,091	10	391	26	4,516	574	225	1,325	76	9,405	3,843	144	20,526	0	1,353	0	0	4,563	-	
1984	1,263	11	968	20	4,794	820	166	1,207	81	10,035	4,997	153	23,241	0	1,255	0	0	3,407	-	
1985	1,481	11	854	24	5,243	521	902	1,586	76	R 10,340	3,442	153	R 23,141	0	2,023	0	0	3,441	-	
1986	933	10	553	38	5,781	620	380	1,680	74	R 11,130	7,082	130	R 27,467	0	2,091	0	0	4,409	-	
1987	1,176	12	779	28	7,541	644	466	2,056	84	R 11,846	5,499	135	R 29,077	0	2,163	0	0	5,638	-	
1988	1,229	13	430	37	6,804	725	492	2,084	81	R 12,320	6,351	139	R 29,464	0	1,844	0	0	5,252	-	
1989	1,183	14	742	33	7,559	759	538	2,470	83	R 12,285	6,186	137	R 30,791	0	1,428	0	0	R 7,061	-	
1990	1,186	14	1,198	21	6,325	647	266	2,122	85	R 11,778	5,252	145	R 27,839	4,081	i NA	i NA	i NA	R -5,544	-	
1991	1,315	14	659	26	6,353	468	322	1,652	76	R 12,135	4,006	122	R 25,819	6,788	NA	NA	NA	R -14,499	-	
1992	1,311	17	791	19	6,612	378	293	1,761	78	R 12,111	3,763	126	R 25,931	7,869	NA	NA	NA	R -16,536	-	
1993	1,428	17	320	43	6,721	388	395	2,123	79	R 12,494	4,105	127	R 26,836	9,047	NA	NA	NA	R -22,013	-	
1994	1,287	20	381	33	6,848	342	337	2,221	83	R 12,811	4,199	132	R 27,386	6,204	NA	NA	NA	R -12,828	-	
1995	1,355	20	365	22	7,410	333	394	2,285	81	13,495	3,319	127	27,832	8,379	NA	NA	NA	R -20,422	-	
1996	1,377	19	627	20	7,947	360	451	2,413	79	13,939	2,915	133	28,882	9,845	NA	NA	NA	-23,847	-	
Trillion Btu																				
1960	5.4	3.0	3.1	0.1	26.7	6.2	4.8	2.1	0.6	25.9	13.8	0.1	83.5	0.0	14.8	0.0	0.0	-5.1	101.5	
1965	11.2	4.1	2.8	0.2	34.4	5.9	4.3	2.6	0.5	30.3	15.2	0.2	96.5	0.0	11.0	0.0	0.0	-2.4	120.4	
1970	27.1	6.8	3.6	0.2	44.7	5.7	4.4	3.1	0.4	42.7	34.7	0.9	140.5	0.0	13.0	0.0	0.0	-12.5	174.9	
1975	26.2	7.7	2.9	0.2	41.9	4.9	2.6	3.3	0.4	49.2	29.0	1.1	137.5	0.0	13.0	0.0	0.0	4.9	189.3	
1980	29.3	9.7	1.7	0.2	33.9	4.2	1.9	4.7	0.5	49.3	35.8	2.5	134.6	0.0	10.7	0.0	0.0	4.7	189.0	
1981	24.2	10.4	2.3	0.1	30.9	3.1	1.2	4.4	0.5	48.6	30.9	1.1	123.3	0.0	14.2	0.0	0.0	8.3	180.5	
1982	27.6	10.3	2.4	0.1	29.5	3.4	1.4	4.8	0.4	48.1	24.1	0.8	115.2	0.0	13.1	0.0	0.0	16.2	182.3	
1983	29.4	9.9	2.6	0.1	26.3	3.1	1.3	4.8	0.5	49.4	24.2	0.8	113.0	0.0	14.2	0.0	0.0	15.6	182.1	
1984	34.1	10.8	6.4	0.1	27.9	4.5	0.9	4.3	0.5	52.7	31.4	0.8	129.7	0.0	13.1	0.0	0.0	11.6	199.3	
1985	39.7	10.9	5.7	0.1	30.5	2.8	5.1	5.7	0.5	54.3	21.6	0.8	127.2	0.0	21.1	0.0	0.0	11.7	210.7	
1986	25.1	10.6	3.7	0.2	33.7	3.3	2.2	6.1	0.4	58.5	44.5	0.7	153.3	0.0	21.8	0.0	0.0	15.0	225.8	
1987	31.6	12.3	5.2	0.1	43.9	3.5	2.6	7.5	0.5	R 62.2	34.6	0.7	R 160.9	0.0	22.5	0.0	0.0	19.2	R 246.6	
1988	32.8	13.3	2.9	0.2	39.6	3.9	2.8	7.6	0.5	R 64.7	39.9	0.8	R 162.9	0.0	19.0	0.0	0.0	17.9	R 246.0	
1989	31.6	14.2	4.9	0.2	44.0	4.1	3.0	9.1	0.5	R 64.5	38.9	0.8	R 170.1	0.0	R 14.9	0.0	0.0	24.1	R 254.8	
1990	31.5	14.5	8.0	0.1	36.8	3.6	1.5	7.7	0.5	R 61.9	33.0	0.8	R 153.9	43.6	R i 30.9	i 30.9	i (s)	-18.9	R i 275.4	
1991	34.8	14.2	4.4	0.1	37.0	2.6	1.8	6.0	0.5	63.7	25.2	0.7	R 142.0	72.9	R 22.5	30.8	(s)	R -49.5	R 269.7	
1992	34.7	17.0	5.2	0.1	38.5	2.1	1.7	6.4	0.5	63.6	23.7	0.7	142.4	84.0	R 22.0	33.3	(s)	-56.4	R 279.4	
1993	37.5	17.1	2.1	0.2	39.1	2.2	2.2	7.8	0.5	65.6	25.8	0.7	146.3	96.6	R 23.1	R 34.4	(s)	-75.1	R 282.5	
1994	33.5	20.0	2.5	0.2	39.9	1.9	1.9	8.1	0.5	67.3	26.4	0.7	149.4	66.2	R 21.9	R 33.5	(s)	R -43.8	R 285.2	
1995	35.5	20.1	2.4	0.1	43.2	1.9	2.2	8.3	0.5	70.9	20.9	0.7	151.0	89.3	R 24.7	R 32.4	(s)	-69.7	R 289.0	
1996	36.2	19.4	4.2	0.1	46.3	2.0	2.6	8.7	0.5	73.2	18.3	0.7	156.6	104.6	29.2	34.3	(s)	-81.4	302.2	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 192. Residential Energy Consumption Estimates, Selected Years 1960-1996, New Hampshire

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	12	12	2	3,622	803	412	4,837	0	0	619	—	1,540	—
1965	0	8	8	3	4,724	710	460	5,894	0	0	868	—	2,072	—
1970	0	5	5	4	6,039	705	474	7,218	0	0	1,476	—	3,577	—
1975	0	3	3	4	5,709	406	692	6,807	0	0	2,148	—	5,181	—
1980	0	2	2	4	3,519	322	588	4,430	0	0	2,478	—	6,026	—
1981	0	4	4	4	3,477	206	587	4,269	0	0	2,481	—	5,913	—
1982	0	7	7	5	3,223	234	597	4,053	0	0	2,460	—	5,910	—
1983	(s)	8	8	4	3,023	217	710	3,950	0	0	2,514	—	6,022	—
1984	0	7	7	5	3,101	160	746	4,007	0	0	2,758	—	6,418	—
1985	0	5	5	5	3,241	855	856	4,951	0	0	2,851	—	6,697	—
1986	0	7	7	5	3,239	353	1,033	4,626	0	0	3,075	—	7,072	—
1987	0	6	6	6	3,943	403	1,226	5,572	0	0	3,261	—	7,452	—
1988	(s)	6	6	6	3,692	438	1,355	5,485	0	0	3,464	—	7,830	—
1989	(s)	4	5	6	4,308	469	1,614	6,391	0	0	3,542	—	R 7,957	—
1990	(s)	7	7	6	3,395	233	1,449	5,078	e 184	e 7	3,444	—	R 7,533	—
1991	0	13	13	6	3,566	269	1,229	5,064	194	7	3,357	—	R 7,306	—
1992	2	7	9	6	3,683	250	1,285	5,218	204	7	3,428	—	R 7,323	—
1993	0	6	6	6	3,815	351	1,480	5,646	212	7	3,420	—	R 7,226	—
1994	0	5	5	7	3,814	282	1,533	5,629	207	8	3,431	—	R 7,158	—
1995	1	3	4	7	4,307	331	1,662	6,300	230	11	3,364	—	7,008	—
1996	1	3	4	7	4,709	393	1,749	6,851	230	11	3,427	—	7,134	—
Trillion Btu														
1960	0.0	0.3	0.3	1.8	21.1	4.6	1.7	27.3	0.0	0.0	2.1	31.5	5.3	36.7
1965	0.0	0.2	0.2	2.7	27.5	4.0	1.8	33.4	0.0	0.0	3.0	39.2	7.1	46.3
1970	0.0	0.1	0.1	3.7	35.2	4.0	1.8	41.0	0.0	0.0	5.0	49.8	12.2	62.0
1975	0.0	0.1	0.1	3.8	33.3	2.3	2.6	38.1	0.0	0.0	7.3	49.3	17.7	67.0
1980	0.0	(s)	(s)	4.4	20.5	1.8	2.2	24.5	0.0	0.0	8.5	37.4	20.6	58.0
1981	0.0	0.1	0.1	4.6	20.3	1.2	2.1	23.6	0.0	0.0	8.5	36.7	20.2	56.9
1982	0.0	0.2	0.2	4.6	18.8	1.3	2.2	22.3	0.0	0.0	8.4	35.4	20.2	55.6
1983	(s)	0.2	0.2	4.4	17.6	1.2	2.6	21.4	0.0	0.0	8.6	34.6	20.5	55.1
1984	0.0	0.2	0.2	4.7	18.1	0.9	2.7	21.7	0.0	0.0	9.4	36.0	21.9	57.9
1985	0.0	0.1	0.1	4.8	18.9	4.8	3.1	26.8	0.0	0.0	9.7	41.5	22.9	64.3
1986	0.0	0.2	0.2	5.2	18.9	2.0	3.8	24.6	0.0	0.0	10.5	40.5	24.1	64.7
1987	0.0	0.2	0.2	5.8	23.0	2.3	4.5	29.7	0.0	0.0	11.1	46.8	25.4	72.2
1988	(s)	0.2	0.2	6.1	21.5	2.5	4.9	28.9	0.0	0.0	11.8	47.0	26.7	73.7
1989	(s)	0.1	0.1	6.4	25.1	2.7	5.9	33.7	0.0	0.0	12.1	52.3	27.1	R 79.5
1990	(s)	0.2	0.2	6.0	19.8	1.3	5.3	26.4	e 3.7	e (s)	11.8	e 48.0	25.7	e 73.7
1991	0.0	0.3	0.3	5.6	20.8	1.5	4.4	26.7	3.9	(s)	11.5	48.1	24.9	73.0
1992	(s)	0.2	0.2	6.5	21.5	1.4	4.7	27.5	4.1	(s)	11.7	50.0	25.0	75.0
1993	0.0	0.1	0.1	6.6	22.2	2.0	5.3	29.5	4.2	(s)	11.7	52.2	R 24.7	76.8
1994	0.0	0.1	0.1	6.7	22.2	1.6	5.6	29.4	4.1	(s)	11.7	52.0	24.4	76.5
1995	(s)	0.1	0.1	6.6	25.1	1.9	6.0	33.0	4.6	(s)	11.5	55.8	23.9	79.7
1996	(s)	0.1	0.1	7.1	27.4	2.2	6.3	36.0	4.6	(s)	11.7	59.5	24.3	83.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 193. Commercial Energy Consumption Estimates, Selected Years 1960-1996, New Hampshire**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	8	8	1	376	30	73	37	18	534	0	371	-	922	-
1965	0	5	5	1	491	26	81	43	26	667	0	468	-	1,117	-
1970	0	3	3	2	628	26	84	46	71	854	0	699	-	1,694	-
1975	0	2	2	3	593	15	122	52	56	839	0	883	-	2,131	-
1980	0	1	1	4	1,044	9	104	116	372	1,645	0	1,110	-	2,699	-
1981	0	3	3	4	533	4	104	91	469	1,200	0	1,182	-	2,817	-
1982	0	4	4	4	591	8	105	76	626	1,407	0	1,223	-	2,938	-
1983	1	5	6	4	404	5	125	67	310	911	0	1,342	-	3,216	-
1984	0	5	5	4	415	4	132	67	423	1,040	0	1,484	-	3,455	-
1985	0	3	3	5	550	41	151	126	87	956	0	1,582	-	3,718	-
1986	0	5	5	4	897	20	182	146	522	1,767	0	1,718	-	3,953	-
1987	0	4	4	5	1,675	36	216	129	282	2,339	0	1,910	-	4,363	-
1988	1	4	5	5	1,153	44	239	142	488	2,066	0	2,046	-	4,625	-
1989	1	3	3	5	1,186	54	285	128	478	R 2,132	0	2,123	-	R 4,770	-
1990	1	4	5	5	1,191	25	256	R 74	657	R 2,202	e NA	2,117	-	R 4,630	-
1991	0	9	9	5	1,140	21	217	55	675	2,109	NA	2,140	-	R 4,658	-
1992	3	5	7	6	1,129	22	227	48	326	1,752	NA	2,193	-	R 4,685	-
1993	0	4	4	6	1,123	35	261	11	380	1,809	31	2,241	-	R 4,735	-
1994	0	3	3	6	1,279	41	271	11	453	2,053	36	3,343	-	R 6,976	-
1995	2	2	4	7	1,093	44	293	11	443	1,883	31	3,357	-	6,992	-
1996	2	2	4	7	1,339	42	309	11	455	2,155	40	3,366	-	7,006	-

**Trillion Btu**

1960	0.0	0.2	0.2	0.5	2.2	0.2	0.3	0.2	0.1	3.0	0.0	1.3	4.9	3.1	8.1
1965	0.0	0.1	0.1	0.8	2.9	0.1	0.3	0.2	0.2	3.7	0.0	1.6	6.3	3.8	10.1
1970	0.0	0.1	0.1	2.3	3.7	0.1	0.3	0.2	0.4	4.8	0.0	2.4	9.5	5.8	15.3
1975	0.0	(s)	(s)	2.6	3.5	0.1	0.5	0.3	0.4	4.6	0.0	3.0	10.3	7.3	17.6
1980	0.0	(s)	(s)	4.2	6.1	0.1	0.4	0.6	2.3	9.5	0.0	3.8	17.5	9.2	26.7
1981	0.0	0.1	0.1	4.5	3.1	(s)	0.4	0.5	3.0	6.9	0.0	4.0	15.5	9.6	25.1
1982	0.0	0.1	0.1	4.5	3.4	(s)	0.4	0.4	3.9	8.2	0.0	4.2	17.0	10.0	27.0
1983	(s)	0.1	0.1	4.5	2.4	(s)	0.5	0.3	1.9	5.1	0.0	4.6	14.4	11.0	25.4
1984	0.0	0.1	0.1	4.2	2.4	(s)	0.5	0.4	2.7	5.9	0.0	5.1	15.3	11.8	27.1
1985	0.0	0.1	0.1	5.1	3.2	0.2	0.5	0.7	0.5	5.2	0.0	5.4	15.8	12.7	28.4
1986	0.0	0.1	0.1	4.6	5.2	0.1	0.7	0.8	3.3	10.1	0.0	5.9	20.6	13.5	34.1
1987	0.0	0.1	0.1	4.7	9.8	0.2	0.8	0.7	1.8	13.2	0.0	6.5	24.6	14.9	39.5
1988	(s)	0.1	0.1	5.2	6.7	0.2	0.9	0.7	3.1	11.7	0.0	7.0	23.9	15.8	39.7
1989	(s)	0.1	0.1	5.5	6.9	0.3	1.0	0.7	3.0	11.9	0.0	7.2	24.8	R 16.3	41.0
1990	(s)	0.1	0.1	5.1	6.9	0.1	0.9	0.4	4.1	12.5	e NA	7.2	25.0	15.8	40.8
1991	0.0	0.2	0.2	5.1	6.6	0.1	0.8	0.3	4.2	12.1	NA	7.3	24.7	15.9	R 40.6
1992	0.1	0.1	0.2	5.9	6.6	0.1	0.8	0.3	2.0	9.8	NA	7.5	23.4	16.0	39.4
1993	0.0	0.1	0.1	6.2	6.5	0.2	0.9	0.1	2.4	10.1	0.6	7.6	R 24.7	R 16.2	R 40.8
1994	0.0	0.1	0.1	6.5	7.5	0.2	1.0	0.1	2.8	11.6	0.7	11.4	R 30.3	23.8	R 54.1
1995	(s)	0.1	0.1	6.6	6.4	0.2	1.1	0.1	2.8	10.5	0.6	11.5	R 29.3	23.9	R 53.1
1996	(s)	0.1	0.1	7.2	7.8	0.2	1.1	0.1	2.9	12.1	0.8	11.5	31.7	23.9	55.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 194. Industrial Energy Consumption Estimates, Selected Years 1960-1996, New Hampshire

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	100	1	470	280	10	47	22	66	727	22	1,644	239	0	0	596	-	1,483	-
1965	36	1	424	421	22	114	24	53	1,046	29	2,132	170	0	0	902	-	2,152	-
1970	9	1	541	511	46	267	17	38	2,842	170	4,432	184	0	0	1,452	-	3,519	-
1975	6	1	431	460	42	617	22	31	2,266	181	4,048	178	0	0	1,839	-	4,436	-
1980	10	1	253	558	9	514	23	27	923	434	2,741	155	0	0	2,406	-	5,851	-
1981	3	1	350	571	5	516	22	18	417	199	2,097	155	0	0	2,421	-	5,770	-
1982	58	1	368	489	6	607	20	19	589	153	2,251	155	0	0	2,345	-	5,632	-
1983	58	1	391	270	3	480	21	21	874	144	2,205	155	0	0	2,414	-	5,783	-
1984	53	2	968	277	2	304	23	31	1,194	153	2,950	155	0	0	2,545	-	5,923	-
1985	40	1	854	384	6	556	21	61	1,024	153	3,059	155	0	0	2,974	-	6,987	-
1986	4	1	553	341	7	448	21	67	1,976	130	3,542	155	0	0	3,079	-	7,083	-
1987	3	2	779	534	26	595	23	64	1,441	135	3,598	155	0	0	3,202	-	7,317	-
1988	1	2	430	497	11	476	23	68	909	139	2,551	155	0	0	3,339	-	7,548	-
1989	15	2	742	539	14	558	23	91	615	137	2,719	155	0	0	3,420	-	R 7,682	-
1990	28	3	1,198	435	8	402	24	55	529	145	R 2,797	f NA	f NA	f NA	3,418	-	R 7,476	-
1991	51	3	659	446	31	198	21	50	461	122	1,988	NA	NA	NA	3,265	-	R 7,106	-
1992	44	4	791	500	20	239	22	51	1,031	126	2,781	NA	NA	NA	3,333	-	R 7,119	-
1993	79	4	320	423	9	405	22	91	1,432	127	2,830	NA	NA	NA	3,100	-	R 6,549	-
1994	0	4	381	365	14	393	23	99	1,323	132	2,730	NA	NA	NA	2,182	-	R 4,554	-
1995	1	5	365	419	19	312	23	109	1,109	127	2,482	NA	NA	NA	2,286	-	R 4,763	-
1996	0	5	627	399	17	340	22	108	973	133	2,619	NA	NA	NA	2,334	-	4,858	-

Trillion Btu

1960	2.5	0.7	3.1	1.6	0.1	0.2	0.1	0.3	4.6	0.1	10.2	2.6	0.0	0.0	2.0	17.9	5.1	23.0
1965	0.9	0.7	2.8	2.5	0.1	0.5	0.1	0.3	6.6	0.2	13.0	1.8	0.0	0.0	3.1	19.4	7.3	26.7
1970	0.2	0.8	3.6	3.0	0.3	1.0	0.1	0.2	17.9	0.9	26.9	1.9	0.0	0.0	5.0	34.8	12.0	46.9
1975	0.1	1.1	2.9	2.7	0.2	2.3	0.1	0.2	14.2	1.1	23.7	1.9	0.0	0.0	6.3	33.0	15.1	48.2
1980	0.2	1.0	1.7	3.2	0.1	1.9	0.1	0.1	5.8	2.5	15.4	1.6	0.0	0.0	8.2	26.5	20.0	46.5
1981	0.1	1.2	2.3	3.3	(s)	1.9	0.1	0.1	2.6	1.1	11.5	1.6	0.0	0.0	8.3	22.7	19.7	42.3
1982	1.4	1.1	2.4	2.8	(s)	2.2	0.1	0.1	3.7	0.8	12.3	1.6	0.0	0.0	8.0	24.4	19.2	43.6
1983	1.4	0.9	2.6	1.6	(s)	1.7	0.1	0.1	5.5	0.8	12.5	1.6	0.0	0.0	8.2	24.6	19.7	44.4
1984	1.3	1.8	6.4	1.6	(s)	1.1	0.1	0.2	7.5	0.8	17.8	1.6	0.0	0.0	8.7	31.2	20.2	51.4
1985	1.0	0.9	5.7	2.2	(s)	2.0	0.1	0.3	6.4	0.8	17.7	1.6	0.0	0.0	10.1	31.3	23.8	55.2
1986	0.1	0.7	3.7	2.0	(s)	1.6	0.1	0.4	12.4	0.7	20.9	1.6	0.0	0.0	10.5	33.9	24.2	58.1
1987	0.1	1.8	5.2	3.1	0.1	2.2	0.1	0.3	9.1	0.7	20.9	1.6	0.0	0.0	10.9	35.3	25.0	R 60.3
1988	(s)	2.0	2.9	2.9	0.1	1.7	0.1	0.4	5.7	0.8	14.5	1.6	0.0	0.0	11.4	29.6	25.8	55.3
1989	0.4	2.3	4.9	3.1	0.1	2.1	0.1	0.5	3.9	0.8	15.4	1.6	0.0	0.0	11.7	31.4	26.2	R 57.6
1990	0.7	3.3	8.0	2.5	(s)	1.5	0.1	0.3	3.3	0.8	16.5	f 2.8	f 27.2	f 0.0	11.7	f 62.2	25.5	f 87.7
1991	1.3	3.5	4.4	2.6	0.2	0.7	0.1	0.3	2.9	0.7	11.8	2.9	26.9	0.0	11.1	57.5	24.2	81.8
1992	1.1	3.9	5.2	2.9	0.1	0.9	0.1	0.3	6.5	0.7	16.7	4.5	29.2	0.0	11.4	R 66.7	24.3	91.0
1993	2.0	3.8	2.1	2.5	0.1	1.5	0.1	0.5	9.0	0.7	16.4	4.2	29.5	0.0	10.6	66.6	22.3	88.9
1994	0.0	4.5	2.5	2.1	0.1	1.4	0.1	0.5	8.3	0.7	15.9	4.4	R 28.7	0.0	7.4	R 60.9	15.5	R 76.4
1995	(s)	4.7	2.4	2.4	0.1	1.1	0.1	0.6	7.0	0.7	14.5	4.2	R 27.2	0.0	7.8	R 58.3	16.2	R 74.5
1996	0.0	5.0	4.2	2.3	0.1	1.2	0.1	0.6	6.1	0.7	15.3	5.2	28.9	0.0	8.0	62.4	16.6	78.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 195. Transportation Energy Consumption Estimates, Selected Years 1960-1996, New Hampshire**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	2	0	18	209	1,151	(s)	74	4,837	49	6,338	0	0	-	0	-
1965	(s)	0	46	178	1,097	1	60	5,677	1	7,061	0	0	-	0	-
1970	(s)	0	38	319	1,053	5	55	8,038	69	9,577	0	0	-	0	-
1975	(s)	0	33	418	903	5	48	9,290	9	10,706	0	0	-	0	-
1980	0	(s)	40	687	771	74	60	9,240	49	10,921	0	0	-	0	-
1981	0	(s)	30	705	582	10	58	9,147	49	10,580	0	0	-	0	-
1982	0	(s)	25	755	633	9	53	9,056	29	10,559	0	0	-	0	-
1983	0	(s)	26	798	574	11	55	9,317	0	10,781	0	0	-	0	-
1984	0	(s)	20	972	820	25	59	9,937	0	11,834	0	0	-	0	-
1985	0	(s)	24	1,038	521	24	55	R 10,152	0	R 11,813	0	0	-	0	-
1986	0	(s)	38	1,269	620	16	53	10,917	50	12,963	0	0	-	0	-
1987	0	(s)	28	1,361	644	19	60	R 11,653	227	R 13,992	0	0	-	0	-
1988	0	(s)	37	1,400	725	14	58	R 12,110	146	R 14,491	0	0	-	0	-
1989	0	(s)	33	1,464	759	14	60	R 12,066	20	R 14,414	0	0	-	0	-
1990	0	(s)	21	1,267	647	15	61	R 11,649	83	R 13,743	e 0	0	-	0	-
1991	0	(s)	26	1,166	468	9	55	R 12,030	200	R 13,954	0	0	-	0	-
1992	0	(s)	19	1,268	378	10	56	R 12,012	122	R 13,865	0	0	-	0	-
1993	0	(s)	43	1,314	388	17	57	R 12,393	1	R 14,213	0	0	-	0	-
1994	0	1	33	1,362	342	24	60	R 12,702	10	R 14,531	0	0	-	0	-
1995	0	(s)	22	1,543	333	18	59	13,376	0	15,351	0	0	-	0	-
1996	0	(s)	20	1,473	360	15	57	13,820	5	15,749	0	0	-	0	-

  

Trillion Btu															
1960	(s)	0.0	0.1	1.2	6.2	(s)	0.5	25.4	0.3	33.6	0.0	0.0	33.7	0.0	33.7
1965	(s)	0.0	0.2	1.0	5.9	(s)	0.4	29.8	(s)	37.3	0.0	0.0	37.3	0.0	37.3
1970	(s)	0.0	0.2	1.9	5.7	(s)	0.3	42.2	0.4	50.7	0.0	0.0	50.7	0.0	50.7
1975	(s)	0.0	0.2	2.4	4.8	(s)	0.3	48.8	0.1	56.6	0.0	0.0	56.6	0.0	56.6
1980	0.0	(s)	0.2	4.0	4.1	0.3	0.4	48.5	0.3	57.8	0.0	0.0	57.9	0.0	57.9
1981	0.0	0.1	0.1	4.1	3.1	(s)	0.3	48.1	0.3	56.1	0.0	0.0	56.2	0.0	56.2
1982	0.0	0.1	0.1	4.4	3.4	(s)	0.3	47.6	0.2	56.0	0.0	0.0	56.1	0.0	56.1
1983	0.0	(s)	0.1	4.6	3.1	(s)	0.3	48.9	0.0	57.2	0.0	0.0	57.2	0.0	57.2
1984	0.0	(s)	0.1	5.7	4.5	0.1	0.4	52.2	0.0	62.9	0.0	0.0	62.9	0.0	62.9
1985	0.0	0.1	0.1	6.0	2.8	0.1	0.3	53.3	0.0	62.7	0.0	0.0	62.8	0.0	62.8
1986	0.0	(s)	0.2	7.4	3.3	0.1	0.3	57.3	0.3	69.0	0.0	0.0	69.0	0.0	69.0
1987	0.0	(s)	0.1	7.9	3.5	0.1	0.4	R 61.2	1.4	R 74.6	0.0	0.0	R 74.7	0.0	R 74.7
1988	0.0	(s)	0.2	8.2	3.9	0.1	0.4	R 63.6	0.9	R 77.2	0.0	0.0	R 77.2	0.0	R 77.2
1989	0.0	(s)	0.2	8.5	4.1	0.1	0.4	63.4	0.1	76.7	0.0	0.0	R 76.8	0.0	R 76.8
1990	0.0	(s)	0.1	7.4	3.6	0.1	0.4	R 61.2	0.5	R 73.2	e 0.0	0.0	R e 73.2	0.0	R e 73.2
1991	0.0	(s)	0.1	6.8	2.6	(s)	0.3	63.2	1.3	74.3	0.0	0.0	74.4	0.0	74.4
1992	0.0	0.1	0.1	7.4	2.1	(s)	0.3	63.1	0.8	73.8	0.0	0.0	73.9	0.0	73.9
1993	0.0	0.3	0.2	7.7	2.2	0.1	0.3	65.1	(s)	75.5	0.0	0.0	75.9	0.0	75.9
1994	0.0	1.0	0.2	7.9	1.9	0.1	0.4	66.7	0.1	R 77.2	0.0	0.0	R 78.2	0.0	R 78.2
1995	0.0	(s)	0.1	9.0	1.9	0.1	0.4	70.3	0.0	81.7	0.0	0.0	81.7	0.0	81.7
1996	0.0	(s)	0.1	8.6	2.0	0.1	0.3	72.6	(s)	83.7	0.0	0.0	83.8	0.0	83.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 196. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, New Hampshire

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	94	0	94	0	1,401	102	0	1,504	0	1,134	0	0	0	--
1965	358	0	358	0	1,343	98	0	1,441	0	882	0	0	0	--
1970	975	0	975	0	2,537	184	0	2,721	0	1,056	0	0	0	--
1975	972	0	972	(s)	2,279	27	0	2,306	0	1,073	0	0	0	--
1980	1,080	0	1,080	0	4,348	18	0	4,366	0	872	0	0	0	--
1981	890	0	890	(s)	3,984	19	0	4,003	0	1,206	0	0	0	--
1982	959	0	959	0	2,593	19	0	2,612	0	1,095	0	0	0	--
1983	1,019	0	1,019	(s)	2,659	20	0	2,680	0	1,198	0	0	0	--
1984	1,198	0	1,198	(s)	3,381	29	0	3,410	0	1,100	0	0	0	--
1985	1,433	0	1,433	0	2,332	31	0	2,363	0	1,868	0	0	0	--
1986	917	0	917	0	4,535	35	0	4,569	0	1,936	0	0	0	--
1987	1,163	0	1,163	(s)	3,548	28	0	3,576	0	2,007	0	0	0	--
1988	1,217	0	1,217	(s)	4,808	62	0	4,870	0	1,688	0	0	0	--
1989	1,160	0	1,160	(s)	5,074	61	0	5,135	0	1,273	0	0	0	--
1990	1,146	0	1,146	0	3,983	37	0	4,020	4,081	1,620	0	0	0	--
1991	1,242	0	1,242	0	2,669	35	0	2,704	6,788	1,878	0	0	0	--
1992	1,251	0	1,251	1	2,283	32	0	2,315	7,869	1,696	0	0	0	--
1993	1,339	0	1,339	(s)	2,291	46	0	2,338	9,047	1,830	0	0	0	--
1994	1,279	0	1,279	1	2,414	28	0	2,442	6,204	1,696	0	0	0	--
1995	1,346	0	1,346	2	1,768	48	0	1,816	8,379	1,990	0	0	0	--
1996	1,369	0	1,369	(s)	1,482	26	0	1,508	9,845	2,320	0	0	0	--

Trillion Btu

1960	2.4	0.0	2.4	0.0	8.8	0.6	0.0	9.4	0.0	12.2	0.0	0.0	0.0	24.0
1965	10.0	0.0	10.0	0.0	8.4	0.6	0.0	9.0	0.0	9.2	0.0	0.0	0.0	28.2
1970	26.7	0.0	26.7	0.0	16.0	1.1	0.0	17.0	0.0	11.1	0.0	0.0	0.0	54.9
1975	26.0	0.0	26.0	0.2	14.3	0.2	0.0	14.5	0.0	11.2	0.0	0.0	0.0	51.8
1980	29.0	0.0	29.0	0.0	27.3	0.1	0.0	27.4	0.0	9.1	0.0	0.0	0.0	65.5
1981	24.0	0.0	24.0	0.1	25.0	0.1	0.0	25.2	0.0	12.6	0.0	0.0	0.0	61.9
1982	25.9	0.0	25.9	0.0	16.3	0.1	0.0	16.4	0.0	11.4	0.0	0.0	0.0	53.8
1983	27.6	0.0	27.6	(s)	16.7	0.1	0.0	16.8	0.0	12.6	0.0	0.0	0.0	57.1
1984	32.4	0.0	32.4	0.1	21.3	0.2	0.0	21.4	0.0	11.5	0.0	0.0	0.0	65.4
1985	38.6	0.0	38.6	0.0	14.7	0.2	0.0	14.8	0.0	19.5	0.0	0.0	0.0	72.9
1986	24.7	0.0	24.7	0.0	28.5	0.2	0.0	28.7	0.0	20.2	0.0	0.0	0.0	73.6
1987	31.2	0.0	31.2	(s)	22.3	0.2	0.0	22.5	0.0	20.9	0.0	0.0	0.0	74.6
1988	32.4	0.0	32.4	0.1	30.2	0.4	0.0	30.6	0.0	17.4	0.0	0.0	0.0	80.5
1989	31.0	0.0	31.0	(s)	31.9	0.4	0.0	32.3	0.0	R 13.3	0.0	0.0	0.0	R 76.5
1990	30.5	0.0	30.5	0.0	25.0	0.2	0.0	25.3	43.6	R 16.8	0.0	0.0	0.0	R 116.6
1991	32.9	0.0	32.9	0.0	16.8	0.2	0.0	17.0	72.9	R 19.6	0.0	0.0	0.0	R 144.4
1992	33.2	0.0	33.2	0.6	14.4	0.2	0.0	14.5	84.0	17.5	0.0	0.0	0.0	152.2
1993	35.3	0.0	35.3	0.1	14.4	0.3	0.0	14.7	96.6	R 18.9	0.0	0.0	0.0	R 168.2
1994	33.3	0.0	33.3	1.3	15.2	0.2	0.0	15.3	66.2	R 17.5	0.0	0.0	0.0	R 138.1
1995	35.3	0.0	35.3	2.3	11.1	0.3	0.0	11.4	89.3	20.5	0.0	0.0	0.0	164.4
1996	36.0	0.0	36.0	(s)	9.3	0.2	0.0	9.5	104.6	24.0	0.0	0.0	0.0	177.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 197. Energy Consumption Estimates by Source, Selected Years 1960-1996, New Jersey**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	6,424	139	4,657	1,147	46,051	2,125	2,468	3,213	1,879	48,706	42,854	12,732	165,832	0	45	0	0	4,034	-	
1965	9,034	210	5,340	1,153	53,611	5,280	2,096	4,268	2,052	55,149	42,900	20,461	192,311	0	-31	0	0	5,282	-	
1970	4,946	323	5,828	160	63,391	6,705	1,829	6,748	1,952	66,231	80,770	25,007	258,622	3,454	-403	0	0	5,934	-	
1975	2,397	244	5,012	92	59,630	6,267	1,211	7,328	1,741	77,617	49,463	26,247	234,608	3,146	-272	0	0	70,001	-	
1980	2,634	340	4,369	83	52,854	8,781	1,694	7,383	2,371	72,740	53,617	30,958	234,849	7,627	-282	0	0	74,427	-	
1981	2,889	390	4,931	75	50,660	18,097	1,461	6,243	2,274	72,379	37,777	28,953	222,848	11,675	-231	0	0	64,880	-	
1982	2,986	376	4,835	141	45,479	34,169	1,406	6,257	2,074	73,334	33,415	23,190	224,300	14,039	-222	0	0	63,821	-	
1983	3,485	405	6,112	155	39,307	37,077	1,793	6,292	2,171	77,650	26,578	21,831	218,965	6,328	-228	0	0	83,997	-	
1984	3,196	418	6,241	135	40,820	42,383	948	8,706	2,315	77,257	29,652	24,855	233,313	5,610	-246	0	0	89,849	-	
1985	3,943	379	4,733	184	40,389	43,910	1,404	7,184	2,158	R 75,405	23,986	22,278	R 221,631	17,770	-244	0	0	68,612	-	
1986	2,961	353	5,565	159	44,963	39,197	1,223	6,405	2,110	R 80,692	30,986	27,233	R 238,532	14,770	-286	0	0	90,455	-	
1987	3,434	421	5,312	201	43,820	43,323	1,318	7,721	2,385	R 81,324	25,218	28,248	R 238,869	22,697	-309	0	0	65,237	-	
1988	3,058	414	4,332	152	46,124	40,820	1,380	7,480	2,300	R 81,081	23,318	29,372	R 236,360	23,890	-219	0	0	74,131	-	
1989	3,545	457	4,032	128	45,037	44,140	1,537	6,336	2,359	R 81,405	22,749	29,920	R 237,643	23,032	-258	0	0	73,875	-	
1990	3,029	428	3,586	119	34,884	46,377	729	4,295	2,428	R 78,343	15,364	31,092	R 217,216	23,770	NA	NA	NA	R 84,140	-	
1991	2,326	463	3,137	100	33,247	43,733	615	6,066	2,172	R 79,704	17,673	28,919	R 215,367	24,807	NA	NA	NA	R 86,803	-	
1992	2,348	546	3,378	122	33,601	46,133	820	6,594	2,214	R 76,633	15,949	30,487	R 215,933	21,595	NA	NA	NA	R 98,508	-	
1993	2,353	552	8,291	121	34,087	48,161	519	3,722	2,255	R 70,463	12,813	30,753	R 211,185	24,932	NA	NA	NA	R 95,302	-	
1994	1,969	585	5,220	158	37,272	48,376	1,504	3,827	2,357	R 81,556	13,603	32,373	R 226,243	22,129	NA	NA	NA	R 102,217	-	
1995	2,074	591	6,151	145	33,032	50,059	1,216	4,062	2,316	82,325	12,700	30,818	R 222,824	16,806	NA	NA	NA	R 120,643	-	
1996	2,402	603	5,373	114	35,912	43,002	841	3,730	2,248	86,044	9,861	34,430	221,555	11,028	NA	NA	NA	144,098	-	
Trillion Btu																				
1960	168.8	144.1	30.9	5.8	268.2	11.5	14.0	12.9	11.4	255.9	269.4	75.7	955.7	0.0	0.5	0.0	0.0	13.8	1,282.8	
1965	236.6	219.2	35.4	5.8	312.3	29.4	11.9	17.1	12.4	289.7	269.7	117.3	1,101.1	0.0	-0.3	0.0	0.0	18.0	1,574.6	
1970	123.3	331.2	38.7	0.8	369.3	37.5	10.4	25.5	11.8	347.9	507.8	141.7	1,491.4	37.9	-4.2	0.0	0.0	20.2	1,999.8	
1975	60.5	251.7	33.3	0.5	347.3	35.1	6.9	27.2	10.6	407.7	311.0	149.9	1,329.4	34.6	-2.8	0.0	0.0	238.8	1,912.2	
1980	68.7	351.0	29.0	0.4	307.9	49.3	9.6	27.1	14.4	382.1	337.1	175.0	1,331.9	83.2	-2.9	0.0	0.0	253.9	2,085.8	
1981	75.5	403.4	32.7	0.4	295.1	102.2	8.3	22.7	13.8	380.2	237.5	163.4	1,256.4	128.8	-2.4	0.0	0.0	221.4	2,082.9	
1982	78.4	387.3	32.1	0.7	264.9	193.3	8.0	22.6	12.6	385.2	210.1	130.7	1,260.2	155.5	-2.3	0.0	0.0	217.8	2,096.7	
1983	91.6	418.0	40.6	0.8	229.0	209.8	10.2	22.7	13.2	407.9	167.1	124.9	1,226.1	69.0	-2.4	0.0	0.0	286.6	2,088.8	
1984	84.0	428.3	41.4	0.7	237.8	239.9	5.4	31.3	14.0	405.8	186.4	139.0	1,301.8	60.8	-2.6	0.0	0.0	306.6	2,178.8	
1985	103.3	389.1	31.4	0.9	235.3	248.6	8.0	25.9	13.1	R 396.1	150.8	124.8	R 1,234.8	192.1	-2.6	0.0	0.0	234.1	R 2,150.9	
1986	77.9	363.0	36.9	0.8	261.9	221.8	6.9	23.3	12.8	423.9	194.8	153.5	1,336.7	159.5	-3.0	0.0	0.0	308.6	2,242.8	
1987	90.5	432.4	35.2	1.0	255.3	245.2	7.5	28.3	14.5	R 427.2	158.5	158.1	R 1,330.8	244.6	-3.2	0.0	0.0	222.6	R 2,317.6	
1988	81.1	425.0	28.7	0.8	268.7	231.1	7.8	27.3	13.9	R 425.9	146.6	165.0	R 1,315.9	256.7	-2.3	0.0	0.0	252.9	R 2,329.4	
1989	94.0	469.0	26.8	0.6	262.3	249.9	8.7	23.3	14.3	R 427.6	143.0	167.9	R 1,324.6	247.0	-2.7	0.0	0.0	R 252.1	R 2,383.9	
1990	80.9	439.0	23.8	0.6	203.2	262.6	4.1	15.6	14.7	R 411.5	96.6	173.8	R 1,206.6	253.9	i -1.2	R i 32.2	i 0.3	R i 287.1	R i 2,298.6	
1991	62.0	475.5	20.8	0.5	193.7	247.0	3.5	21.9	13.2	R 418.7	111.1	162.8	R 1,193.1	266.4	-1.4	R 38.2	0.3	R 296.2	R 2,330.3	
1992	62.8	560.5	22.4	0.6	195.7	261.2	4.7	23.9	13.4	402.6	100.3	170.4	R 1,195.1	230.6	-1.2	R 41.1	0.4	R 336.1	R 2,425.3	
1993	62.7	571.8	55.0	0.6	198.6	272.8	2.9	13.4	13.7	R 370.1	80.6	172.3	R 1,180.0	266.3	-1.1	R 45.8	0.4	R 325.2	R 2,451.0	
1994	52.4	607.7	34.6	0.8	217.1	274.2	8.5	13.9	14.3	R 428.4	85.5	181.5	R 1,258.9	236.3	-1.6	R 49.5	0.4	R 348.8	R 2,552.0	
1995	R 55.0	610.9	40.8	0.7	192.4	283.8	6.9	14.7	14.0	432.5	79.8	172.7	1,238.4	179.1	-0.9	R 51.3	0.4	411.6	R 2,545.1	
1996	62.4	624.6	35.7	0.6	209.2	243.8	4.8	13.5	13.6	452.0	62.0	192.9	1,228.0	117.1	-1.0	52.3	0.5	491.7	2,574.9	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 198. Residential Energy Consumption Estimates, Selected Years 1960-1996, New Jersey**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	23	232	255	75	25,587	1,200	737	27,524	0	0	5,080	-	12,635	-
1965	12	146	158	114	29,038	969	672	30,679	0	0	7,410	-	17,692	-
1970	1	89	90	140	32,933	769	834	34,536	0	0	12,131	-	29,398	-
1975	1	47	47	129	30,655	431	964	32,050	0	0	14,495	-	34,964	-
1980	0	34	34	136	23,976	262	777	25,015	0	0	16,329	-	39,707	-
1981	2	56	58	146	23,162	193	946	24,301	0	0	16,026	-	38,195	-
1982	0	56	56	149	19,292	353	842	20,487	0	0	15,759	-	37,850	-
1983	0	50	50	147	16,041	310	1,000	17,352	0	0	16,869	-	40,415	-
1984	1	19	20	152	16,451	451	923	17,824	0	0	17,157	-	39,935	-
1985	4	58	62	151	18,071	907	918	19,896	0	0	17,177	-	40,356	-
1986	1	36	36	158	17,268	644	1,025	18,937	0	0	18,089	-	41,609	-
1987	0	17	17	169	17,440	513	1,108	19,061	0	0	19,308	-	44,118	-
1988	0	14	14	182	17,480	472	1,351	19,303	0	0	20,656	-	46,700	-
1989	(s)	8	9	196	15,926	570	1,303	17,800	0	0	20,695	-	46,484	R
1990	(s)	7	8	172	11,498	295	899	12,692	e 647	e 94	20,498	-	44,832	R
1991	(s)	6	7	177	11,069	329	1,108	12,505	681	98	21,539	-	46,881	R
1992	1	7	8	198	11,201	273	1,317	12,790	717	104	20,547	-	43,887	R
1993	0	5	5	196	11,535	223	1,391	13,149	767	109	22,042	-	46,570	R
1994	0	6	6	217	12,340	291	1,304	13,935	751	122	22,154	-	46,224	R
1995	0	4	4	194	11,647	236	1,548	13,431	834	129	22,470	-	46,806	R
1996	0	5	5	223	12,344	284	1,606	14,233	833	138	22,632	-	47,105	-
<b>Trillion Btu</b>														
1960	0.6	5.7	6.3	77.7	149.0	6.8	3.0	158.8	0.0	0.0	17.3	260.2	43.1	303.3
1965	0.3	3.5	3.8	119.6	169.1	5.5	2.7	177.3	0.0	0.0	25.3	326.0	60.4	386.4
1970	(s)	2.1	2.1	143.9	191.8	4.4	3.2	199.3	0.0	0.0	41.4	386.7	100.3	487.0
1975	(s)	1.0	1.1	133.4	178.6	2.4	3.6	184.6	0.0	0.0	49.5	368.5	119.3	487.8
1980	0.0	0.8	0.8	140.9	139.7	1.5	2.9	144.0	0.0	0.0	55.7	341.4	135.5	476.9
1981	0.1	1.3	1.4	150.8	134.9	1.1	3.4	139.5	0.0	0.0	54.7	346.3	130.3	476.6
1982	0.0	1.4	1.4	153.4	112.4	2.0	3.0	117.4	0.0	0.0	53.8	326.0	129.1	455.1
1983	0.0	1.2	1.2	150.9	93.4	1.8	3.6	98.8	0.0	0.0	57.6	308.6	137.9	446.5
1984	(s)	0.5	0.5	154.9	95.8	2.6	3.3	101.7	0.0	0.0	58.5	315.6	136.3	451.9
1985	0.1	1.3	1.4	154.3	105.3	5.1	3.3	113.7	0.0	0.0	58.6	328.0	137.7	465.7
1986	(s)	0.9	0.9	162.4	100.6	3.7	3.7	108.0	0.0	0.0	61.7	332.9	142.0	474.9
1987	0.0	0.5	0.5	172.8	101.6	2.9	4.1	108.5	0.0	0.0	65.9	347.7	150.5	498.2
1988	0.0	0.4	0.4	186.0	101.8	2.7	4.9	109.4	0.0	0.0	70.5	366.3	159.3	525.7
1989	(s)	0.2	0.2	200.4	92.8	3.2	4.8	100.8	0.0	0.0	70.6	372.1	158.6	530.7
1990	(s)	0.2	0.2	176.0	67.0	1.7	3.3	71.9	e 12.9	e 0.3	69.9	e 331.3	153.0	484.3
1991	(s)	0.2	0.2	181.1	64.5	1.9	4.0	70.3	13.6	0.3	73.5	339.0	160.0	499.0
1992	(s)	0.2	0.2	203.5	65.2	1.5	4.8	71.6	14.3	0.4	70.1	360.1	149.7	509.8
1993	0.0	0.1	0.1	202.6	67.2	1.3	5.0	73.5	15.3	0.4	75.2	367.1	158.9	526.0
1994	0.0	0.2	0.2	225.4	71.9	1.7	4.7	78.3	15.0	0.4	75.6	394.9	157.7	552.6
1995	0.0	0.1	0.1	201.1	67.8	1.3	5.6	74.8	16.7	0.4	76.7	369.8	159.7	529.5
1996	0.0	0.1	0.1	230.8	71.9	1.6	5.8	79.3	16.7	0.5	77.2	404.6	160.7	565.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
- =Not applicable.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 199. Commercial Energy Consumption Estimates, Selected Years 1960-1996, New Jersey**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	42	155	197	10	8,640	466	130	308	7,117	16,661	0	4,391	-	10,922	-
1965	23	97	120	20	9,805	377	119	420	7,473	18,194	0	6,945	-	16,583	-
1970	2	59	61	56	11,121	299	147	613	11,415	23,595	0	10,807	-	26,188	-
1975	1	31	32	53	10,351	168	170	634	6,484	17,807	0	13,848	-	33,404	-
1980	0	22	22	60	9,167	39	137	297	10,950	20,590	0	16,879	-	41,045	-
1981	4	37	41	75	7,662	57	167	308	6,404	14,597	0	17,262	-	41,141	-
1982	0	38	38	79	7,030	96	149	323	4,623	12,221	0	17,725	-	42,572	-
1983	0	34	34	80	7,166	51	177	729	2,662	10,785	0	18,647	-	44,674	-
1984	3	12	15	84	7,350	27	163	647	3,634	11,820	0	19,691	-	45,833	-
1985	7	39	46	83	5,638	77	162	660	3,128	9,665	0	20,911	-	49,127	-
1986	1	24	25	86	8,889	108	181	652	2,717	12,546	0	22,181	-	51,023	-
1987	0	12	12	94	7,787	109	196	R 666	2,390	R 11,148	0	23,679	-	54,105	-
1988	0	10	10	101	7,899	116	238	R 647	2,854	R 11,755	0	25,527	-	57,710	-
1989	1	6	6	117	8,167	264	230	R 670	1,795	11,125	0	26,849	-	R 60,309	-
1990	1	5	5	116	6,916	178	159	R 754	1,480	R 9,487	e NA	27,216	-	R 59,525	-
1991	(s)	4	4	121	6,559	192	195	R 692	1,607	9,244	NA	28,009	-	R 60,963	-
1992	2	5	7	131	6,364	389	232	613	1,371	8,970	NA	27,783	-	R 59,342	-
1993	0	3	3	129	5,605	160	245	77	1,997	8,084	155	28,885	-	R 61,028	-
1994	0	4	4	132	4,983	615	230	84	2,109	8,022	141	29,753	-	R 62,081	-
1995	0	3	3	139	3,357	566	273	78	1,257	5,531	96	30,198	-	R 62,905	-
1996	0	3	3	150	5,015	243	283	77	1,303	6,922	151	30,547	-	63,577	-

**Trillion Btu**

1960	1.0	3.8	4.9	10.7	50.3	2.6	0.5	1.6	44.7	99.9	0.0	15.0	130.4	37.3	167.7
1965	0.6	2.4	2.9	21.1	57.1	2.1	0.5	2.2	47.0	108.9	0.0	23.7	156.7	56.6	213.2
1970	(s)	1.4	1.4	57.4	64.8	1.7	0.6	3.2	71.8	142.0	0.0	36.9	237.7	89.4	327.1
1975	(s)	0.7	0.7	55.0	60.3	1.0	0.6	3.3	40.8	106.0	0.0	47.3	208.9	114.0	322.9
1980	0.0	0.5	0.5	62.5	53.4	0.2	0.5	1.6	68.8	124.5	0.0	57.6	245.1	140.0	385.1
1981	0.1	0.9	1.0	77.1	44.6	0.3	0.6	1.6	40.3	87.4	0.0	58.9	224.4	140.4	364.8
1982	0.0	0.9	0.9	81.2	41.0	0.5	0.5	1.7	29.1	72.8	0.0	60.5	215.4	145.3	360.6
1983	0.0	0.8	0.8	81.9	41.7	0.3	0.6	3.8	16.7	63.2	0.0	63.6	209.6	152.4	362.1
1984	0.1	0.3	0.4	85.6	42.8	0.2	0.6	3.4	22.8	69.8	0.0	67.2	223.0	156.4	379.4
1985	0.2	0.9	1.1	85.3	32.8	0.4	0.6	3.5	19.7	57.0	0.0	71.3	214.7	167.6	382.3
1986	(s)	0.6	0.6	88.0	51.8	0.6	0.7	3.4	17.1	73.6	0.0	75.7	237.8	174.1	411.9
1987	0.0	0.3	0.3	96.8	45.4	0.6	0.7	3.5	15.0	65.2	0.0	80.8	243.1	184.6	427.7
1988	0.0	0.2	0.2	103.9	46.0	0.7	0.9	3.4	17.9	68.9	0.0	87.1	260.1	196.9	457.0
1989	(s)	0.2	0.2	120.3	47.6	1.5	0.8	3.5	11.3	64.7	0.0	91.6	276.8	R 205.8	R 482.6
1990	(s)	0.1	0.1	118.5	40.3	1.0	0.6	R 4.0	9.3	55.1	e NA	92.9	266.6	R 203.1	R 469.7
1991	(s)	0.1	0.1	124.3	38.2	1.1	0.7	3.6	10.1	53.7	NA	95.6	273.7	R 208.0	R 481.7
1992	(s)	0.1	0.2	134.2	37.1	2.2	0.8	3.2	8.6	52.0	NA	94.8	281.1	R 202.5	R 483.6
1993	0.0	0.1	0.1	133.6	32.6	0.9	0.9	0.4	12.6	47.4	3.1	98.6	R 282.7	R 208.2	R 491.0
1994	0.0	0.1	0.1	137.2	29.0	3.5	0.8	0.4	13.3	47.1	2.8	101.5	R 288.7	R 211.8	R 500.5
1995	0.0	0.1	0.1	143.7	19.6	3.2	1.0	0.4	7.9	32.1	1.9	103.0	R 280.8	214.6	R 495.4
1996	0.0	0.1	0.1	156.0	29.2	1.4	1.0	0.4	8.2	40.2	3.0	104.2	303.5	216.9	520.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 200. Industrial Energy Consumption Estimates, Selected Years 1960-1996, New Jersey**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,368	28	4,657	6,719	802	2,340	1,194	612	18,822	12,732	47,878	10	0	0	8,021	-	19,952	-
1965	1,921	52	5,340	8,423	750	3,438	1,433	532	17,049	20,461	57,426	4	0	0	11,519	-	27,503	-
1970	740	80	5,828	9,560	761	5,665	1,379	401	22,609	25,007	71,209	4	0	0	15,215	-	36,872	-
1975	67	52	5,012	7,963	612	6,096	1,136	233	14,809	26,247	62,108	4	0	0	14,562	-	35,126	-
1980	33	63	4,369	7,339	1,393	6,429	1,658	147	17,694	30,958	69,988	3	0	0	16,345	-	39,745	-
1981	22	89	4,931	9,715	1,211	4,928	1,590	145	9,221	28,953	60,694	3	0	0	16,311	-	38,874	-
1982	148	82	4,835	8,400	957	5,102	1,450	121	9,019	23,190	53,074	3	0	0	15,233	-	36,587	-
1983	269	81	6,112	3,625	1,432	4,918	1,518	113	3,944	21,831	43,495	3	0	0	15,380	-	36,848	-
1984	308	85	6,241	3,718	470	7,427	1,619	94	5,385	24,855	49,809	3	0	0	15,681	-	36,500	-
1985	359	81	4,733	2,539	420	5,994	1,509	462	4,851	22,278	42,786	3	0	0	15,657	-	36,784	-
1986	263	70	5,565	3,430	470	5,097	1,476	466	5,360	27,233	49,097	3	0	0	15,631	-	35,955	-
1987	324	80	5,312	2,967	696	6,336	1,668	R 517	6,125	28,248	R 51,868	3	0	0	15,665	-	35,792	-
1988	261	78	4,332	3,199	793	5,803	1,609	R 524	5,266	29,372	R 50,897	3	0	0	15,844	-	35,819	-
1989	286	85	4,032	3,474	703	R 4,719	1,650	R 500	4,103	29,920	R 49,102	3	0	0	15,713	-	R 35,295	-
1990	276	90	3,586	2,907	256	R 3,163	1,698	R 460	3,673	31,092	R 46,833	f NA	f NA	f NA	15,041	-	R 32,896	-
1991	234	101	3,137	2,529	95	R 4,693	1,519	420	3,146	28,919	44,459	NA	NA	NA	15,031	-	R 32,716	-
1992	215	175	3,378	2,001	158	R 4,969	1,549	423	3,114	30,487	46,080	NA	NA	NA	14,687	-	R 31,371	-
1993	222	189	8,291	2,074	136	R 2,005	1,577	R 542	2,615	30,753	R 47,994	NA	NA	NA	14,596	-	R 30,838	-
1994	72	191	5,220	2,228	597	R 2,157	1,648	556	2,527	32,373	47,307	NA	NA	NA	14,251	-	R 29,736	-
1995	13	209	6,151	1,931	414	R 2,172	1,620	602	1,930	30,818	45,639	NA	NA	NA	13,989	-	R 29,139	-
1996	7	201	5,373	1,954	314	1,781	1,572	597	1,689	34,430	47,711	NA	NA	NA	13,603	-	28,311	-

**Trillion Btu**

1960	61.2	28.7	30.9	39.1	4.5	9.4	7.2	3.2	118.3	75.7	288.5	0.1	0.0	0.0	27.4	405.8	68.1	473.9
1965	49.0	54.6	35.4	49.1	4.3	13.8	8.7	2.8	107.2	117.3	338.5	(s)	0.0	0.0	39.3	481.5	93.8	575.3
1970	18.6	81.9	38.7	55.7	4.3	21.4	8.4	2.1	142.1	141.7	414.4	(s)	0.0	0.0	51.9	566.9	125.8	692.7
1975	1.6	54.0	33.3	46.4	3.5	22.6	6.9	1.2	93.1	149.9	356.9	(s)	0.0	0.0	49.7	462.2	119.9	582.0
1980	0.8	64.9	29.0	42.7	7.9	23.6	10.1	0.8	111.2	175.0	400.3	(s)	0.0	0.0	55.8	521.8	135.6	657.4
1981	0.5	91.8	32.7	56.6	6.9	18.0	9.6	0.8	58.0	163.4	345.9	(s)	0.0	0.0	55.7	493.9	132.6	626.6
1982	3.6	84.1	32.1	48.9	5.4	18.4	8.8	0.6	56.7	130.7	301.7	(s)	0.0	0.0	52.0	441.5	124.8	566.3
1983	6.8	83.6	40.6	21.1	8.1	17.8	9.2	0.6	24.8	124.9	247.0	(s)	0.0	0.0	52.5	389.9	125.7	515.6
1984	7.7	86.6	41.4	21.7	2.7	26.7	9.8	0.5	33.9	139.0	275.6	(s)	0.0	0.0	53.5	423.5	124.5	548.1
1985	8.8	83.0	31.4	14.8	2.4	21.6	9.2	2.4	30.5	124.8	237.1	(s)	0.0	0.0	53.4	382.3	125.5	507.8
1986	6.6	71.5	36.9	20.0	2.7	18.6	8.9	2.5	33.7	153.5	276.7	(s)	0.0	0.0	53.3	408.3	122.7	530.9
1987	8.2	81.7	35.2	17.3	3.9	23.2	10.1	2.7	38.5	158.1	289.1	(s)	0.0	0.0	53.4	432.5	122.1	554.7
1988	6.6	79.5	28.7	18.6	4.5	21.2	9.8	2.8	33.1	165.0	283.7	(s)	0.0	0.0	54.1	423.9	122.2	546.1
1989	7.2	86.9	26.8	20.2	4.0	17.4	10.0	2.6	25.8	167.9	274.7	(s)	0.0	0.0	53.6	422.4	R 120.4	R 542.9
1990	7.0	92.7	23.8	16.9	1.5	11.5	10.3	2.4	23.1	173.8	263.3	f 0.3	f 19.2	f 0.0	51.3	f 433.7	R 112.2	R f 546.0
1991	5.9	103.3	20.8	14.7	0.5	17.0	9.2	2.2	19.8	162.8	247.0	0.2	24.5	0.0	51.3	432.3	R 111.6	R 543.9
1992	5.4	179.0	22.4	11.7	0.9	18.0	9.4	2.2	19.6	170.4	254.5	0.2	26.6	0.0	50.1	516.0	107.0	623.0
1993	5.6	195.7	55.0	12.1	0.8	7.2	9.6	2.8	16.4	172.3	276.3	0.2	27.3	0.0	49.8	554.9	105.2	660.1
1994	1.8	198.3	34.6	13.0	3.4	7.8	10.0	2.9	15.9	181.5	269.2	0.2	R 31.3	0.0	48.6	R 549.4	R 101.5	R 650.9
1995	0.3	216.2	40.8	11.2	2.3	7.9	9.8	3.2	12.1	172.7	260.1	0.1	R 31.8	0.0	47.7	R 556.2	99.4	R 655.6
1996	0.2	208.3	35.7	11.4	1.8	6.4	9.5	3.1	10.6	192.9	271.5	0.2	31.9	0.0	46.4	558.4	96.6	655.0

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 201. Transportation Energy Consumption Estimates, Selected Years 1960-1996, New Jersey**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>e</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	40	1	1,147	4,748	2,125	6	685	47,786	5,754	62,252	0	4	-	9	-
1965	6	(s)	1,153	5,964	5,280	40	619	54,198	6,431	73,684	0	4	-	9	-
1970	1	1	160	8,558	6,705	102	574	65,217	9,081	90,396	0	31	-	76	-
1975	(s)	(s)	92	8,907	5,777	98	605	76,750	4,246	96,475	0	44	-	106	-
1980	0	(s)	83	10,243	8,088	40	713	72,296	12,053	103,516	0	32	-	77	-
1981	0	1	75	9,367	17,518	202	683	71,926	12,290	112,061	0	35	-	84	-
1982	0	1	141	10,407	33,809	166	623	72,890	11,688	129,724	0	35	-	84	-
1983	0	1	155	11,477	37,077	196	653	76,807	12,374	138,740	0	27	-	65	-
1984	0	2	135	12,269	42,383	194	696	76,517	12,345	144,539	0	57	-	133	-
1985	0	2	184	13,470	43,910	111	649	R 74,283	11,010	R 143,615	0	88	-	206	-
1986	0	3	159	14,680	39,197	102	634	R 79,574	14,420	R 148,766	0	92	-	211	-
1987	0	3	201	14,603	43,323	R 81	717	R 80,141	12,032	R 151,097	0	94	-	214	-
1988	0	3	152	15,889	40,820	88	691	R 79,910	7,651	R 145,201	0	85	-	192	-
1989	0	4	128	15,347	44,140	83	709	R 80,235	8,992	R 149,634	0	101	-	R 228	-
1990	0	3	119	12,950	46,377	75	730	R 77,129	7,374	R 144,754	R e 1,054	102	-	R 223	-
1991	0	3	100	12,515	43,733	69	653	R 78,592	10,203	R 145,866	R 835	103	-	224	-
1992	0	4	122	13,718	46,133	76	666	R 75,597	9,688	R 146,000	R 1,015	105	-	225	-
1993	0	3	121	14,486	48,161	80	678	R 69,845	6,492	R 139,863	R 1,133	98	-	207	-
1994	0	3	158	17,082	48,376	135	708	R 80,915	6,376	R 153,751	R 3,951	100	-	208	-
1995	0	2	145	15,732	50,059	69	696	R 81,644	8,174	R 156,519	R 12,012	97	-	202	-
1996	0	3	114	16,176	43,002	59	676	85,370	6,111	151,507	10,150	108	-	225	-

  

Trillion Btu															
1960	1.0	0.6	5.8	27.7	11.5	(s)	4.2	251.0	36.2	336.3	0.0	(s)	337.9	(s)	338.0
1965	0.2	0.5	5.8	34.7	29.4	0.2	3.8	284.7	40.4	399.0	0.0	(s)	399.6	(s)	399.7
1970	(s)	1.0	0.8	49.8	37.5	0.4	3.5	342.6	57.1	491.7	0.0	0.1	492.8	0.3	493.1
1975	(s)	0.4	0.5	51.9	32.3	0.4	3.7	403.2	26.7	518.6	0.0	0.1	519.1	0.4	519.5
1980	0.0	0.5	0.4	59.7	45.4	0.1	4.3	379.8	75.8	565.5	0.0	0.1	566.1	0.3	566.3
1981	0.0	0.7	0.4	54.6	98.9	0.7	4.1	377.8	77.3	613.8	0.0	0.1	614.6	0.3	614.9
1982	0.0	1.0	0.7	60.6	191.2	0.6	3.8	382.9	73.5	713.3	0.0	0.1	714.4	0.3	714.7
1983	0.0	1.0	0.8	66.9	209.8	0.7	4.0	403.5	77.8	763.4	0.0	0.1	764.5	0.2	764.7
1984	0.0	2.4	0.7	71.5	239.9	0.7	4.2	401.9	77.6	796.5	0.0	0.2	799.1	0.5	799.6
1985	0.0	2.3	0.9	78.5	248.6	0.4	3.9	R 390.2	69.2	R 791.7	0.0	0.3	R 794.3	0.7	R 795.0
1986	0.0	2.9	0.8	85.5	221.8	0.4	3.8	R 418.0	90.7	R 821.0	0.0	0.3	R 824.2	0.7	R 825.0
1987	0.0	3.5	1.0	85.1	245.2	0.3	4.3	R 421.0	75.6	R 832.6	0.0	0.3	R 836.4	0.7	R 837.1
1988	0.0	2.9	0.8	92.6	231.1	0.3	4.2	R 419.8	48.1	R 796.8	0.0	0.3	R 800.0	0.7	R 800.6
1989	0.0	4.1	0.6	89.4	249.9	0.3	4.3	R 421.5	56.5	R 822.6	0.0	0.3	R 827.0	0.8	R 827.8
1990	0.0	2.7	0.6	75.4	262.6	0.3	4.4	R 405.2	46.4	R 794.9	R e 0.1	0.3	R e 797.9	0.8	R e 798.7
1991	0.0	3.0	0.5	72.9	247.0	0.3	4.0	R 412.8	64.1	R 801.6	R 0.1	0.4	R 804.9	0.8	R 805.7
1992	0.0	3.7	0.6	79.9	261.2	0.3	4.0	R 397.1	60.9	R 804.0	R 0.1	0.4	808.1	0.8	R 808.8
1993	0.0	3.0	0.6	84.4	272.8	0.3	4.1	R 366.9	40.8	R 769.9	R 0.1	0.3	R 773.2	0.7	R 773.9
1994	0.0	2.6	0.8	99.5	274.2	0.5	4.3	R 425.0	40.1	R 844.4	R 0.3	0.3	R 847.4	0.7	R 848.1
1995	0.0	2.6	0.7	91.6	283.8	0.2	4.2	428.9	51.4	860.9	R 0.9	0.3	R 863.8	0.7	864.5
1996	0.0	3.2	0.6	94.2	243.8	0.2	4.1	448.4	38.4	829.8	0.8	0.4	833.4	0.8	834.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 202. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, New Jersey**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	3,563	1	3,565	25	11,160	357	0	11,518	0	35	0	0	0	-
1965	6,829	(s)	6,829	22	11,947	382	0	12,329	0	-35	0	0	0	-
1970	4,054	0	4,054	46	37,665	1,220	0	38,885	3,454	-407	0	0	0	-
1975	2,250	0	2,250	9	23,924	2,244	0	26,168	3,146	-276	0	0	0	-
1980	2,545	0	2,545	80	12,919	2,821	0	15,740	7,627	-286	0	0	0	-
1981	2,768	0	2,768	80	9,861	1,334	0	11,195	11,675	-234	0	0	0	-
1982	2,744	0	2,744	66	8,086	709	0	8,794	14,039	-225	0	0	0	-
1983	3,132	0	3,132	97	7,597	996	0	8,593	6,328	-231	0	0	0	-
1984	2,853	0	2,853	95	8,287	1,033	0	9,320	5,610	-249	0	0	0	-
1985	3,476	0	3,476	61	4,997	671	0	5,668	17,770	-247	0	0	0	-
1986	2,637	0	2,637	37	8,489	697	0	9,186	14,770	-289	0	0	0	-
1987	3,081	0	3,081	75	4,671	1,024	0	5,695	22,697	-312	0	0	0	-
1988	2,773	0	2,773	51	7,547	1,657	0	9,204	23,890	-222	0	0	0	-
1989	3,244	0	3,244	55	7,859	2,123	0	9,982	23,032	-261	0	0	0	-
1990	2,740	0	2,740	48	2,836	613	0	3,450	23,770	-150	0	0	0	-
1991	2,081	0	2,081	62	2,717	576	0	3,293	24,807	-155	0	0	0	-
1992	2,118	0	2,118	39	1,775	317	0	2,092	21,595	-138	0	0	0	-
1993	2,123	0	2,123	36	1,708	387	0	2,095	24,932	-123	0	0	0	-
1994	1,887	0	1,887	43	2,590	639	0	3,229	22,129	-167	0	0	0	-
1995	2,054	0	2,054	46	1,339	366	0	1,704	16,806	-95	0	0	0	-
1996	2,387	0	2,387	26	759	423	0	1,182	11,028	-114	0	0	0	-

  

Trillion Btu														
1960	95.4	(s)	95.4	26.4	70.2	2.1	0.0	72.2	0.0	0.4	0.0	0.0	0.0	194.4
1965	180.7	(s)	180.7	23.4	75.1	2.2	0.0	77.3	0.0	-0.4	0.0	0.0	0.0	281.1
1970	101.1	0.0	101.1	47.1	236.8	7.1	0.0	243.9	37.9	-4.3	0.0	0.0	0.0	425.8
1975	57.2	0.0	57.2	8.8	150.4	13.0	0.0	163.4	34.6	-2.9	0.0	0.0	0.0	261.2
1980	66.6	0.0	66.6	82.2	81.2	16.3	0.0	97.5	83.2	-3.0	0.0	0.0	0.0	326.6
1981	72.6	0.0	72.6	83.0	62.0	7.7	0.0	69.7	128.8	-2.4	0.0	0.0	0.0	351.6
1982	72.4	0.0	72.4	67.7	50.8	4.1	0.0	54.9	155.5	-2.4	0.0	0.0	0.0	348.1
1983	82.8	0.0	82.8	100.5	47.8	5.8	0.0	53.6	69.0	-2.4	0.0	0.0	0.0	303.4
1984	75.4	0.0	75.4	98.8	52.1	6.0	0.0	58.1	60.8	-2.6	0.0	0.0	0.0	290.5
1985	92.0	0.0	92.0	64.2	31.4	3.9	0.0	35.3	192.1	-2.6	0.0	0.0	0.0	381.1
1986	69.8	0.0	69.8	38.2	53.4	4.1	0.0	57.4	159.5	-3.0	0.0	0.0	0.0	321.9
1987	81.6	0.0	81.6	77.6	29.4	6.0	0.0	35.3	244.6	-3.3	0.0	0.0	0.0	435.8
1988	73.9	0.0	73.9	52.8	47.4	9.7	0.0	57.1	256.7	-2.3	0.0	0.0	0.0	438.1
1989	86.4	0.0	86.4	57.2	49.4	12.4	0.0	61.8	247.0	-2.7	0.0	0.0	0.0	449.7
1990	73.6	0.0	73.6	49.1	17.8	3.6	0.0	21.4	253.9	<sup>R</sup> -1.6	0.0	0.0	0.0	<sup>R</sup> 396.4
1991	55.8	0.0	55.8	63.9	17.1	3.4	0.0	20.4	266.4	-1.6	0.0	0.0	0.0	404.9
1992	57.0	0.0	57.0	40.1	11.2	1.8	0.0	13.0	230.6	-1.4	0.0	0.0	0.0	339.3
1993	56.9	0.0	56.9	36.8	10.7	2.3	0.0	13.0	266.3	-1.3	0.0	0.0	0.0	371.8
1994	50.4	0.0	50.4	44.1	16.3	3.7	0.0	20.0	236.3	-1.7	0.0	0.0	0.0	349.0
1995	54.6	0.0	54.6	47.3	8.4	2.1	0.0	10.5	179.1	-1.0	0.0	0.0	0.0	290.6
1996	62.0	0.0	62.0	26.3	4.8	2.5	0.0	7.2	117.1	-1.2	0.0	0.0	0.0	211.6

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.  
<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.  
<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.  
<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.  
<sup>R</sup>=Revised data.  
 - =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 203. Energy Consumption Estimates by Source, Selected Years 1960-1996, New Mexico**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	174	200	964	201	3,067	2,186	485	3,014	226	9,555	191	484	20,372	0	69	0	0	951	-
1965	2,450	202	1,388	239	3,895	2,530	376	3,334	237	10,806	699	645	24,148	0	43	0	0	-14,477	-
1970	5,529	270	1,208	111	5,410	3,110	994	4,413	270	13,146	220	731	29,615	0	66	0	0	-27,673	-
1975	7,425	240	1,632	81	6,717	2,667	654	3,865	317	16,493	3,046	1,450	36,923	0	63	0	0	-39,258	-
1980	11,458	222	1,138	167	7,967	2,673	1,339	4,710	332	16,913	1,033	1,801	38,074	0	94	0	0	-46,980	-
1981	10,750	196	1,164	136	12,471	2,554	767	3,120	318	16,972	854	1,085	39,441	0	88	0	0	-43,925	-
1982	12,312	204	1,448	129	7,978	2,629	585	2,720	290	17,144	792	1,082	34,799	0	79	0	0	-49,333	-
1983	14,469	179	1,774	106	6,754	2,638	1,937	2,736	304	17,088	3,441	1,386	38,165	0	89	0	0	-56,245	-
1984	13,979	162	1,901	83	7,147	2,999	2,473	5,716	324	17,447	2,287	1,041	41,418	0	94	0	0	-46,355	-
1985	14,589	151	1,501	95	8,517	2,873	191	3,002	302	R 17,905	825	1,013	R 36,223	0	128	0	0	-47,212	-
1986	13,245	134	1,616	104	9,711	2,783	68	1,757	295	18,298	263	1,153	36,048	0	166	0	0	-37,723	-
1987	14,395	153	2,069	87	10,654	2,983	60	1,537	334	R 18,941	87	1,288	R 38,038	0	164	0	0	-41,747	-
1988	14,715	173	2,113	55	10,229	2,812	51	1,497	322	R 19,302	120	1,517	R 38,018	0	100	0	0	-42,863	-
1989	15,295	196	1,666	96	8,977	2,849	70	3,879	330	R 18,897	183	1,572	R 38,519	0	232	0	0	R -47,342	-
1990	15,111	239	1,451	86	9,127	2,912	56	7,943	340	R 18,647	149	1,613	R 42,323	0	i NA	i NA	i NA	R -44,912	-
1991	12,858	219	1,525	94	9,435	2,441	65	11,735	304	R 19,148	129	1,856	R 46,731	0	NA	NA	NA	R -32,737	-
1992	14,832	203	1,874	94	9,980	2,834	23	10,457	310	R 19,432	130	2,143	R 47,275	0	NA	NA	NA	R -40,400	-
1993	15,012	216	2,438	71	8,234	3,303	17	9,616	315	R 20,394	184	2,020	R 46,592	0	NA	NA	NA	R -41,553	-
1994	15,374	221	2,114	62	7,278	2,576	11	8,767	330	R 20,806	179	2,121	R 44,244	0	NA	NA	NA	R -42,506	-
1995	15,221	215	1,859	53	4,739	2,222	16	8,191	324	21,014	182	2,042	40,642	0	NA	NA	NA	R -39,923	-
1996	15,297	222	1,648	100	9,960	1,615	17	2,067	314	20,247	198	2,312	38,479	0	NA	NA	NA	-37,990	-

  

Trillion Btu																			
1960	4.1	207.3	6.4	1.0	17.9	11.7	2.7	12.1	1.4	50.2	1.2	2.9	107.5	0.0	0.7	0.0	0.0	3.2	322.8
1965	44.3	224.3	9.2	1.2	22.7	13.7	2.1	13.4	1.4	56.8	4.4	3.9	128.8	0.0	0.4	0.0	0.0	-49.4	348.3
1970	99.4	292.5	8.0	0.6	31.5	17.0	5.6	16.7	1.6	69.1	1.4	4.4	155.9	0.0	0.7	0.0	0.0	-94.4	454.1
1975	132.5	255.6	10.8	0.4	39.1	14.6	3.7	14.4	1.9	86.6	19.1	8.7	199.5	0.0	0.7	0.0	0.0	-133.9	454.3
1980	202.9	231.3	7.6	0.8	46.4	14.6	7.6	17.3	2.0	88.8	6.5	10.8	202.4	0.0	1.0	0.0	0.0	-160.3	477.3
1981	196.9	205.4	7.7	0.7	72.6	13.9	4.3	11.4	1.9	89.2	5.4	6.8	214.0	0.0	0.9	0.0	0.0	-149.9	467.4
1982	225.5	213.4	9.6	0.7	46.5	14.3	3.3	9.8	1.8	90.1	5.0	6.8	187.8	0.0	0.8	0.0	0.0	-168.3	459.2
1983	263.7	184.6	11.8	0.5	39.3	14.4	11.0	9.9	1.8	89.8	21.6	8.5	208.7	0.0	0.9	0.0	0.0	-191.9	465.9
1984	252.9	169.8	12.6	0.4	41.6	14.6	14.0	20.6	2.0	91.6	14.4	6.3	220.0	0.0	1.0	0.0	0.0	-158.2	485.4
1985	268.4	162.3	10.0	0.5	49.6	15.7	1.1	10.8	1.8	R 94.1	5.2	6.3	R 195.0	0.0	1.3	0.0	0.0	-161.1	465.9
1986	241.6	144.5	10.7	0.5	56.6	15.2	0.4	6.4	1.8	96.1	1.7	7.1	196.5	0.0	1.7	0.0	0.0	-128.7	455.7
1987	260.7	164.6	13.7	0.4	62.1	16.4	0.3	5.6	2.0	R 99.5	0.5	7.8	R 208.4	0.0	1.7	0.0	0.0	-142.4	R 493.0
1988	266.1	185.2	14.0	0.3	59.6	15.4	0.3	5.5	2.0	R 101.4	0.8	9.1	R 208.2	0.0	1.0	0.0	0.0	-146.2	R 514.4
1989	279.5	205.1	11.1	0.5	52.3	15.6	0.4	14.3	2.0	R 99.3	1.2	9.4	205.9	0.0	2.4	0.0	0.0	R -161.5	R 531.5
1990	275.0	251.4	9.6	0.4	53.2	16.0	0.3	28.8	2.1	R 98.0	0.9	9.6	R 218.9	0.0	i 2.1	R i 4.6	i 0.5	R -153.2	R i 599.8
1991	234.0	227.3	10.1	0.5	55.0	13.5	0.4	42.4	1.8	100.6	0.8	11.1	236.1	0.0	2.5	R 4.7	0.5	R -111.7	R 593.2
1992	267.5	211.0	12.4	0.5	58.1	15.6	0.1	37.9	1.9	102.1	0.8	12.7	242.1	0.0	2.6	R 5.1	0.5	R -137.8	590.8
1993	270.2	224.9	16.2	0.4	48.0	18.3	0.1	34.7	1.9	107.1	1.2	12.0	239.8	0.0	3.0	5.1	0.5	-141.8	R 601.5
1994	278.3	221.4	14.0	0.3	42.4	14.6	0.1	31.9	2.0	109.3	1.1	12.6	228.3	0.0	2.2	R 5.6	0.5	R -145.0	R 590.8
1995	275.3	219.4	12.3	0.3	27.6	12.6	0.1	29.7	2.0	110.4	1.1	12.1	208.2	0.0	2.7	R 6.9	0.5	-136.2	R 575.3
1996	279.2	228.2	10.9	0.5	58.0	9.2	0.1	7.5	1.9	106.4	1.2	13.7	209.4	0.0	2.2	6.6	0.5	-129.6	595.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. - =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 204. Residential Energy Consumption Estimates, Selected Years 1960-1996, New Mexico**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	15	0	15	20	3	17	1,441	1,461	0	0	872	—	2,169	—
1965	4	0	4	24	2	14	1,518	1,534	0	0	988	—	2,360	—
1970	(s)	0	(s)	31	3	29	2,004	2,036	0	0	1,475	—	3,574	—
1975	0	0	0	28	5	27	1,270	1,301	0	0	1,957	—	4,720	—
1980	15	0	15	29	11	132	1,209	1,352	0	0	2,453	—	5,965	—
1981	2	0	2	25	18	85	820	923	0	0	2,355	—	5,613	—
1982	4	0	4	26	24	178	1,078	1,280	0	0	2,419	—	5,809	—
1983	4	0	4	27	17	287	1,282	1,585	0	0	2,569	—	6,155	—
1984	3	0	3	27	17	450	593	1,059	0	0	3,039	—	7,074	—
1985	3	0	3	22	21	41	2,091	2,153	0	0	3,098	—	7,279	—
1986	2	0	2	24	35	21	1,000	1,056	0	0	3,144	—	7,231	—
1987	2	0	2	28	13	22	1,017	1,051	0	0	3,306	—	7,554	—
1988	1	0	1	28	12	11	903	926	0	0	3,394	—	7,672	—
1989	3	0	3	27	11	10	1,223	1,243	0	0	3,463	—	R 7,778	—
1990	2	0	2	28	12	4	1,705	1,721	e 157	e 148	3,566	—	R 7,798	—
1991	3	0	3	30	9	6	1,349	1,364	165	150	3,665	—	R 7,977	—
1992	3	(s)	3	31	14	5	1,096	1,115	174	152	3,791	—	R 8,098	—
1993	3	(s)	4	32	6	4	808	818	163	152	3,884	—	R 8,207	—
1994	3	(s)	3	31	8	3	772	784	160	155	4,080	—	R 8,512	—
1995	3	R 0	3	29	2	6	860	868	177	157	4,124	—	R 8,591	—
1996	3	0	3	34	2	7	853	862	177	160	4,328	—	9,009	—

  

Trillion Btu														
1960	0.3	0.0	0.3	21.1	(s)	0.1	5.8	5.9	0.0	0.0	3.0	30.3	7.4	37.7
1965	0.1	0.0	0.1	26.9	(s)	0.1	6.1	6.2	0.0	0.0	3.4	36.5	8.1	44.5
1970	(s)	0.0	(s)	33.3	(s)	0.2	7.6	7.8	0.0	0.0	5.0	46.1	12.2	58.3
1975	0.0	0.0	0.0	29.9	(s)	0.2	4.7	4.9	0.0	0.0	6.7	41.5	16.1	57.6
1980	0.3	0.0	0.3	29.9	0.1	0.7	4.4	5.3	0.0	0.0	8.4	43.9	20.4	64.2
1981	(s)	0.0	(s)	26.0	0.1	0.5	3.0	3.6	0.0	0.0	8.0	37.6	19.2	56.8
1982	0.1	0.0	0.1	27.8	0.1	1.0	3.9	5.0	0.0	0.0	8.3	41.2	19.8	61.0
1983	0.1	0.0	0.1	27.7	0.1	1.6	4.6	6.4	0.0	0.0	8.8	42.9	21.0	63.9
1984	0.1	0.0	0.1	29.1	0.1	2.5	2.1	4.8	0.0	0.0	10.4	44.3	24.1	68.4
1985	0.1	0.0	0.1	23.9	0.1	0.2	7.5	7.9	0.0	0.0	10.6	42.4	24.8	67.2
1986	(s)	0.0	(s)	26.0	0.2	0.1	3.6	4.0	0.0	0.0	10.7	40.7	24.7	65.4
1987	(s)	0.0	(s)	29.8	0.1	0.1	3.7	3.9	0.0	0.0	11.3	45.0	25.8	70.8
1988	(s)	0.0	(s)	29.9	0.1	0.1	3.3	3.4	0.0	0.0	11.6	44.9	26.2	71.1
1989	0.1	0.0	0.1	27.9	0.1	0.1	4.5	4.6	0.0	0.0	11.8	44.4	26.5	R 71.0
1990	(s)	0.0	(s)	29.7	0.1	(s)	6.2	6.3	e 3.1	e 0.5	12.2	e 51.8	26.6	e 78.4
1991	0.1	0.0	0.1	31.0	(s)	(s)	4.9	5.0	3.3	0.5	12.5	52.4	27.2	R 79.6
1992	0.1	(s)	0.1	32.8	0.1	(s)	4.0	4.1	3.5	0.5	12.9	53.9	27.6	81.5
1993	0.1	(s)	0.1	33.2	(s)	(s)	2.9	3.0	3.3	0.5	13.3	53.3	28.0	81.3
1994	0.1	(s)	0.1	30.9	(s)	(s)	2.8	2.9	3.2	0.5	13.9	51.4	29.0	80.5
1995	0.1	R 0.0	0.1	29.4	(s)	(s)	3.1	3.2	3.5	0.5	14.1	50.7	29.3	80.0
1996	0.1	0.0	0.1	34.8	(s)	(s)	3.1	3.1	3.5	0.5	14.8	56.8	30.7	87.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 205. Commercial Energy Consumption Estimates, Selected Years 1960-1996, New Mexico**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	27	0	27	9	107	4	254	46	0	412	0	963	-	2,395	-
1965	7	0	7	13	65	4	268	54	0	391	0	1,485	-	3,547	-
1970	1	0	1	33	114	8	354	70	0	545	0	2,216	-	5,371	-
1975	0	0	0	23	179	7	224	91	0	501	0	2,743	-	6,618	-
1980	29	0	29	25	133	659	213	108	0	1,113	0	3,380	-	8,219	-
1981	3	0	3	20	681	526	145	120	0	1,472	0	3,299	-	7,863	-
1982	8	0	8	22	558	153	190	124	0	1,026	0	3,494	-	8,392	-
1983	7	0	7	22	487	1,186	226	106	618	2,623	0	3,470	-	8,313	-
1984	5	0	5	23	478	1,383	105	95	413	2,473	0	4,606	-	10,720	-
1985	5	0	5	17	452	61	369	113	4	999	0	4,664	-	10,958	-
1986	3	0	3	21	406	13	177	116	0	712	0	4,855	-	11,168	-
1987	4	0	4	20	707	15	179	R 123	0	R 1,025	0	5,171	-	11,816	-
1988	2	0	2	31	561	31	159	118	0	R 869	0	5,329	-	12,049	-
1989	5	0	5	28	506	14	216	R 119	0	R 856	0	5,699	-	R 12,802	-
1990	3	0	3	24	627	15	301	R 127	0	1,069	e NA	5,842	-	R 12,778	-
1991	5	0	5	25	462	20	238	113	0	833	NA	5,872	-	R 12,781	-
1992	6	(s)	6	28	241	9	193	100	0	543	NA	6,031	-	R 12,883	-
1993	6	(s)	6	28	339	6	143	18	0	506	9	6,226	-	R 13,155	-
1994	6	(s)	6	25	212	3	136	18	0	369	6	6,595	-	R 13,760	-
1995	5	R 0	5	24	200	4	152	18	0	374	6	6,641	-	13,833	-
1996	5	0	5	26	154	1	150	18	(s)	324	5	6,924	-	14,411	-

**Trillion Btu**

1960	0.6	0.0	0.6	9.3	0.6	(s)	1.0	0.2	0.0	1.9	0.0	3.3	15.2	8.2	23.3
1965	0.2	0.0	0.2	13.9	0.4	(s)	1.1	0.3	0.0	1.8	0.0	5.1	20.9	12.1	33.0
1970	(s)	0.0	(s)	35.8	0.7	(s)	1.3	0.4	0.0	2.4	0.0	7.6	45.8	18.3	64.1
1975	0.0	0.0	0.0	24.5	1.0	(s)	0.8	0.5	0.0	2.4	0.0	9.4	36.3	22.6	58.9
1980	0.6	0.0	0.6	25.7	0.8	3.7	0.8	0.6	0.0	5.9	0.0	11.5	43.6	28.0	71.7
1981	0.1	0.0	0.1	21.5	4.0	3.0	0.5	0.6	0.0	8.1	0.0	11.3	41.0	26.8	67.8
1982	0.2	0.0	0.2	22.8	3.3	0.9	0.7	0.7	0.0	5.5	0.0	11.9	40.4	28.6	69.0
1983	0.1	0.0	0.1	23.3	2.8	6.7	0.8	0.6	3.9	14.8	0.0	11.8	50.1	28.4	78.5
1984	0.1	0.0	0.1	24.4	2.8	7.8	0.4	0.5	2.6	14.1	0.0	15.7	54.3	36.6	90.8
1985	0.1	0.0	0.1	18.2	2.6	0.3	1.3	0.6	(s)	4.9	0.0	15.9	39.1	37.4	76.5
1986	0.1	0.0	0.1	22.4	2.4	0.1	0.6	0.6	0.0	3.7	0.0	16.6	42.7	38.1	80.8
1987	0.1	0.0	0.1	21.5	4.1	0.1	0.7	0.6	0.0	5.5	0.0	17.6	44.8	40.3	85.1
1988	(s)	0.0	(s)	33.3	3.3	0.2	0.6	0.6	0.0	4.6	0.0	18.2	56.2	41.1	97.3
1989	0.1	0.0	0.1	29.9	2.9	0.1	0.8	0.6	0.0	4.5	0.0	19.4	53.9	R 43.7	R 97.6
1990	0.1	0.0	0.1	25.0	3.7	0.1	1.1	0.7	0.0	5.5	e NA	19.9	50.5	43.6	94.1
1991	0.1	0.0	0.1	26.1	2.7	0.1	0.9	0.6	0.0	4.3	NA	20.0	50.4	43.6	R 94.1
1992	0.1	(s)	0.1	29.1	1.4	(s)	0.7	0.5	0.0	2.7	NA	20.6	52.5	R 44.0	96.4
1993	0.1	(s)	0.1	29.1	2.0	(s)	0.5	0.1	0.0	2.6	0.2	21.2	R 53.3	44.9	R 98.1
1994	0.1	(s)	0.1	25.0	1.2	(s)	0.5	0.1	0.0	1.8	0.1	22.5	R 49.5	R 47.0	R 96.5
1995	0.1	R 0.0	0.1	24.4	1.2	(s)	0.6	0.1	0.0	1.8	0.1	22.7	R 49.1	47.2	R 96.3
1996	0.1	0.0	0.1	27.3	0.9	(s)	0.5	0.1	(s)	1.5	0.1	23.6	52.7	49.2	101.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 206. Industrial Energy Consumption Estimates, Selected Years 1960-1996, New Mexico**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	105	120	964	1,028	463	1,194	67	295	59	484	4,555	0	0	0	1,548	—	3,851	—
1965	22	97	1,388	1,206	358	1,345	72	241	621	645	5,876	0	0	0	1,299	—	3,103	—
1970	11	121	1,208	2,127	957	1,813	104	192	123	731	7,256	0	0	0	1,911	—	4,632	—
1975	0	95	1,632	2,299	620	2,160	120	145	1,342	1,450	9,769	0	0	0	1,960	—	4,728	—
1980	8	74	1,138	2,196	548	3,260	118	84	858	1,801	10,003	0	0	0	2,945	—	7,161	—
1981	126	57	1,164	3,514	156	2,029	113	72	801	1,085	8,935	0	0	0	3,212	—	7,656	—
1982	127	76	1,448	1,629	254	1,363	103	55	625	1,082	6,559	0	0	0	2,934	—	7,048	—
1983	99	69	1,774	2,477	465	1,122	108	47	2,671	1,386	10,051	0	0	0	2,778	—	6,655	—
1984	75	71	1,901	2,433	641	4,937	116	210	1,785	1,041	13,063	0	0	0	3,396	—	7,904	—
1985	83	58	1,501	3,669	89	447	108	361	781	1,013	7,968	0	0	0	4,111	—	9,658	—
1986	93	44	1,616	3,795	34	488	105	341	222	1,153	7,755	0	0	0	3,902	—	8,976	—
1987	49	62	2,069	4,026	23	268	119	R 329	57	1,288	R 8,179	0	0	0	3,855	—	8,808	—
1988	51	56	2,113	3,572	8	362	115	333	78	1,517	8,098	0	0	0	4,032	—	9,116	—
1989	37	61	1,666	2,244	46	R 2,330	118	R 348	148	1,572	8,471	0	0	0	4,208	—	R 9,452	—
1990	41	85	1,451	2,187	37	R 5,819	121	R 330	117	1,613	R 11,675	f NA	f NA	f NA	4,413	—	R 9,652	—
1991	41	64	1,525	2,366	39	10,067	108	361	119	1,856	16,440	NA	NA	NA	4,546	—	R 9,895	—
1992	48	71	1,874	1,911	10	R 9,068	111	328	128	2,143	15,572	NA	NA	NA	4,609	—	R 9,844	—
1993	60	67	2,438	1,515	7	8,568	113	561	182	2,020	R 15,404	NA	NA	NA	4,816	—	R 10,176	—
1994	68	74	2,114	1,235	5	7,715	118	R 600	179	2,121	R 14,086	NA	NA	NA	5,184	—	R 10,817	—
1995	76	74	1,859	1,577	7	7,085	116	653	181	2,042	13,520	NA	NA	NA	5,651	—	11,770	—
1996	74	105	1,648	1,776	10	974	112	658	198	2,312	7,688	NA	NA	NA	5,921	—	12,323	—

**Trillion Btu**

1960	2.4	124.5	6.4	6.0	2.6	4.8	0.4	1.6	0.4	2.9	25.0	0.0	0.0	0.0	5.3	157.2	13.1	170.3
1965	0.5	107.1	9.2	7.0	2.0	5.4	0.4	1.3	3.9	3.9	33.1	0.0	0.0	0.0	4.4	145.2	10.6	155.8
1970	0.2	131.2	8.0	12.4	5.4	6.8	0.6	1.0	0.8	4.4	39.5	0.0	0.0	0.0	6.5	177.4	15.8	193.2
1975	0.0	102.6	10.8	13.4	3.5	8.0	0.7	0.8	8.4	8.7	54.4	0.0	0.0	0.0	6.7	163.7	16.1	179.8
1980	0.2	77.6	7.6	12.8	3.1	12.0	0.7	0.4	5.4	10.8	52.8	0.0	0.0	0.0	10.0	140.6	24.4	165.1
1981	2.7	60.3	7.7	20.5	0.9	7.4	0.7	0.4	5.0	6.8	49.4	0.0	0.0	0.0	11.0	123.4	26.1	149.6
1982	2.8	80.4	9.6	9.5	1.4	4.9	0.6	0.3	3.9	6.8	37.1	0.0	0.0	0.0	10.0	130.2	24.0	154.3
1983	2.1	71.6	11.8	14.4	2.6	4.1	0.7	0.2	16.8	8.5	59.1	0.0	0.0	0.0	9.5	142.3	22.7	165.0
1984	1.6	75.8	12.6	14.2	3.6	17.8	0.7	1.1	11.2	6.3	67.6	0.0	0.0	0.0	11.6	156.5	27.0	183.5
1985	1.8	63.5	10.0	21.4	0.5	1.6	0.7	1.9	4.9	6.3	47.2	0.0	0.0	0.0	14.0	126.5	33.0	159.4
1986	2.0	47.2	10.7	22.1	0.2	1.8	0.6	1.8	1.4	7.1	45.8	0.0	0.0	0.0	13.3	108.3	30.6	139.0
1987	1.0	66.6	13.7	23.5	0.1	1.0	0.7	1.7	0.4	7.8	48.9	0.0	0.0	0.0	13.2	129.7	30.1	159.7
1988	1.1	60.6	14.0	20.8	(s)	1.3	0.7	R 1.7	0.5	9.1	48.3	0.0	0.0	0.0	13.8	123.7	31.1	154.8
1989	0.9	64.0	11.1	13.1	0.3	8.6	0.7	1.8	0.9	9.4	45.8	0.0	0.0	0.0	14.4	125.1	32.2	R 157.4
1990	0.9	90.0	9.6	12.7	0.2	21.1	0.7	1.7	0.7	9.6	56.5	f 0.0	f 1.3	f 0.0	15.1	f 163.7	32.9	R f 196.7
1991	0.9	66.8	10.1	13.8	0.2	36.4	0.7	1.9	0.7	11.1	74.9	0.0	1.3	0.0	15.5	159.4	R 33.8	193.1
1992	1.0	73.8	12.4	11.1	0.1	32.9	0.7	1.7	0.8	12.7	72.4	0.0	1.4	0.0	15.7	164.3	33.6	197.9
1993	1.3	69.5	16.2	8.8	(s)	30.9	0.7	2.9	1.1	12.0	72.7	0.0	1.4	0.0	16.4	161.4	34.7	196.1
1994	1.5	73.5	14.0	7.2	(s)	28.0	0.7	3.2	1.1	12.6	66.9	0.0	R 1.8	0.0	17.7	R 161.4	36.9	R 198.3
1995	1.7	75.2	12.3	9.2	(s)	25.7	0.7	3.4	1.1	12.1	64.6	0.0	R 1.7	0.0	19.3	R 162.5	40.2	R 202.7
1996	1.6	107.9	10.9	10.3	0.1	3.5	0.7	3.5	1.2	13.7	43.9	0.0	1.8	0.0	20.2	175.4	42.0	217.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 207. Transportation Energy Consumption Estimates, Selected Years 1960-1996, New Mexico**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	2	17	201	1,919	2,186	124	159	9,213	25	13,826	0	0	-	0	-
1965	(s)	25	239	2,618	2,530	203	165	10,511	36	16,301	0	0	-	0	-
1970	(s)	30	111	3,158	3,110	243	166	12,884	11	19,684	0	0	-	0	-
1975	0	29	81	4,200	2,667	211	197	16,257	0	23,615	0	0	-	0	-
1980	0	38	167	5,411	2,673	29	213	16,721	0	25,214	0	0	-	0	-
1981	0	39	136	8,134	2,554	125	205	16,780	0	27,933	0	0	-	0	-
1982	0	35	129	5,608	2,629	89	187	16,966	0	25,607	0	0	-	0	-
1983	0	30	106	3,691	2,638	106	195	16,936	(s)	23,672	0	0	-	0	-
1984	0	9	83	4,184	2,999	R 82	208	17,142	(s)	24,699	0	0	-	0	-
1985	0	26	95	4,330	2,873	95	194	R 17,431	0	R 25,018	0	0	-	0	-
1986	0	26	104	5,433	2,783	92	190	R 17,840	0	R 26,443	0	0	-	0	-
1987	0	26	87	5,855	2,983	72	215	R 18,489	0	R 27,700	0	0	-	0	-
1988	0	37	55	6,032	2,812	73	207	R 18,852	0	R 28,030	0	0	-	0	-
1989	0	52	96	6,167	2,849	110	212	R 18,430	0	R 27,865	0	0	-	0	-
1990	0	76	86	6,264	2,912	R 118	218	R 18,190	0	R 27,788	R e 2,315	0	-	0	-
1991	0	72	94	6,542	2,441	80	195	R 18,674	0	R 28,026	R 1,835	0	-	0	-
1992	0	50	94	7,743	2,834	100	199	R 19,004	0	R 29,973	R 2,230	0	-	0	-
1993	0	62	71	6,303	3,303	97	203	R 19,815	0	R 29,792	R 2,489	0	-	0	-
1994	0	59	62	5,777	2,576	143	212	R 20,187	0	R 28,958	R 6,380	0	-	0	-
1995	0	57	53	2,916	2,222	94	208	20,342	0	25,835	R 19,407	0	-	0	-
1996	0	27	100	7,984	1,615	91	202	19,570	0	29,562	16,399	0	-	0	-

  

Trillion Btu															
1960	(s)	17.6	1.0	11.2	11.7	0.5	1.0	48.4	0.2	73.9	0.0	0.0	91.5	0.0	91.5
1965	(s)	27.6	1.2	15.3	13.7	0.8	1.0	55.2	0.2	87.4	0.0	0.0	115.0	0.0	115.0
1970	(s)	32.8	0.6	18.4	17.0	0.9	1.0	67.7	0.1	105.7	0.0	0.0	138.5	0.0	138.5
1975	0.0	31.2	0.4	24.5	14.6	0.8	1.2	85.4	0.0	126.9	0.0	0.0	158.1	0.0	158.1
1980	0.0	40.2	0.8	31.5	14.6	0.1	1.3	87.8	0.0	136.2	0.0	0.0	176.3	0.0	176.3
1981	0.0	41.4	0.7	47.4	13.9	0.5	1.2	88.1	0.0	151.8	0.0	0.0	193.2	0.0	193.2
1982	0.0	36.7	0.7	32.7	14.3	0.3	1.1	89.1	0.0	138.2	0.0	0.0	174.9	0.0	174.9
1983	0.0	31.6	0.5	21.5	14.4	0.4	1.2	89.0	(s)	126.9	0.0	0.0	158.5	0.0	158.5
1984	0.0	9.9	0.4	24.4	16.4	0.3	1.3	90.0	(s)	132.8	0.0	0.0	142.7	0.0	142.7
1985	0.0	28.2	0.5	25.2	15.7	0.3	1.2	R 91.6	0.0	R 134.5	0.0	0.0	162.7	0.0	162.7
1986	0.0	27.9	0.5	31.6	15.2	0.3	1.2	R 93.7	0.0	R 142.6	0.0	0.0	170.5	0.0	170.5
1987	0.0	27.8	0.4	34.1	16.4	0.3	1.3	R 97.1	0.0	R 149.6	0.0	0.0	R 177.4	0.0	R 177.4
1988	0.0	39.8	0.3	35.1	15.4	0.3	1.3	R 99.0	0.0	R 151.3	0.0	0.0	R 191.2	0.0	R 191.2
1989	0.0	55.0	0.5	35.9	15.6	0.4	1.3	96.8	0.0	150.5	0.0	0.0	R 205.6	0.0	R 205.6
1990	0.0	80.4	0.4	36.5	16.0	0.4	1.3	R 95.6	0.0	R 150.2	R e 0.2	0.0	R e 230.6	0.0	R e 230.6
1991	0.0	74.8	0.5	38.1	13.5	0.3	1.2	98.1	0.0	151.6	R 0.1	0.0	R 226.5	0.0	R 226.5
1992	0.0	52.5	0.5	45.1	15.6	0.4	1.2	99.8	0.0	162.6	R 0.2	0.0	215.0	0.0	215.0
1993	0.0	64.9	0.4	36.7	18.3	R 0.4	1.2	R 104.1	0.0	R 161.1	R 0.2	0.0	R 226.0	0.0	R 226.0
1994	0.0	59.2	0.3	33.7	14.6	0.5	1.3	R 106.0	0.0	R 156.4	R 0.5	0.0	215.6	0.0	215.6
1995	0.0	58.0	0.3	17.0	12.6	0.3	1.3	106.9	0.0	138.3	R 1.5	0.0	196.3	0.0	196.3
1996	0.0	27.9	0.5	46.5	9.2	0.3	1.2	102.8	0.0	160.5	1.3	0.0	188.4	0.0	188.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 208. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, New Mexico

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	26	0	26	34	107	10	0	117	0	69	0	0	0	--
1965	2,418	0	2,418	44	42	4	0	46	0	43	0	0	0	--
1970	5,518	0	5,518	55	86	8	0	94	0	66	0	0	0	--
1975	7,425	0	7,425	65	1,704	34	0	1,738	0	63	0	0	0	--
1980	11,406	0	11,406	56	175	216	0	391	0	94	0	0	0	--
1981	10,619	0	10,619	55	53	124	0	178	0	88	0	0	0	--
1982	12,173	0	12,173	45	168	159	0	327	0	79	0	0	0	--
1983	14,359	0	14,359	31	151	83	0	234	0	89	0	0	0	--
1984	13,896	0	13,896	31	88	36	0	124	0	94	0	0	0	--
1985	14,498	0	14,498	28	41	45	0	86	0	128	0	0	0	--
1986	13,147	0	13,147	20	41	42	0	83	0	166	0	0	0	--
1987	14,340	0	14,340	18	30	52	0	83	0	164	0	0	0	--
1988	14,661	0	14,661	21	42	52	0	94	0	100	0	0	0	--
1989	15,250	0	15,250	27	36	49	0	84	0	232	0	0	0	--
1990	15,065	0	15,065	25	32	37	0	69	0	205	0	0	0	--
1991	12,809	0	12,809	28	10	57	0	67	0	237	0	0	0	--
1992	14,775	0	14,775	22	2	71	0	73	0	255	0	0	0	--
1993	14,942	0	14,942	28	1	70	0	72	0	294	0	0	0	--
1994	15,297	0	15,297	32	(s)	46	0	47	0	213	0	0	0	--
1995	15,137	0	15,137	32	1	44	0	44	0	264	0	0	0	--
1996	15,215	0	15,215	30	(s)	43	0	43	0	211	0	0	0	--

Trillion Btu

1960	0.6	0.0	0.6	34.9	0.7	0.1	0.0	0.7	0.0	0.7	0.0	0.0	0.0	37.0
1965	43.5	0.0	43.5	48.7	0.3	(s)	0.0	0.3	0.0	0.4	0.0	0.0	0.0	93.0
1970	99.1	0.0	99.1	59.5	0.5	(s)	0.0	0.6	0.0	0.7	0.0	0.0	0.0	159.9
1975	132.5	0.0	132.5	67.4	10.7	0.2	0.0	10.9	0.0	0.7	0.0	0.0	0.0	211.5
1980	201.8	0.0	201.8	57.9	1.1	1.3	0.0	2.4	0.0	1.0	0.0	0.0	0.0	263.1
1981	194.1	0.0	194.1	56.1	0.3	0.7	0.0	1.1	0.0	0.9	0.0	0.0	0.0	252.2
1982	222.5	0.0	222.5	45.7	1.1	0.9	0.0	2.0	0.0	0.8	0.0	0.0	0.0	271.0
1983	261.3	0.0	261.3	30.4	1.0	0.5	0.0	1.4	0.0	0.9	0.0	0.0	0.0	294.1
1984	251.1	0.0	251.1	30.7	0.6	0.2	0.0	0.8	0.0	1.0	0.0	0.0	0.0	283.5
1985	266.4	0.0	266.4	28.5	0.3	0.3	0.0	0.5	0.0	1.3	0.0	0.0	0.0	296.8
1986	239.5	0.0	239.5	21.0	0.3	0.2	0.0	0.5	0.0	1.7	0.0	0.0	0.0	262.7
1987	259.5	0.0	259.5	18.9	0.2	0.3	0.0	0.5	0.0	1.7	0.0	0.0	0.0	280.7
1988	264.9	0.0	264.9	21.6	0.3	0.3	0.0	0.6	0.0	1.0	0.0	0.0	0.0	288.2
1989	278.4	0.0	278.4	28.3	0.2	0.3	0.0	0.5	0.0	2.4	0.0	0.0	0.0	309.6
1990	274.7	0.0	274.7	26.3	0.2	0.2	0.0	0.4	0.0	2.1	0.0	0.0	0.0	303.5
1991	232.9	0.0	232.9	28.6	0.1	0.3	0.0	0.4	0.0	2.5	0.0	0.0	0.0	264.3
1992	266.3	0.0	266.3	22.9	(s)	0.4	0.0	0.4	0.0	2.6	0.0	0.0	0.0	R 292.3
1993	268.7	0.0	268.7	28.2	(s)	0.4	0.0	0.4	0.0	3.0	0.0	0.0	0.0	300.3
1994	276.7	0.0	276.7	32.9	(s)	0.3	0.0	0.3	0.0	2.2	0.0	0.0	0.0	312.0
1995	273.5	0.0	273.5	32.5	(s)	0.3	0.0	0.3	0.0	2.7	0.0	0.0	0.0	308.9
1996	277.4	0.0	277.4	30.3	(s)	0.3	0.0	0.3	0.0	2.2	0.0	0.0	0.0	310.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 209. Energy Consumption Estimates by Source, Selected Years 1960-1996, New York**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum													Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total								
			Thousand Barrels																		
1960	26,413	419	5,424	13,729	82,380	9,411	5,302	2,849	2,312	95,706	77,563	3,203	297,879	0	15,709	0	0	-18,429	--		
1965	28,735	545	6,234	2,427	104,033	23,620	5,623	3,174	2,221	109,226	104,296	6,937	367,791	727	20,072	0	0	-10,286	--		
1970	23,935	711	5,612	249	111,107	38,338	6,994	4,506	2,199	130,737	152,252	8,647	460,640	4,273	25,995	0	0	-14,477	--		
1975	12,678	577	5,733	274	105,118	38,634	5,206	5,188	1,948	133,461	144,721	9,454	449,737	13,111	29,955	0	0	-17,753	--		
1980	12,503	737	4,983	320	72,559	35,936	2,309	5,631	2,091	127,422	115,488	12,023	378,763	19,276	33,641	13	0	-5,317	--		
1981	12,388	760	5,424	271	64,120	25,383	2,072	5,215	2,006	129,730	95,745	10,196	340,162	17,444	40,000	1	0	-16,047	--		
1982	11,514	775	5,400	198	62,116	4,827	2,561	4,878	1,829	129,867	95,706	7,824	315,206	14,438	40,690	9	0	-8,319	--		
1983	10,676	720	5,732	225	56,756	3,790	3,506	4,905	1,915	127,144	76,067	6,476	286,516	16,376	46,670	17	0	-20,606	--		
1984	11,895	790	5,387	189	59,227	3,887	1,776	5,056	2,042	113,249	73,011	7,103	270,927	21,187	47,737	11	0	-36,116	--		
1985	11,944	763	7,208	221	62,013	3,856	5,319	4,923	1,903	R 136,330	66,334	6,862	R 294,971	24,092	44,477	(s)	0	-25,342	--		
1986	9,931	729	6,438	256	70,542	3,738	3,061	4,878	1,861	R 136,798	79,619	7,683	R 314,875	22,084	45,175	0	0	-14,093	--		
1987	11,471	779	6,553	126	73,069	2,904	4,158	5,474	2,104	R 142,918	77,490	9,158	R 323,954	22,926	43,241	(s)	0	-20,539	--		
1988	12,956	790	7,989	104	75,460	4,915	5,263	5,238	2,029	R 130,449	88,972	9,410	R 329,831	24,175	36,327	0	0	-8,492	--		
1989	14,105	846	4,967	89	76,608	6,047	4,797	5,579	2,081	R 133,483	85,410	9,186	R 328,248	22,847	28,696	0	0	R 845	--		
1990	13,465	863	5,524	78	66,310	5,447	2,283	5,606	2,141	R 139,180	77,570	10,619	R 314,757	23,623	NA	NA	NA	R 14,658	--		
1991	13,338	875	6,375	65	61,552	5,300	2,646	7,206	1,916	R 133,311	67,888	9,680	R 295,939	28,448	NA	NA	NA	R 12,486	--		
1992	12,996	959	6,904	74	65,721	5,357	1,862	7,076	1,953	R 129,064	51,559	11,110	R 280,679	24,155	NA	NA	NA	R 45,387	--		
1993	11,878	944	8,068	60	70,070	5,131	2,421	6,139	1,989	R 131,710	48,130	10,320	R 284,037	26,889	NA	NA	NA	R 56,859	--		
1994	11,474	1,012	7,439	99	67,740	5,729	2,289	6,351	2,079	R 128,228	40,402	10,812	R 271,166	29,231	NA	NA	NA	R 46,454	--		
1995	R 11,062	1,140	7,073	76	69,385	7,697	2,364	6,332	2,043	R 132,627	30,392	10,616	268,605	26,336	NA	NA	NA	R 61,646	--		
1996	11,337	1,131	6,184	66	73,165	11,532	2,884	6,930	1,983	130,979	36,975	11,172	281,870	35,226	NA	NA	NA	62,237	--		
<b>Trillion Btu</b>																					
1960	691.6	434.1	36.0	69.3	479.9	52.6	30.1	11.4	14.0	502.7	487.6	18.9	1,702.6	0.0	169.0	0.0	0.0	-62.9	2,934.5		
1965	755.2	558.7	41.4	12.3	606.0	133.2	31.9	12.7	13.5	573.8	655.7	39.6	2,120.0	8.6	209.8	0.0	0.0	-35.1	3,617.2		
1970	598.9	725.8	37.2	1.3	647.2	216.7	39.7	17.0	13.3	686.8	957.2	48.7	2,665.1	46.9	272.8	0.0	0.0	-49.4	4,260.2		
1975	312.5	585.5	38.0	1.4	612.3	218.5	29.5	19.3	11.8	701.1	909.9	53.6	2,595.4	144.4	311.7	0.0	0.0	-60.6	3,889.0		
1980	313.7	755.9	33.1	1.6	422.7	203.3	13.1	20.7	12.7	669.3	726.1	67.3	2,169.8	210.3	349.5	0.1	0.0	-18.1	3,781.1		
1981	308.7	775.7	36.0	1.4	373.5	143.5	11.7	19.0	12.2	681.5	602.0	57.6	1,938.3	192.4	418.1	(s)	0.0	-54.8	3,578.4		
1982	289.0	793.1	35.8	1.0	361.8	27.0	14.5	17.6	11.1	682.2	601.7	44.0	1,796.7	159.9	425.4	0.1	0.0	-28.4	3,435.8		
1983	268.0	739.8	38.0	1.1	330.6	21.1	19.9	17.7	11.6	667.9	478.2	36.6	1,622.8	178.6	491.0	0.2	0.0	-70.3	3,230.0		
1984	299.9	811.3	35.7	1.0	345.0	21.5	10.1	18.2	12.4	594.9	459.0	39.0	1,536.8	229.7	498.4	0.1	0.0	-123.2	3,253.0		
1985	301.4	784.7	47.8	1.1	361.2	21.4	30.2	17.7	11.5	R 716.1	417.0	38.0	R 1,662.1	260.5	464.6	(s)	0.0	-86.5	R 3,386.9		
1986	253.3	749.9	42.7	1.3	410.9	20.8	17.4	17.8	11.3	718.6	500.6	42.5	1,783.8	238.5	471.9	0.0	0.0	-48.1	3,449.3		
1987	294.3	801.9	43.5	0.6	425.6	16.0	23.6	20.0	12.8	R 750.7	487.2	51.2	R 1,831.2	247.1	450.5	(s)	0.0	-70.1	R 3,554.9		
1988	333.0	813.1	53.0	0.5	439.6	27.4	29.8	19.1	12.3	R 685.3	559.4	52.9	R 1,879.2	259.7	375.0	0.0	0.0	-29.0	R 3,631.2		
1989	362.6	870.4	33.0	0.4	446.2	33.8	27.2	20.5	12.6	R 701.2	537.0	51.5	R 1,863.5	245.0	R 299.3	0.0	0.0	R 2.9	R 3,643.7		
1990	346.1	889.0	36.7	0.4	386.3	30.4	12.9	20.3	13.0	R 731.1	487.7	59.8	R 1,778.6	252.3	R i 302.1	R i 128.4	i 0.2	R 50.0	R i 3,729.4		
1991	344.4	899.7	42.3	0.3	358.5	29.6	15.0	26.0	11.6	R 700.3	426.8	54.3	R 1,664.8	305.5	R 311.7	R 129.7	0.2	R 42.6	R i 3,695.0		
1992	336.7	986.8	45.8	0.4	382.8	29.9	10.6	25.6	11.8	R 678.0	324.2	62.5	R 1,571.5	257.9	R 320.8	R 138.5	0.3	R 154.9	R 3,766.0		
1993	306.5	971.2	53.5	0.3	408.2	28.7	13.7	22.1	12.1	R 691.9	302.6	57.7	R 1,590.8	287.2	R 354.3	R 153.7	0.3	R 194.0	R 3,865.9		
1994	297.3	1,040.8	49.4	0.5	394.6	32.3	13.0	23.1	12.6	R 673.6	254.0	60.5	R 1,513.5	312.1	R 357.7	R 153.9	0.3	R 158.5	R 3,878.9		
1995	R 288.1	1,172.4	46.9	0.4	404.2	43.6	13.4	22.9	12.4	696.7	191.1	59.5	1,491.1	280.7	R 319.4	R 159.7	0.4	R 210.3	R 3,948.0		
1996	294.3	1,159.9	41.0	0.3	426.2	65.4	16.4	25.0	12.0	688.0	232.5	62.4	1,569.3	374.2	343.3	167.6	0.5	212.4	4,129.6		

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.  
<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.  
<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.  
<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data. --=Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 210. Residential Energy Consumption Estimates, Selected Years 1960-1996, New York**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	146	927	1,074	225	44,927	4,174	2,130	51,232	0	0	12,496	-	31,082	-
1965	111	583	694	288	57,623	4,161	2,254	64,037	0	0	17,027	-	40,655	-
1970	26	356	381	347	60,128	5,581	2,782	68,491	0	0	25,492	-	61,777	-
1975	41	187	228	327	55,966	3,746	3,078	62,790	0	0	28,710	-	69,253	-
1980	47	134	181	334	37,690	1,723	2,511	41,923	0	0	30,583	-	74,367	-
1981	78	157	234	337	35,045	1,509	2,668	39,222	0	0	30,702	-	73,170	-
1982	120	166	287	343	31,660	1,836	2,501	35,997	0	0	30,626	-	73,559	-
1983	76	104	180	322	29,404	1,497	2,974	33,874	0	0	31,803	-	76,194	-
1984	98	126	224	337	30,155	1,090	2,963	34,208	0	0	32,836	-	76,429	-
1985	73	134	208	320	30,992	3,219	3,227	37,438	0	0	32,757	-	76,961	-
1986	102	104	206	337	34,065	2,209	3,282	39,555	0	0	33,771	-	77,683	-
1987	69	104	173	334	36,220	3,212	3,834	43,266	0	0	35,294	-	80,645	-
1988	65	74	139	357	36,422	4,163	3,718	44,304	0	0	37,460	-	84,690	-
1989	59	78	137	365	34,788	2,771	3,931	41,490	0	0	37,878	-	85,082	-
1990	49	80	129	338	26,529	1,765	4,079	32,373	e 2,325	e 68	38,574	-	84,367	-
1991	52	78	130	339	25,021	2,098	5,051	32,170	2,450	72	39,177	-	85,271	-
1992	51	77	128	379	27,997	1,252	4,965	34,214	2,577	78	38,720	-	82,703	-
1993	26	94	120	384	28,707	1,565	4,293	34,565	2,758	84	39,897	-	84,295	-
1994	33	55	88	385	26,760	1,396	4,350	32,505	2,704	100	40,105	-	83,680	-
1995	38	R 68	105	375	27,713	1,240	4,516	33,469	3,001	115	39,887	-	83,088	-
1996	48	87	135	403	30,674	1,450	4,707	36,830	2,996	133	40,285	-	83,845	-

  

Trillion Btu														
1960	3.6	22.9	26.5	232.5	261.7	23.7	8.5	293.9	0.0	0.0	42.6	595.5	106.1	701.6
1965	2.7	14.2	16.9	295.0	335.7	23.6	9.0	368.3	0.0	0.0	58.1	738.3	138.7	877.0
1970	0.6	8.3	9.0	353.8	350.2	31.6	10.5	392.4	0.0	0.0	87.0	842.2	210.8	1,052.9
1975	1.0	4.2	5.1	332.2	326.0	21.2	11.4	358.7	0.0	0.0	98.0	794.0	236.3	1,030.3
1980	1.1	3.1	4.2	341.5	219.5	9.8	9.2	238.5	0.0	0.0	104.3	688.6	253.7	942.3
1981	1.9	3.7	5.6	342.7	204.1	8.6	9.7	222.4	0.0	0.0	104.8	675.5	249.7	925.1
1982	2.9	4.1	7.0	350.3	184.4	10.4	9.0	203.9	0.0	0.0	104.5	665.7	251.0	916.7
1983	1.9	2.5	4.4	330.3	171.3	8.5	10.7	190.5	0.0	0.0	108.5	633.8	260.0	893.8
1984	2.4	3.2	5.6	345.8	175.7	6.2	10.7	192.5	0.0	0.0	112.0	655.9	260.8	916.7
1985	1.8	3.1	4.9	328.8	180.5	18.3	11.6	210.4	0.0	0.0	111.8	655.9	262.6	918.5
1986	2.5	2.5	5.0	345.9	198.4	12.5	11.9	222.9	0.0	0.0	115.2	689.1	265.1	954.2
1987	1.7	2.7	4.5	344.4	211.0	18.2	14.0	243.2	0.0	0.0	120.4	712.5	275.2	987.7
1988	1.6	1.9	3.5	367.5	212.2	23.6	13.6	249.3	0.0	0.0	127.8	748.2	289.0	1,037.1
1989	1.5	2.1	3.6	375.4	202.6	15.7	14.5	232.8	0.0	0.0	129.2	741.0	R 290.3	R 1,031.3
1990	1.2	2.0	3.2	347.8	154.5	10.0	14.8	179.3	e 46.5	e 0.2	131.6	e 708.7	R 287.9	R e 996.5
1991	1.3	2.0	3.3	348.1	145.7	11.9	18.3	175.9	49.0	0.2	133.7	710.1	R 290.9	R 1,001.1
1992	1.3	1.9	3.2	389.6	163.1	7.1	18.0	188.2	51.5	0.3	132.1	764.8	R 282.2	R 1,047.0
1993	0.7	2.3	2.9	395.2	167.2	8.9	15.5	191.6	55.2	0.3	136.1	781.3	R 287.6	R 1,068.9
1994	0.8	1.4	2.2	395.9	155.9	7.9	15.8	179.6	54.1	0.3	136.8	769.0	R 285.5	R 1,054.5
1995	0.9	1.7	2.6	385.7	161.4	7.0	16.4	184.8	60.0	0.4	136.1	769.7	283.5	R 1,053.2
1996	1.2	2.1	3.4	413.6	178.7	8.2	17.0	203.9	59.9	0.5	137.5	818.6	286.1	1,104.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 211. Commercial Energy Consumption Estimates, Selected Years 1960-1996, New York**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	272	618	890	63	15,225	468	376	636	28,208	44,913	0	17,497	-	43,520	-
1965	207	389	596	87	19,527	467	398	828	37,514	58,733	0	23,617	-	56,387	-
1970	48	237	285	139	20,376	626	491	1,052	43,318	65,863	0	33,250	-	80,576	-
1975	75	125	200	128	18,965	420	543	1,162	28,482	49,573	0	37,804	-	91,189	-
1980	87	90	177	162	14,492	169	443	1,035	25,431	41,569	0	40,556	-	98,618	-
1981	144	104	249	167	12,598	158	471	1,144	13,763	28,133	0	42,651	-	101,650	-
1982	224	111	334	165	13,598	199	441	1,045	18,776	34,060	0	42,818	-	102,842	-
1983	141	69	210	162	11,928	1,289	525	974	12,442	27,159	0	44,190	-	105,870	-
1984	181	84	265	170	12,233	437	523	1,073	16,986	31,252	0	48,026	-	111,785	-
1985	136	90	226	165	11,835	862	569	1,911	16,677	31,855	0	49,017	-	115,160	-
1986	189	69	258	168	16,471	228	579	1,856	19,955	39,090	0	50,743	-	116,724	-
1987	129	69	198	167	14,782	318	677	1,371	18,987	36,134	0	52,732	-	120,489	-
1988	121	49	170	188	14,720	207	656	1,104	18,154	34,842	0	55,701	-	125,928	-
1989	110	52	162	196	15,473	519	694	1,348	15,878	33,912	0	56,511	-	126,935	-
1990	91	53	144	195	12,974	269	720	1,201	17,643	32,806	0	56,393	-	123,340	-
1991	96	52	148	200	12,758	213	891	716	17,102	31,679	NA	56,795	-	123,616	-
1992	96	51	147	217	13,899	408	876	681	15,951	31,816	NA	56,473	-	120,622	-
1993	49	63	112	221	15,123	616	758	198	17,531	34,226	419	57,922	-	122,377	-
1994	60	37	97	223	14,592	538	768	180	16,301	32,379	413	59,381	-	123,900	-
1995	70	45	115	231	15,210	714	797	208	13,766	30,695	435	63,131	-	131,505	-
1996	90	58	148	253	15,754	751	831	200	13,008	30,544	473	63,190	-	131,518	-

**Trillion Btu**

1960	6.7	15.3	22.0	65.2	88.7	2.7	1.5	3.3	177.3	273.5	0.0	59.7	420.4	148.5	568.9
1965	5.1	9.5	14.5	88.8	113.7	2.6	1.6	4.3	235.9	358.2	0.0	80.6	542.1	192.4	734.5
1970	1.1	5.6	6.7	142.4	118.7	3.5	1.9	5.5	272.3	402.0	0.0	113.4	664.5	274.9	939.5
1975	1.8	2.8	4.5	130.2	110.5	2.4	2.0	6.1	179.1	300.0	0.0	129.0	563.7	311.1	874.9
1980	2.1	2.0	4.2	165.5	84.4	1.0	1.6	5.4	159.9	252.3	0.0	138.4	560.4	336.5	896.8
1981	3.5	2.5	6.0	170.2	73.4	0.9	1.7	6.0	86.5	168.5	0.0	145.5	490.2	346.8	837.0
1982	5.4	2.7	8.2	168.3	79.2	1.1	1.6	5.5	118.0	205.5	0.0	146.1	528.0	350.9	878.9
1983	3.5	1.7	5.2	166.0	69.5	7.3	1.9	5.1	78.2	162.0	0.0	150.8	484.0	361.2	845.2
1984	4.5	2.1	6.6	174.7	71.3	2.5	1.9	5.6	106.8	188.0	0.0	163.9	533.2	381.4	914.6
1985	3.4	2.1	5.4	170.0	68.9	4.9	2.1	10.0	104.8	190.8	0.0	167.2	533.4	392.9	926.4
1986	4.6	1.7	6.3	172.1	95.9	1.3	2.1	9.7	125.5	234.6	0.0	173.1	586.1	398.3	984.4
1987	3.2	1.8	5.0	172.2	86.1	1.8	2.5	7.2	119.4	217.0	0.0	179.9	574.1	411.1	985.2
1988	3.0	1.3	4.3	193.4	85.7	1.2	2.4	5.8	114.1	209.3	0.0	190.1	597.0	429.7	1,026.6
1989	2.7	1.4	4.1	202.1	90.1	2.9	2.6	7.1	99.8	202.5	0.0	192.8	601.6	433.1	1,034.7
1990	2.2	1.3	3.6	200.6	75.6	1.5	2.6	6.3	110.9	196.9	0	192.4	593.6	420.8	1,014.4
1991	2.4	1.3	3.7	205.0	74.3	1.2	3.2	3.8	107.5	190.0	NA	193.8	592.5	421.8	1,014.3
1992	2.4	1.3	3.6	223.5	81.0	2.3	3.2	3.6	100.3	190.3	NA	192.7	610.1	411.6	1,021.6
1993	1.2	1.5	2.7	227.0	88.1	3.5	2.7	1.0	110.2	205.6	8.4	197.6	641.4	417.6	1,058.9
1994	1.5	0.9	2.4	229.4	85.0	3.1	2.8	0.9	102.5	194.3	8.3	202.6	636.9	422.7	1,059.7
1995	1.8	1.1	2.9	238.0	88.6	4.1	2.9	1.1	86.5	183.2	8.7	215.4	648.1	448.7	1,096.8
1996	2.2	1.4	3.7	259.5	91.8	4.3	3.0	1.1	81.8	181.9	9.5	215.6	670.2	448.7	1,118.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 212. Industrial Energy Consumption Estimates, Selected Years 1960-1996, New York**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	11,947	72	5,424	12,930	660	325	944	3,369	22,444	3,203	49,298	341	0	0	14,428	-	35,888	-
1965	13,811	93	6,234	16,909	996	485	1,099	3,708	29,213	6,937	65,581	275	0	0	23,101	-	55,156	-
1970	12,125	116	5,612	16,810	787	1,125	1,003	3,281	33,696	8,647	70,962	269	0	0	27,152	-	65,799	-
1975	6,125	105	5,733	15,761	1,039	1,442	998	1,351	23,039	9,454	58,817	188	0	0	27,247	-	65,723	-
1980	5,699	114	4,983	9,339	417	2,598	1,027	1,535	14,815	12,023	46,738	233	0	0	32,110	-	78,081	-
1981	5,420	122	5,424	6,129	405	1,917	985	4,155	7,987	10,196	37,198	233	0	0	32,240	-	76,837	-
1982	4,232	111	5,400	6,105	526	1,795	898	1,047	10,184	7,824	33,779	233	0	0	30,484	-	73,218	-
1983	3,575	98	5,732	4,883	720	1,240	941	829	4,164	6,476	24,985	233	0	0	31,424	-	75,285	-
1984	4,073	108	5,387	5,008	249	R 1,360	1,003	613	5,685	7,103	R 26,408	233	0	0	28,789	-	67,010	-
1985	3,723	101	7,208	4,816	1,238	980	935	1,224	5,553	6,862	R 28,816	233	0	0	28,659	-	67,331	-
1986	3,169	88	6,438	3,148	624	909	914	1,252	6,033	7,683	27,001	233	0	0	28,107	-	64,653	-
1987	3,272	97	6,553	3,866	628	R 877	1,033	R 1,287	5,232	9,158	R 28,635	233	0	0	28,726	-	65,637	-
1988	3,528	92	7,989	3,705	893	742	997	R 1,410	4,919	9,410	R 30,064	233	0	0	30,155	-	68,174	-
1989	3,649	97	4,967	3,846	1,507	R 800	1,022	1,389	4,366	9,186	27,084	233	0	0	31,448	-	R 70,639	-
1990	3,199	102	5,524	3,428	249	R 657	1,052	R 1,145	4,750	10,619	R 27,423	f NA	f NA	f NA	31,929	-	R 69,834	-
1991	3,185	120	6,375	3,043	335	1,107	941	1,097	2,383	9,680	24,961	NA	NA	NA	31,112	-	R 70,715	-
1992	2,758	148	6,904	3,117	201	1,092	959	1,110	3,095	11,110	27,587	NA	NA	NA	31,027	-	R 66,272	-
1993	2,947	161	8,068	4,047	241	R 961	977	984	3,911	10,320	29,509	NA	NA	NA	30,187	-	R 63,779	-
1994	2,893	215	7,439	3,066	355	948	1,021	R 1,079	3,208	10,812	R 27,928	NA	NA	NA	29,467	-	R 61,483	-
1995	R 2,791	280	7,073	2,973	409	881	1,004	1,126	2,021	10,616	26,101	NA	NA	NA	25,317	-	R 52,737	-
1996	2,799	324	6,184	3,097	682	1,272	974	1,114	2,498	11,172	26,992	NA	NA	NA	25,947	-	54,005	-

**Trillion Btu**

1960	311.9	74.2	36.0	75.3	3.7	1.3	5.7	17.7	141.1	18.9	299.8	3.7	0.0	0.0	49.2	738.8	122.5	861.3
1965	360.1	95.3	41.4	98.5	5.6	1.9	6.7	19.5	183.7	39.6	396.9	2.9	0.0	0.0	78.8	934.0	188.2	1,122.2
1970	308.4	118.0	37.2	97.9	4.5	4.3	6.1	17.2	211.8	48.7	427.8	2.8	0.0	0.0	92.6	949.6	224.5	1,174.1
1975	155.5	106.2	38.0	91.8	5.9	5.4	6.1	7.1	144.8	53.6	352.7	2.0	0.0	0.0	93.0	709.4	224.2	933.6
1980	146.5	116.4	33.1	54.4	2.4	9.5	6.2	8.1	93.1	67.3	274.1	2.4	0.0	0.0	109.6	649.1	266.4	915.5
1981	138.7	124.2	36.0	35.7	2.3	7.0	6.0	21.8	50.2	57.6	216.6	2.4	0.0	0.0	110.0	591.9	262.2	854.1
1982	108.3	113.1	35.8	35.6	3.0	6.5	5.4	5.5	64.0	44.0	199.8	2.4	0.0	0.0	104.0	527.7	249.8	777.5
1983	90.9	100.1	38.0	28.4	4.1	4.5	5.7	4.4	26.2	36.6	147.9	2.5	0.0	0.0	107.2	448.5	256.9	705.4
1984	103.6	110.6	35.7	29.2	1.4	4.9	6.1	3.2	35.7	39.0	155.3	2.4	0.0	0.0	98.2	470.2	228.6	698.8
1985	94.8	103.6	47.8	28.1	7.0	3.5	5.7	6.4	34.9	38.0	171.4	2.4	0.0	0.0	97.8	470.1	229.7	699.8
1986	81.7	90.0	42.7	18.3	3.5	3.3	5.5	6.6	37.9	42.5	160.5	2.4	0.0	0.0	95.9	430.6	220.6	651.2
1987	84.7	100.0	43.5	22.5	3.6	3.2	6.3	R 6.8	32.9	51.2	R 169.9	2.4	0.0	0.0	98.0	454.9	224.0	678.9
1988	91.5	94.3	53.0	21.6	5.1	2.7	6.0	7.4	30.9	52.9	179.6	2.4	0.0	0.0	102.9	470.7	232.6	703.3
1989	94.4	100.3	33.0	22.4	8.5	2.9	6.2	7.3	27.4	51.5	159.3	2.4	0.0	0.0	107.3	463.7	R 241.0	R 704.7
1990	82.6	105.1	36.7	20.0	1.4	2.4	6.4	6.0	29.9	59.8	162.4	f 12.4	f 81.7	f 0.0	108.9	f 553.2	R 238.3	R f 791.5
1991	82.2	123.3	42.3	17.7	1.9	4.0	5.7	5.8	15.0	54.3	146.7	11.7	80.5	0.0	106.2	550.5	R 231.0	R 781.5
1992	71.3	152.7	45.8	18.2	1.1	4.0	5.8	5.8	19.5	62.5	162.6	14.9	86.7	0.0	105.9	R 594.0	R 226.1	R 820.2
1993	76.2	165.6	53.5	23.6	1.4	3.5	5.9	5.2	24.6	57.7	175.3	13.7	89.7	0.0	103.0	623.5	R 217.6	R 841.1
1994	R 75.1	221.1	49.4	17.9	2.0	3.4	6.2	5.7	20.2	60.5	165.2	15.0	R 90.8	0.0	100.5	R 667.8	R 209.8	R 877.5
1995	R 72.4	287.6	46.9	17.3	2.3	3.2	6.1	5.9	12.7	59.5	154.0	12.6	R 88.8	0.0	86.4	R 701.7	R 179.9	R 881.7
1996	72.5	331.9	41.0	18.0	3.9	4.6	5.9	5.9	15.7	62.4	157.4	19.1	96.1	0.0	88.5	765.5	184.3	949.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 213. Transportation Energy Consumption Estimates, Selected Years 1960-1996, New York**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	201	2	13,729	8,758	9,411	18	1,368	91,701	17,060	142,046	0	2,095	-	5,211	-
1965	44	3	2,427	8,800	23,620	38	1,122	104,690	16,158	156,856	0	2,056	-	4,908	-
1970	19	3	249	10,653	38,338	107	1,196	126,403	18,450	195,396	0	1,906	-	4,618	-
1975	1	3	274	10,488	37,252	125	950	130,948	8,862	188,899	0	2,080	-	5,017	-
1980	0	4	320	10,309	35,916	79	1,064	124,853	11,344	183,885	0	2,061	-	5,012	-
1981	0	4	271	9,443	25,381	159	1,020	124,431	11,737	172,443	0	2,093	-	4,988	-
1982	0	4	198	10,110	4,815	140	931	127,775	11,214	155,184	0	2,051	-	4,926	-
1983	0	3	225	9,938	3,790	167	974	125,340	2,100	142,534	0	2,081	-	4,987	-
1984	0	5	189	11,019	3,887	210	1,039	111,563	1,988	129,895	0	2,259	-	5,258	-
1985	0	4	221	13,551	3,856	147	968	R 133,195	884	R 152,822	0	2,241	-	5,266	-
1986	0	3	256	15,509	3,738	108	947	R 133,690	1,526	R 155,775	0	2,287	-	5,262	-
1987	0	7	126	16,759	2,904	87	1,070	R 140,259	2,175	R 163,381	0	2,217	-	5,066	-
1988	0	5	104	18,450	4,915	122	1,032	R 127,936	3,059	R 155,619	0	2,326	-	5,258	-
1989	0	5	89	18,865	6,047	R 154	1,059	R 130,745	531	R 157,490	0	2,365	-	R 5,313	-
1990	0	5	78	22,363	5,447	R 150	1,089	R 136,834	1,377	R 167,339	R e 3,246	2,428	-	R 5,310	-
1991	0	5	65	19,846	5,300	158	975	R 131,498	3,971	R 161,813	R 2,573	2,327	-	R 5,065	-
1992	0	6	74	20,290	5,357	R 144	994	R 127,273	3,730	R 157,862	R 3,127	2,250	-	R 4,806	-
1993	0	6	60	21,625	5,131	R 127	1,012	R 130,528	3,258	R 161,740	R 3,490	2,164	-	R 4,572	-
1994	0	6	99	22,381	5,729	286	1,058	R 126,968	3,169	R 159,690	R 8,547	2,224	-	R 4,641	-
1995	0	8	76	22,342	7,697	138	1,039	R 131,294	2,354	R 164,941	R 26,922	2,135	-	4,447	-
1996	0	8	66	22,562	11,532	121	1,009	129,665	6,550	171,505	22,748	2,105	-	4,382	-

**Trillion Btu**

1960	5.2	2.4	69.3	51.0	52.6	0.1	8.3	481.7	107.3	770.3	0.0	7.1	785.0	17.8	802.8
1965	1.1	3.4	12.3	51.3	133.2	0.2	6.8	549.9	101.6	855.2	0.0	7.0	866.8	16.7	883.5
1970	0.5	3.2	1.3	62.1	216.7	0.4	7.3	664.0	116.0	1,067.7	0.0	6.5	1,077.9	15.8	1,093.7
1975	(s)	3.0	1.4	61.1	210.7	0.5	5.8	687.9	55.7	1,023.0	0.0	7.1	1,033.0	17.1	1,050.2
1980	0.0	3.6	1.6	60.1	203.2	0.3	6.5	655.9	71.3	998.8	0.0	7.0	1,009.4	17.1	1,026.5
1981	0.0	3.9	1.4	55.0	143.5	0.6	6.2	653.6	73.8	934.1	0.0	7.1	945.1	17.0	962.1
1982	0.0	4.2	1.0	58.9	26.9	0.5	5.6	671.2	70.5	834.6	0.0	7.0	845.8	16.8	862.6
1983	0.0	3.4	1.1	57.9	21.1	0.6	5.9	658.4	13.2	758.2	0.0	7.1	768.7	17.0	785.7
1984	0.0	5.1	1.0	64.2	21.5	0.8	6.3	R 586.0	12.5	R 692.2	0.0	7.7	R 705.0	17.9	R 722.9
1985	0.0	3.6	1.1	78.9	21.4	0.5	5.9	R 699.7	5.6	R 813.0	0.0	7.6	R 824.3	18.0	R 842.3
1986	0.0	3.5	1.3	90.3	20.8	0.4	5.7	702.3	9.6	830.4	0.0	7.8	841.7	18.0	859.6
1987	0.0	6.8	0.6	97.6	16.0	0.3	6.5	R 736.8	13.7	R 871.5	0.0	7.6	R 885.9	17.3	R 903.2
1988	0.0	4.9	0.5	107.5	27.4	0.4	6.3	R 672.0	19.2	R 833.4	0.0	7.9	R 846.2	17.9	R 864.1
1989	0.0	5.4	0.4	109.9	33.8	0.6	6.4	R 686.8	3.3	R 841.3	0.0	8.1	R 854.8	18.1	R 872.9
1990	0.0	4.9	0.4	130.3	30.4	0.5	6.6	R 718.8	8.7	R 895.7	R e 0.2	8.3	R e 908.8	18.1	R e 927.0
1991	0.0	5.2	0.3	115.6	29.6	0.6	5.9	R 690.8	25.0	R 867.7	R 0.2	7.9	R 880.8	17.3	R 898.1
1992	0.0	6.1	0.4	118.2	29.9	0.5	6.0	R 668.6	23.4	R 847.0	R 0.2	7.7	R 860.7	16.4	R 877.1
1993	0.0	6.3	0.3	126.0	28.7	0.5	6.1	R 685.7	20.5	R 867.7	R 0.3	7.4	R 881.4	15.6	R 897.0
1994	0.0	6.3	0.5	130.4	32.3	1.0	6.4	R 667.0	19.9	R 857.5	R 0.7	7.6	R 871.4	15.8	R 887.2
1995	0.0	8.4	0.4	130.1	43.6	0.5	6.3	689.7	14.8	R 885.4	R 2.1	7.3	901.2	15.2	916.4
1996	0.0	8.1	0.3	131.4	65.4	0.4	6.1	681.1	41.2	926.0	1.7	7.2	941.3	15.0	956.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 214. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, New York**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	12,179	123	12,302	58	9,851	540	0	10,391	0	15,369	0	0	0	--
1965	13,591	0	13,591	74	21,410	1,174	0	22,584	727	19,797	0	0	0	--
1970	11,125	0	11,125	106	56,787	3,139	0	59,927	4,273	25,726	0	0	0	--
1975	6,124	0	6,124	14	84,338	5,319	0	89,658	13,111	29,766	0	0	0	--
1980	6,446	0	6,446	124	63,898	749	0	64,647	19,276	33,408	13	0	0	--
1981	6,485	0	6,485	131	62,258	907	0	63,165	17,444	39,767	1	0	0	--
1982	6,662	0	6,662	153	55,531	655	0	56,186	14,438	40,457	9	0	0	--
1983	6,711	0	6,711	136	57,361	603	0	57,964	16,376	46,436	17	0	0	--
1984	7,333	0	7,333	170	48,352	813	0	49,165	21,187	47,504	11	0	0	--
1985	7,787	0	7,787	173	43,220	821	0	44,041	24,092	44,243	(s)	0	0	--
1986	6,298	0	6,298	134	52,104	1,349	0	53,453	22,084	44,942	0	0	0	--
1987	7,828	0	7,828	173	51,096	1,442	0	52,538	22,926	43,007	(s)	0	0	--
1988	9,120	0	9,120	148	62,840	2,162	0	65,002	24,175	36,094	0	0	0	--
1989	10,158	0	10,158	182	64,636	3,636	0	68,272	22,847	28,463	0	0	0	--
1990	9,993	0	9,993	223	53,800	1,016	0	54,816	23,623	27,855	0	0	0	--
1991	9,874	0	9,874	212	44,432	884	0	45,315	28,448	28,778	0	0	0	--
1992	9,963	0	9,963	209	28,784	417	0	29,201	24,155	29,586	0	0	0	--
1993	8,699	0	8,699	172	23,430	567	0	23,998	26,889	33,038	13	0	0	--
1994	8,395	0	8,395	183	17,724	941	0	18,664	29,231	33,241	11	0	0	--
1995	8,051	0	8,051	246	12,251	1,146	0	13,398	26,336	29,776	12	0	0	--
1996	8,254	0	8,254	143	14,919	1,079	0	15,998	35,226	31,359	40	0	0	--

**Trillion Btu**

1960	323.9	2.2	326.1	59.8	61.9	3.1	0.0	65.1	0.0	165.4	0.0	0.0	0.0	616.4
1965	362.6	0.0	362.6	76.1	134.6	6.8	0.0	141.4	8.6	206.9	0.0	0.0	0.0	795.7
1970	274.4	0.0	274.4	108.4	357.0	18.3	0.0	375.3	46.9	270.0	0.0	0.0	0.0	1,074.9
1975	147.3	0.0	147.3	14.0	530.2	30.8	0.0	561.0	144.4	309.8	0.0	0.0	0.0	1,176.4
1980	158.8	0.0	158.8	128.9	401.7	4.4	0.0	406.1	210.3	347.0	0.1	0.0	0.0	1,251.2
1981	158.4	0.0	158.4	134.7	391.4	5.3	0.0	396.7	192.4	415.7	(s)	0.0	0.0	1,297.8
1982	165.5	0.0	165.5	157.2	349.1	3.8	0.0	352.9	159.9	422.9	0.1	0.0	0.0	1,258.5
1983	167.6	0.0	167.6	140.0	360.6	3.5	0.0	364.1	178.6	488.5	0.2	0.0	0.0	1,339.0
1984	184.1	0.0	184.1	175.2	304.0	4.7	0.0	308.7	229.7	495.9	0.1	0.0	0.0	1,393.8
1985	196.2	0.0	196.2	178.7	271.7	4.8	0.0	276.5	260.5	462.2	(s)	0.0	0.0	1,374.1
1986	160.2	0.0	160.2	138.4	327.6	7.9	0.0	335.4	238.5	469.5	0.0	0.0	0.0	1,342.0
1987	200.2	0.0	200.2	178.5	321.2	8.4	0.0	329.6	247.1	448.1	(s)	0.0	0.0	1,403.5
1988	233.7	0.0	233.7	153.1	395.1	12.6	0.0	407.7	259.7	372.6	0.0	0.0	0.0	1,426.8
1989	260.5	0.0	260.5	187.1	406.4	21.2	0.0	427.5	245.0	R 296.9	0.0	0.0	0.0	R 1,417.1
1990	256.7	0.0	256.7	230.6	338.2	5.9	0.0	344.2	252.3	R 289.7	0.0	0.0	0.0	R 1,356.3
1991	255.2	0.0	255.2	218.2	279.3	5.1	0.0	284.5	305.5	R 300.0	0.0	0.0	0.0	R 1,360.0
1992	258.6	0.0	258.6	215.0	181.0	2.4	0.0	183.4	257.9	R 305.9	0.0	0.0	0.0	R 1,219.7
1993	224.7	0.0	224.7	177.1	147.3	3.3	0.0	150.6	287.2	R 340.6	0.1	0.0	0.0	R 1,188.5
1994	217.6	0.0	217.6	188.2	111.4	5.5	0.0	116.9	312.1	R 342.7	0.1	0.0	0.0	R 1,223.0
1995	210.1	0.0	210.1	252.7	77.0	6.7	0.0	83.7	280.7	R 306.8	0.1	0.0	0.0	R 1,162.1
1996	214.8	0.0	214.8	146.8	93.8	6.3	0.0	100.1	374.2	324.2	0.4	0.0	0.0	1,170.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 215. Energy Consumption Estimates by Source, Selected Years 1960-1996, North Carolina**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	8,948	45	2,617	692	13,445	3,401	12,091	2,635	724	35,875	4,603	186	76,268	0	4,998	0	0	735	-	
1965	12,708	76	2,699	714	17,182	3,649	12,717	4,188	835	43,144	4,723	835	90,687	0	5,385	0	0	-6,408	-	
1970	20,417	151	3,621	151	22,612	4,702	11,612	5,489	851	56,348	6,778	1,416	113,580	0	4,374	0	0	-9,690	-	
1975	20,055	115	3,049	219	21,259	3,809	5,832	6,445	944	66,935	7,779	1,815	118,083	1,405	7,055	0	0	22,308	-	
1980	25,466	153	3,089	215	24,116	5,209	3,259	7,979	1,206	66,222	9,058	3,112	123,465	5,775	5,486	0	0	10,592	-	
1981	26,816	152	2,160	268	21,225	5,319	2,356	7,533	1,156	66,515	5,621	3,195	115,349	6,246	2,930	0	0	11,974	-	
1982	25,356	142	2,209	185	20,179	5,747	2,332	6,943	1,054	65,854	5,756	2,577	112,835	9,126	5,408	0	0	-3,977	-	
1983	23,918	137	3,216	188	24,644	6,404	1,549	6,981	1,104	67,201	5,802	2,143	119,234	12,363	6,142	0	0	5,745	-	
1984	22,417	144	3,850	167	26,065	6,413	1,514	6,797	1,177	69,921	7,906	2,672	126,483	20,232	6,369	0	0	5,591	-	
1985	22,052	134	3,450	174	24,824	6,668	4,775	7,546	1,097	R 70,856	6,233	2,493	R 128,116	19,303	4,094	0	0	23,946	-	
1986	23,242	136	4,533	227	27,613	7,123	3,941	7,289	1,073	R 74,004	6,338	4,155	R 136,296	20,286	2,521	0	0	31,547	-	
1987	19,965	149	4,022	218	28,380	7,749	3,662	8,791	1,213	R 76,719	6,281	4,599	R 141,634	28,600	5,101	0	0	37,444	-	
1988	20,506	152	4,490	236	31,546	8,318	4,803	7,863	1,170	R 78,933	6,119	4,655	R 148,132	29,146	2,893	0	0	46,352	-	
1989	22,239	162	3,766	231	27,059	7,689	3,372	9,308	1,200	R 77,874	5,512	4,504	R 140,516	29,212	6,999	0	0	28,335	-	
1990	21,150	161	4,207	213	25,075	5,567	1,625	8,892	1,235	R 77,525	5,939	5,173	R 135,450	25,905	i NA	i NA	i NA	R 50,544	-	
1991	20,877	166	3,821	170	23,954	4,384	1,937	10,308	1,104	R 77,046	6,108	5,192	R 134,024	30,312	NA	NA	NA	R 45,394	-	
1992	24,075	180	4,250	154	25,733	4,684	2,026	11,092	1,126	R 77,196	7,529	5,801	R 139,592	22,754	NA	NA	NA	R 51,588	-	
1993	25,760	186	4,645	118	26,479	4,897	2,097	11,870	1,147	R 81,432	8,090	5,541	R 146,317	23,759	NA	NA	NA	R 50,542	-	
1994	23,282	188	4,824	136	28,599	4,359	1,732	12,331	1,198	R 83,445	6,395	5,693	R 148,712	32,346	NA	NA	NA	R 38,730	-	
1995	24,084	203	6,426	139	31,828	4,947	2,360	12,137	1,178	86,421	6,361	5,528	157,325	35,910	NA	NA	NA	R 40,115	-	
1996	27,624	213	4,046	148	33,386	9,127	2,890	13,613	1,143	88,147	6,944	5,814	165,258	33,718	NA	NA	NA	30,701	-	
<b>Trillion Btu</b>																				
1960	231.4	47.0	17.4	3.5	78.3	18.2	68.6	10.6	4.4	188.4	28.9	1.1	419.4	0.0	53.8	0.0	0.0	2.5	754.1	
1965	325.9	78.2	17.9	3.6	100.1	19.7	72.1	16.8	5.1	226.6	29.7	4.7	496.3	0.0	56.3	0.0	0.0	-21.9	934.9	
1970	491.4	154.9	24.0	0.8	131.7	25.7	65.8	20.7	5.2	296.0	42.6	8.0	620.6	0.0	45.9	0.0	0.0	-33.1	1,279.7	
1975	476.5	116.9	20.2	1.1	123.8	20.8	33.1	23.9	5.7	351.6	48.9	10.2	639.5	15.5	73.4	0.0	0.0	76.1	1,397.9	
1980	624.7	155.2	20.5	1.1	140.5	28.7	18.5	29.3	7.3	347.9	56.9	17.2	667.9	63.0	57.0	0.0	0.0	36.1	1,603.9	
1981	655.3	154.3	14.3	1.4	123.6	29.4	13.4	27.4	7.0	349.4	35.3	17.8	619.1	68.9	30.6	0.0	0.0	40.9	1,569.1	
1982	622.1	146.8	14.7	0.9	117.5	31.8	13.2	25.1	6.4	345.9	36.2	14.3	606.1	101.1	56.5	0.0	0.0	-13.6	1,519.0	
1983	595.0	141.1	21.3	1.0	143.6	35.6	8.8	25.2	6.7	353.0	36.5	11.9	643.5	134.8	64.6	0.0	0.0	19.6	1,598.6	
1984	558.9	148.7	25.5	0.8	151.8	35.5	8.6	24.5	7.1	367.3	49.7	14.6	685.5	219.4	66.5	0.0	0.0	19.1	1,698.2	
1985	550.5	138.4	22.9	0.9	144.6	37.0	27.1	27.2	6.7	R 372.2	39.2	13.7	R 691.5	208.7	42.8	0.0	0.0	81.7	R 1,713.5	
1986	583.2	140.3	30.1	1.1	160.8	39.7	22.3	26.5	6.5	R 388.7	39.8	22.8	R 738.5	219.1	26.3	0.0	0.0	107.6	R 1,815.0	
1987	500.9	153.3	26.7	1.1	165.3	43.2	20.8	32.2	7.4	R 403.0	39.5	25.3	R 764.4	308.2	53.1	0.0	0.0	127.8	R 1,907.7	
1988	515.4	156.6	29.8	1.2	183.8	46.4	27.2	28.7	7.1	R 414.6	38.5	25.8	R 803.0	313.1	29.9	0.0	0.0	158.2	R 1,976.2	
1989	556.8	166.8	25.0	1.2	157.6	42.8	19.1	34.3	7.3	R 409.1	34.7	24.9	R 755.9	313.3	R 73.0	0.0	0.0	R 96.7	R 1,962.5	
1990	530.2	166.4	27.9	1.1	146.1	30.8	9.2	32.2	7.5	R 407.2	37.3	28.7	R 728.1	276.7	R i 72.4	R i 77.7	i 0.1	R i 2,023.8	R i 2,023.8	
1991	522.5	171.7	25.4	0.9	139.5	24.3	11.0	37.3	6.7	R 404.7	38.4	28.8	R 716.9	325.6	R 62.9	R 79.2	0.1	R 154.9	R 2,033.5	
1992	600.3	185.7	28.2	0.8	149.9	26.0	11.5	40.2	6.8	R 405.5	47.3	32.2	R 748.4	243.0	R 60.8	R 85.7	0.1	R 176.0	R 2,099.7	
1993	642.7	192.1	30.8	0.6	154.2	27.2	11.9	42.8	7.0	R 427.8	50.9	30.6	R 783.8	253.8	R 54.0	R 89.0	0.1	R 172.5	R 2,187.7	
1994	578.8	194.6	32.0	0.7	166.6	24.5	9.8	44.8	7.3	R 438.3	40.2	31.5	R 795.7	345.3	R 78.2	R 92.2	0.1	R 132.1	R 2,216.2	
1995	601.1	209.4	42.6	0.7	185.4	28.0	13.4	44.0	7.1	454.0	40.0	30.6	845.8	382.7	R 91.0	59.8	0.1	R 136.9	R 2,326.9	
1996	687.0	220.8	26.8	0.7	194.5	51.7	16.4	49.2	6.9	463.0	43.7	32.0	885.1	358.2	66.2	96.7	0.2	104.8	2,416.5	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 216. Residential Energy Consumption Estimates, Selected Years 1960-1996, North Carolina**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	348	0	348	9	5,887	10,429	1,615	17,931	0	0	5,796	-	14,417	-
1965	190	0	190	15	6,654	10,547	2,563	19,765	0	0	8,601	-	20,537	-
1970	153	0	153	27	8,663	10,045	3,003	21,711	0	0	14,660	-	35,527	-
1975	129	0	129	27	7,261	4,901	2,245	14,408	0	0	18,999	-	45,828	-
1980	60	0	60	34	7,044	2,747	2,846	12,637	0	0	24,377	-	59,277	-
1981	48	0	48	33	5,516	1,939	2,784	10,239	0	0	24,928	-	59,410	-
1982	54	0	54	32	4,910	2,025	2,521	9,456	0	0	24,007	-	57,662	-
1983	45	1	45	31	5,582	1,214	2,997	9,793	0	0	25,237	-	60,464	-
1984	42	0	42	32	5,724	1,292	3,163	10,179	0	0	26,930	-	62,683	-
1985	68	1	69	29	4,880	3,994	3,194	12,067	0	0	26,852	-	63,086	-
1986	54	0	54	32	4,980	3,324	3,180	11,483	0	0	29,506	-	67,871	-
1987	57	0	57	36	5,684	3,210	3,877	12,770	0	0	31,507	-	71,990	-
1988	71	(s)	71	38	5,735	4,079	3,591	13,405	0	0	32,212	-	72,824	-
1989	53	(s)	54	39	4,676	3,012	4,823	12,512	0	0	32,784	-	R 73,638	-
1990	55	0	55	35	3,556	1,408	4,277	9,241	e 772	e 42	33,144	-	R 72,491	-
1991	34	(s)	34	38	3,201	1,674	4,790	9,664	813	42	34,391	-	R 74,853	-
1992	71	(s)	71	43	3,501	1,834	5,377	10,713	856	42	34,761	-	R 74,248	-
1993	80	(s)	80	47	3,701	1,888	5,552	11,140	933	43	37,742	-	R 79,742	-
1994	92	(s)	92	47	3,258	1,308	5,568	10,133	914	43	37,207	-	R 77,633	-
1995	78	R 0	78	49	3,895	2,098	5,850	11,842	1,015	44	39,506	-	R 82,293	-
1996	72	0	72	59	4,318	2,546	6,384	13,248	1,013	45	41,592	-	86,566	-
<b>Trillion Btu</b>														
1960	8.6	0.0	8.6	8.9	34.3	59.1	6.5	99.9	0.0	0.0	19.8	137.2	49.2	186.4
1965	4.7	0.0	4.7	15.1	38.8	59.8	10.3	108.8	0.0	0.0	29.3	157.9	70.1	228.0
1970	3.6	0.0	3.6	28.0	50.5	57.0	11.3	118.8	0.0	0.0	50.0	200.4	121.2	321.6
1975	3.0	0.0	3.0	28.0	42.3	27.8	8.3	78.4	0.0	0.0	64.8	174.3	156.4	330.6
1980	1.5	0.0	1.5	34.4	41.0	15.6	10.5	67.1	0.0	0.0	83.2	186.1	202.3	388.3
1981	1.2	0.0	1.2	33.4	32.1	11.0	10.1	53.3	0.0	0.0	85.1	172.9	202.7	375.6
1982	1.3	0.0	1.3	32.6	28.6	11.5	9.1	49.2	0.0	0.0	81.9	165.1	196.7	361.8
1983	1.1	(s)	1.1	32.3	32.5	6.9	10.8	50.2	0.0	0.0	86.1	169.7	206.3	376.0
1984	1.0	0.0	1.0	33.5	33.3	7.3	11.4	52.1	0.0	0.0	91.9	178.5	213.9	392.4
1985	1.7	(s)	1.7	29.6	28.4	22.6	11.5	62.6	0.0	0.0	91.6	185.5	215.2	400.8
1986	1.4	0.0	1.4	32.7	29.0	18.8	11.6	59.4	0.0	0.0	100.7	194.2	231.6	425.8
1987	1.4	0.0	1.4	37.0	33.1	18.2	14.2	65.5	0.0	0.0	107.5	211.4	245.6	457.1
1988	1.8	(s)	1.8	39.5	33.4	23.1	13.1	69.7	0.0	0.0	109.9	220.9	248.5	469.4
1989	1.3	(s)	1.3	39.9	27.2	17.1	17.8	62.1	0.0	0.0	111.9	215.1	R 251.3	R 466.4
1990	1.4	0.0	1.4	36.1	20.7	8.0	15.5	44.2	e 15.4	e 0.1	113.1	e 210.4	R 247.3	R e 457.7
1991	0.9	(s)	0.9	39.2	18.6	9.5	17.3	45.4	16.3	0.1	117.3	219.3	R 255.4	R 474.6
1992	1.8	(s)	1.8	44.0	20.4	10.4	19.5	50.3	17.1	0.1	118.6	232.0	R 253.3	R 485.3
1993	2.0	(s)	2.0	48.8	21.6	10.7	20.0	52.3	18.7	0.1	128.8	250.6	R 272.1	R 522.7
1994	2.3	(s)	2.3	49.2	19.0	7.4	20.2	46.6	18.3	0.1	126.9	243.5	R 264.9	R 508.4
1995	2.0	R 0.0	2.0	51.0	22.7	11.9	21.2	55.8	20.3	0.1	134.8	264.0	280.8	544.8
1996	1.8	0.0	1.8	60.9	25.2	14.4	23.1	62.7	20.3	0.2	141.9	287.7	295.4	583.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 217. Commercial Energy Consumption Estimates, Selected Years 1960-1996, North Carolina**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	647	0	647	4	1,156	248	285	206	122	2,018	0	2,667	-	6,634	-
1965	352	0	352	7	1,307	251	452	278	120	2,409	0	5,360	-	12,797	-
1970	284	0	284	22	1,701	239	530	355	179	3,004	0	9,697	-	23,499	-
1975	240	0	240	22	1,426	117	396	414	233	2,586	0	11,679	-	28,170	-
1980	111	0	111	26	1,673	118	502	790	491	3,574	0	14,258	-	34,671	-
1981	90	0	90	26	1,343	45	491	801	102	2,782	0	15,681	-	37,373	-
1982	101	0	101	25	885	33	445	689	185	2,237	0	15,760	-	37,854	-
1983	83	(s)	83	25	2,932	94	529	664	169	4,388	0	16,357	-	39,188	-
1984	78	0	78	26	3,007	41	558	1,524	230	5,361	0	18,264	-	42,510	-
1985	125	1	126	25	2,649	245	564	R 633	322	4,412	0	19,163	-	45,021	-
1986	101	0	101	25	2,418	172	561	647	241	4,040	0	20,858	-	47,979	-
1987	105	0	105	30	2,934	137	684	R 723	63	R 4,542	0	22,110	-	50,519	-
1988	132	(s)	132	32	3,087	257	634	R 682	282	R 4,942	0	23,117	-	52,262	-
1989	99	(s)	99	33	2,351	176	851	R 625	226	R 4,231	0	24,273	-	R 54,522	-
1990	102	0	102	31	1,938	78	755	R 782	226	R 3,778	e NA	25,516	-	R 55,807	-
1991	63	(s)	63	34	1,821	93	845	375	118	3,252	NA	26,411	-	R 57,485	-
1992	132	(s)	132	36	1,639	46	949	323	112	3,070	NA	26,912	-	R 57,483	-
1993	149	(s)	149	37	1,886	50	980	59	288	3,264	52	28,547	-	R 60,315	-
1994	170	(s)	171	39	1,959	340	983	78	268	3,627	55	29,275	-	R 61,084	-
1995	145	R 0	145	37	2,270	147	1,032	61	188	3,699	65	31,104	-	R 64,790	-
1996	134	0	134	40	2,864	178	1,127	312	223	4,705	86	32,563	-	67,774	-

  

Trillion Btu															
1960	16.0	0.0	16.0	3.8	6.7	1.4	1.1	1.1	0.8	11.1	0.0	9.1	40.1	22.6	62.7
1965	8.7	0.0	8.7	7.5	7.6	1.4	1.8	1.5	0.8	13.1	0.0	18.3	47.5	43.7	91.2
1970	6.7	0.0	6.7	22.0	9.9	1.4	2.0	1.9	1.1	16.3	0.0	33.1	78.1	80.2	158.3
1975	5.6	0.0	5.6	22.0	8.3	0.7	1.5	2.2	1.5	14.1	0.0	39.8	81.6	96.1	177.7
1980	2.7	0.0	2.7	26.5	9.7	0.7	1.8	4.1	3.1	19.5	0.0	48.6	97.3	118.3	215.6
1981	2.2	0.0	2.2	26.7	7.8	0.3	1.8	4.2	0.6	14.7	0.0	53.5	97.1	127.5	224.6
1982	2.5	0.0	2.5	25.7	5.2	0.2	1.6	3.6	1.2	11.7	0.0	53.8	93.7	129.2	222.8
1983	2.1	(s)	2.1	25.5	17.1	0.5	1.9	3.5	1.1	24.1	0.0	55.8	107.5	133.7	241.2
1984	1.9	0.0	1.9	27.1	17.5	0.2	2.0	8.0	1.4	29.2	0.0	62.3	120.5	145.0	265.6
1985	3.1	(s)	3.1	25.9	15.4	1.4	2.0	3.3	2.0	24.2	0.0	65.4	118.6	153.6	272.2
1986	2.5	0.0	2.5	26.3	14.1	1.0	2.0	3.4	1.5	22.0	0.0	71.2	122.0	163.7	285.7
1987	2.6	0.0	2.6	30.9	17.1	0.8	2.5	3.8	0.4	24.6	0.0	75.4	133.6	172.4	R 306.0
1988	3.3	(s)	3.3	33.4	18.0	1.5	2.3	3.6	1.8	27.1	0.0	78.9	142.7	178.3	R 321.1
1989	2.5	(s)	2.5	34.2	13.7	1.0	3.1	3.3	1.4	22.5	0.0	82.8	142.0	R 186.0	R 328.0
1990	2.6	0.0	2.6	32.3	11.3	0.4	2.7	4.1	1.4	20.0	e NA	87.1	141.9	R 190.4	R 332.3
1991	1.6	(s)	1.6	35.4	10.6	0.5	3.1	2.0	0.7	16.9	NA	90.1	144.0	R 196.1	R 340.2
1992	3.3	(s)	3.3	37.7	9.5	0.3	3.4	1.7	0.7	15.7	NA	91.8	148.4	R 196.1	R 344.6
1993	3.7	(s)	3.7	38.7	11.0	0.3	3.5	0.3	1.8	16.9	1.0	97.4	R 157.8	R 205.8	R 363.6
1994	4.3	(s)	4.3	40.3	11.4	1.9	3.6	0.4	1.7	19.0	1.1	99.9	R 164.6	R 208.4	R 373.0
1995	3.7	R 0.0	3.7	38.6	13.2	0.8	3.7	0.3	1.2	19.3	1.3	106.1	R 169.0	R 221.1	R 390.0
1996	3.3	0.0	3.3	41.9	16.7	1.0	4.1	1.6	1.4	24.8	1.7	111.1	182.9	231.2	414.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 218. Industrial Energy Consumption Estimates, Selected Years 1960-1996, North Carolina**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,421	26	2,617	3,155	1,413	730	179	1,089	3,967	186	13,336	48	0	0	8,773	-	21,822	-
1965	2,563	47	2,699	4,710	1,919	1,156	258	1,315	4,005	835	16,896	37	0	0	10,707	-	25,565	-
1970	2,267	75	3,621	4,514	1,328	1,891	328	1,004	5,809	1,416	19,911	10	0	0	16,099	-	39,013	-
1975	1,479	62	3,049	4,271	814	3,695	446	782	7,045	1,815	21,915	5	0	0	20,875	-	50,354	-
1980	1,375	86	3,089	4,131	394	4,581	571	514	8,468	3,112	24,859	3	0	0	25,254	-	61,409	-
1981	1,729	86	2,160	3,289	372	4,118	548	488	5,098	3,195	19,268	3	0	0	24,700	-	58,867	-
1982	1,661	79	2,209	3,171	274	3,832	499	434	5,330	2,577	18,326	3	0	0	22,575	-	54,222	-
1983	1,876	75	3,216	2,951	241	3,284	523	386	5,591	2,143	18,336	3	0	0	24,623	-	58,993	-
1984	1,992	80	3,850	3,026	181	2,868	558	926	7,633	2,672	R 21,715	3	0	0	26,474	-	61,620	-
1985	2,247	75	3,450	3,236	537	3,606	520	832	5,814	2,493	R 20,486	3	0	0	26,272	-	61,725	-
1986	2,545	72	4,533	4,584	445	3,378	508	815	5,967	4,155	R 24,386	3	0	0	27,072	-	62,273	-
1987	2,548	76	4,022	3,808	315	4,105	574	R 822	5,569	4,599	R 23,815	3	0	0	28,993	-	66,247	-
1988	2,536	75	4,490	3,717	467	3,490	554	R 739	5,421	4,655	R 23,533	3	0	0	30,211	-	68,301	-
1989	2,570	83	3,766	3,564	184	R 3,480	568	R 837	4,616	4,504	R 21,520	3	0	0	31,152	-	R 69,974	-
1990	2,989	86	4,207	2,918	139	R 3,700	585	R 807	5,193	5,173	R 22,722	f NA	f NA	f NA	31,265	-	R 68,380	-
1991	2,702	85	3,821	2,977	170	4,487	523	R 860	5,244	5,192	R 23,275	NA	NA	NA	31,514	-	R 68,592	-
1992	2,860	91	4,250	3,205	146	R 4,623	533	R 819	6,758	5,801	26,135	NA	NA	NA	32,522	-	R 69,465	-
1993	2,476	92	4,645	3,138	158	R 5,184	543	R 845	7,374	5,541	27,430	NA	NA	NA	33,488	-	R 70,753	-
1994	2,396	95	4,824	3,117	84	5,503	568	R 890	5,915	5,693	26,593	NA	NA	NA	33,307	-	R 69,496	-
1995	2,437	107	6,426	4,492	115	5,115	558	R 977	5,869	5,528	29,050	NA	NA	NA	34,063	-	R 70,955	-
1996	2,336	104	4,046	4,434	165	5,970	541	1,003	6,387	5,814	28,361	NA	NA	NA	34,142	-	71,060	-

**Trillion Btu**

1960	61.6	27.0	17.4	18.4	8.0	2.9	1.1	5.7	24.9	1.1	79.5	0.5	0.0	0.0	29.9	198.6	74.5	273.0
1965	64.6	48.3	17.9	27.4	10.9	4.6	1.6	6.9	25.2	4.7	99.2	0.4	0.0	0.0	36.5	249.1	87.2	336.3
1970	53.9	76.9	24.0	26.3	7.5	7.1	2.0	5.3	36.5	8.0	116.8	0.1	0.0	0.0	54.9	302.5	133.1	435.6
1975	34.7	63.2	20.2	24.9	4.6	13.7	2.7	4.1	44.3	10.2	124.8	0.1	0.0	0.0	71.2	294.0	171.8	465.8
1980	33.6	86.6	20.5	24.1	2.2	16.8	3.5	2.7	53.2	17.2	140.2	(s)	0.0	0.0	86.2	346.6	209.5	556.2
1981	42.1	86.9	14.3	19.2	2.1	15.0	3.3	2.6	32.1	17.8	106.3	(s)	0.0	0.0	84.3	319.7	200.9	520.5
1982	40.7	81.5	14.7	18.5	1.6	13.9	3.0	2.3	33.5	14.3	101.7	(s)	0.0	0.0	77.0	301.0	185.0	486.0
1983	46.5	77.2	21.3	17.2	1.4	11.9	3.2	2.0	35.2	11.9	104.0	(s)	0.0	0.0	84.0	311.7	201.3	513.0
1984	49.3	82.2	25.5	17.6	1.0	10.3	3.4	4.9	48.0	14.6	125.4	(s)	0.0	0.0	90.3	347.3	210.2	557.5
1985	55.9	77.4	22.9	18.8	3.0	13.0	3.2	4.4	36.6	13.7	115.6	(s)	0.0	0.0	89.6	338.5	210.6	549.1
1986	63.5	74.9	30.1	26.7	2.5	12.3	3.1	4.3	37.5	22.8	139.3	(s)	0.0	0.0	92.4	370.1	212.5	582.5
1987	63.8	78.8	26.7	22.2	1.8	15.0	3.5	4.3	35.0	25.3	133.8	(s)	0.0	0.0	98.9	375.3	226.0	R 601.4
1988	63.5	77.1	29.8	21.6	2.6	12.7	3.4	3.9	34.1	25.8	133.9	(s)	0.0	0.0	103.1	377.7	233.0	610.7
1989	63.9	85.2	25.0	20.8	1.0	12.8	3.4	4.4	29.0	24.9	121.3	(s)	0.0	0.0	106.3	376.8	R 238.8	R 615.5
1990	74.5	88.9	27.9	17.0	0.8	13.4	3.5	4.2	32.6	28.7	128.2	f 0.1	f 62.1	f 0.0	106.7	R f 460.6	R 233.3	R f 693.9
1991	67.8	87.6	25.4	17.3	1.0	16.2	3.2	4.5	33.0	28.8	129.3	0.1	62.8	0.0	107.5	455.1	R 234.0	R 689.1
1992	71.7	94.1	28.2	18.7	0.8	16.8	3.2	4.3	42.5	32.2	146.6	0.4	68.3	0.0	111.0	492.2	R 237.0	R 729.2
1993	62.3	95.5	30.8	18.3	0.9	18.7	3.3	4.4	46.4	30.6	153.4	0.3	69.0	0.0	114.3	494.8	R 241.4	R 736.2
1994	60.1	98.3	32.0	18.2	0.5	20.0	3.4	4.7	37.2	31.5	147.4	20.4	R 71.8	0.0	113.6	R 511.7	R 237.1	R 748.8
1995	61.6	110.3	42.6	26.2	0.7	18.5	3.4	5.1	36.9	30.6	164.0	R 18.4	R 69.4	0.0	116.2	R 539.8	242.1	R 781.9
1996	58.7	107.9	26.8	25.8	0.9	21.6	3.3	5.3	40.2	32.0	155.9	19.6	72.3	0.0	116.5	530.9	242.5	773.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 219. Transportation Energy Consumption Estimates, Selected Years 1960-1996, North Carolina**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	43	2	692	3,187	3,401	5	545	34,580	494	42,905	0	0	-	0	-
1965	9	4	714	4,458	3,649	17	578	41,551	581	51,548	0	0	-	0	-
1970	4	6	151	6,301	4,702	65	523	54,989	345	67,077	0	0	-	0	-
1975	(s)	4	219	8,207	3,809	108	498	65,739	263	78,844	0	0	-	0	-
1980	0	6	215	10,707	5,209	50	635	64,918	99	81,834	0	0	-	0	-
1981	0	6	268	10,598	5,319	139	609	65,227	421	82,581	0	0	-	0	-
1982	0	7	185	10,883	5,747	144	555	64,731	240	82,485	0	0	-	0	-
1983	0	6	188	12,716	6,404	171	581	66,151	41	86,253	0	0	-	0	-
1984	0	6	167	13,972	6,413	R 207	620	67,471	42	88,892	0	0	-	0	-
1985	0	5	174	13,617	6,668	183	578	R 69,392	97	R 90,708	0	0	-	0	-
1986	0	5	227	15,281	7,123	170	565	R 72,542	130	R 96,038	0	0	-	0	-
1987	0	5	218	15,519	7,749	125	638	R 75,173	648	R 100,071	0	0	-	0	-
1988	0	5	236	18,549	8,318	148	616	R 77,511	415	R 105,793	0	0	-	0	-
1989	0	6	231	15,910	7,689	153	631	R 76,412	670	R 101,696	0	0	-	0	-
1990	0	6	213	16,289	5,567	R 160	650	R 75,937	520	R 99,336	R e 3,063	0	-	0	-
1991	0	6	170	15,605	4,384	186	581	R 75,811	746	R 97,483	R 2,428	0	-	0	-
1992	0	6	154	17,073	4,684	R 143	593	R 76,054	659	R 99,361	R 2,951	0	-	0	-
1993	0	6	118	17,403	4,897	R 155	604	R 80,528	428	R 104,133	R 3,293	0	-	0	-
1994	0	6	136	19,819	4,359	R 278	631	R 82,476	213	R 107,912	R 12,428	0	-	0	-
1995	0	6	139	20,665	4,947	141	620	85,383	304	R 112,199	R 1,166	0	-	0	-
1996	0	7	148	21,201	9,127	133	602	86,832	334	118,376	32,566	0	-	0	-

**Trillion Btu**

1960	1.1	2.5	3.5	18.6	18.2	(s)	3.3	181.6	3.1	228.4	0.0	0.0	232.0	0.0	232.0
1965	0.2	4.4	3.6	26.0	19.7	0.1	3.5	218.3	3.7	274.8	0.0	0.0	279.4	0.0	279.4
1970	0.1	6.3	0.8	36.7	25.7	0.2	3.2	288.9	2.2	357.7	0.0	0.0	364.0	0.0	364.0
1975	(s)	3.6	1.1	47.8	20.8	0.4	3.0	345.3	1.7	420.1	0.0	0.0	423.8	0.0	423.8
1980	0.0	5.9	1.1	62.4	28.7	0.2	3.8	341.0	0.6	437.8	0.0	0.0	443.7	0.0	443.7
1981	0.0	6.3	1.4	61.7	29.4	0.5	3.7	342.6	2.6	441.9	0.0	0.0	448.3	0.0	448.3
1982	0.0	6.9	0.9	63.4	31.8	0.5	3.4	340.0	1.5	441.6	0.0	0.0	448.4	0.0	448.4
1983	0.0	6.0	1.0	74.1	35.6	0.6	3.5	347.5	0.3	462.5	0.0	0.0	468.5	0.0	468.5
1984	0.0	5.8	0.8	81.4	35.5	0.7	3.8	354.4	0.3	476.9	0.0	0.0	482.7	0.0	482.7
1985	0.0	4.9	0.9	79.3	37.0	0.7	3.5	R 364.5	0.6	R 486.5	0.0	0.0	R 491.4	0.0	R 491.4
1986	0.0	5.2	1.1	89.0	39.7	0.6	3.4	381.1	0.8	515.8	0.0	0.0	521.0	0.0	521.0
1987	0.0	5.3	1.1	90.4	43.2	0.5	3.9	R 394.9	4.1	R 538.0	0.0	0.0	R 543.3	0.0	R 543.3
1988	0.0	5.4	1.2	108.0	46.4	0.5	3.7	R 407.2	2.6	R 569.7	0.0	0.0	R 575.0	0.0	R 575.0
1989	0.0	5.9	1.2	92.7	42.8	0.6	3.8	R 401.4	4.2	R 546.7	0.0	0.0	R 552.5	0.0	R 552.5
1990	0.0	6.5	1.1	94.9	30.8	0.6	3.9	R 398.9	3.3	R 533.5	R e 0.2	0.0	R e 539.9	0.0	R e 539.9
1991	0.0	6.4	0.9	90.9	24.3	0.7	3.5	R 398.2	4.7	R 523.2	R 0.2	0.0	R 529.6	0.0	R 529.6
1992	0.0	6.7	0.8	99.5	26.0	0.5	3.6	R 399.5	4.1	R 534.0	R 0.2	0.0	R 540.6	0.0	R 540.6
1993	0.0	6.2	0.6	101.4	27.2	0.6	3.7	R 423.0	2.7	R 559.1	R 0.3	0.0	R 565.3	0.0	R 565.3
1994	0.0	6.0	0.7	115.4	24.5	1.0	3.8	R 433.2	1.3	R 580.1	R 0.9	0.0	R 586.1	0.0	R 586.1
1995	0.0	6.3	0.7	120.4	28.0	0.5	3.8	448.5	1.9	603.8	0.1	0.0	610.1	0.0	610.1
1996	0.0	7.6	0.7	123.5	51.7	0.5	3.6	456.1	2.1	638.3	2.5	0.0	646.0	0.0	646.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 220. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, North Carolina**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	5,488	0	5,488	5	19	60	0	79	0	4,951	0	0	0	--
1965	9,595	0	9,595	3	16	53	0	70	0	5,349	0	0	0	--
1970	17,709	0	17,709	21	445	1,432	0	1,877	0	4,363	0	0	0	--
1975	18,206	0	18,206	(s)	237	93	0	330	1,405	7,050	0	0	0	--
1980	23,920	0	23,920	2	(s)	561	0	561	5,775	5,483	0	0	0	--
1981	24,950	0	24,950	1	0	480	0	480	6,246	2,927	0	0	0	--
1982	23,540	0	23,540	(s)	1	330	0	331	9,126	5,405	0	0	0	--
1983	21,913	0	21,913	(s)	0	464	0	464	12,363	6,139	0	0	0	--
1984	20,306	0	20,306	(s)	1	335	0	336	20,232	6,366	0	0	0	--
1985	19,610	0	19,610	1	0	443	0	443	19,303	4,091	0	0	0	--
1986	20,542	0	20,542	1	0	349	0	349	20,286	2,518	0	0	0	--
1987	17,255	0	17,255	1	0	435	0	435	28,600	5,098	0	0	0	--
1988	17,766	0	17,766	1	0	458	0	458	29,146	2,890	0	0	0	--
1989	19,516	0	19,516	2	0	557	0	557	29,212	6,996	0	0	0	--
1990	18,005	0	18,005	2	0	373	0	373	25,905	6,957	0	0	0	--
1991	18,078	0	18,078	3	0	349	0	349	30,312	6,024	0	0	0	--
1992	21,011	0	21,011	3	0	314	0	314	22,754	5,835	0	0	0	--
1993	23,055	0	23,055	3	0	351	0	351	23,759	5,207	0	0	0	--
1994	20,624	0	20,624	1	0	447	0	447	32,346	5,606	0	0	0	--
1995	21,424	0	21,424	3	0	505	0	505	35,910	4,014	0	0	0	--
1996	25,083	0	25,083	2	0	569	0	569	33,718	4,517	0	0	0	--

**Trillion Btu**

1960	144.0	0.0	144.0	4.8	0.1	0.4	0.0	0.5	0.0	53.3	0.0	0.0	0.0	202.6
1965	247.7	0.0	247.7	3.0	0.1	0.3	0.0	0.4	0.0	55.9	0.0	0.0	0.0	307.0
1970	427.0	0.0	427.0	21.6	2.8	8.3	0.0	11.1	0.0	45.8	0.0	0.0	0.0	505.6
1975	433.1	0.0	433.1	0.1	1.5	0.5	0.0	2.0	15.5	73.4	0.0	0.0	0.0	524.1
1980	586.9	0.0	586.9	1.8	(s)	3.3	0.0	3.3	63.0	57.0	0.0	0.0	0.0	711.9
1981	609.8	0.0	609.8	0.9	0.0	2.8	0.0	2.8	68.9	30.6	0.0	0.0	0.0	713.1
1982	577.6	0.0	577.6	0.1	(s)	1.9	0.0	1.9	101.1	56.5	0.0	0.0	0.0	737.2
1983	545.4	0.0	545.4	0.2	0.0	2.7	0.0	2.7	134.8	64.6	0.0	0.0	0.0	747.6
1984	506.7	0.0	506.7	0.1	(s)	2.0	0.0	2.0	219.4	66.5	0.0	0.0	0.0	794.6
1985	489.8	0.0	489.8	0.6	0.0	2.6	0.0	2.6	208.7	42.7	0.0	0.0	0.0	744.4
1986	515.7	0.0	515.7	1.2	0.0	2.0	0.0	2.0	219.1	26.3	0.0	0.0	0.0	764.3
1987	433.1	0.0	433.1	1.2	0.0	2.5	0.0	2.5	308.2	53.1	0.0	0.0	0.0	798.1
1988	446.8	0.0	446.8	1.1	0.0	2.7	0.0	2.7	313.1	29.8	0.0	0.0	0.0	793.5
1989	489.1	0.0	489.1	1.7	0.0	3.2	0.0	3.2	313.3	R 73.0	0.0	0.0	0.0	R 880.3
1990	451.7	0.0	451.7	2.5	0.0	2.2	0.0	2.2	276.7	R 72.3	0.0	0.0	0.0	R 805.4
1991	452.2	0.0	452.2	3.1	0.0	2.0	0.0	2.0	325.6	R 62.8	0.0	0.0	0.0	R 845.7
1992	523.4	0.0	523.4	3.3	0.0	1.8	0.0	1.8	243.0	R 60.3	0.0	0.0	0.0	R 831.9
1993	574.8	0.0	574.8	3.0	0.0	2.0	0.0	2.0	253.8	R 53.7	0.0	0.0	0.0	R 887.3
1994	512.1	0.0	512.1	0.9	0.0	2.6	0.0	2.6	345.3	R 57.8	0.0	0.0	0.0	R 918.8
1995	533.9	0.0	533.9	3.2	0.0	2.9	0.0	2.9	382.7	R 41.4	0.0	0.0	0.0	964.2
1996	623.2	0.0	623.2	2.5	0.0	3.3	0.0	3.3	358.2	46.7	0.0	0.0	0.0	1,033.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 221. Energy Consumption Estimates by Source, Selected Years 1960-1996, North Dakota**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	2,101	26	1,123	66	3,773	2,103	904	1,212	202	7,719	687	803	18,592	0	1,060	0	0	-3,501	-	
1965	1,719	32	795	165	5,170	2,069	52	1,154	167	8,212	868	925	19,576	0	2,497	0	0	-6,185	-	
1970	4,186	33	1,402	95	4,975	2,074	245	1,719	166	8,766	728	985	21,154	0	3,108	0	0	-14,183	-	
1975	5,100	37	1,054	85	4,446	1,855	70	1,580	158	10,044	1,089	1,071	21,453	0	4,511	0	0	-18,295	-	
1980	12,346	23	753	64	8,139	1,702	15	1,302	177	9,167	716	1,127	23,162	0	5,364	0	0	-43,747	-	
1981	13,018	34	745	47	7,689	1,629	14	1,451	170	9,523	1,119	699	23,086	0	5,265	0	0	-45,422	-	
1982	14,977	28	761	35	7,248	1,583	26	1,446	155	9,340	1,129	725	22,448	0	7,155	0	0	-56,627	-	
1983	16,190	26	1,090	24	6,867	1,495	21	1,455	163	9,017	1,508	906	22,546	0	8,029	0	0	-64,903	-	
1984	19,656	30	996	31	7,486	1,707	21	477	173	8,867	1,006	920	21,684	0	7,105	0	0	-64,392	-	
1985	22,958	28	1,047	4	7,505	1,682	15	549	162	8,822	505	871	21,161	0	4,818	0	(s)	-58,231	-	
1986	23,587	25	877	37	7,405	1,646	16	1,730	158	8,580	377	877	21,703	0	3,304	0	(s)	-54,289	-	
1987	24,101	25	884	29	6,819	1,254	8	1,773	179	8,837	355	980	21,118	0	3,365	0	(s)	-56,153	-	
1988	28,029	29	956	32	6,776	1,315	15	1,606	172	8,588	349	1,159	20,967	0	2,273	0	0	-67,478	-	
1989	27,401	30	924	31	7,010	1,336	11	1,747	177	8,398	297	1,172	21,103	0	1,948	0	0	-62,370	-	
1990	28,114	32	814	28	6,764	1,178	6	1,426	182	8,151	331	1,151	20,031	0	NA	NA	NA	-68,893	-	
1991	28,597	40	778	28	7,413	964	10	2,025	163	8,255	306	1,008	20,950	0	NA	NA	NA	-69,702	-	
1992	30,301	37	1,465	28	7,034	1,405	7	1,771	166	8,233	291	1,197	21,597	0	NA	NA	NA	-74,113	-	
1993	30,302	40	915	62	7,443	1,254	10	1,369	169	8,482	399	1,124	21,227	0	NA	NA	NA	-75,248	-	
1994	30,363	43	1,252	43	8,338	846	7	1,316	176	8,387	343	1,175	21,884	0	NA	NA	NA	-74,126	-	
1995	30,237	45	791	65	8,553	333	5	1,754	173	8,650	166	1,135	21,626	0	NA	NA	NA	-72,037	-	
1996	30,511	49	911	50	8,511	246	8	1,994	168	8,683	138	1,297	22,006	0	NA	NA	NA	-78,698	-	
Trillion Btu																				
1960	30.5	27.4	7.5	0.3	22.0	11.3	5.1	4.9	1.2	40.5	4.3	4.8	101.9	0.0	11.4	0.0	0.0	-11.9	159.3	
1965	24.7	32.4	5.3	0.8	30.1	11.1	0.3	4.6	1.0	43.1	5.5	5.6	107.4	0.0	26.1	0.0	0.0	-21.1	169.6	
1970	57.5	33.7	9.3	0.5	29.0	11.2	1.4	6.5	1.0	46.0	4.6	5.9	115.4	0.0	32.6	0.0	0.0	-48.4	190.8	
1975	67.9	36.9	7.0	0.4	25.9	10.0	0.4	5.9	1.0	52.8	6.8	6.4	116.6	0.0	46.9	0.0	0.0	-62.4	205.9	
1980	163.3	24.0	5.0	0.3	47.4	9.2	0.1	4.8	1.1	48.2	4.5	6.8	127.3	0.0	55.7	0.0	0.0	-149.3	221.1	
1981	172.4	35.9	4.9	0.2	44.8	8.8	0.1	5.3	1.0	50.0	7.0	4.4	126.6	0.0	55.0	0.0	0.0	-155.0	235.0	
1982	198.9	29.1	5.0	0.2	42.2	8.5	0.1	5.2	0.9	49.1	7.1	4.5	123.0	0.0	74.8	0.0	0.0	-193.2	232.6	
1983	213.4	27.3	7.2	0.1	40.0	8.1	0.1	5.3	1.0	47.4	9.5	5.5	124.0	0.0	84.5	0.0	0.0	-221.4	227.9	
1984	256.7	31.6	6.6	0.2	43.6	9.2	0.1	1.7	1.1	46.6	6.3	5.6	121.0	0.0	74.2	0.0	0.0	-219.7	263.7	
1985	302.0	29.8	6.9	(s)	43.7	9.1	0.1	2.0	1.0	46.3	3.2	5.4	117.7	0.0	50.3	0.0	(s)	-198.7	301.1	
1986	310.9	26.6	5.8	0.2	43.1	8.9	0.1	6.3	1.0	45.1	2.4	5.5	118.3	0.0	34.5	0.0	(s)	-185.2	305.0	
1987	319.3	26.0	5.9	0.1	39.7	6.8	(s)	6.5	1.1	46.4	2.2	6.0	114.8	0.0	35.1	0.0	(s)	-191.6	303.6	
1988	369.8	30.2	6.3	0.2	39.5	7.1	0.1	5.9	1.0	45.1	2.2	7.0	114.4	0.0	23.5	0.0	0.0	-230.2	307.6	
1989	361.7	31.6	6.1	0.2	40.8	7.2	0.1	6.4	1.1	44.1	1.9	7.1	115.0	0.0	20.3	0.0	0.0	-212.8	315.8	
1990	374.6	33.5	5.4	0.1	39.4	6.4	(s)	5.2	1.1	42.8	2.1	6.9	109.5	0.0	24.3	0.0	i(s)	-235.1	308.8	
1991	379.2	41.6	5.2	0.1	43.2	5.2	0.1	7.3	1.0	43.4	1.9	6.1	113.5	0.0	25.3	2.1	(s)	-237.8	321.3	
1992	399.1	38.2	9.7	0.1	41.0	7.6	(s)	6.4	1.0	43.3	1.8	7.2	118.2	0.0	23.4	R 2.3	(s)	-252.9	329.1	
1993	399.7	42.4	6.1	0.3	43.4	6.8	0.1	4.9	1.0	44.6	2.5	6.8	116.4	0.0	29.0	R 2.1	(s)	-256.7	332.6	
1994	402.4	45.3	8.3	0.2	48.6	4.6	(s)	4.8	1.1	44.1	2.2	7.1	120.9	0.0	24.3	R 2.3	(s)	-252.9	344.1	
1995	399.8	47.6	5.2	0.3	49.8	1.9	(s)	6.4	1.1	45.4	1.0	6.9	118.0	0.0	28.5	R 2.5	(s)	-245.8	351.2	
1996	404.1	51.5	6.0	0.3	49.6	1.4	(s)	7.2	1.0	45.6	0.9	7.8	119.8	0.0	40.8	2.3	(s)	-268.5	351.9	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.  
<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.  
<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.  
<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
R=Revised data. --=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 222. Residential Energy Consumption Estimates, Selected Years 1960-1996, North Dakota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	195	0	195	4	874	860	787	2,521	0	0	728	—	1,810	—
1965	108	0	108	7	1,269	40	758	2,067	0	0	911	—	2,176	—
1970	50	0	50	8	1,103	190	1,283	2,576	0	0	1,399	—	3,391	—
1975	53	0	53	10	776	21	1,181	1,978	0	0	1,901	—	4,584	—
1980	50	0	50	10	1,173	5	511	1,689	0	0	2,456	—	5,972	—
1981	59	0	59	9	1,065	14	653	1,733	0	0	2,651	—	6,317	—
1982	75	0	75	11	912	22	376	1,310	0	0	2,900	—	6,965	—
1983	83	0	83	10	915	19	447	1,380	0	0	2,702	—	6,472	—
1984	88	0	88	10	988	18	129	1,135	0	0	2,953	—	6,874	—
1985	69	0	69	10	1,119	14	169	1,302	0	0	3,012	—	7,075	—
1986	62	0	62	9	1,056	8	623	1,687	0	0	2,954	—	6,795	—
1987	36	0	36	8	895	6	637	1,538	0	0	2,788	—	6,370	—
1988	49	(s)	49	9	965	8	751	1,724	0	0	3,050	—	6,896	—
1989	61	(s)	61	10	913	10	838	1,761	0	0	3,060	—	6,874	—
1990	47	0	47	9	845	5	653	1,502	<sup>e</sup> 84	<sup>e</sup> (s)	2,954	—	6,461	—
1991	47	(s)	47	10	902	7	976	1,885	88	(s)	3,096	—	6,739	—
1992	42	0	42	10	642	6	1,081	1,729	93	(s)	3,020	—	6,451	—
1993	48	0	48	11	751	8	762	1,521	77	(s)	3,209	—	6,780	—
1994	49	0	49	11	733	6	693	1,432	76	(s)	3,243	—	6,766	—
1995	<sup>R</sup> 38	0	<sup>R</sup> 38	11	775	4	775	1,553	84	(s)	3,384	—	7,048	—
1996	51	2	52	13	829	5	922	1,756	84	(s)	3,602	—	7,496	—

**Trillion Btu**

1960	3.0	0.0	3.0	4.0	5.1	4.9	3.2	13.1	0.0	0.0	2.5	22.6	6.2	28.8
1965	1.7	0.0	1.7	6.6	7.4	0.2	3.0	10.7	0.0	0.0	3.1	22.0	7.4	29.5
1970	0.7	0.0	0.7	8.4	6.4	1.1	4.8	12.4	0.0	0.0	4.8	26.3	11.6	37.9
1975	0.7	0.0	0.7	10.2	4.5	0.1	4.4	9.0	0.0	0.0	6.5	26.5	15.6	42.1
1980	0.7	0.0	0.7	10.1	6.8	(s)	1.9	8.7	0.0	0.0	8.4	27.9	20.4	48.3
1981	0.8	0.0	0.8	9.3	6.2	0.1	2.4	8.7	0.0	0.0	9.0	27.8	21.6	49.4
1982	1.0	0.0	1.0	11.2	5.3	0.1	1.4	6.8	0.0	0.0	9.9	28.9	23.8	52.7
1983	1.1	0.0	1.1	10.1	5.3	0.1	1.6	7.1	0.0	0.0	9.2	27.5	22.1	49.6
1984	1.1	0.0	1.1	10.5	5.8	0.1	0.5	6.3	0.0	0.0	10.1	28.0	23.5	51.5
1985	0.9	0.0	0.9	11.0	6.5	0.1	0.6	7.2	0.0	0.0	10.3	29.4	24.1	53.5
1986	0.8	0.0	0.8	9.8	6.2	(s)	2.3	8.5	0.0	0.0	10.1	29.1	23.2	52.3
1987	0.5	0.0	0.5	8.5	5.2	(s)	2.3	7.6	0.0	0.0	9.5	26.0	21.7	47.8
1988	0.6	(s)	0.6	9.7	5.6	(s)	2.7	8.4	0.0	0.0	10.4	29.1	23.5	52.6
1989	0.8	(s)	0.8	10.3	5.3	0.1	3.1	8.5	0.0	0.0	10.4	30.0	<sup>R</sup> 23.5	<sup>R</sup> 53.5
1990	0.7	0.0	0.7	9.5	4.9	(s)	2.4	7.3	<sup>e</sup> 1.7	<sup>e</sup> (s)	10.1	<sup>e</sup> 29.2	22.0	<sup>e</sup> 51.2
1991	0.7	(s)	0.7	10.8	5.3	(s)	3.5	8.8	1.8	(s)	10.6	32.6	23.0	55.6
1992	0.6	0.0	0.6	10.1	3.7	(s)	3.9	7.7	1.9	(s)	10.3	30.6	22.0	52.6
1993	0.7	0.0	0.7	11.4	4.4	(s)	2.7	7.2	1.5	(s)	10.9	31.7	23.1	54.9
1994	0.7	0.0	0.7	11.3	4.3	(s)	2.5	6.8	1.5	(s)	11.1	31.4	23.1	54.5
1995	0.6	0.0	0.6	11.8	4.5	(s)	2.8	7.3	1.7	(s)	11.5	32.9	24.0	57.0
1996	0.7	(s)	0.8	13.2	4.8	(s)	3.3	8.2	1.7	(s)	12.3	36.2	25.6	61.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 223. Commercial Energy Consumption Estimates, Selected Years 1960-1996, North Dakota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	362	0	362	3	198	0	139	32	73	442	0	304	-	757	-
1965	201	0	201	5	288	0	134	179	209	809	0	443	-	1,058	-
1970	93	0	93	8	250	0	226	151	104	731	0	696	-	1,686	-
1975	99	0	99	12	176	0	208	95	493	972	0	805	-	1,942	-
1980	93	0	93	11	642	0	90	73	400	1,206	0	1,145	-	2,784	-
1981	110	0	110	9	392	0	115	80	60	647	0	1,243	-	2,963	-
1982	138	0	138	11	210	4	66	82	208	571	0	1,347	-	3,234	-
1983	154	0	154	10	423	(s)	79	85	139	725	0	1,264	-	3,029	-
1984	163	0	163	10	456	(s)	23	20	93	592	0	1,950	-	4,540	-
1985	128	0	128	10	484	(s)	30	69	64	647	0	2,026	-	4,760	-
1986	114	0	114	9	314	(s)	110	71	78	573	0	2,005	-	4,611	-
1987	67	0	67	8	242	1	112	73	33	462	0	1,970	-	4,502	-
1988	90	(s)	90	10	154	1	133	73	46	407	0	1,987	-	4,491	-
1989	114	(s)	114	11	186	1	148	61	27	423	0	1,989	-	R 4,467	-
1990	88	0	88	10	151	(s)	115	70	23	359	e NA	2,300	-	R 5,031	-
1991	88	(s)	88	11	160	1	172	44	8	384	NA	2,397	-	R 5,217	-
1992	79	0	79	10	157	(s)	191	37	12	397	NA	2,273	-	R 4,855	-
1993	89	0	89	11	143	1	134	10	16	305	4	2,318	-	R 4,898	-
1994	90	0	90	11	192	1	122	10	15	340	5	2,427	-	R 5,063	-
1995	R 71	0	R 71	12	160	1	137	10	19	327	5	2,728	-	5,682	-
1996	94	1	95	12	211	2	163	10	6	392	6	2,877	-	5,988	-

**Trillion Btu**

1960	5.6	0.0	5.6	2.9	1.2	0.0	0.6	0.2	0.5	2.3	0.0	1.0	11.9	2.6	14.5
1965	3.1	0.0	3.1	5.0	1.7	0.0	0.5	0.9	1.3	4.5	0.0	1.5	14.1	3.6	17.7
1970	1.4	0.0	1.4	8.6	1.5	0.0	0.9	0.8	0.7	3.8	0.0	2.4	16.1	5.8	21.8
1975	1.4	0.0	1.4	12.4	1.0	0.0	0.8	0.5	3.1	5.4	0.0	2.7	21.9	6.6	28.6
1980	1.2	0.0	1.2	11.6	3.7	0.0	0.3	0.4	2.5	7.0	0.0	3.9	23.7	9.5	33.2
1981	1.5	0.0	1.5	9.8	2.3	0.0	0.4	0.4	0.4	3.5	0.0	4.2	19.0	10.1	29.1
1982	1.8	0.0	1.8	11.7	1.2	(s)	0.2	0.4	1.3	3.2	0.0	4.6	21.3	11.0	32.4
1983	2.0	0.0	2.0	10.3	2.5	(s)	0.3	0.4	0.9	4.1	0.0	4.3	20.7	10.3	31.0
1984	2.1	0.0	2.1	10.4	2.7	(s)	0.1	0.1	0.6	3.4	0.0	6.7	22.7	15.5	38.1
1985	1.7	0.0	1.7	10.7	2.8	(s)	0.1	0.4	0.4	3.7	0.0	6.9	23.0	16.2	39.3
1986	1.5	0.0	1.5	9.5	1.8	(s)	0.4	0.4	0.5	3.1	0.0	6.8	20.9	15.7	36.6
1987	0.9	0.0	0.9	8.3	1.4	(s)	0.4	0.4	0.2	2.4	0.0	6.7	18.3	15.4	33.7
1988	1.2	(s)	1.2	10.4	0.9	(s)	0.5	0.4	0.3	2.1	0.0	6.8	20.4	15.3	35.7
1989	1.5	(s)	1.5	11.1	1.1	(s)	0.5	0.3	0.2	2.1	0.0	6.8	21.5	15.2	R 36.8
1990	1.2	0.0	1.2	10.6	0.9	(s)	0.4	0.4	0.1	1.8	e NA	7.8	21.4	R 17.2	38.6
1991	1.2	(s)	1.2	11.2	0.9	(s)	0.6	0.2	(s)	1.8	NA	8.2	22.5	17.8	R 40.3
1992	1.1	0.0	1.1	10.2	0.9	(s)	0.7	0.2	0.1	1.9	NA	7.8	21.0	16.6	37.5
1993	1.3	0.0	1.3	11.3	0.8	(s)	0.5	0.1	0.1	1.5	0.1	7.9	R 22.1	16.7	R 38.8
1994	1.3	0.0	1.3	11.4	1.1	(s)	0.4	0.1	0.1	1.7	0.1	8.3	R 22.9	17.3	R 40.1
1995	1.1	0.0	1.1	12.2	0.9	(s)	0.5	0.1	0.1	1.6	0.1	9.3	24.3	19.4	R 43.7
1996	1.4	(s)	1.4	12.8	1.2	(s)	0.6	0.1	(s)	1.9	0.1	9.8	26.0	20.4	46.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 224. Industrial Energy Consumption Estimates, Selected Years 1960-1996, North Dakota**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	521	20	1,123	2,104	44	257	44	2,927	530	803	7,832	0	0	0	121	-	300	-
1965	444	21	795	2,696	12	240	20	2,533	632	925	7,853	0	0	0	241	-	576	-
1970	523	16	1,402	2,174	55	206	28	2,315	558	985	7,723	0	0	0	720	-	1,745	-
1975	570	14	1,054	1,613	49	189	21	2,193	577	1,071	6,767	0	0	0	1,007	-	2,428	-
1980	585	2	753	2,460	10	690	26	1,540	315	1,127	6,921	0	0	0	1,576	-	3,832	-
1981	491	16	745	2,973	0	563	25	1,164	1,058	699	7,226	0	0	0	1,677	-	3,997	-
1982	664	6	761	2,816	0	842	23	1,305	607	725	7,079	0	0	0	1,736	-	4,171	-
1983	566	6	1,090	2,371	2	737	24	1,147	1,368	906	7,645	0	0	0	1,773	-	4,249	-
1984	2,452	10	996	2,561	3	306	25	843	913	920	6,566	0	0	0	1,839	-	4,281	-
1985	5,407	7	1,047	2,783	1	340	24	1,080	440	871	R 6,586	0	0	0	1,988	-	4,672	-
1986	6,120	7	877	3,084	8	973	23	924	297	877	R 7,065	0	0	0	1,890	-	4,348	-
1987	6,563	8	884	2,574	1	1,010	26	R 1,028	322	980	R 6,825	0	0	0	1,839	-	4,202	-
1988	6,204	8	956	2,466	6	706	25	R 896	303	1,159	R 6,516	0	0	0	2,070	-	4,680	-
1989	6,688	8	924	2,782	1	743	26	R 819	269	1,172	R 6,737	0	0	0	2,013	-	R 4,521	-
1990	6,400	11	814	2,596	1	644	27	R 799	308	1,151	R 6,339	f NA	f NA	f NA	1,760	-	R 3,849	-
1991	6,287	17	778	3,063	2	862	24	784	298	1,008	6,820	NA	NA	NA	1,762	-	R 3,835	-
1992	6,988	14	1,465	2,940	(s)	483	24	720	279	1,197	R 7,108	NA	NA	NA	1,835	-	R 3,920	-
1993	6,875	14	915	2,952	1	455	25	R 674	383	1,124	R 6,529	NA	NA	NA	1,905	-	R 4,024	-
1994	6,976	17	1,252	3,234	1	480	26	R 698	328	1,175	R 7,195	NA	NA	NA	2,011	-	R 4,197	-
1995	7,447	18	791	3,272	(s)	830	25	685	147	1,135	6,885	NA	NA	NA	1,771	-	3,690	-
1996	6,724	20	911	2,952	1	901	25	575	132	1,297	6,793	NA	NA	NA	1,835	-	3,820	-

  

Trillion Btu																		
1960	7.7	20.3	7.5	12.3	0.2	1.0	0.3	15.4	3.3	4.8	44.8	0.0	0.0	0.0	0.4	73.3	1.0	74.3
1965	6.5	20.9	5.3	15.7	0.1	1.0	0.1	13.3	4.0	5.6	45.0	0.0	0.0	0.0	0.8	73.2	2.0	75.1
1970	7.2	16.3	9.3	12.7	0.3	0.8	0.2	12.2	3.5	5.9	44.8	0.0	0.0	0.0	2.5	70.8	6.0	76.8
1975	7.4	14.0	7.0	9.4	0.3	0.7	0.1	11.5	3.6	6.4	39.1	0.0	0.0	0.0	3.4	63.9	8.3	72.2
1980	7.7	2.1	5.0	14.3	0.1	2.5	0.2	8.1	2.0	6.8	38.9	0.0	0.0	0.0	5.4	54.1	13.1	67.1
1981	6.5	16.5	4.9	17.3	0.0	2.1	0.2	6.1	6.7	4.4	41.6	0.0	0.0	0.0	5.7	70.3	13.6	83.9
1982	8.8	5.7	5.0	16.4	0.0	3.0	0.1	6.9	3.8	4.5	39.8	0.0	0.0	0.0	5.9	60.2	14.2	74.4
1983	7.4	6.2	7.2	13.8	(s)	2.7	0.1	6.0	8.6	5.5	44.0	0.0	0.0	0.0	6.1	63.7	14.5	78.2
1984	32.3	10.2	6.6	14.9	(s)	1.1	0.2	4.4	5.7	5.6	38.6	0.0	0.0	0.0	6.3	R 87.3	14.6	101.9
1985	71.2	7.3	6.9	16.2	(s)	1.2	0.1	5.7	2.8	5.4	38.4	0.0	0.0	0.0	6.8	R 123.7	15.9	139.6
1986	81.0	7.0	5.8	18.0	(s)	3.5	0.1	4.9	1.9	5.5	39.7	0.0	0.0	0.0	6.4	R 134.2	14.8	149.1
1987	87.8	8.3	5.9	15.0	(s)	3.7	0.2	5.4	2.0	6.0	38.1	0.0	0.0	0.0	6.3	R 140.5	14.3	154.8
1988	82.4	8.4	6.3	14.4	(s)	2.6	0.2	4.7	1.9	7.0	37.1	0.0	0.0	0.0	7.1	134.9	16.0	150.9
1989	89.1	8.3	6.1	16.2	(s)	2.7	0.2	4.3	1.7	7.1	38.3	0.0	0.0	0.0	6.9	142.6	15.4	158.0
1990	86.3	11.7	5.4	15.1	(s)	2.3	0.2	4.2	1.9	6.9	36.1	f 0.0	f 0.0	f 0.0	6.0	f 140.1	13.1	f 153.2
1991	84.3	17.5	5.2	17.8	(s)	3.1	0.1	4.1	1.9	6.1	38.4	0.0	0.0	0.0	6.0	146.2	13.1	159.3
1992	93.1	15.1	9.7	17.1	(s)	1.8	0.1	3.8	1.8	7.2	41.5	0.0	0.0	0.0	6.3	155.9	13.4	169.3
1993	91.6	15.2	6.1	17.2	(s)	1.6	0.1	3.5	2.4	6.8	37.8	0.0	0.0	0.0	6.5	151.2	13.7	164.9
1994	93.8	18.1	8.3	18.8	(s)	1.7	0.2	3.7	2.1	7.1	41.9	0.0	0.1	0.0	6.9	160.9	14.3	175.2
1995	99.4	18.7	5.2	19.1	(s)	3.0	0.2	3.6	0.9	6.9	38.8	0.0	0.2	0.0	6.0	163.3	12.6	175.9
1996	90.0	20.5	6.0	17.2	(s)	3.3	0.1	3.0	0.8	7.8	38.3	0.0	0.1	0.0	6.3	155.1	13.0	168.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 225. Transportation Energy Consumption Estimates, Selected Years 1960-1996, North Dakota**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	9	(s)	66	592	2,103	29	158	4,760	69	7,778	0	0	-	0	-
1965	1	(s)	165	916	2,069	22	147	5,499	25	8,843	0	0	-	0	-
1970	1	(s)	95	1,441	2,074	3	138	6,300	41	10,092	0	0	-	0	-
1975	(s)	(s)	85	1,880	1,855	2	137	7,756	0	11,715	0	0	-	0	-
1980	0	(s)	64	3,795	1,702	12	151	7,553	0	13,278	0	0	-	0	-
1981	0	(s)	47	3,168	1,629	120	145	8,280	0	13,390	0	0	-	0	-
1982	0	(s)	35	3,222	1,583	162	132	7,953	313	13,401	0	0	-	0	-
1983	0	1	24	3,060	1,495	193	139	7,786	(s)	12,696	0	0	-	0	-
1984	0	(s)	31	3,318	1,707	20	148	8,004	(s)	13,228	0	0	-	0	-
1985	0	1	4	3,046	1,682	11	138	R 7,673	0	R 12,553	0	0	-	0	-
1986	0	(s)	37	2,894	1,646	23	135	7,584	2	12,320	0	0	-	0	-
1987	0	1	29	3,058	1,254	14	152	R 7,736	0	R 12,244	0	0	-	0	-
1988	0	2	32	3,145	1,315	16	147	R 7,619	0	R 12,273	0	0	-	0	-
1989	0	2	31	3,056	1,336	18	151	R 7,518	0	R 12,110	0	0	-	0	-
1990	0	2	28	3,116	1,178	14	155	R 7,282	0	R 11,774	R e 5,738	0	-	0	-
1991	0	2	28	3,219	964	15	139	R 7,427	0	R 11,792	R 4,549	0	-	0	-
1992	0	3	28	3,238	1,405	16	141	R 7,477	0	R 12,305	R 5,528	0	-	0	-
1993	0	4	62	3,527	1,254	R 18	144	R 7,798	0	R 12,803	R 6,169	0	-	0	-
1994	0	4	43	4,067	846	20	151	R 7,679	0	R 12,805	R 7,241	0	-	0	-
1995	0	5	65	4,248	333	13	148	7,955	0	12,762	R 6,753	0	-	0	-
1996	0	5	50	4,363	246	8	144	8,098	0	12,910	5,014	0	-	0	-

  

Trillion Btu															
1960	0.1	(s)	0.3	3.5	11.3	0.1	1.0	25.0	0.4	41.6	0.0	0.0	41.7	0.0	41.7
1965	(s)	(s)	0.8	5.3	11.1	0.1	0.9	28.9	0.2	47.3	0.0	0.0	47.3	0.0	47.3
1970	(s)	(s)	0.5	8.4	11.2	(s)	0.8	33.1	0.3	54.2	0.0	0.0	54.3	0.0	54.3
1975	(s)	0.1	0.4	11.0	10.0	(s)	0.8	40.7	0.0	63.0	0.0	0.0	63.1	0.0	63.1
1980	0.0	0.2	0.3	22.1	9.2	(s)	0.9	39.7	0.0	72.3	0.0	0.0	72.5	0.0	72.5
1981	0.0	0.2	0.2	18.5	8.8	0.4	0.9	43.5	0.0	72.3	0.0	0.0	72.5	0.0	72.5
1982	0.0	0.5	0.2	18.8	8.5	0.6	0.8	41.8	2.0	72.6	0.0	0.0	73.1	0.0	73.1
1983	0.0	0.7	0.1	17.8	8.1	0.7	0.8	40.9	(s)	68.4	0.0	0.0	69.1	0.0	69.1
1984	0.0	0.5	0.2	19.3	9.2	0.1	0.9	42.0	(s)	71.7	0.0	0.0	72.2	0.0	72.2
1985	0.0	0.7	(s)	17.7	9.1	(s)	0.8	40.3	0.0	68.0	0.0	0.0	R 68.8	0.0	R 68.8
1986	0.0	0.3	0.2	16.9	8.9	0.1	0.8	39.8	(s)	66.7	0.0	0.0	67.0	0.0	67.0
1987	0.0	1.0	0.1	17.8	6.8	0.1	0.9	R 40.6	0.0	66.3	0.0	0.0	R 67.4	0.0	R 67.4
1988	0.0	1.8	0.2	18.3	7.1	0.1	0.9	R 40.0	0.0	66.6	0.0	0.0	68.4	0.0	68.4
1989	0.0	1.9	0.2	17.8	7.2	0.1	0.9	39.5	0.0	R 65.7	0.0	0.0	R 67.6	0.0	R 67.6
1990	0.0	1.8	0.1	18.2	6.4	0.1	0.9	R 38.3	0.0	R 63.9	e 0.4	0.0	R e 65.7	0.0	R e 65.7
1991	0.0	2.1	0.1	18.8	5.2	0.1	0.8	39.0	0.0	64.0	0.3	0.0	66.1	0.0	66.1
1992	0.0	2.9	0.1	18.9	7.6	0.1	0.9	39.3	0.0	66.8	0.4	0.0	R 69.6	0.0	R 69.6
1993	0.0	4.5	0.3	20.5	6.8	0.1	0.9	R 41.0	0.0	69.5	R 0.5	0.0	R 74.1	0.0	R 74.1
1994	0.0	4.5	0.2	23.7	4.6	0.1	0.9	R 40.3	0.0	R 69.8	R 0.6	0.0	R 74.3	0.0	R 74.3
1995	0.0	4.9	0.3	24.7	1.9	(s)	0.9	41.8	0.0	69.7	0.5	0.0	74.6	0.0	74.6
1996	0.0	5.0	0.3	25.4	1.4	(s)	0.9	42.5	0.0	70.5	0.4	0.0	75.5	0.0	75.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 226. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, North Dakota**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	1,014	0	1,014	(s)	15	4	0	20	0	1,060	0	0	0	--
1965	964	0	964	(s)	2	1	0	3	0	2,497	0	0	0	--
1970	3,519	0	3,519	(s)	25	7	0	32	0	3,108	0	0	0	--
1975	4,377	0	4,377	(s)	18	2	0	20	0	4,511	0	0	0	--
1980	11,618	0	11,618	(s)	0	68	0	68	0	5,364	0	0	0	--
1981	12,358	0	12,358	(s)	0	91	0	91	0	5,265	0	0	0	--
1982	14,100	0	14,100	(s)	0	88	0	88	0	7,155	0	0	0	--
1983	15,386	0	15,386	(s)	0	98	0	98	0	8,029	0	0	0	--
1984	16,953	0	16,953	(s)	0	163	0	163	0	7,105	0	0	0	--
1985	17,354	0	17,354	(s)	0	74	0	74	0	4,818	0	0	(s)	--
1986	17,291	0	17,291	(s)	0	57	0	57	0	3,304	0	0	(s)	--
1987	17,434	0	17,434	(s)	0	50	0	50	0	3,365	0	0	(s)	--
1988	21,686	0	21,686	(s)	0	46	0	46	0	2,273	0	0	0	--
1989	20,538	0	20,538	(s)	0	72	0	72	0	1,948	0	0	0	--
1990	21,579	0	21,579	(s)	0	57	0	57	0	2,334	0	0	0	--
1991	22,174	0	22,174	(s)	0	69	0	69	0	2,426	0	0	0	--
1992	23,192	0	23,192	(s)	0	58	0	58	0	2,259	0	0	0	--
1993	23,290	0	23,290	(s)	0	69	0	69	0	2,817	0	0	0	--
1994	23,248	0	23,248	(s)	0	112	0	112	0	2,353	0	0	0	--
1995	22,680	0	22,680	(s)	0	99	0	99	0	2,764	0	0	0	--
1996	23,640	0	23,640	(s)	0	155	0	155	0	3,946	0	0	0	--

  

Trillion Btu														
1960	14.0	0.0	14.0	0.1	0.1	(s)	0.0	0.1	0.0	11.4	0.0	0.0	0.0	25.7
1965	13.4	0.0	13.4	(s)	(s)	(s)	0.0	(s)	0.0	26.1	0.0	0.0	0.0	39.6
1970	48.1	0.0	48.1	0.4	0.2	(s)	0.0	0.2	0.0	32.6	0.0	0.0	0.0	81.3
1975	58.4	0.0	58.4	0.2	0.1	(s)	0.0	0.1	0.0	46.9	0.0	0.0	0.0	105.6
1980	153.8	0.0	153.8	(s)	0.0	0.4	0.0	0.4	0.0	55.7	0.0	0.0	0.0	209.9
1981	163.7	0.0	163.7	(s)	0.0	0.5	0.0	0.5	0.0	55.0	0.0	0.0	0.0	219.3
1982	187.3	0.0	187.3	(s)	0.0	0.5	0.0	0.5	0.0	74.8	0.0	0.0	0.0	262.7
1983	202.9	0.0	202.9	(s)	0.0	0.6	0.0	0.6	0.0	84.5	0.0	0.0	0.0	287.9
1984	221.1	0.0	221.1	(s)	0.0	0.9	0.0	0.9	0.0	74.2	0.0	0.0	0.0	296.3
1985	228.2	0.0	228.2	(s)	0.0	0.4	0.0	0.4	0.0	50.3	0.0	0.0	(s)	279.0
1986	227.5	0.0	227.5	(s)	0.0	0.3	0.0	0.3	0.0	34.5	0.0	0.0	(s)	262.4
1987	230.2	0.0	230.2	(s)	0.0	0.3	0.0	0.3	0.0	35.1	0.0	0.0	(s)	265.5
1988	285.6	0.0	285.6	(s)	0.0	0.3	0.0	0.3	0.0	23.5	0.0	0.0	0.0	309.3
1989	270.3	0.0	270.3	(s)	0.0	0.4	0.0	0.4	0.0	R 20.3	0.0	0.0	0.0	R 291.0
1990	286.4	0.0	286.4	(s)	0.0	0.3	0.0	0.3	0.0	R 24.3	0.0	0.0	0.0	R 311.3
1991	293.0	0.0	293.0	(s)	0.0	0.4	0.0	0.4	0.0	R 25.3	0.0	0.0	0.0	R 316.5
1992	304.2	0.0	304.2	(s)	0.0	0.3	0.0	0.3	0.0	R 23.4	0.0	0.0	0.0	329.1
1993	306.0	0.0	306.0	(s)	0.0	0.4	0.0	0.4	0.0	29.0	0.0	0.0	0.0	R 335.7
1994	306.5	0.0	306.5	(s)	0.0	0.7	0.0	0.7	0.0	R 24.3	0.0	0.0	0.0	R 333.8
1995	298.7	0.0	298.7	(s)	0.0	0.6	0.0	0.6	0.0	28.5	0.0	0.0	0.0	328.7
1996	311.9	0.0	311.9	(s)	0.0	0.9	0.0	0.9	0.0	40.8	0.0	0.0	0.0	355.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 227. Energy Consumption Estimates by Source, Selected Years 1960-1996, Ohio

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	51,256	700	6,862	1,395	23,919	1,808	3,955	3,680	3,064	78,170	11,605	9,158	143,617	0	20	8	0	49,779	-
1965	54,023	880	7,344	2,125	27,663	3,075	6,328	5,441	3,312	86,271	10,963	14,615	167,137	22	11	7	0	52,423	-
1970	66,863	1,053	9,017	712	34,458	5,857	6,494	8,712	3,631	106,296	6,445	16,283	197,905	0	7	5	0	49,736	-
1975	70,764	957	8,749	491	42,168	6,039	3,600	9,910	3,609	118,808	10,399	16,834	220,607	0	7	(s)	0	41,054	-
1980	64,914	897	7,324	473	48,833	7,219	2,452	44,263	3,821	113,232	6,918	22,807	257,344	2,119	6	1	0	47,144	-
1981	65,595	870	6,903	408	45,122	5,745	2,751	39,689	3,664	110,193	5,846	17,038	237,358	4,407	6	(s)	0	43,633	-
1982	58,953	814	7,364	393	40,393	5,485	2,563	40,793	3,341	105,904	2,444	14,770	223,450	3,226	5	(s)	0	24,499	-
1983	55,301	747	6,744	397	33,347	5,821	1,895	41,043	3,498	107,106	4,093	15,402	219,346	4,904	135	9	0	41,134	-
1984	57,049	785	6,881	322	36,139	6,832	1,971	29,239	3,730	109,043	2,800	17,357	214,315	4,312	164	203	0	77,273	-
1985	57,979	733	6,339	330	35,980	7,204	1,709	27,919	3,477	108,763	2,322	15,991	210,034	1,943	175	265	0	84,049	-
1986	59,324	717	7,341	375	35,839	9,924	1,566	14,652	3,399	111,933	2,313	16,813	R 204,157	24	172	279	0	73,779	-
1987	59,350	715	9,006	239	33,518	10,800	1,458	15,912	3,843	R 116,091	2,079	18,825	R 211,771	7,513	225	352	0	69,918	-
1988	61,096	805	6,356	331	37,060	9,218	1,743	11,025	3,706	R 117,072	2,814	19,580	R 208,905	8,455	187	351	0	66,907	-
1989	61,016	814	10,622	250	38,238	10,405	1,337	13,213	3,801	R 114,574	2,316	19,511	R 214,269	12,661	130	316	0	R 66,307	-
1990	59,205	747	9,880	239	36,666	10,602	901	10,994	3,912	R 110,487	1,677	20,528	R 205,886	10,664	i NA	i NA	i NA	R 77,728	-
1991	58,578	766	8,993	214	35,684	10,400	971	11,120	3,500	R 109,920	1,345	18,722	R 200,869	14,833	NA	NA	NA	R 65,247	-
1992	58,671	810	9,910	224	38,323	10,631	932	14,638	3,568	R 108,696	1,623	21,698	R 210,243	14,805	NA	NA	NA	R 51,310	-
1993	59,031	834	7,682	207	39,642	10,650	1,352	15,065	3,633	R 114,756	2,164	20,518	R 215,669	10,011	NA	NA	NA	R 65,178	-
1994	56,711	843	8,847	186	43,195	11,678	1,063	15,234	3,797	R 113,178	2,048	21,242	R 220,468	10,952	NA	NA	NA	R 90,833	-
1995	56,580	896	8,973	235	42,641	11,236	1,024	14,273	3,732	R 116,222	1,444	20,446	R 220,227	16,768	NA	NA	NA	R 78,906	-
1996	59,835	936	11,258	345	45,241	11,960	1,194	14,578	3,622	115,361	1,713	22,767	228,039	13,919	NA	NA	NA	63,896	-

  

Trillion Btu																			
1960	1,269.4	724.8	45.5	7.0	139.3	9.8	22.4	14.8	18.6	410.6	73.0	54.9	796.0	0.0	0.2	0.1	0.0	169.8	2,960.3
1965	1,324.4	909.4	48.7	10.7	161.1	17.0	35.9	21.8	20.1	453.2	68.9	85.3	922.8	0.3	0.1	0.1	0.0	178.9	3,335.9
1970	1,571.4	1,077.2	59.8	3.6	200.7	32.8	36.8	32.9	22.0	558.4	40.5	94.1	1,081.7	0.0	0.1	0.1	0.0	169.7	3,900.1
1975	1,619.1	978.9	58.1	2.5	245.6	33.9	20.4	36.8	21.9	624.1	65.4	97.8	1,206.5	0.0	0.1	(s)	0.0	140.1	3,944.6
1980	1,528.1	911.3	48.6	2.4	284.5	40.6	13.9	162.6	23.2	594.8	43.5	129.8	1,343.9	23.1	0.1	(s)	0.0	160.9	3,967.4
1981	1,534.9	890.4	45.8	2.1	262.8	32.4	15.6	144.6	22.2	578.8	36.8	98.1	1,239.2	48.6	0.1	(s)	0.0	148.9	3,862.0
1982	1,392.0	837.1	48.9	2.0	235.3	30.9	14.5	147.5	20.3	556.3	15.4	85.2	1,156.2	35.7	0.1	(s)	0.0	83.6	3,504.7
1983	1,321.1	772.7	44.8	2.0	194.2	32.8	10.7	148.3	21.2	562.6	25.7	89.4	1,131.8	53.5	1.4	0.1	0.0	140.4	3,420.9
1984	1,361.8	814.4	45.7	1.6	210.5	38.5	11.2	105.2	22.6	572.8	17.6	99.0	1,124.7	46.8	1.7	2.1	0.0	263.7	3,615.2
1985	1,389.5	765.4	42.1	1.7	209.6	40.6	9.7	100.6	21.1	R 571.3	14.6	92.3	R 1,103.6	21.0	1.8	2.8	0.0	286.8	R 3,570.8
1986	1,431.8	749.7	48.7	1.9	208.8	56.0	8.9	53.3	20.6	588.0	14.5	96.9	1,097.7	0.3	1.8	2.9	0.0	251.7	3,536.0
1987	1,433.1	747.1	59.8	1.2	195.2	61.0	8.3	58.2	23.3	R 609.8	13.1	107.8	R 1,137.7	81.0	2.3	3.7	0.0	238.6	R 3,643.4
1988	1,474.7	837.5	42.2	1.7	215.9	52.0	9.9	40.3	22.5	R 615.0	17.7	112.6	R 1,129.6	90.8	1.9	3.6	0.0	228.3	R 3,766.5
1989	1,463.9	848.3	70.5	1.3	222.7	58.7	7.6	48.7	23.1	R 601.9	14.6	111.8	R 1,160.7	135.8	R 1.4	3.3	0.0	R 226.2	R 3,839.6
1990	1,424.8	776.6	65.6	1.2	213.6	59.9	5.1	39.9	23.7	R 580.4	10.5	117.6	R 1,117.5	113.9	i 1.9	R i 112.9	i (s)	R 265.2	R i 3,798.7
1991	1,413.0	799.3	59.7	1.1	207.9	58.8	5.5	40.2	21.2	R 577.4	8.5	107.5	R 1,087.7	159.3	1.6	R 111.4	(s)	R 222.6	R 3,783.9
1992	1,418.7	839.3	65.8	1.1	223.2	60.1	5.3	53.0	21.6	R 571.0	10.2	124.1	R 1,135.4	158.1	2.6	R 115.5	(s)	R 175.1	R 3,831.3
1993	1,432.3	865.5	51.0	1.0	230.9	60.2	7.7	54.3	22.0	R 602.8	13.6	117.4	R 1,161.0	106.9	R 2.0	R 98.7	(s)	R 222.4	R 3,873.8
1994	1,377.1	874.5	58.7	0.9	251.6	66.1	6.0	55.4	23.0	R 594.5	12.9	121.8	R 1,191.0	116.9	2.0	R 100.7	(s)	R 309.9	R 3,954.6
1995	1,379.8	930.1	59.5	1.2	248.4	63.7	5.8	51.7	22.6	610.5	9.1	117.4	1,190.0	178.7	2.4	R 99.9	(s)	269.2	R 4,033.9
1996	1,448.8	972.0	74.7	1.7	263.5	67.8	6.8	52.7	22.0	606.0	10.8	130.6	1,236.6	147.9	4.1	94.6	(s)	218.0	4,115.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 228. Residential Energy Consumption Estimates, Selected Years 1960-1996, Ohio**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	1,177	29	1,206	362	7,270	1,837	1,750	10,857	0	0	10,786	-	26,830	-
1965	778	18	797	412	7,795	3,626	2,293	13,715	0	0	14,504	-	34,630	-
1970	560	11	571	460	9,320	2,979	3,892	16,191	0	0	22,266	-	53,958	-
1975	393	6	399	428	10,776	2,060	4,876	17,713	0	0	27,890	-	67,275	-
1980	192	4	196	394	7,430	1,016	2,556	11,003	0	0	33,459	-	81,361	-
1981	245	2	246	377	5,696	1,016	2,780	9,493	0	0	32,863	-	78,320	-
1982	250	2	252	369	4,488	912	2,640	8,040	0	0	32,798	-	78,776	-
1983	295	2	297	330	3,118	877	3,140	7,135	0	0	33,418	-	80,063	-
1984	333	2	335	350	3,367	1,222	3,308	7,898	0	0	34,090	-	79,347	-
1985	296	7	304	328	4,474	941	3,339	8,754	0	0	33,945	-	79,750	-
1986	368	1	369	327	4,583	1,181	3,444	9,207	0	0	35,220	-	81,017	-
1987	283	2	285	326	4,162	1,072	4,058	9,291	0	0	36,711	-	83,882	-
1988	252	4	256	351	4,656	1,259	3,985	9,899	0	0	38,713	-	87,522	-
1989	189	4	192	359	4,573	874	4,519	9,966	0	0	38,792	-	87,135	-
1990	228	1	229	308	4,080	625	4,205	8,909	<sup>e</sup> 1,560	<sup>e</sup> 5	37,889	-	82,870	-
1991	170	2	172	322	4,221	677	4,451	9,348	1,644	5	40,942	-	89,112	-
1992	202	7	209	341	4,662	728	3,987	9,377	1,729	6	39,141	-	83,602	-
1993	203	3	205	354	4,473	839	4,721	10,032	882	7	41,950	-	88,633	-
1994	171	6	177	343	4,895	709	4,623	10,227	865	8	41,791	-	87,199	-
1995	143	1	143	358	4,321	748	4,979	10,048	960	9	44,010	-	91,676	-
1996	225	7	232	375	3,829	818	5,925	10,572	958	10	44,573	-	92,771	-

  

Trillion Btu														
1960	28.1	0.7	28.8	374.5	42.3	10.4	7.0	59.8	0.0	0.0	36.8	499.9	91.5	591.4
1965	18.5	0.4	18.9	425.6	45.4	20.6	9.2	75.2	0.0	0.0	49.5	569.2	118.2	687.3
1970	12.8	0.3	13.1	470.6	54.3	16.9	14.7	85.9	0.0	0.0	76.0	645.5	184.1	829.6
1975	8.8	0.1	8.9	438.1	62.8	11.7	18.1	92.6	0.0	0.0	95.2	634.7	229.5	864.3
1980	4.5	0.1	4.6	400.1	43.3	5.8	9.4	58.4	0.0	0.0	114.2	577.2	277.6	854.8
1981	5.7	(s)	5.8	385.8	33.2	5.8	10.1	49.1	0.0	0.0	112.1	552.8	267.2	820.0
1982	5.9	(s)	5.9	380.2	26.1	5.2	9.5	40.9	0.0	0.0	111.9	538.9	268.8	807.6
1983	7.0	(s)	7.1	340.9	18.2	5.0	11.3	34.5	0.0	0.0	114.0	496.4	273.2	769.6
1984	7.9	(s)	8.0	363.3	19.6	6.9	11.9	38.5	0.0	0.0	116.3	526.0	270.7	796.7
1985	7.1	0.2	7.2	342.0	26.1	5.3	12.0	43.4	0.0	0.0	115.8	508.5	272.1	780.6
1986	8.8	(s)	8.8	342.4	26.7	6.7	12.5	45.9	0.0	0.0	120.2	517.3	276.4	793.7
1987	6.8	(s)	6.9	341.2	24.2	6.1	14.8	45.2	0.0	0.0	125.3	518.5	286.2	804.7
1988	6.1	0.1	6.2	364.6	27.1	7.1	14.6	48.8	0.0	0.0	132.1	551.8	298.6	850.4
1989	4.5	0.1	4.6	374.2	26.6	5.0	16.6	48.2	0.0	0.0	132.4	559.4	297.3	856.8
1990	5.5	(s)	5.5	320.7	23.8	3.5	15.2	42.5	<sup>e</sup> 31.2	<sup>e</sup> (s)	129.3	<sup>e</sup> 529.3	282.8	812.0
1991	4.1	(s)	4.2	335.9	24.6	3.8	16.1	44.5	32.9	(s)	139.7	557.2	304.1	861.2
1992	4.9	0.2	5.1	352.9	27.2	4.1	14.4	45.7	34.6	(s)	133.5	571.9	285.3	857.1
1993	4.9	0.1	5.0	367.6	26.1	4.8	17.0	47.8	17.6	(s)	143.1	581.2	302.4	883.6
1994	4.2	0.1	4.3	356.0	28.5	4.0	16.8	49.3	17.3	(s)	142.6	569.6	297.5	867.1
1995	3.5	(s)	3.5	371.4	25.2	4.2	18.0	47.5	19.2	(s)	150.2	591.7	312.8	904.5
1996	5.4	0.2	5.5	389.1	22.3	4.6	21.4	48.4	19.2	(s)	152.1	614.2	316.5	930.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



Table 229. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Ohio

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	2,187	19	2,206	108	1,443	95	309	541	2,118	4,507	0	7,592	—	18,885	—
1965	1,446	12	1,458	127	1,548	188	405	572	1,997	4,710	0	10,386	—	24,799	—
1970	1,040	7	1,047	183	1,850	155	687	401	824	3,917	0	17,084	—	41,399	—
1975	729	4	733	169	2,139	107	861	956	1,457	5,520	0	20,046	—	48,354	—
1980	357	3	360	166	2,591	130	451	2,058	380	5,610	0	23,325	—	56,719	—
1981	454	1	455	161	2,597	67	491	1,186	28	4,368	0	26,035	—	62,048	—
1982	464	1	465	158	2,104	61	466	837	178	3,646	0	26,522	—	63,700	—
1983	548	1	549	144	3,575	345	554	789	29	5,292	0	27,076	—	64,869	—
1984	619	1	620	155	3,861	300	584	2,142	19	6,905	0	27,984	—	65,136	—
1985	550	5	555	143	2,036	440	589	R 604	83	3,752	0	29,179	—	68,555	—
1986	683	(s)	684	139	2,127	190	608	1,863	160	4,947	0	30,481	—	70,115	—
1987	526	1	527	147	2,116	189	716	R 2,020	50	R 5,091	0	31,779	—	72,612	—
1988	468	2	470	159	2,232	264	703	R 3,024	79	R 6,302	0	33,325	—	75,339	—
1989	351	2	353	162	1,687	240	798	R 2,059	18	R 4,802	0	34,478	—	R 77,444	—
1990	424	(s)	425	144	1,652	189	742	R 1,059	22	R 3,665	e NA	34,856	—	R 76,235	—
1991	316	1	317	150	1,615	180	785	925	40	R 3,547	NA	36,820	—	R 80,140	—
1992	374	5	379	161	1,683	68	704	673	74	3,201	NA	36,158	—	R 77,231	—
1993	376	2	378	164	1,384	201	833	393	27	R 2,838	38	37,749	—	R 79,756	—
1994	318	4	322	167	1,501	144	816	448	8	R 2,916	43	38,536	—	R 80,407	—
1995	265	(s)	265	175	1,847	89	879	438	5	3,257	53	40,104	—	R 83,538	—
1996	419	5	423	190	1,354	155	1,046	365	2	2,920	41	40,580	—	84,459	—

  

Trillion Btu															
1960	52.2	0.5	52.6	111.7	8.4	0.5	1.2	2.8	13.3	26.3	0.0	25.9	216.6	64.4	281.0
1965	34.3	0.3	34.6	131.0	9.0	1.1	1.6	3.0	12.6	27.3	0.0	35.4	228.3	84.6	313.0
1970	23.8	0.2	24.0	187.6	10.8	0.9	2.6	2.1	5.2	21.5	0.0	58.3	291.5	141.3	432.7
1975	16.3	0.1	16.4	173.4	12.5	0.6	3.2	5.0	9.2	30.4	0.0	68.4	288.6	165.0	453.6
1980	8.3	0.1	8.3	168.9	15.1	0.7	1.7	10.8	2.4	30.7	0.0	79.6	287.5	193.5	481.0
1981	10.7	(s)	10.7	164.8	15.1	0.4	1.8	6.2	0.2	23.7	0.0	88.8	288.0	211.7	499.7
1982	10.9	(s)	11.0	162.2	12.3	0.3	1.7	4.4	1.1	19.8	0.0	90.5	283.5	217.3	500.9
1983	13.0	(s)	13.0	148.5	20.8	2.0	2.0	4.1	0.2	29.1	0.0	92.4	283.0	221.3	504.3
1984	14.7	(s)	14.8	161.1	22.5	1.7	2.1	11.2	0.1	37.7	0.0	95.5	309.0	222.2	531.2
1985	13.1	0.1	13.2	149.6	11.9	2.5	2.1	3.2	0.5	20.2	0.0	99.6	282.6	233.9	516.5
1986	16.4	(s)	16.4	145.5	12.4	1.1	2.2	9.8	1.0	26.5	0.0	104.0	292.4	239.2	531.6
1987	12.7	(s)	12.7	153.6	12.3	1.1	2.6	10.6	0.3	26.9	0.0	108.4	301.7	247.8	R 549.5
1988	11.4	0.1	11.4	165.1	13.0	1.5	2.6	15.9	0.5	R 33.4	0.0	113.7	323.7	257.1	R 580.8
1989	8.4	0.1	8.4	168.3	9.8	1.4	2.9	10.8	0.1	25.1	0.0	117.6	319.4	R 264.2	R 583.7
1990	10.2	(s)	10.3	149.3	9.6	1.1	2.7	R 5.6	0.1	19.1	e NA	118.9	297.5	R 260.1	R 557.6
1991	7.6	(s)	7.7	157.0	9.4	1.0	2.8	4.9	0.3	18.4	NA	125.6	308.7	R 273.4	R 582.1
1992	9.1	0.1	9.2	166.4	9.8	0.4	2.5	3.5	0.5	16.7	NA	123.4	315.8	R 263.5	R 579.3
1993	9.2	(s)	9.2	170.3	8.1	1.1	3.0	2.1	0.2	14.4	0.8	128.8	R 323.5	R 272.1	R 595.6
1994	7.7	0.1	7.8	173.0	8.7	0.8	3.0	2.4	(s)	14.9	0.9	131.5	R 328.1	R 274.3	R 602.4
1995	6.5	(s)	6.5	181.8	10.8	0.5	3.2	2.3	(s)	16.8	1.1	136.8	R 343.0	285.0	R 628.0
1996	10.0	0.1	10.1	197.2	7.9	0.9	3.8	1.9	(s)	14.5	0.8	138.5	361.0	288.2	649.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 230. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Ohio**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	25,835	218	6,862	7,112	2,023	1,585	1,683	3,354	9,082	9,158	40,860	12	0	0	39,246	-	97,619	-
1965	26,758	327	7,344	8,479	2,513	2,649	2,050	2,598	8,228	14,615	48,476	1	0	0	41,757	-	99,701	-
1970	29,875	376	9,017	11,429	3,360	3,999	2,390	1,926	4,166	16,283	52,571	0	0	0	45,827	-	111,055	-
1975	22,307	345	8,749	11,150	1,433	3,993	1,987	1,519	7,038	16,834	52,704	0	0	0	55,597	-	134,108	-
1980	15,821	321	7,324	12,591	1,306	41,031	2,395	1,154	5,678	22,807	94,285	0	0	0	55,283	-	134,429	-
1981	16,433	317	6,903	12,365	1,668	36,074	2,297	866	5,552	17,038	82,763	0	0	0	54,209	-	129,194	-
1982	12,476	271	7,364	10,901	1,590	37,343	2,095	470	2,122	14,770	76,654	0	0	0	42,565	-	102,235	-
1983	10,438	263	6,744	4,545	673	36,938	2,193	1,042	3,942	15,402	71,479	0	0	0	46,290	-	110,900	-
1984	11,069	266	6,881	4,908	448	R 24,806	2,339	1,466	2,630	17,357	R 60,835	0	0	0	59,208	-	137,812	-
1985	10,420	253	6,339	6,688	328	23,612	2,180	1,074	2,098	15,991	58,310	0	0	0	61,109	-	143,571	-
1986	10,487	241	7,341	5,841	196	10,190	2,131	1,019	2,067	16,813	45,598	0	0	0	58,497	-	134,560	-
1987	11,019	229	9,006	5,302	198	R 10,788	2,409	R 1,031	1,909	18,825	R 49,468	0	0	0	61,855	-	141,334	-
1988	11,478	285	6,356	5,193	220	5,989	2,324	R 1,025	2,336	19,580	R 43,023	0	0	0	62,238	-	140,706	-
1989	9,992	282	10,622	5,255	223	R 7,522	2,383	R 1,016	1,778	19,511	R 48,311	0	0	0	68,314	-	R 153,446	-
1990	9,703	284	9,880	5,141	87	R 5,689	2,453	R 973	1,514	20,528	R 46,265	f NA	f NA	f NA	69,682	-	R 152,404	-
1991	8,511	281	8,993	5,254	114	5,592	2,194	963	1,128	18,722	R 42,962	NA	NA	NA	67,856	-	R 147,691	-
1992	7,725	296	9,910	6,395	136	9,696	2,237	2,794	1,433	21,698	54,299	NA	NA	NA	69,674	-	R 148,820	-
1993	6,992	303	7,682	6,524	313	R 9,265	2,278	1,123	2,100	20,518	NA	NA	NA	NA	68,831	-	R 145,426	-
1994	6,886	312	8,847	7,127	209	R 9,334	2,381	1,099	1,949	21,242	R 52,188	NA	NA	NA	74,010	-	R 154,424	-
1995	6,386	338	8,973	6,334	187	8,159	2,340	1,200	1,383	20,446	49,023	NA	NA	NA	74,473	-	R 153,132	-
1996	5,636	348	11,258	5,686	221	7,387	2,271	1,203	1,627	22,767	52,421	NA	NA	NA	73,394	-	152,757	-

**Trillion Btu**

1960	664.3	226.1	45.5	41.4	11.5	6.4	10.2	17.6	57.1	54.9	244.6	0.1	0.0	0.0	133.9	1,269.1	333.1	1,602.2
1965	681.5	338.3	48.7	49.4	14.2	10.6	12.4	13.6	51.7	85.3	286.1	(s)	0.0	0.0	142.5	1,448.3	340.2	1,788.5
1970	738.5	384.8	59.8	66.6	19.1	15.1	14.5	10.1	26.2	94.1	305.4	0.0	0.0	0.0	156.4	1,585.1	378.9	1,964.1
1975	556.5	352.8	58.1	64.9	8.1	14.8	12.1	8.0	44.2	97.8	308.1	0.0	0.0	0.0	189.7	1,407.1	457.6	1,864.6
1980	404.7	326.0	48.6	73.3	7.4	150.7	14.5	6.1	35.7	129.8	466.2	0.0	0.0	0.0	188.6	1,385.5	458.7	1,844.2
1981	418.1	324.5	45.8	72.0	9.5	131.4	13.9	4.5	34.9	98.1	410.2	0.0	0.0	0.0	185.0	1,337.7	440.8	1,778.5
1982	317.8	279.2	48.9	63.5	9.0	135.0	12.7	2.5	13.3	85.2	370.1	0.0	0.0	0.0	145.2	1,112.3	348.8	1,461.1
1983	263.4	271.7	44.8	26.5	3.8	133.5	13.3	5.5	24.8	89.4	341.5	0.0	0.0	0.0	157.9	1,034.6	378.4	1,413.0
1984	280.1	276.4	45.7	28.6	2.5	89.3	14.2	7.7	16.5	99.0	303.5	0.0	0.0	0.0	202.0	1,062.0	470.2	1,532.2
1985	265.7	264.4	42.1	39.0	1.9	85.1	13.2	5.6	13.2	92.3	292.4	0.0	0.0	0.0	208.5	1,030.9	489.9	1,520.8
1986	268.3	252.2	48.7	34.0	1.1	37.1	12.9	5.4	13.0	96.9	249.2	0.0	0.0	0.0	199.6	969.2	459.1	1,428.4
1987	282.1	239.7	59.8	30.9	1.1	39.5	14.6	5.4	12.0	107.8	271.1	0.0	0.0	0.0	211.0	1,003.9	482.2	1,486.2
1988	293.9	296.3	42.2	30.3	1.2	21.9	14.1	5.4	14.7	112.6	242.3	0.0	0.0	0.0	212.4	1,044.9	480.1	1,525.0
1989	256.0	293.9	70.5	30.6	1.3	27.7	14.5	5.3	11.2	111.8	272.8	0.0	0.0	0.0	233.1	1,055.9	R 523.6	R 1,579.5
1990	248.2	294.9	65.6	29.9	0.5	20.6	14.9	5.1	9.5	117.6	263.7	f 0.1	f 64.9	f 0.0	237.8	R f 1,109.6	R 520.0	R f 1,629.6
1991	216.8	293.6	59.7	30.6	0.6	20.2	13.3	5.1	7.1	107.5	244.1	0.1	64.3	0.0	231.5	1,050.4	R 503.9	R 1,554.3
1992	197.6	306.9	65.8	37.3	0.8	35.1	13.6	14.7	9.0	124.1	300.3	0.1	64.2	0.0	237.7	1,106.8	R 507.8	R 1,614.6
1993	178.2	314.1	51.0	38.0	1.8	33.4	13.8	5.9	13.2	117.4	274.5	0.1	64.6	0.0	234.9	1,066.3	R 496.2	R 1,562.4
1994	176.0	324.0	58.7	41.5	1.2	33.9	14.4	5.8	12.3	121.8	289.6	(s)	R 65.0	0.0	252.5	R 1,107.2	R 526.9	R 1,634.1
1995	162.9	350.7	59.5	36.9	1.1	29.6	14.2	6.3	8.7	117.4	273.7	R (s)	R 63.4	0.0	254.1	R 1,104.8	529.3	R 1,634.1
1996	142.2	361.6	74.7	33.1	1.3	26.7	13.8	6.3	10.2	130.6	296.7	0.1	68.3	0.0	250.4	1,119.3	521.2	1,640.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 231. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Ohio

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	449	9	1,395	7,987	1,808	36	1,381	74,274	310	87,192	0	93	-	232	-
1965	88	11	2,125	9,722	3,075	94	1,263	83,101	633	100,013	0	54	-	130	-
1970	48	12	712	11,068	5,857	133	1,241	103,970	758	123,739	0	43	-	105	-
1975	4	9	491	15,647	5,926	180	1,622	116,333	592	140,790	0	45	-	109	-
1980	0	11	473	24,578	7,219	225	1,425	110,021	255	144,198	0	44	-	106	-
1981	0	13	408	23,624	5,745	343	1,367	108,141	50	139,678	0	49	-	116	-
1982	0	14	393	22,167	5,485	345	1,247	104,596	1	134,233	0	45	-	108	-
1983	0	10	397	21,587	5,821	410	1,305	105,275	19	134,813	0	36	-	85	-
1984	0	12	322	23,525	6,832	R 541	1,392	105,436	40	138,087	0	35	-	81	-
1985	0	8	330	22,274	7,204	379	1,297	107,086	0	138,569	0	42	-	98	-
1986	0	9	375	22,795	9,924	411	1,268	R 109,051	4	R 143,828	0	40	-	92	-
1987	0	11	239	21,419	10,800	R 351	1,434	R 113,040	31	R 147,312	0	37	-	86	-
1988	0	10	331	24,446	9,218	349	1,383	R 113,023	12	R 148,761	0	40	-	91	-
1989	0	10	250	26,215	10,405	R 374	1,418	R 111,499	10	R 150,171	0	41	-	91	-
1990	0	10	239	25,341	10,602	R 358	1,459	R 108,455	5	R 146,458	R e 183,756	38	-	84	-
1991	0	9	214	24,010	10,400	292	1,306	R 108,032	8	R 144,260	R 145,661	40	-	86	-
1992	0	10	224	25,156	10,631	R 251	1,331	R 105,229	55	R 142,877	R 177,034	44	-	93	-
1993	0	10	207	26,716	10,650	R 246	1,355	R 113,239	16	R 152,430	R 197,565	40	-	85	-
1994	0	18	186	28,828	11,678	460	1,417	R 111,632	64	R 154,265	R 229,400	39	-	82	-
1995	0	18	235	29,497	11,236	256	1,392	R 114,584	57	R 157,258	R 211,823	38	-	79	-
1996	0	20	345	33,788	11,960	220	1,351	113,793	84	161,541	83,698	40	-	84	-

  

Trillion Btu															
1960	11.1	9.4	7.0	46.5	9.8	0.1	8.4	390.2	2.0	464.0	0.0	0.3	484.9	0.8	485.7
1965	2.2	11.4	10.7	56.6	17.0	0.4	7.7	436.5	4.0	532.9	0.0	0.2	546.7	0.4	547.1
1970	1.1	12.3	3.6	64.5	32.8	0.5	7.5	546.2	4.8	659.8	0.0	0.1	673.4	0.4	673.7
1975	0.1	9.2	2.5	91.1	33.3	0.7	9.8	611.1	3.7	752.2	0.0	0.2	761.7	0.4	762.1
1980	0.0	11.6	2.4	143.2	40.6	0.8	8.6	577.9	1.6	775.2	0.0	0.1	787.0	0.4	787.3
1981	0.0	13.2	2.1	137.6	32.4	1.3	8.3	568.1	0.3	750.0	0.0	0.2	763.3	0.4	763.7
1982	0.0	14.3	2.0	129.1	30.9	1.2	7.6	549.4	(s)	720.2	0.0	0.2	734.7	0.4	735.1
1983	0.0	10.6	2.0	125.7	32.8	R 1.5	7.9	553.0	0.1	723.0	0.0	0.1	733.7	0.3	734.0
1984	0.0	12.9	1.6	137.0	38.5	R 1.9	8.4	553.9	0.2	741.6	0.0	0.1	754.7	0.3	754.9
1985	0.0	8.6	1.7	129.7	40.6	1.4	7.9	R 562.5	0.0	R 743.8	0.0	0.1	R 752.5	0.3	R 752.9
1986	0.0	9.1	1.9	132.8	56.0	1.5	7.7	R 572.8	(s)	772.8	0.0	0.1	782.0	0.3	782.3
1987	0.0	11.7	1.2	124.8	61.0	1.3	8.7	R 593.8	0.2	R 790.9	0.0	0.1	R 802.8	0.3	R 803.1
1988	0.0	10.4	1.7	142.4	52.0	1.3	8.4	R 593.7	0.1	R 799.5	0.0	0.1	R 810.0	0.3	R 810.4
1989	0.0	10.8	1.3	152.7	58.7	1.4	8.6	R 585.7	0.1	R 808.4	0.0	0.1	R 819.4	0.3	R 819.7
1990	0.0	10.5	1.2	147.6	59.9	1.3	8.9	R 569.7	(s)	R 788.6	R e 14.0	0.1	R e 799.2	0.3	R e 799.5
1991	0.0	9.5	1.1	139.9	58.8	1.1	7.9	R 567.5	(s)	R 776.3	R 11.1	0.1	R 785.9	0.3	R 786.2
1992	0.0	10.0	1.1	146.5	60.1	0.9	8.1	R 552.8	0.3	R 769.8	R 13.5	0.1	R 780.0	0.3	R 780.3
1993	0.0	10.7	1.0	155.6	60.2	0.9	8.2	R 594.8	0.1	R 820.9	R 15.1	0.1	R 831.8	0.3	R 832.1
1994	0.0	18.6	0.9	167.9	66.1	1.7	8.6	R 586.4	0.4	R 832.0	R 17.5	0.1	R 850.7	0.3	R 851.0
1995	0.0	18.5	1.2	171.8	63.7	0.9	8.4	601.9	0.4	848.3	R 16.2	0.1	867.0	0.3	867.3
1996	0.0	21.2	1.7	196.8	67.8	0.8	8.2	597.8	0.5	873.6	6.4	0.1	894.9	0.3	895.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 232. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Ohio**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	21,559	0	21,559	3	94	107	0	201	0	7	8	0	0	--
1965	24,923	0	24,923	3	105	119	0	223	22	10	7	0	0	--
1970	35,321	0	35,321	21	697	791	0	1,487	0	7	5	0	0	--
1975	47,321	0	47,321	6	1,312	2,568	0	3,880	0	7	(s)	0	0	--
1980	48,537	0	48,537	5	605	1,643	0	2,248	2,119	6	1	0	0	--
1981	48,460	0	48,460	2	216	840	0	1,056	4,407	6	(s)	0	0	--
1982	45,759	0	45,759	1	143	734	0	876	3,226	5	(s)	0	0	--
1983	44,017	0	44,017	1	104	523	0	626	4,904	135	9	0	0	--
1984	45,025	0	45,025	1	111	478	0	589	4,312	164	203	0	0	--
1985	46,700	0	46,700	1	141	508	0	649	1,943	175	265	0	0	--
1986	47,785	0	47,785	1	82	493	0	576	24	172	279	0	0	--
1987	47,520	0	47,520	1	90	519	0	608	7,513	225	352	0	0	--
1988	48,893	0	48,893	1	387	533	0	921	8,455	187	351	0	0	--
1989	50,479	0	50,479	1	510	508	0	1,018	12,661	130	316	0	0	--
1990	48,848	0	48,848	1	136	452	0	588	10,664	173	267	0	0	--
1991	49,577	0	49,577	3	169	584	0	753	14,833	145	298	0	0	--
1992	50,358	0	50,358	3	62	427	0	489	14,805	244	310	0	0	--
1993	51,456	0	51,456	3	21	545	0	565	10,011	183	64	0	0	--
1994	49,326	0	49,326	3	28	844	0	872	10,952	189	0	0	0	--
1995	49,785	0	49,785	7	0	642	0	642	16,768	227	0	0	0	--
1996	53,543	0	53,543	3	0	584	0	584	13,919	392	0	0	0	--

**Trillion Btu**

1960	512.5	0.0	512.5	3.1	0.6	0.6	0.0	1.2	0.0	0.1	0.1	0.0	0.0	516.9
1965	587.3	0.0	587.3	3.0	0.7	0.7	0.0	1.3	0.3	0.1	0.1	0.0	0.0	592.1
1970	794.7	0.0	794.7	21.9	4.4	4.6	0.0	9.0	0.0	0.1	0.1	0.0	0.0	825.7
1975	1,037.2	0.0	1,037.2	5.3	8.2	14.9	0.0	23.2	0.0	0.1	(s)	0.0	0.0	1,065.8
1980	1,110.5	0.0	1,110.5	4.7	3.8	9.6	0.0	13.4	23.1	0.1	(s)	0.0	0.0	1,151.8
1981	1,100.4	0.0	1,100.4	2.1	1.4	4.9	0.0	6.3	48.6	0.1	(s)	0.0	0.0	1,157.4
1982	1,057.3	0.0	1,057.3	1.2	0.9	4.3	0.0	5.2	35.7	0.1	(s)	0.0	0.0	1,099.5
1983	1,037.6	0.0	1,037.6	1.1	0.7	3.0	0.0	3.7	53.5	1.4	0.1	0.0	0.0	1,097.3
1984	1,059.0	0.0	1,059.0	0.7	0.7	2.8	0.0	3.5	46.8	1.7	2.1	0.0	0.0	1,113.7
1985	1,103.3	0.0	1,103.3	0.7	0.9	3.0	0.0	3.8	21.0	1.8	2.8	0.0	0.0	1,133.5
1986	1,138.3	0.0	1,138.3	0.6	0.5	2.9	0.0	3.4	0.3	1.8	2.9	0.0	0.0	1,147.3
1987	1,131.4	0.0	1,131.4	0.9	0.6	3.0	0.0	3.6	81.0	2.3	3.7	0.0	0.0	1,222.8
1988	1,163.2	0.0	1,163.2	1.0	2.4	3.1	0.0	5.5	90.8	1.9	3.6	0.0	0.0	1,266.1
1989	1,194.8	0.0	1,194.8	1.0	3.2	3.0	0.0	6.2	135.8	R 1.4	3.3	0.0	0.0	R 1,342.4
1990	1,160.8	0.0	1,160.8	1.3	0.9	2.6	0.0	3.5	113.9	1.8	2.8	0.0	0.0	1,284.0
1991	1,184.4	0.0	1,184.4	3.3	1.1	3.4	0.0	4.5	159.3	1.5	3.1	0.0	0.0	R 1,356.1
1992	1,206.8	0.0	1,206.8	3.1	0.4	2.5	0.0	2.9	158.1	2.5	3.2	0.0	0.0	1,376.6
1993	1,240.0	0.0	1,240.0	2.8	0.1	3.2	0.0	3.3	106.9	1.9	0.7	0.0	0.0	1,355.6
1994	1,189.0	0.0	1,189.0	2.9	0.2	4.9	0.0	5.1	116.9	1.9	0.0	0.0	0.0	R 1,315.9
1995	1,207.0	0.0	1,207.0	7.7	0.0	3.7	0.0	3.7	178.7	2.3	0.0	0.0	0.0	1,399.4
1996	1,291.0	0.0	1,291.0	3.0	0.0	3.4	0.0	3.4	147.9	4.1	0.0	0.0	0.0	1,449.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 233. Energy Consumption Estimates by Source, Selected Years 1960-1996, Oklahoma

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum												Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	
1960	77	308	2,034	562	2,618	2,920	431	6,433	661	22,708	1,454	7,938	47,758	0	705	0	0	-3,605	-	
1965	30	468	3,586	745	2,877	3,453	945	7,654	679	25,815	851	8,617	55,222	0	825	0	0	-4,992	-	
1970	7	597	4,598	448	5,584	4,378	1,103	9,618	622	32,521	807	8,730	68,410	0	1,406	0	0	-18,718	-	
1975	23	669	5,675	309	9,449	3,916	328	9,342	810	38,469	641	9,555	78,495	0	2,945	0	0	-21,277	-	
1980	6,046	722	4,826	328	12,125	4,900	342	8,987	1,356	39,633	732	9,296	82,525	0	1,315	0	0	-28,011	-	
1981	9,048	671	3,353	268	15,488	5,009	302	7,145	1,301	41,673	741	5,733	81,013	0	1,122	0	0	-16,914	-	
1982	11,781	677	3,436	155	14,512	5,911	461	8,073	1,186	43,409	676	5,193	83,013	0	2,090	0	0	-15,841	-	
1983	12,629	629	4,332	121	16,589	5,974	120	8,122	1,242	42,731	516	6,151	85,899	0	2,500	0	0	-15,800	-	
1984	13,254	653	3,093	188	17,992	7,017	117	7,138	1,324	41,908	358	5,359	84,494	0	2,339	0	0	-19,881	-	
1985	13,602	587	4,003	217	18,377	5,870	114	8,035	1,234	R 42,170	219	4,955	R 85,195	0	3,980	0	0	-15,019	-	
1986	12,395	554	3,281	250	13,948	5,942	77	5,950	1,207	R 40,568	393	5,139	R 76,755	0	2,951	0	0	-10,571	-	
1987	13,476	596	2,729	179	13,960	7,440	63	5,487	1,364	R 38,731	332	5,874	R 76,159	0	2,948	0	0	-14,929	-	
1988	15,006	589	3,564	172	14,916	7,224	89	4,911	1,316	R 38,806	660	7,003	R 78,661	0	2,045	0	0	-13,947	-	
1989	15,086	601	2,750	165	14,762	9,239	120	5,681	1,349	R 38,888	394	7,294	R 80,644	0	2,392	0	0	R -16,314	-	
1990	15,423	604	3,508	146	15,348	7,832	38	3,289	1,389	R 38,998	631	7,544	R 78,722	0	i NA	i NA	i NA	R -2,321	-	
1991	16,345	570	3,433	111	14,175	10,569	31	4,878	1,242	R 38,816	242	6,931	R 80,430	0	NA	NA	NA	R -12,283	-	
1992	17,430	544	2,930	124	16,287	12,948	31	4,502	1,267	R 39,883	628	8,192	R 86,791	0	NA	NA	NA	R -20,212	-	
1993	18,866	579	3,721	104	16,391	9,012	26	5,687	1,290	R 40,814	713	7,770	R 85,528	0	NA	NA	NA	R -22,941	-	
1994	17,726	572	3,542	84	17,325	10,345	32	5,626	1,348	R 41,524	557	7,610	R 87,993	0	NA	NA	NA	R -12,132	-	
1995	19,596	568	3,181	154	17,675	5,359	15	3,625	1,325	42,382	447	7,417	81,580	0	NA	NA	NA	R -18,456	-	
1996	20,125	567	2,762	117	20,479	4,707	32	3,729	1,286	43,763	396	8,535	85,805	0	NA	NA	NA	-12,014	-	
Trillion Btu																				
1960	1.8	319.3	13.5	2.8	15.3	15.7	2.4	25.8	4.0	119.3	9.1	47.7	255.6	0.0	7.6	0.0	0.0	-12.3	572.0	
1965	0.7	480.1	23.8	3.8	16.8	18.7	5.4	30.7	4.1	135.6	5.4	51.7	295.8	0.0	8.6	0.0	0.0	-17.0	768.2	
1970	0.2	616.3	30.5	2.3	32.5	24.0	6.3	36.3	3.8	170.8	5.1	52.3	363.9	0.0	14.8	0.0	0.0	-63.9	931.2	
1975	0.5	678.9	37.7	1.6	55.0	21.5	1.9	34.7	4.9	202.1	4.0	57.3	420.7	0.0	30.6	0.0	0.0	-72.6	1,058.1	
1980	106.3	738.9	32.0	1.7	70.6	26.9	1.9	33.0	8.2	208.2	4.6	55.7	442.9	0.0	13.7	0.0	0.0	-95.6	1,206.3	
1981	157.7	694.5	22.2	1.4	90.2	27.6	1.7	26.0	7.9	218.9	4.7	35.8	436.5	0.0	11.7	0.0	0.0	-57.7	1,242.7	
1982	203.8	692.3	22.8	0.8	84.5	32.8	2.6	29.2	7.2	228.0	4.3	32.2	444.4	0.0	21.8	0.0	0.0	-54.0	1,308.4	
1983	219.3	655.4	28.7	0.6	96.6	33.1	0.7	29.4	7.5	224.5	3.2	37.6	462.0	0.0	26.3	0.0	0.0	-53.9	1,309.0	
1984	230.9	669.3	20.5	1.0	104.8	39.0	0.7	25.7	8.0	220.1	2.3	32.6	454.6	0.0	24.4	0.0	0.0	-67.8	1,311.4	
1985	237.2	603.9	26.6	1.1	107.0	32.5	0.6	29.0	7.5	221.5	1.4	30.7	R 457.9	0.0	41.6	0.0	0.0	-51.2	1,289.2	
1986	217.9	570.7	21.8	1.3	81.2	32.9	0.4	21.7	7.3	213.1	2.5	32.0	414.2	0.0	30.8	0.0	0.0	-36.1	1,197.6	
1987	240.7	617.6	18.1	0.9	81.3	41.4	0.4	20.1	8.3	R 203.5	2.1	35.8	R 411.9	0.0	30.7	0.0	0.0	-50.9	R 1,249.8	
1988	269.4	611.2	23.7	0.9	86.9	40.2	0.5	17.9	8.0	R 203.8	4.2	42.3	R 428.3	0.0	21.1	0.0	0.0	-47.6	R 1,282.4	
1989	268.7	617.6	18.3	0.8	86.0	51.7	0.7	20.9	8.2	R 204.3	2.5	43.7	R 437.0	0.0	R 25.0	0.0	0.0	R -55.7	R 1,292.6	
1990	277.1	620.7	23.3	0.7	89.4	43.8	0.2	11.9	8.4	R 204.9	4.0	45.2	R 431.8	0.0	R i 28.6	i 23.8	i 0.1	R -7.9	R i 1,374.3	
1991	291.6	582.1	22.8	0.6	82.6	59.1	0.2	17.6	7.5	R 203.9	1.5	41.7	R 437.5	0.0	R 19.4	23.5	0.1	R -41.9	R 1,312.3	
1992	307.2	558.0	19.4	0.6	94.9	72.8	0.2	16.3	7.7	R 209.5	3.9	48.8	474.1	0.0	R 33.2	24.2	0.1	-69.0	R 1,327.7	
1993	331.5	593.8	24.7	0.5	95.5	50.5	0.1	20.5	7.8	R 214.4	4.5	46.6	465.1	0.0	R 44.3	R 23.7	0.1	-78.3	R 1,380.3	
1994	307.0	588.1	23.5	0.4	100.9	58.1	0.2	20.5	8.2	R 218.1	3.5	45.5	478.9	0.0	R 25.4	R 24.4	0.1	R -41.4	R 1,382.4	
1995	343.5	579.5	21.1	0.8	103.0	30.3	0.1	13.1	8.0	222.6	2.8	44.4	446.2	0.0	28.0	R 24.8	0.1	-63.0	R 1,359.1	
1996	349.9	580.2	18.3	0.6	119.3	26.7	0.2	13.5	7.8	229.9	2.5	50.9	469.6	0.0	21.5	25.5	0.1	-41.0	1,405.7	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 234. Residential Energy Consumption Estimates, Selected Years 1960-1996, Oklahoma**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	18	0	18	60	2	18	3,938	3,959	0	0	2,372	-	5,900	-
1965	6	0	6	65	2	78	4,642	4,722	0	0	4,086	-	9,756	-
1970	2	0	2	77	3	52	5,802	5,856	0	0	7,293	-	17,674	-
1975	1	0	1	80	12	24	5,628	5,663	0	0	9,222	-	22,245	-
1980	11	0	11	77	15	21	1,759	1,795	0	0	12,309	-	29,931	-
1981	1	0	1	70	96	15	1,888	1,999	0	0	13,351	-	31,819	-
1982	6	0	6	80	1	14	2,177	2,192	0	0	14,138	-	33,957	-
1983	1	0	1	79	75	13	2,590	2,678	0	0	14,644	-	35,085	-
1984	2	0	2	81	81	25	1,625	1,731	0	0	14,259	-	33,189	-
1985	1	0	1	76	82	30	2,027	2,140	0	0	14,400	-	33,831	-
1986	1	0	1	67	30	9	1,477	1,516	0	0	13,903	-	31,981	-
1987	1	0	1	64	10	22	1,362	1,394	0	0	14,085	-	32,183	-
1988	3	(s)	3	72	28	25	1,323	1,376	0	0	14,475	-	32,724	-
1989	(s)	0	(s)	72	(s)	19	1,509	1,528	0	0	14,083	-	R 31,632	-
1990	(s)	0	(s)	66	(s)	10	1,274	1,284	<sup>e</sup> 345	<sup>e</sup> 23	17,077	-	R 37,351	-
1991	(s)	0	(s)	69	(s)	10	1,373	1,383	364	23	15,325	-	R 33,355	-
1992	(s)	(s)	(s)	66	2	11	1,112	1,124	383	23	14,254	-	R 30,445	-
1993	(s)	0	(s)	78	(s)	7	1,286	1,293	335	23	15,901	-	R 33,596	-
1994	(s)	(s)	(s)	69	(s)	5	1,198	1,203	328	23	16,128	-	R 33,651	-
1995	4	0	4	69	12	4	1,214	1,230	364	23	16,319	-	R 33,994	-
1996	(s)	0	(s)	77	24	20	1,445	1,489	364	23	17,303	-	36,013	-
<b>Trillion Btu</b>														
1960	0.4	0.0	0.4	61.9	(s)	0.1	15.8	15.9	0.0	0.0	8.1	86.3	20.1	106.4
1965	0.1	0.0	0.1	66.5	(s)	0.4	18.6	19.1	0.0	0.0	13.9	99.7	33.3	133.0
1970	(s)	0.0	(s)	79.9	(s)	0.3	21.9	22.2	0.0	0.0	24.9	127.1	60.3	187.4
1975	(s)	0.0	(s)	79.6	0.1	0.1	20.9	21.1	0.0	0.0	31.5	132.2	75.9	208.1
1980	0.2	0.0	0.2	76.8	0.1	0.1	6.5	6.7	0.0	0.0	42.0	125.7	102.1	227.8
1981	(s)	0.0	(s)	71.6	0.6	0.1	6.9	7.5	0.0	0.0	45.6	124.7	108.6	233.3
1982	0.1	0.0	0.1	80.4	(s)	0.1	7.9	8.0	0.0	0.0	48.2	136.7	115.9	252.5
1983	(s)	0.0	(s)	82.1	0.4	0.1	9.4	9.9	0.0	0.0	50.0	142.0	119.7	261.7
1984	(s)	0.0	(s)	82.8	0.5	0.1	5.8	6.5	0.0	0.0	48.7	137.9	113.2	251.2
1985	(s)	0.0	(s)	77.6	0.5	0.2	7.3	8.0	0.0	0.0	49.1	134.7	115.4	250.2
1986	(s)	0.0	(s)	68.2	0.2	0.1	5.4	5.6	0.0	0.0	47.4	121.2	109.1	230.4
1987	(s)	0.0	(s)	66.1	0.1	0.1	5.0	5.2	0.0	0.0	48.1	119.4	109.8	229.2
1988	0.1	(s)	0.1	74.7	0.2	0.1	4.8	5.1	0.0	0.0	49.4	129.3	111.7	240.9
1989	(s)	0.0	(s)	73.3	(s)	0.1	5.6	5.7	0.0	0.0	48.0	127.1	R 107.9	R 235.0
1990	(s)	0.0	(s)	66.9	(s)	0.1	4.6	4.7	<sup>e</sup> 6.9	<sup>e</sup> 0.1	58.3	<sup>e</sup> 136.9	R 127.4	R e 264.3
1991	(s)	0.0	(s)	70.1	(s)	0.1	5.0	5.0	7.3	0.1	52.3	134.8	R 113.8	R 248.6
1992	(s)	(s)	(s)	67.2	(s)	0.1	4.0	4.1	7.7	0.1	48.6	127.7	R 103.9	R 231.6
1993	(s)	0.0	(s)	80.0	(s)	(s)	4.6	4.7	6.7	0.1	54.3	145.7	114.6	R 260.4
1994	(s)	(s)	(s)	71.0	(s)	(s)	4.4	4.4	6.6	0.1	55.0	137.1	114.8	R 251.9
1995	0.1	0.0	0.1	69.7	0.1	(s)	4.4	4.5	7.3	0.1	55.7	137.4	116.0	253.3
1996	(s)	0.0	(s)	78.4	0.1	0.1	5.2	5.5	7.3	0.1	59.0	150.2	122.9	273.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 235. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Oklahoma**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels									
1960	33	0	33	29	72	83	695	177	395	1,422	0	1,904	-	4,737	-
1965	12	0	12	27	68	353	819	204	233	1,677	0	2,945	-	7,032	-
1970	4	0	4	44	95	233	1,024	229	190	1,771	0	4,415	-	10,699	-
1975	2	0	2	42	406	106	993	264	196	1,965	0	6,810	-	16,427	-
1980	20	0	20	47	315	15	310	301	30	972	0	9,005	-	21,897	-
1981	3	0	3	41	524	38	333	315	0	1,210	0	10,624	-	25,321	-
1982	10	0	10	46	157	242	384	321	0	1,103	0	11,372	-	27,314	-
1983	1	0	1	44	597	13	457	411	0	1,478	0	11,768	-	28,193	-
1984	4	0	4	44	645	15	287	599	0	1,546	0	11,228	-	26,134	-
1985	2	0	2	41	705	20	358	338	0	1,420	0	11,706	-	27,501	-
1986	3	0	3	37	282	5	261	346	0	893	0	11,650	-	26,798	-
1987	1	0	1	32	408	5	240	R 359	16	R 1,029	0	11,594	-	26,491	-
1988	5	(s)	5	48	624	43	234	341	6	1,247	0	12,132	-	27,428	-
1989	(s)	0	(s)	39	638	88	266	312	45	1,350	0	11,885	-	R 26,697	-
1990	(s)	0	(s)	37	539	13	225	R 374	82	R 1,231	<sup>e</sup> NA	13,663	-	R 29,883	-
1991	1	0	1	40	485	10	242	231	76	R 1,045	NA	12,665	-	R 27,565	-
1992	(s)	(s)	1	35	374	4	196	172	43	790	NA	12,414	-	R 26,517	-
1993	(s)	0	(s)	41	324	5	227	37	0	593	9	12,931	-	R 27,321	-
1994	(s)	(s)	1	37	263	4	211	37	0	515	7	13,294	-	R 27,739	-
1995	7	0	7	40	292	5	214	38	(s)	549	8	13,359	-	R 27,827	-
1996	1	0	1	46	388	5	255	38	0	686	12	13,828	-	28,781	-

  

Trillion Btu															
1960	0.8	0.0	0.8	29.8	0.4	0.5	2.8	0.9	2.5	7.1	0.0	6.5	44.2	16.2	60.3
1965	0.3	0.0	0.3	27.9	0.4	2.0	3.3	1.1	1.5	8.2	0.0	10.0	46.5	24.0	70.5
1970	0.1	0.0	0.1	45.3	0.6	1.3	3.9	1.2	1.2	8.1	0.0	15.1	68.6	36.5	105.1
1975	(s)	0.0	(s)	41.6	2.4	0.6	3.7	1.4	1.2	9.3	0.0	23.2	74.2	56.0	130.2
1980	0.5	0.0	0.5	47.2	1.8	0.1	1.1	1.6	0.2	4.8	0.0	30.7	83.2	74.7	158.0
1981	0.1	0.0	0.1	41.9	3.1	0.2	1.2	1.7	0.0	6.1	0.0	36.3	84.3	86.4	170.7
1982	0.2	0.0	0.2	46.1	0.9	1.4	1.4	1.7	0.0	5.4	0.0	38.8	90.5	93.2	183.7
1983	(s)	0.0	(s)	45.8	3.5	0.1	1.7	2.2	0.0	7.4	0.0	40.2	93.3	96.2	189.5
1984	0.1	0.0	0.1	45.2	3.8	0.1	1.0	3.1	0.0	8.0	0.0	38.3	91.6	89.2	180.8
1985	(s)	0.0	(s)	41.6	4.1	0.1	1.3	1.8	0.0	7.3	0.0	39.9	88.9	93.8	182.7
1986	0.1	0.0	0.1	37.4	1.6	(s)	0.9	1.8	0.0	4.4	0.0	39.7	81.6	91.4	173.0
1987	(s)	0.0	(s)	33.4	2.4	(s)	0.9	1.9	0.1	5.3	0.0	39.6	78.3	90.4	168.7
1988	0.1	(s)	0.1	49.7	3.6	0.2	0.9	1.8	(s)	6.6	0.0	41.4	97.7	93.6	191.3
1989	(s)	0.0	(s)	39.3	3.7	0.5	1.0	1.6	0.3	7.1	0.0	40.6	87.0	R 91.1	R 178.1
1990	(s)	0.0	(s)	38.0	3.1	0.1	0.8	2.0	0.5	6.5	<sup>e</sup> NA	46.6	91.1	R 102.0	R 193.0
1991	(s)	0.0	(s)	40.1	2.8	0.1	0.9	1.2	0.5	R 5.5	NA	43.2	88.8	R 94.1	R 182.8
1992	(s)	(s)	(s)	36.0	2.2	(s)	0.7	0.9	0.3	4.1	NA	42.4	82.4	R 90.5	172.9
1993	(s)	0.0	(s)	41.6	1.9	(s)	0.8	0.2	0.0	2.9	0.2	44.1	R 88.9	93.2	R 182.1
1994	(s)	(s)	(s)	37.4	1.5	(s)	0.8	0.2	0.0	2.5	0.1	45.4	R 85.5	94.6	R 180.1
1995	0.2	0.0	0.2	40.2	1.7	(s)	0.8	0.2	(s)	2.7	0.2	45.6	R 88.9	94.9	R 183.8
1996	(s)	0.0	(s)	47.2	2.3	(s)	0.9	0.2	0.0	3.4	0.2	47.2	98.0	98.2	196.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 236. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Oklahoma**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	25	128	2,034	1,193	330	1,511	176	1,383	1,017	7,938	15,581	0	0	0	2,561	-	6,371	-
1965	11	236	3,586	1,203	514	1,704	152	812	346	8,617	16,934	0	0	0	3,563	-	8,507	-
1970	0	218	4,598	2,084	819	2,277	166	515	477	8,730	19,667	0	0	0	4,888	-	11,845	-
1975	20	223	5,675	4,166	198	2,248	274	437	374	9,555	22,928	0	0	0	7,233	-	17,447	-
1980	264	246	4,826	3,705	306	6,683	579	359	702	9,296	26,455	0	0	0	9,795	-	23,818	-
1981	676	253	3,353	5,052	249	4,592	555	346	738	5,733	20,618	0	0	0	10,383	-	24,745	-
1982	669	276	3,436	4,632	205	5,093	506	325	675	5,193	20,066	0	0	0	10,284	-	24,700	-
1983	585	244	4,332	5,873	95	4,579	530	286	515	6,151	22,360	0	0	0	10,557	-	25,292	-
1984	707	275	3,093	6,343	77	5,093	565	747	343	5,359	21,619	0	0	0	10,343	-	24,074	-
1985	852	245	4,003	6,949	64	5,517	527	977	211	4,955	23,203	0	0	0	10,576	-	24,848	-
1986	763	233	3,281	3,480	62	4,106	515	907	386	5,139	17,877	0	0	0	10,206	-	23,477	-
1987	613	288	2,729	2,930	36	3,792	583	821	314	5,874	17,079	0	0	0	10,417	-	23,803	-
1988	563	264	3,564	3,163	21	3,252	562	792	651	7,003	19,007	0	0	0	10,719	-	24,234	-
1989	663	276	2,750	2,778	12	3,821	576	908	339	7,294	18,479	0	0	0	11,039	-	24,797	-
1990	557	307	3,508	3,091	16	1,693	593	834	491	7,544	17,770	f NA	f NA	f NA	11,764	-	25,729	-
1991	676	269	3,433	3,200	12	3,154	530	895	154	6,931	18,309	NA	NA	NA	11,415	-	24,845	-
1992	730	268	2,930	4,200	17	3,114	541	831	574	8,192	20,399	NA	NA	NA	11,599	-	24,775	-
1993	1,198	279	3,721	3,135	14	4,080	551	1,026	708	7,770	21,004	NA	NA	NA	11,699	-	24,718	-
1994	764	287	3,542	3,484	23	4,073	576	1,109	550	7,610	20,967	NA	NA	NA	11,721	-	24,457	-
1995	1,455	275	3,181	3,105	6	2,138	566	1,183	334	7,417	17,930	NA	NA	NA	11,714	-	24,401	-
1996	738	274	2,762	3,435	7	1,991	549	1,216	263	8,535	18,757	NA	NA	NA	12,160	-	25,309	-

  

Trillion Btu																		
1960	0.6	132.5	13.5	7.0	1.9	6.1	1.1	7.3	6.4	47.7	90.8	0.0	0.0	0.0	8.7	232.7	21.7	254.4
1965	0.3	242.2	23.8	7.0	2.9	6.8	0.9	4.3	2.2	51.7	99.6	0.0	0.0	0.0	12.2	354.2	29.0	383.2
1970	0.0	225.3	30.5	12.1	4.6	8.6	1.0	2.7	3.0	52.3	114.9	0.0	0.0	0.0	16.7	356.9	40.4	397.3
1975	0.5	221.7	37.7	24.3	1.1	8.4	1.7	2.3	2.4	57.3	135.0	0.0	0.0	0.0	24.7	381.8	59.5	441.4
1980	5.6	246.4	32.0	21.6	1.7	24.6	3.5	1.9	4.4	55.7	145.4	0.0	0.0	0.0	33.4	430.8	81.3	512.1
1981	14.4	259.3	22.2	29.4	1.4	16.7	3.4	1.8	4.6	35.8	115.5	0.0	0.0	0.0	35.4	424.6	84.4	509.0
1982	14.2	278.7	22.8	27.0	1.2	18.4	3.1	1.7	4.2	32.2	110.6	0.0	0.0	0.0	35.1	438.6	84.3	522.9
1983	12.6	252.9	28.7	34.2	0.5	16.5	3.2	1.5	3.2	37.6	125.6	0.0	0.0	0.0	36.0	427.2	86.3	513.5
1984	15.0	279.3	20.5	36.9	0.4	18.3	3.4	3.9	2.2	32.6	118.3	0.0	0.0	0.0	35.3	447.9	82.1	530.1
1985	18.3	249.3	26.6	40.5	0.4	19.9	3.2	5.1	1.3	30.7	127.6	0.0	0.0	0.0	36.1	431.3	84.8	516.1
1986	16.4	237.9	21.8	20.3	0.4	14.9	3.1	4.8	2.4	32.0	99.6	0.0	0.0	0.0	34.8	388.8	80.1	468.9
1987	12.9	296.8	18.1	17.1	0.2	13.9	3.5	4.3	2.0	35.8	94.9	0.0	0.0	0.0	35.5	440.2	81.2	521.4
1988	12.0	273.9	23.7	18.4	0.1	11.9	3.4	4.2	4.1	42.3	108.0	0.0	0.0	0.0	36.6	430.5	82.7	513.2
1989	14.1	282.0	18.3	16.2	0.1	14.1	3.5	4.8	2.1	43.7	102.7	0.0	0.0	0.0	37.7	436.5	R 84.6	R 521.1
1990	12.7	312.7	23.3	18.0	0.1	6.1	3.6	4.4	3.1	45.2	103.8	f 0.0	f 16.9	f 0.0	40.1	f 486.3	R 87.8	R f 574.1
1991	16.1	272.6	22.8	18.6	0.1	11.4	3.2	4.7	1.0	41.7	103.5	0.0	16.2	0.0	38.9	447.4	R 84.8	532.1
1992	16.6	274.0	19.4	24.5	0.1	11.3	3.3	4.4	3.6	48.8	115.3	0.0	16.5	0.0	39.6	462.0	84.5	R 546.6
1993	26.9	285.2	24.7	18.3	0.1	14.7	3.3	5.4	4.4	46.6	117.5	0.0	16.8	0.0	39.9	486.4	84.3	570.7
1994	16.1	294.4	23.5	20.3	0.1	14.8	3.5	5.8	3.5	45.5	117.0	0.0	R 17.7	0.0	40.0	R 485.1	83.4	R 568.6
1995	33.0	279.0	21.1	18.1	(s)	7.7	3.4	6.2	2.1	44.4	103.1	0.0	R 17.3	0.0	40.0	R 472.4	83.3	R 555.6
1996	16.4	280.3	18.3	20.0	(s)	7.2	3.3	6.4	1.7	50.9	107.8	0.0	18.0	0.0	41.5	464.0	86.4	550.3

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 237. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Oklahoma**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>e</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	(s)	9	562	1,325	2,920	290	485	21,148	8	26,737	0	0	-	0	-
1965	(s)	13	745	1,582	3,453	489	527	24,799	244	31,839	0	0	-	0	-
1970	0	23	448	3,351	4,378	516	457	31,776	75	41,000	0	0	-	0	-
1975	(s)	24	309	4,809	3,916	474	537	37,768	42	47,854	0	0	-	0	-
1980	0	23	328	8,030	4,900	235	777	38,974	0	53,244	0	0	-	0	-
1981	0	22	268	9,779	5,009	332	745	41,012	0	57,146	0	0	-	0	-
1982	0	29	155	9,666	5,911	419	680	42,763	0	59,594	0	0	-	0	-
1983	0	25	121	9,994	5,974	497	712	42,034	0	59,331	0	0	-	0	-
1984	0	28	188	10,865	7,017	134	759	40,562	0	59,525	0	0	-	0	-
1985	0	25	217	10,562	5,870	133	707	R 40,855	0	R 58,345	0	0	-	0	-
1986	0	21	250	10,041	5,942	105	692	R 39,316	0	R 56,346	0	0	-	0	-
1987	0	24	179	10,545	7,440	R 93	782	R 37,551	0	R 56,590	0	0	-	0	-
1988	0	28	172	11,045	7,224	102	754	R 37,673	0	R 56,971	0	0	-	0	-
1989	0	36	165	11,293	9,239	85	773	R 37,668	0	R 59,225	0	0	-	0	-
1990	0	26	146	11,690	7,832	R 97	796	R 37,790	0	R 58,351	0	0	-	0	-
1991	0	25	111	10,464	10,569	109	712	R 37,690	0	R 59,655	0	0	-	0	-
1992	0	26	124	11,692	12,948	80	726	R 38,880	0	R 64,450	0	0	-	0	-
1993	0	27	104	12,911	9,012	94	739	R 39,750	0	R 62,610	0	0	-	0	-
1994	0	26	84	13,559	10,345	144	772	R 40,378	0	R 65,282	0	0	-	0	-
1995	0	31	154	14,250	5,359	59	759	R 41,161	0	61,742	0	0	-	0	-
1996	0	34	117	16,548	4,707	38	737	42,509	0	64,656	0	0	-	0	-
<b>Trillion Btu</b>															
1960	(s)	9.3	2.8	7.7	15.7	1.2	2.9	111.1	0.1	141.4	0.0	0.0	150.8	0.0	150.8
1965	(s)	12.9	3.8	9.2	18.7	2.0	3.2	130.3	1.5	168.7	0.0	0.0	181.5	0.0	181.5
1970	0.0	23.5	2.3	19.5	24.0	1.9	2.8	166.9	0.5	217.9	0.0	0.0	241.4	0.0	241.4
1975	(s)	23.6	1.6	28.0	21.5	1.8	3.3	198.4	0.3	254.8	0.0	0.0	278.4	0.0	278.4
1980	0.0	22.8	1.7	46.8	26.9	0.9	4.7	204.7	0.0	285.6	0.0	0.0	308.4	0.0	308.4
1981	0.0	22.5	1.4	57.0	27.6	1.2	4.5	215.4	0.0	307.1	0.0	0.0	329.7	0.0	329.7
1982	0.0	29.1	0.8	56.3	32.8	1.5	4.1	224.6	0.0	320.1	0.0	0.0	349.3	0.0	349.3
1983	0.0	25.5	0.6	58.2	33.1	1.8	4.3	220.8	0.0	318.9	0.0	0.0	344.3	0.0	344.3
1984	0.0	28.0	1.0	63.3	39.0	0.5	4.6	213.1	0.0	321.4	0.0	0.0	349.4	0.0	349.4
1985	0.0	25.8	1.1	61.5	32.5	0.5	4.3	214.6	0.0	R 314.5	0.0	0.0	340.3	0.0	340.3
1986	0.0	21.6	1.3	58.5	32.9	0.4	4.2	206.5	0.0	R 303.8	0.0	0.0	325.4	0.0	325.4
1987	0.0	24.5	0.9	61.4	41.4	0.3	4.7	R 197.3	0.0	R 306.1	0.0	0.0	R 330.6	0.0	R 330.6
1988	0.0	28.8	0.9	64.3	40.2	0.4	4.6	R 197.9	0.0	R 308.3	0.0	0.0	R 337.0	0.0	R 337.0
1989	0.0	37.3	0.8	65.8	51.7	0.3	4.7	R 197.9	0.0	R 321.2	0.0	0.0	R 358.4	0.0	R 358.4
1990	0.0	26.6	0.7	68.1	43.8	0.4	4.8	R 198.5	0.0	R 316.3	0.0	0.0	R e 342.9	0.0	R e 342.9
1991	0.0	25.4	0.6	61.0	59.1	0.4	4.3	R 198.0	0.0	R 323.3	0.0	0.0	R 348.7	0.0	R 348.7
1992	0.0	26.3	0.6	68.1	72.8	0.3	4.4	R 204.2	0.0	R 350.4	0.0	0.0	376.7	0.0	376.7
1993	0.0	27.3	0.5	75.2	50.5	0.3	4.5	R 208.8	0.0	R 339.9	0.0	0.0	367.1	0.0	367.1
1994	0.0	27.0	0.4	79.0	58.1	0.5	4.7	R 212.1	0.0	R 354.8	0.0	0.0	R 381.8	0.0	R 381.8
1995	0.0	31.2	0.8	83.0	30.3	0.2	4.6	216.2	0.0	335.1	0.0	0.0	366.3	0.0	366.3
1996	0.0	34.5	0.6	96.4	26.7	0.1	4.5	223.3	0.0	351.6	0.0	0.0	386.0	0.0	386.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 238. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Oklahoma**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	(s)	0	(s)	83	33	26	0	59	0	705	0	0	0	-
1965	1	0	1	127	28	22	0	50	0	825	0	0	0	-
1970	1	0	1	235	64	51	0	116	0	1,406	0	0	0	-
1975	(s)	0	(s)	301	29	55	0	85	0	2,945	0	0	0	-
1980	5,752	0	5,752	330	(s)	59	0	59	0	1,315	0	0	0	-
1981	8,368	0	8,368	286	4	37	0	41	0	1,122	0	0	0	-
1982	11,096	0	11,096	247	2	56	0	58	0	2,090	0	0	0	-
1983	12,042	0	12,042	237	2	50	0	51	0	2,500	0	0	0	-
1984	12,541	0	12,541	225	15	58	0	73	0	2,339	0	0	0	-
1985	12,747	0	12,747	201	9	79	0	87	0	3,980	0	0	0	-
1986	11,628	0	11,628	197	7	116	0	123	0	2,951	0	0	0	-
1987	12,861	0	12,861	188	1	67	0	68	0	2,948	0	0	0	-
1988	14,435	0	14,435	177	4	56	0	60	0	2,045	0	0	0	-
1989	14,423	0	14,423	178	10	52	0	62	0	2,392	0	0	0	-
1990	14,866	0	14,866	169	58	28	0	86	0	2,750	0	0	0	-
1991	15,668	0	15,668	167	12	26	0	38	0	1,857	0	0	0	-
1992	16,699	0	16,699	149	10	18	0	28	0	3,210	0	0	0	-
1993	17,668	0	17,668	154	6	21	0	27	0	4,296	0	0	0	-
1994	16,961	0	16,961	153	6	19	0	25	0	2,465	0	0	0	-
1995	18,130	0	18,130	154	112	17	0	129	0	2,715	0	0	0	-
1996	19,386	0	19,386	136	133	84	0	217	0	2,078	0	0	0	-

  

Trillion Btu														
1960	(s)	0.0	(s)	85.7	0.2	0.2	0.0	0.4	0.0	7.6	0.0	0.0	0.0	93.7
1965	(s)	0.0	(s)	130.5	0.2	0.1	0.0	0.3	0.0	8.6	0.0	0.0	0.0	139.5
1970	(s)	0.0	(s)	242.2	0.4	0.3	0.0	0.7	0.0	14.8	0.0	0.0	0.0	257.7
1975	(s)	0.0	(s)	312.3	0.2	0.3	0.0	0.5	0.0	30.6	0.0	0.0	0.0	343.5
1980	100.0	0.0	100.0	345.8	(s)	0.3	0.0	0.3	0.0	13.7	0.0	0.0	0.0	459.8
1981	143.2	0.0	143.2	299.1	(s)	0.2	0.0	0.2	0.0	11.7	0.0	0.0	0.0	454.3
1982	189.3	0.0	189.3	258.0	(s)	0.3	0.0	0.3	0.0	21.8	0.0	0.0	0.0	469.5
1983	206.6	0.0	206.6	249.0	(s)	0.3	0.0	0.3	0.0	26.3	0.0	0.0	0.0	482.2
1984	215.8	0.0	215.8	234.0	0.1	0.3	0.0	0.4	0.0	24.4	0.0	0.0	0.0	474.6
1985	218.8	0.0	218.8	209.5	0.1	0.5	0.0	0.5	0.0	41.6	0.0	0.0	0.0	470.4
1986	201.5	0.0	201.5	205.7	(s)	0.7	0.0	0.7	0.0	30.8	0.0	0.0	0.0	438.7
1987	227.7	0.0	227.7	196.7	(s)	0.4	0.0	0.4	0.0	30.7	0.0	0.0	0.0	455.5
1988	257.3	0.0	257.3	184.1	(s)	0.3	0.0	0.4	0.0	21.1	0.0	0.0	0.0	462.9
1989	254.6	0.0	254.6	185.7	0.1	0.3	0.0	0.4	0.0	R 25.0	0.0	0.0	0.0	R 465.6
1990	264.4	0.0	264.4	176.6	0.4	0.2	0.0	0.5	0.0	R 28.6	0.0	0.0	0.0	R 470.1
1991	275.5	0.0	275.5	173.9	0.1	0.2	0.0	0.2	0.0	R 19.4	0.0	0.0	0.0	R 469.0
1992	290.6	0.0	290.6	154.5	0.1	0.1	0.0	0.2	0.0	R 33.2	0.0	0.0	0.0	R 478.4
1993	304.6	0.0	304.6	159.7	(s)	0.1	0.0	0.2	0.0	R 44.3	0.0	0.0	0.0	R 508.8
1994	290.8	0.0	290.8	158.3	(s)	0.1	0.0	0.1	0.0	R 25.4	0.0	0.0	0.0	R 474.7
1995	310.3	0.0	310.3	159.4	0.7	0.1	0.0	0.8	0.0	28.0	0.0	0.0	0.0	498.4
1996	333.4	0.0	333.4	139.9	0.8	0.5	0.0	1.3	0.0	21.5	0.0	0.0	0.0	496.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 239. Energy Consumption Estimates by Source, Selected Years 1960-1996, Oregon**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	381	31	1,820	655	10,966	384	45	1,164	476	16,361	5,562	434	37,866	0	12,466	24	0	8,038	-
1965	305	56	1,960	277	13,085	812	19	961	612	19,838	5,115	1,653	44,332	0	16,508	26	0	13,499	-
1970	140	95	2,167	305	12,904	2,086	218	1,251	768	24,958	6,632	1,613	52,903	0	29,912	44	0	-4,443	-
1975	130	110	3,218	171	13,267	2,079	225	726	679	28,904	4,321	1,395	54,984	2	34,562	(s)	0	8,289	-
1980	715	79	2,483	260	16,764	2,465	112	1,354	751	30,511	4,511	1,043	60,254	5,395	30,222	160	0	17,611	-
1981	1,514	76	1,839	219	16,423	1,694	142	1,259	720	29,713	6,344	1,558	59,911	6,424	32,160	120	0	1,859	-
1982	700	71	1,669	127	14,974	1,785	96	1,322	657	28,386	10,531	1,316	60,865	4,792	45,223	39	0	-38,436	-
1983	578	67	2,173	125	16,035	1,777	74	1,321	688	28,309	4,244	847	55,594	3,685	45,077	0	(s)	-37,922	-
1984	685	79	2,519	125	15,750	1,962	61	1,301	733	29,354	5,766	691	58,262	4,736	46,635	0	0	-33,472	-
1985	591	83	2,838	141	15,394	2,142	68	1,527	684	R 29,047	4,961	813	R 57,615	6,911	45,876	0	0	-43,920	-
1986	163	71	2,225	193	14,894	2,618	31	1,517	668	29,947	5,491	1,210	58,793	7,081	42,096	0	0	-35,483	-
1987	205	80	2,140	127	16,207	2,928	17	1,490	756	R 30,649	5,089	1,845	R 61,247	4,348	40,717	0	0	-14,098	-
1988	177	87	2,423	98	16,473	3,189	20	1,581	729	R 32,092	6,155	1,818	R 64,579	6,339	36,309	99	0	-1,850	-
1989	396	108	2,802	102	16,254	3,377	50	1,612	747	R 31,889	5,385	1,743	R 63,962	5,299	39,975	28	0	R -9,355	-
1990	934	109	3,026	121	17,051	3,319	26	1,384	769	R 31,728	4,492	2,150	R 64,066	6,074	i NA	i NA	i NA	R -19,958	-
1991	1,940	123	2,657	126	16,152	3,744	21	1,559	688	R 32,125	6,333	2,167	R 65,571	1,465	NA	NA	NA	R -14,047	-
1992	2,124	122	3,297	129	15,351	4,011	31	1,430	702	R 31,921	6,570	2,904	R 66,346	4,573	NA	NA	NA	R -9,405	-
1993	2,100	136	3,329	110	14,126	4,310	41	1,561	714	R 33,528	4,656	2,389	R 64,765	-21	NA	NA	NA	R 6,393	-
1994	2,479	146	3,422	156	14,008	4,649	74	1,423	747	R 33,837	4,452	2,578	R 65,346	0	NA	NA	NA	R 13,410	-
1995	1,125	146	2,758	143	14,700	5,114	62	1,535	734	34,021	3,645	2,631	R 65,344	0	NA	NA	NA	R 3,087	-
1996	1,134	169	2,745	191	14,089	5,235	89	1,669	712	35,161	3,304	2,816	66,011	0	NA	NA	NA	-9,723	-

  

Trillion Btu																			
1960	8.9	31.9	12.1	3.3	63.9	2.1	0.3	4.7	2.9	85.9	35.0	2.6	212.7	0.0	134.1	0.3	0.0	27.4	415.4
1965	7.1	60.0	13.0	1.4	76.2	4.5	0.1	3.9	3.7	104.2	32.2	9.8	249.0	0.0	172.6	0.3	0.0	46.1	535.0
1970	3.0	99.6	14.4	1.5	75.2	11.8	1.2	4.7	4.7	131.1	41.7	9.5	295.7	0.0	313.9	0.5	0.0	-15.2	697.6
1975	2.7	114.2	21.4	0.9	77.3	11.7	1.3	2.7	4.1	151.8	27.2	8.3	306.6	(s)	359.6	(s)	0.0	28.3	811.4
1980	12.1	82.3	16.5	1.3	97.7	13.9	0.6	5.0	4.6	160.3	28.4	6.1	334.3	58.8	314.0	1.7	0.0	60.1	863.3
1981	25.8	78.9	12.2	1.1	95.7	9.6	0.8	4.6	4.4	156.1	39.9	9.3	333.6	70.9	336.2	1.3	0.0	6.3	852.9
1982	11.8	73.9	11.1	0.6	87.2	10.1	0.5	4.8	4.0	149.1	66.2	7.9	341.5	53.1	472.8	0.4	0.0	-131.1	822.4
1983	9.9	69.8	14.4	0.6	93.4	10.0	0.4	4.8	4.2	148.7	26.7	5.0	308.3	40.2	474.2	0.0	(s)	-129.4	773.0
1984	11.8	81.5	16.7	0.6	91.7	11.1	0.3	4.7	4.4	154.2	36.3	4.0	324.1	51.3	486.9	0.0	0.0	-114.2	841.4
1985	10.0	85.5	18.8	0.7	89.7	12.1	0.4	5.5	4.1	R 152.6	31.2	4.8	319.9	74.7	479.3	0.0	0.0	-149.9	819.6
1986	2.9	72.5	14.8	1.0	86.8	14.8	0.2	5.5	4.1	R 157.3	34.5	7.1	326.0	76.5	439.7	0.0	0.0	-121.1	796.6
1987	3.7	82.5	14.2	0.6	94.4	16.5	0.1	5.5	4.6	R 161.0	32.0	11.0	R 339.8	46.9	424.2	0.0	0.0	-48.1	R 849.0
1988	3.1	89.2	16.1	0.5	96.0	18.0	0.1	5.8	4.4	R 168.6	38.7	10.8	R 358.9	68.1	374.9	1.0	0.0	-6.3	R 888.9
1989	6.8	111.8	18.6	0.5	94.7	19.1	0.3	5.9	4.5	R 167.5	33.9	10.4	R 355.4	56.8	R 417.0	0.3	0.0	R -31.9	R 916.2
1990	15.7	111.7	20.1	0.6	99.3	18.8	0.1	5.0	4.7	R 166.7	28.2	12.8	R 356.3	64.9	R i 445.4	R i 75.4	i 0.3	R i -68.1	R i 1,003.6
1991	32.8	127.0	17.6	0.6	94.1	21.1	0.1	5.6	4.2	R 168.8	39.8	12.8	R 364.8	15.7	R 456.5	R 72.5	0.3	R -47.9	R 1,028.0
1992	40.8	126.6	21.9	0.7	89.4	22.7	0.2	5.2	4.3	R 167.7	41.3	17.2	R 370.4	48.8	R 376.9	R 74.5	0.3	R -32.1	R 1,018.8
1993	37.1	140.6	22.1	0.6	82.3	24.4	0.2	5.6	4.3	R 176.1	29.3	14.1	R 359.0	-0.2	R 395.9	R 73.2	0.4	R 21.8	R 1,032.8
1994	44.6	152.3	22.7	0.8	81.6	26.4	0.4	5.2	4.5	R 177.7	28.0	15.3	362.6	0.0	R 346.7	R 77.3	0.4	R 45.8	R 1,045.7
1995	20.2	151.7	18.3	0.7	85.6	29.0	0.4	5.6	4.5	R 178.7	22.9	15.6	361.2	0.0	R 431.3	R 76.8	0.5	R 10.5	R 1,058.2
1996	20.3	175.3	18.2	1.0	82.1	29.7	0.5	6.0	4.3	184.7	20.8	16.7	363.9	0.0	491.3	80.4	0.5	-33.2	1,108.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 240. Residential Energy Consumption Estimates, Selected Years 1960-1996, Oregon**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	56	0	56	7	2,865	1	507	3,373	0	0	5,263	-	13,090	-
1965	45	0	45	11	3,382	5	785	4,172	0	0	7,169	-	17,118	-
1970	11	0	11	20	3,101	65	867	4,033	0	0	9,850	-	23,871	-
1975	5	0	5	29	2,390	48	362	2,800	0	0	12,096	-	29,178	-
1980	6	0	6	18	2,019	37	574	2,630	0	0	13,545	-	32,937	-
1981	1	0	1	17	2,535	71	629	3,235	0	0	13,182	-	31,416	-
1982	2	0	2	19	2,111	60	611	2,782	0	0	13,825	-	33,206	-
1983	1	0	1	17	1,845	28	722	2,595	0	0	13,116	-	31,423	-
1984	2	0	2	19	2,086	26	441	2,553	0	0	14,050	-	32,702	-
1985	1	0	1	21	2,374	41	517	2,932	0	0	14,526	-	34,128	-
1986	(s)	0	(s)	19	2,045	22	435	2,501	0	0	13,722	-	31,565	-
1987	1	0	1	19	1,747	10	419	2,176	0	0	13,711	-	31,328	-
1988	2	0	2	21	1,843	10	316	2,168	0	0	14,338	-	32,416	-
1989	2	(s)	2	23	1,889	38	359	2,286	0	0	15,085	-	R 33,883	-
1990	1	0	1	23	1,784	13	380	2,177	e 558	e 81	15,380	-	R 33,637	-
1991	(s)	0	(s)	26	1,487	13	488	1,989	588	91	15,949	-	R 34,714	-
1992	(s)	0	(s)	23	1,068	17	432	1,517	618	98	15,202	-	R 32,471	-
1993	(s)	1	1	30	1,036	18	483	1,537	522	107	16,696	-	R 35,276	-
1994	(s)	(s)	(s)	29	933	50	510	1,493	511	121	16,462	-	R 34,349	-
1995	(s)	0	(s)	28	942	26	488	1,456	567	136	16,315	-	R 33,984	-
1996	0	0	0	33	821	40	463	1,324	566	153	17,285	-	35,975	-

  

Trillion Btu														
1960	1.4	0.0	1.4	7.0	16.7	(s)	2.0	18.7	0.0	0.0	18.0	45.1	44.7	89.7
1965	1.1	0.0	1.1	11.6	19.7	(s)	3.2	22.9	0.0	0.0	24.5	60.1	58.4	118.5
1970	0.3	0.0	0.3	20.6	18.1	0.4	3.3	21.7	0.0	0.0	33.6	76.2	81.4	157.7
1975	0.1	0.0	0.1	29.9	13.9	0.3	1.3	15.5	0.0	0.0	41.3	86.8	99.6	186.3
1980	0.1	0.0	0.1	19.2	11.8	0.2	2.1	14.1	0.0	0.0	46.2	79.7	112.4	192.0
1981	(s)	0.0	(s)	17.9	14.8	0.4	2.3	17.5	0.0	0.0	45.0	80.4	107.2	187.6
1982	(s)	0.0	(s)	19.5	12.3	0.3	2.2	14.8	0.0	0.0	47.2	81.6	113.3	194.9
1983	(s)	0.0	(s)	17.5	10.7	0.2	2.6	13.5	0.0	0.0	44.8	75.8	107.2	183.0
1984	(s)	0.0	(s)	20.2	12.1	0.1	1.6	13.9	0.0	0.0	47.9	82.1	111.6	193.6
1985	(s)	0.0	(s)	22.1	13.8	0.2	1.9	15.9	0.0	0.0	49.6	87.6	116.4	204.1
1986	(s)	0.0	(s)	19.5	11.9	0.1	1.6	13.6	0.0	0.0	46.8	79.9	107.7	187.6
1987	(s)	0.0	(s)	19.3	10.2	0.1	1.5	11.8	0.0	0.0	46.8	77.8	106.9	184.7
1988	(s)	0.0	(s)	21.3	10.7	0.1	1.2	11.9	0.0	0.0	48.9	82.2	110.6	192.8
1989	(s)	(s)	0.1	23.3	11.0	0.2	1.3	12.5	0.0	0.0	51.5	87.4	R 115.6	R 203.0
1990	(s)	0.0	(s)	23.9	10.4	0.1	1.4	11.8	e 11.2	e 0.3	52.5	e 99.7	R 114.8	R e 214.5
1991	(s)	0.0	(s)	27.1	8.7	0.1	1.8	10.5	11.8	0.3	54.4	104.1	R 118.4	R 222.6
1992	(s)	0.0	(s)	24.0	6.2	0.1	1.6	7.9	12.4	0.3	51.9	96.4	R 110.8	207.2
1993	(s)	(s)	(s)	31.0	6.0	0.1	1.7	7.9	10.4	0.4	57.0	106.7	R 120.4	227.0
1994	(s)	(s)	(s)	30.2	5.4	0.3	1.9	7.6	10.2	0.4	56.2	104.6	R 117.2	R 221.8
1995	(s)	0.0	(s)	29.3	5.5	0.1	1.8	7.4	11.3	0.5	55.7	104.2	R 116.0	220.1
1996	0.0	0.0	0.0	34.7	4.8	0.2	1.7	6.7	11.3	0.5	59.0	112.2	122.7	234.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 241. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Oregon**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	104	0	104	3	1,485	(s)	89	139	991	2,704	0	3,083	-	7,669	-
1965	84	0	84	6	1,752	4	139	206	1,046	3,147	0	4,557	-	10,881	-
1970	20	0	20	11	1,607	46	153	249	1,326	3,382	0	6,674	-	16,173	-
1975	9	0	9	16	1,238	34	64	218	962	2,517	0	8,804	-	21,235	-
1980	11	0	11	15	1,792	37	101	291	876	3,098	0	10,456	-	25,425	-
1981	3	0	3	15	957	53	111	296	985	2,401	0	9,088	-	21,658	-
1982	4	0	4	16	1,000	12	108	305	1,488	2,913	0	9,119	-	21,902	-
1983	3	0	3	15	1,798	45	127	407	117	2,494	0	9,001	-	21,565	-
1984	3	0	3	17	2,032	33	78	296	295	2,735	0	9,773	-	22,747	-
1985	2	0	2	19	1,384	26	91	231	191	1,922	0	10,340	-	24,292	-
1986	1	0	1	17	1,341	7	77	234	328	1,987	0	10,350	-	23,809	-
1987	2	0	2	17	1,622	5	74	243	220	R 2,164	0	10,786	-	24,645	-
1988	3	0	3	18	1,520	9	56	R 237	331	R 2,153	0	11,333	-	25,621	-
1989	4	(s)	4	20	1,075	7	63	220	264	1,630	0	11,614	-	R 26,087	-
1990	1	0	1	20	1,336	8	67	R 272	287	R 1,971	e NA	12,092	-	R 26,447	-
1991	1	0	1	22	995	4	86	174	256	1,514	NA	12,396	-	R 26,981	-
1992	1	0	1	20	767	5	76	165	243	1,256	NA	12,576	-	R 26,862	-
1993	1	(s)	1	24	548	11	85	32	175	851	15	12,861	-	R 27,173	-
1994	(s)	(s)	1	23	513	14	90	R 32	111	760	15	13,428	-	R 28,018	-
1995	1	0	1	22	783	14	86	33	88	1,004	22	13,561	-	R 28,248	-
1996	0	0	0	26	620	38	82	33	84	856	19	14,087	-	29,320	-

  

Trillion Btu															
1960	2.6	0.0	2.6	3.2	8.6	(s)	0.4	0.7	6.2	16.0	0.0	10.5	32.3	26.2	58.4
1965	2.1	0.0	2.1	6.0	10.2	(s)	0.6	1.1	6.6	18.4	0.0	15.5	42.0	37.1	79.2
1970	0.5	0.0	0.5	11.9	9.4	0.3	0.6	1.3	8.3	19.8	0.0	22.8	55.0	55.2	110.2
1975	0.2	0.0	0.2	16.5	7.2	0.2	0.2	1.1	6.0	14.8	0.0	30.0	61.6	72.5	134.0
1980	0.3	0.0	0.3	15.9	10.4	0.2	0.4	1.5	5.5	18.1	0.0	35.7	69.9	86.8	156.6
1981	0.1	0.0	0.1	15.6	5.6	0.3	0.4	1.6	6.2	14.0	0.0	31.0	60.7	73.9	134.6
1982	0.1	0.0	0.1	17.0	5.8	0.1	0.4	1.6	9.4	17.2	0.0	31.1	65.5	74.7	140.2
1983	0.1	0.0	0.1	15.8	10.5	0.3	0.5	2.1	0.7	14.1	0.0	30.7	60.6	73.6	134.2
1984	0.1	0.0	0.1	17.6	11.8	0.2	0.3	1.6	1.9	15.7	0.0	33.3	66.8	77.6	144.4
1985	(s)	0.0	(s)	19.6	8.1	0.1	0.3	1.2	1.2	10.9	0.0	35.3	65.9	82.9	148.8
1986	(s)	0.0	(s)	17.2	7.8	(s)	0.3	1.2	2.1	11.4	0.0	35.3	64.0	81.2	145.2
1987	(s)	0.0	(s)	17.2	9.4	(s)	0.3	1.3	1.4	12.4	0.0	36.8	66.4	84.1	150.5
1988	0.1	0.0	0.1	18.8	8.9	0.1	0.2	1.2	2.1	12.4	0.0	38.7	70.0	87.4	157.4
1989	0.1	(s)	0.1	21.0	6.3	(s)	0.2	1.2	1.7	9.4	0.0	39.6	70.0	R 89.0	R 159.0
1990	(s)	0.0	(s)	20.9	7.8	(s)	0.2	1.4	1.8	11.3	e NA	41.3	73.5	R 90.2	R 163.8
1991	(s)	0.0	(s)	23.0	5.8	(s)	0.3	0.9	1.6	8.6	NA	42.3	74.0	R 92.1	R 166.0
1992	(s)	0.0	(s)	20.3	4.5	(s)	0.3	0.9	1.5	7.2	NA	42.9	70.4	R 91.7	R 162.1
1993	(s)	(s)	(s)	25.0	3.2	0.1	0.3	0.2	1.1	4.8	0.3	43.9	R 74.1	R 92.7	R 166.8
1994	(s)	(s)	(s)	24.0	3.0	0.1	0.3	0.2	0.7	4.3	0.3	45.8	R 74.4	R 95.6	R 170.0
1995	(s)	0.0	(s)	23.4	4.6	0.1	0.3	0.2	0.6	5.7	0.4	46.3	R 75.8	96.4	R 172.2
1996	0.0	0.0	0.0	26.7	3.6	0.2	0.3	0.2	0.5	4.8	0.4	48.1	80.0	100.0	180.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 242. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Oregon**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	217	20	1,820	3,723	44	558	175	1,080	3,411	434	11,244	77	0	0	5,247	-	13,051	-
1965	175	39	1,960	4,287	10	33	208	808	3,398	1,653	12,358	61	0	0	7,167	-	17,111	-
1970	109	58	2,167	3,413	107	212	281	722	4,217	1,613	12,733	77	0	0	9,123	-	22,109	-
1975	116	57	3,218	2,827	143	287	189	560	2,922	1,395	11,541	40	0	0	12,402	-	29,916	-
1980	213	39	2,483	3,992	38	614	221	417	2,528	1,043	11,337	28	0	0	13,847	-	33,671	-
1981	313	40	1,839	3,264	18	379	212	315	1,751	1,558	9,336	28	0	0	15,376	-	36,645	-
1982	157	32	1,669	2,922	24	530	194	284	3,481	1,316	10,420	28	0	0	11,847	-	28,454	-
1983	216	32	2,173	3,238	1	385	203	188	857	847	7,892	28	0	0	11,613	-	27,822	-
1984	174	39	2,519	3,659	2	R 494	216	486	2,162	691	R 10,228	28	0	0	14,245	-	33,157	-
1985	170	38	2,838	2,545	1	728	201	482	1,679	813	9,289	28	0	0	11,081	-	26,033	-
1986	162	32	2,225	2,476	2	850	197	500	2,153	1,210	9,613	28	0	0	10,994	-	25,289	-
1987	202	37	2,140	3,045	1	R 821	223	R 482	1,576	1,845	R 10,135	28	0	0	13,210	-	30,183	-
1988	172	40	2,423	2,914	2	1,008	215	417	1,606	1,818	R 10,403	28	0	0	13,633	-	30,821	-
1989	84	44	2,802	2,898	4	1,005	220	478	366	1,743	R 9,516	28	0	0	14,913	-	R 33,498	-
1990	82	49	3,026	2,843	4	R 755	227	R 425	453	2,150	R 9,884	f NA	f NA	f NA	15,498	-	R 33,897	-
1991	108	55	2,657	2,291	4	826	203	489	349	2,167	R 8,986	NA	NA	NA	15,297	-	R 33,294	-
1992	129	59	3,297	2,270	9	776	207	254	503	2,904	10,220	NA	NA	NA	15,123	-	R 32,302	-
1993	117	61	3,329	2,433	12	R 849	211	452	677	2,389	10,352	NA	NA	NA	15,012	-	R 31,718	-
1994	145	63	3,422	2,091	10	R 603	220	498	420	2,578	R 9,843	NA	NA	NA	15,072	-	R 31,448	-
1995	147	69	2,758	2,624	23	850	216	513	330	2,631	9,945	NA	NA	NA	15,839	-	R 32,994	-
1996	90	88	2,745	1,738	11	1,020	210	565	136	2,816	9,241	NA	NA	NA	15,804	-	32,894	-

**Trillion Btu**

1960	4.9	20.9	12.1	21.7	0.3	2.2	1.1	5.7	21.4	2.6	67.0	0.8	0.0	0.0	17.9	111.6	44.5	156.1
1965	3.9	41.5	13.0	25.0	0.1	0.1	1.3	4.2	21.4	9.8	74.8	0.6	0.0	0.0	24.5	145.4	58.4	203.8
1970	2.3	60.3	14.4	19.9	0.6	0.8	1.7	3.8	26.5	9.5	77.1	0.8	0.0	0.0	31.1	171.6	75.4	247.1
1975	2.4	59.6	21.4	16.5	0.8	1.1	1.1	2.9	18.4	8.3	70.4	0.4	0.0	0.0	42.3	175.1	102.1	277.2
1980	3.8	41.0	16.5	23.3	0.2	2.3	1.3	2.2	15.9	6.1	67.8	0.3	0.0	0.0	47.2	160.1	114.9	275.0
1981	5.9	41.4	12.2	19.0	0.1	1.4	1.3	1.7	11.0	9.3	55.9	0.3	0.0	0.0	52.5	156.0	125.0	281.0
1982	2.8	33.8	11.1	17.0	0.1	1.9	1.2	1.5	21.9	7.9	62.6	0.3	0.0	0.0	40.4	139.8	97.1	236.9
1983	3.9	33.4	14.4	18.9	(s)	1.4	1.2	1.0	5.4	5.0	47.3	0.3	0.0	0.0	39.6	124.5	94.9	219.4
1984	3.3	40.9	16.7	21.3	(s)	1.8	1.3	2.6	13.6	4.0	61.3	0.3	0.0	0.0	48.6	154.3	113.1	267.5
1985	3.0	39.0	18.8	14.8	(s)	2.6	1.2	2.5	10.6	4.8	55.4	0.3	0.0	0.0	37.8	135.6	88.8	224.4
1986	2.9	32.3	14.8	14.4	(s)	3.1	1.2	2.6	13.5	7.1	56.8	0.3	0.0	0.0	37.5	129.8	86.3	216.0
1987	3.6	37.8	14.2	17.7	(s)	3.0	1.4	2.5	9.9	11.0	59.7	0.3	0.0	0.0	45.1	146.5	103.0	249.5
1988	3.0	40.8	16.1	17.0	(s)	3.7	1.3	2.2	10.1	10.8	61.2	0.3	0.0	0.0	46.5	151.8	105.2	256.9
1989	1.5	45.3	18.6	16.9	(s)	3.7	1.3	2.5	2.3	10.4	55.7	0.3	0.0	0.0	50.9	153.7	R 114.3	R 268.0
1990	1.4	50.1	20.1	16.6	(s)	2.7	1.4	2.2	2.8	12.8	58.7	f 1.6	f 61.6	f 0.0	52.9	f 226.3	R 115.7	R f 342.0
1991	1.9	56.8	17.6	13.3	(s)	3.0	1.2	2.6	2.2	12.8	52.8	1.5	58.7	0.0	52.2	223.9	R 113.6	R 337.5
1992	2.3	60.8	21.9	13.2	0.1	2.8	1.3	1.3	3.2	17.2	60.9	2.5	59.6	(s)	51.6	237.8	110.2	R 348.0
1993	2.2	63.2	22.1	14.2	0.1	3.1	1.3	2.4	4.3	14.1	61.4	3.5	59.5	0.0	51.2	241.0	108.2	349.2
1994	2.9	65.6	22.7	12.2	0.1	2.2	1.3	2.6	2.6	15.3	59.0	3.2	R 66.8	0.0	51.4	R 248.7	R 107.3	R 356.0
1995	2.8	72.0	18.3	15.3	0.1	3.1	1.3	2.7	2.1	15.6	58.5	3.7	R 65.0	0.0	54.0	R 255.9	112.6	R 368.5
1996	1.9	91.6	18.2	10.1	0.1	3.7	1.3	3.0	0.9	16.7	53.9	4.2	68.7	0.0	53.9	274.1	112.2	386.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 243. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Oregon**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	4	(s)	655	2,893	384	10	301	15,142	1,157	20,542	0	0	-	0	-
1965	1		277	3,664	812	4	404	18,824	670	24,654	0	0	-	0	-
1970	(s)	6	305	4,782	2,086	18	487	23,987	1,070	32,736	0	0	-	0	-
1975	(s)	8	171	6,783	2,079	13	490	28,125	438	38,098	0	0	-	0	-
1980	0	6	260	8,851	2,465	65	530	29,803	1,107	43,080	0	0	-	0	-
1981	0	4	219	9,631	1,694	140	508	29,102	3,608	44,903	0	0	-	0	-
1982	0	3	127	8,927	1,785	74	463	27,798	5,562	44,736	0	0	-	0	-
1983	0	3	125	9,128	1,777	87	485	27,714	3,270	42,587	0	0	-	0	-
1984	0	3	125	7,962	1,962	R 288	517	28,572	3,309	R 42,736	0	0	-	0	-
1985	0	5	141	9,088	2,142	191	482	R 28,335	3,091	R 43,469	0	0	-	0	-
1986	0	3	193	9,028	2,618	156	471	29,213	3,010	44,688	0	0	-	0	-
1987	0	8	127	9,791	2,928	R 175	533	R 29,924	3,293	R 46,771	0	7	-	15	-
1988	0	8	98	10,195	3,189	201	514	R 31,438	4,218	R 49,853	0	8	-	18	-
1989	0	9	102	10,317	3,377	R 186	527	R 31,191	4,755	R 50,455	0	7	-	16	-
1990	0	9	121	11,032	3,319	R 183	542	R 31,030	3,752	R 49,979	R e 34,245	8	-	17	-
1991	0	9	126	11,356	3,744	158	485	R 31,462	5,729	R 53,060	R 27,145	9	-	19	-
1992	0	7	129	11,227	4,011	146	495	R 31,502	5,824	R 53,334	R 32,992	9	-	19	-
1993	0	5	110	10,054	4,310	R 144	504	R 33,044	3,804	R 51,970	R 36,818	8	-	17	-
1994	0	6	156	10,460	4,649	R 220	527	R 33,306	3,921	R 53,239	0	8	-	18	-
1995	0	7	143	10,340	5,114	110	518	33,476	3,227	52,928	0	11	-	22	-
1996	0	8	191	10,899	5,235	105	502	34,562	3,084	54,579	0	9	-	18	-

**Trillion Btu**

1960	0.1	0.1	3.3	16.9	2.1	(s)	1.8	79.5	7.3	111.0	0.0	0.0	111.1	0.0	111.1
1965	(s)	0.7	1.4	21.3	4.5	(s)	2.4	98.9	4.2	132.8	0.0	0.0	133.6	0.0	133.6
1970	(s)	5.8	1.5	27.9	11.8	0.1	3.0	126.0	6.7	176.9	0.0	0.0	182.7	0.0	182.7
1975	(s)	8.2	0.9	39.5	11.7	(s)	3.0	147.7	2.8	205.6	0.0	0.0	213.8	0.0	213.8
1980	0.0	5.9	1.3	51.6	13.9	0.2	3.2	156.6	7.0	233.8	0.0	0.0	239.6	0.0	239.6
1981	0.0	3.8	1.1	56.1	9.6	0.5	3.1	152.9	22.7	245.9	0.0	0.0	249.7	0.0	249.7
1982	0.0	3.6	0.6	52.0	10.1	0.3	2.8	146.0	35.0	246.8	0.0	0.0	250.3	0.0	250.3
1983	0.0	3.1	0.6	53.2	10.0	0.3	2.9	145.6	20.6	233.2	0.0	0.0	236.4	0.0	236.4
1984	0.0	2.8	0.6	46.4	11.1	1.0	3.1	150.1	20.8	233.1	0.0	0.0	235.9	0.0	235.9
1985	0.0	4.7	0.7	52.9	12.1	0.7	2.9	148.8	19.4	237.6	0.0	0.0	242.3	0.0	242.3
1986	0.0	3.6	1.0	52.6	14.8	0.6	2.9	153.5	18.9	244.1	0.0	0.0	247.7	0.0	247.7
1987	0.0	8.2	0.6	57.0	16.5	0.6	3.2	R 157.2	20.7	R 255.9	0.0	(s)	R 264.2	0.1	R 264.2
1988	0.0	8.2	0.5	59.4	18.0	0.7	3.1	R 165.1	26.5	R 273.4	0.0	(s)	R 281.7	0.1	R 281.7
1989	0.0	8.8	0.5	60.1	19.1	0.7	3.2	163.8	29.9	R 277.3	0.0	(s)	R 286.2	0.1	R 286.2
1990	0.0	9.2	0.6	64.3	18.8	0.7	3.3	R 163.0	23.6	R 274.2	R e 2.6	(s)	R e 283.4	0.1	R e 283.5
1991	0.0	9.1	0.6	66.2	21.1	0.6	2.9	R 165.3	36.0	292.7	R 2.1	(s)	R 301.8	0.1	301.9
1992	0.0	7.1	0.7	65.4	22.7	0.5	3.0	165.5	36.6	R 294.3	R 2.5	(s)	R 301.4	0.1	301.5
1993	0.0	5.1	0.6	58.6	24.4	0.5	3.1	R 173.6	23.9	R 284.6	R 2.8	(s)	R 289.7	0.1	289.7
1994	0.0	6.1	0.8	60.9	26.4	0.8	3.2	175.0	24.7	291.7	0.0	(s)	297.8	0.1	R 297.8
1995	0.0	7.6	0.7	60.2	29.0	0.4	3.1	175.8	20.3	289.6	0.0	(s)	297.3	0.1	297.3
1996	0.0	8.3	1.0	63.5	29.7	0.4	3.0	181.6	19.4	298.5	0.0	(s)	306.8	0.1	306.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 244. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Oregon**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	0	0	0	1	3	(s)	0	3	0	12,389	24	0	0	--
1965	0	0	0	(s)	1	(s)	0	1	0	16,447	26	0	0	--
1970	0	0	0	1	18	(s)	0	19	0	29,836	44	0	0	--
1975	0	0	0	(s)	0	29	0	29	2	34,522	(s)	0	0	--
1980	485	0	485	(s)	0	110	0	110	5,395	30,194	160	0	0	--
1981	1,197	0	1,197	(s)	0	36	0	36	6,424	32,132	120	0	0	--
1982	537	0	537	(s)	0	14	0	14	4,792	45,195	39	0	0	--
1983	358	0	358	(s)	0	25	0	25	3,685	45,049	0	0	(s)	--
1984	506	0	506	(s)	0	10	0	10	4,736	46,607	0	0	0	--
1985	418	0	418	0	0	3	0	3	6,911	45,848	0	0	0	--
1986	0	0	0	(s)	0	4	0	4	7,081	42,068	0	0	0	--
1987	0	0	0	0	0	2	0	2	4,348	40,689	0	0	0	--
1988	0	0	0	0	0	1	0	1	6,339	36,281	99	0	0	--
1989	306	0	306	13	0	76	0	76	5,299	39,946	28	0	0	--
1990	850	0	850	7	0	56	0	56	6,074	42,682	1	0	0	--
1991	1,831	0	1,831	11	0	23	0	23	1,465	43,643	(s)	0	0	--
1992	1,994	0	1,994	14	0	19	0	19	4,573	36,209	6	0	0	--
1993	1,981	0	1,981	16	0	56	0	56	-21	38,066	11	0	0	--
1994	2,333	0	2,333	26	0	11	0	11	0	33,327	0	0	0	--
1995	977	0	977	19	0	12	0	12	0	41,499	0	0	0	--
1996	1,044	0	1,044	14	0	10	0	10	0	47,117	0	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	0.7	(s)	(s)	0.0	(s)	0.0	133.3	0.3	0.0	0.0	134.3
1965	0.0	0.0	0.0	0.1	(s)	(s)	0.0	(s)	0.0	171.9	0.3	0.0	0.0	172.3
1970	0.0	0.0	0.0	1.1	0.1	(s)	0.0	0.1	0.0	313.1	0.5	0.0	0.0	314.7
1975	0.0	0.0	0.0	(s)	0.0	0.2	0.0	0.2	(s)	359.2	(s)	0.0	0.0	359.4
1980	7.9	0.0	7.9	0.3	0.0	0.6	0.0	0.6	58.8	313.7	1.7	0.0	0.0	383.1
1981	19.8	0.0	19.8	0.2	0.0	0.2	0.0	0.2	70.9	335.9	1.3	0.0	0.0	428.2
1982	8.9	0.0	8.9	(s)	0.0	0.1	0.0	0.1	53.1	472.5	0.4	0.0	0.0	535.0
1983	6.0	0.0	6.0	(s)	0.0	0.1	0.0	0.1	40.2	473.9	0.0	0.0	(s)	520.2
1984	8.4	0.0	8.4	(s)	0.0	0.1	0.0	0.1	51.3	486.6	0.0	0.0	0.0	546.4
1985	6.9	0.0	6.9	0.0	0.0	(s)	0.0	(s)	74.7	479.0	0.0	0.0	0.0	560.7
1986	0.0	0.0	0.0	(s)	0.0	(s)	0.0	(s)	76.5	439.4	0.0	0.0	0.0	515.9
1987	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	46.9	423.9	0.0	0.0	0.0	470.8
1988	0.0	0.0	0.0	0.0	0.0	(s)	0.0	(s)	68.1	374.6	1.0	0.0	0.0	443.7
1989	5.2	0.0	5.2	13.4	0.0	0.4	0.0	0.4	56.8	R 416.7	0.3	0.0	0.0	R 492.9
1990	14.2	0.0	14.2	7.6	0.0	0.3	0.0	0.3	64.9	R 443.8	(s)	0.0	0.0	R 535.5
1991	30.9	0.0	30.9	11.0	0.0	0.1	0.0	0.1	15.7	R 455.0	(s)	0.0	0.0	R 521.0
1992	38.4	0.0	38.4	14.4	0.0	0.1	0.0	0.1	48.8	R 374.4	0.1	0.0	0.0	R 491.2
1993	34.9	0.0	34.9	16.3	0.0	0.3	0.0	0.3	-0.2	R 392.4	0.1	0.0	0.0	R 451.6
1994	41.7	0.0	41.7	26.4	0.0	0.1	0.0	0.1	0.0	R 343.6	0.0	0.0	0.0	R 427.8
1995	17.4	0.0	17.4	19.4	0.0	0.1	0.0	0.1	0.0	R 427.6	0.0	0.0	0.0	R 470.5
1996	18.3	0.0	18.3	14.1	0.0	0.1	0.0	0.1	0.0	487.1	0.0	0.0	0.0	529.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 245. Energy Consumption Estimates by Source, Selected Years 1960-1996, Pennsylvania**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	60,624	522	4,731	1,994	46,257	1,036	3,508	2,334	2,775	80,104	42,958	11,573	197,271	230	1,826	0	0	-1,496	-	
1965	68,907	629	6,201	1,922	54,459	3,406	3,851	3,030	3,540	85,723	43,238	14,972	220,342	313	1,329	0	0	4,970	-	
1970	68,573	772	6,600	662	63,489	9,083	4,251	4,754	3,844	101,718	60,436	14,808	269,645	465	1,366	0	0	2,804	-	
1975	67,043	654	5,663	426	68,017	8,548	3,398	6,077	3,349	108,765	41,631	15,678	261,552	15,869	1,576	0	0	-34,243	-	
1980	65,911	776	5,148	337	68,602	10,148	2,763	7,255	4,069	107,925	35,099	19,451	260,795	12,091	734	0	0	-36,478	-	
1981	60,535	785	5,424	278	59,885	9,019	2,651	7,635	3,902	104,151	29,878	15,955	238,779	14,276	660	0	0	-19,294	-	
1982	52,472	695	5,400	197	52,945	8,625	2,932	7,170	3,558	102,134	20,869	14,993	218,823	16,472	1,829	0	0	-43,383	-	
1983	53,847	644	3,985	210	52,872	9,152	1,836	7,210	3,726	102,680	24,104	16,781	222,556	14,718	1,170	0	0	-46,670	-	
1984	58,648	677	4,061	186	55,036	10,465	1,351	8,778	3,973	102,159	22,962	17,717	226,688	21,564	1,447	0	0	-59,437	-	
1985	56,703	626	4,913	208	53,862	10,126	3,557	7,577	3,703	101,979	17,799	16,397	220,121	26,232	972	0	0	-75,188	-	
1986	53,103	610	5,956	251	54,276	9,915	3,813	8,430	3,620	104,103	23,616	15,605	229,586	39,820	1,453	0	0	-111,574	-	
1987	55,413	636	6,572	147	57,723	10,530	2,918	8,398	4,093	106,628	23,878	17,245	238,132	34,982	1,132	0	0	-84,175	-	
1988	58,799	669	5,473	189	58,748	11,705	3,693	6,105	3,947	110,729	22,033	19,078	241,699	37,862	705	0	0	-88,875	-	
1989	58,687	682	6,718	177	61,381	9,661	3,071	6,967	4,048	108,915	21,871	19,147	241,955	39,166	1,290	0	0	-94,645	-	
1990	57,319	644	7,466	145	53,913	12,042	1,654	6,313	4,166	107,467	17,687	19,780	230,634	57,787	NA	NA	NA	-131,504	-	
1991	54,931	639	6,192	116	52,993	11,355	1,781	7,585	3,727	107,081	15,965	18,258	225,054	57,476	NA	NA	NA	-117,443	-	
1992	56,074	683	6,036	163	55,063	10,932	1,828	9,176	3,800	107,406	14,904	20,913	230,222	60,133	NA	NA	NA	-128,887	-	
1993	56,158	691	6,087	150	61,246	11,787	2,056	5,759	3,869	109,970	18,266	18,963	238,153	59,331	NA	NA	NA	-125,012	-	
1994	54,094	697	7,610	136	62,323	11,748	2,078	5,634	4,044	109,532	18,981	19,877	241,964	67,207	NA	NA	NA	-131,487	-	
1995	55,326	721	7,808	125	61,821	12,313	2,760	5,509	3,975	112,282	12,787	20,221	239,603	66,462	NA	NA	NA	-121,605	-	
1996	57,226	728	7,472	121	62,598	11,831	3,116	5,952	3,857	113,639	12,039	19,346	239,971	68,672	NA	NA	NA	-136,329	-	
Trillion Btu																				
1960	1,529.9	540.1	31.4	10.1	269.4	5.7	19.9	9.4	16.8	420.8	270.1	69.3	1,122.9	2.7	19.6	0.0	0.0	-5.1	3,210.2	
1965	1,751.2	652.9	41.2	9.7	317.2	19.2	21.8	12.2	21.5	450.3	271.8	88.0	1,252.9	3.7	13.9	0.0	0.0	17.0	3,691.6	
1970	1,699.0	797.9	43.8	3.3	369.8	51.4	24.1	18.0	23.3	534.3	380.0	87.0	1,535.0	5.1	14.3	0.0	0.0	9.6	4,060.9	
1975	1,646.7	670.1	37.6	2.1	396.2	48.4	19.3	22.6	20.3	571.3	261.7	92.2	1,471.7	174.8	16.4	0.0	0.0	-116.8	3,862.8	
1980	1,636.1	792.8	34.2	1.7	399.6	57.4	15.7	26.7	24.7	566.9	220.7	112.4	1,459.8	131.9	7.6	0.0	0.0	-124.5	3,903.7	
1981	1,495.9	802.0	36.0	1.4	348.8	51.0	15.0	27.8	23.7	547.1	187.8	93.1	1,331.8	157.5	6.9	0.0	0.0	-65.8	3,728.3	
1982	1,291.5	714.1	35.8	1.0	308.4	48.8	16.6	25.9	21.6	536.5	131.2	88.2	1,214.0	182.4	19.1	0.0	0.0	-148.0	3,273.1	
1983	1,337.5	662.6	26.4	1.1	308.0	51.8	10.4	26.1	22.6	539.4	151.5	99.2	1,236.4	160.5	12.3	0.0	0.0	-159.2	3,250.1	
1984	1,462.3	699.7	26.9	0.9	320.6	59.2	7.7	31.6	24.1	536.6	144.4	103.1	1,255.7	233.8	15.1	0.0	0.0	-202.8	3,463.3	
1985	1,409.1	646.9	32.6	1.1	313.7	57.3	20.2	27.3	22.5	535.7	111.9	96.5	1,218.7	283.6	10.1	0.0	0.0	-256.5	3,312.0	
1986	1,318.4	631.9	39.5	1.3	316.2	56.1	21.6	30.7	22.0	546.9	148.5	93.1	1,275.7	430.0	15.2	0.0	0.0	-380.7	3,290.5	
1987	1,381.1	659.1	43.6	0.7	336.2	59.6	16.5	30.7	24.8	560.1	150.1	101.6	1,324.1	377.0	11.8	0.0	0.0	-287.2	3,465.8	
1988	1,466.2	692.7	36.3	1.0	342.2	66.2	20.9	22.3	23.9	581.7	138.5	112.3	1,345.3	406.8	7.3	0.0	0.0	-303.2	3,615.1	
1989	1,463.7	706.8	44.6	0.9	357.5	54.6	17.4	25.7	24.6	572.1	137.5	112.0	1,347.0	420.0	13.5	0.0	0.0	-322.9	3,628.1	
1990	1,427.3	667.6	49.5	0.7	314.0	68.2	9.4	22.9	25.3	564.5	111.2	115.6	1,281.4	617.2	20.6	NA	NA	-448.7	3,659.4	
1991	1,364.8	661.7	41.1	0.6	308.7	64.3	10.1	27.4	22.6	562.5	100.4	107.0	1,244.6	617.3	9.9	NA	NA	-400.7	3,593.8	
1992	1,407.7	707.1	40.1	0.8	320.7	61.9	10.4	33.3	23.0	564.2	93.7	121.6	1,269.7	642.1	17.2	NA	NA	-439.8	3,710.3	
1993	1,409.7	716.6	40.4	0.8	356.8	66.7	11.7	20.8	23.5	577.7	114.8	110.5	1,323.5	633.8	15.4	NA	NA	-426.5	3,786.6	
1994	1,357.8	722.3	50.5	0.7	363.0	66.5	11.8	20.5	24.5	575.4	119.3	115.8	1,348.0	717.5	19.7	NA	NA	-448.6	3,833.4	
1995	1,387.4	746.7	51.8	0.6	360.1	69.8	15.7	20.0	24.1	589.8	80.4	118.2	1,330.5	708.3	8.2	NA	NA	-414.9	3,885.4	
1996	1,432.3	752.7	49.6	0.6	364.6	67.1	17.7	21.5	23.4	596.9	75.7	112.2	1,329.3	729.5	23.2	NA	NA	-465.2	3,927.3	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."  
<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.  
<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.  
<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.  
<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
R=Revised data. --=Not applicable. NA=Not available.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 246. Residential Energy Consumption Estimates, Selected Years 1960-1996, Pennsylvania**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	435	4,579	5,014	232	25,101	2,763	1,125	28,989	0	0	11,094	-	27,594	-
1965	277	2,878	3,155	256	28,391	2,753	1,349	32,493	0	0	14,807	-	35,352	-
1970	244	1,755	1,999	297	31,242	3,368	1,890	36,500	0	0	23,007	-	55,754	-
1975	115	924	1,039	273	31,587	2,023	2,109	35,719	0	0	27,678	-	66,762	-
1980	162	664	825	288	27,838	2,362	1,589	31,789	0	0	31,767	-	77,247	-
1981	147	831	978	286	24,202	1,992	1,827	28,022	0	0	31,714	-	75,583	-
1982	223	643	866	272	20,702	2,194	1,777	24,674	0	0	31,467	-	75,578	-
1983	193	558	751	252	20,703	1,260	2,113	24,076	0	0	32,334	-	77,465	-
1984	181	607	788	265	21,232	1,077	2,284	24,593	0	0	33,132	-	77,117	-
1985	171	472	642	245	21,658	2,853	2,299	26,810	0	0	32,686	-	76,794	-
1986	202	515	716	255	18,868	2,973	1,978	23,819	0	0	34,241	-	78,763	-
1987	246	513	759	251	19,067	2,150	2,245	23,462	0	0	35,761	-	81,711	-
1988	210	484	694	268	19,779	2,920	2,360	25,059	0	0	37,828	-	85,520	-
1989	214	492	706	271	22,046	2,534	2,526	27,105	0	0	38,141	-	R 85,671	-
1990	116	586	702	240	17,007	1,377	2,533	20,917	e 1,039	e 115	38,164	-	R 83,470	-
1991	192	515	708	243	17,482	1,508	2,940	21,930	1,094	117	39,598	-	R 86,185	-
1992	264	523	787	267	17,640	1,585	3,109	22,333	1,152	119	39,245	-	R 83,825	-
1993	144	507	651	269	20,914	1,655	2,840	25,409	1,233	120	41,455	-	R 87,587	-
1994	89	541	630	268	19,796	1,490	2,890	24,176	1,209	127	42,239	-	R 88,133	-
1995	R 113	R 520	R 632	262	19,661	2,064	3,089	24,814	1,342	133	42,802	-	R 89,158	-
1996	42	524	566	279	21,001	2,411	3,205	26,617	1,339	142	43,645	-	90,838	-

  

Trillion Btu														
1960	10.8	113.2	124.0	240.2	146.2	15.7	4.5	166.4	0.0	0.0	37.9	568.4	94.1	662.5
1965	6.8	70.0	76.8	265.3	165.4	15.6	5.4	186.4	0.0	0.0	50.5	579.1	120.6	699.7
1970	5.8	41.2	47.0	306.8	182.0	19.1	7.1	208.2	0.0	0.0	78.5	640.6	190.2	830.8
1975	2.7	20.6	23.3	279.5	184.0	11.5	7.8	203.3	0.0	0.0	94.4	600.5	227.8	828.3
1980	3.9	15.1	19.0	294.7	162.2	13.4	5.8	181.4	0.0	0.0	108.4	603.4	263.6	867.0
1981	3.5	19.7	23.3	292.1	141.0	11.3	6.7	158.9	0.0	0.0	108.2	582.5	257.9	840.4
1982	5.5	15.8	21.3	280.1	120.6	12.4	6.4	139.5	0.0	0.0	107.4	548.2	257.9	806.0
1983	4.8	13.7	18.4	259.6	120.6	7.1	7.6	135.4	0.0	0.0	110.3	523.7	264.3	788.1
1984	4.5	15.3	19.7	274.3	123.7	6.1	8.2	138.0	0.0	0.0	113.0	545.1	263.1	808.2
1985	4.2	10.9	15.1	253.2	126.2	16.2	8.3	150.6	0.0	0.0	111.5	530.5	262.0	792.5
1986	5.0	12.6	17.6	264.0	109.9	16.9	7.2	134.0	0.0	0.0	116.8	532.4	268.7	801.2
1987	6.1	13.5	19.6	260.2	111.1	12.2	8.2	131.5	0.0	0.0	122.0	533.3	278.8	812.1
1988	5.2	12.6	17.8	277.7	115.2	16.6	8.6	140.4	0.0	0.0	129.1	565.0	291.8	856.8
1989	5.4	13.4	18.7	280.8	128.4	14.4	9.3	152.1	0.0	0.0	130.1	581.7	R 292.3	R 874.0
1990	2.9	14.8	17.7	248.9	99.1	7.8	9.2	116.1	e 20.8	e 0.4	130.2	e 534.0	R 284.8	Re 818.8
1991	4.8	13.0	17.8	251.2	101.8	8.5	10.6	121.0	21.9	0.4	135.1	547.5	R 294.1	R 841.5
1992	6.7	12.9	19.5	276.1	102.8	9.0	11.3	123.0	23.0	0.4	133.9	576.0	R 286.0	R 862.0
1993	3.6	12.2	15.9	279.0	121.8	9.4	10.2	141.4	24.7	0.4	141.4	602.8	R 298.8	R 901.6
1994	2.2	13.6	15.8	278.1	115.3	8.4	10.5	134.3	24.2	0.4	144.1	596.9	R 300.7	R 897.6
1995	R 2.8	12.8	R 15.7	271.3	114.5	11.7	11.2	137.4	26.8	0.5	146.0	R 597.8	304.2	R 902.0
1996	1.1	12.9	14.0	288.1	122.3	13.7	11.6	147.6	26.8	0.5	148.9	625.8	309.9	935.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 247. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Pennsylvania**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	808	3,053	3,861	56	4,363	241	198	2,084	5,514	12,401	0	7,118	-	17,704	-
1965	514	1,919	2,433	68	4,935	240	238	2,585	5,899	13,897	0	9,426	-	22,507	-
1970	453	1,170	1,623	99	5,431	294	334	2,455	5,254	13,767	0	13,470	-	32,644	-
1975	214	616	830	99	5,491	177	372	1,310	3,630	10,980	0	18,606	-	44,881	-
1980	300	442	743	118	5,858	193	280	313	1,521	8,165	0	21,754	-	52,898	-
1981	273	554	827	129	5,160	183	322	669	1,590	7,925	0	22,376	-	53,328	-
1982	414	429	843	126	4,721	236	314	490	1,106	6,867	0	22,650	-	54,402	-
1983	359	372	730	115	5,708	365	373	667	1,529	8,642	0	23,033	-	55,181	-
1984	336	405	741	126	5,854	150	403	393	2,087	8,887	0	23,962	-	55,773	-
1985	317	315	631	115	4,933	359	406	448	1,414	7,559	0	24,610	-	57,820	-
1986	374	343	717	114	6,004	394	349	459	946	8,153	0	25,922	-	59,628	-
1987	457	342	799	115	5,649	328	396	R 486	1,202	R 8,060	0	27,066	-	61,844	-
1988	390	323	713	127	5,585	421	417	R 472	1,147	8,042	0	28,428	-	64,268	-
1989	397	328	725	132	7,296	284	446	452	913	9,391	0	29,497	-	R 66,256	-
1990	215	391	606	126	5,588	150	447	R 701	805	R 7,692	<sup>e</sup> NA	30,250	-	R 66,162	-
1991	357	343	701	126	5,450	131	519	555	632	R 7,287	NA	31,669	-	R 68,928	-
1992	491	348	839	134	5,409	102	549	R 334	885	7,279	NA	31,867	-	R 68,065	-
1993	267	338	606	132	6,001	173	501	87	1,125	7,887	166	33,298	-	R 70,351	-
1994	165	361	526	138	6,916	334	510	87	1,385	9,232	196	34,437	-	R 71,854	-
1995	R 209	R 347	R 556	144	6,132	528	545	88	1,240	8,533	175	35,627	-	R 74,213	-
1996	79	349	428	155	6,240	556	566	87	1,326	8,774	187	36,453	-	75,870	-

  

Trillion Btu															
1960	20.0	75.5	95.5	58.1	25.4	1.4	0.8	10.9	34.7	73.2	0.0	24.3	251.1	60.4	311.5
1965	12.7	46.7	59.3	70.1	28.7	1.4	1.0	13.6	37.1	81.7	0.0	32.2	243.3	76.8	320.1
1970	10.8	27.5	38.3	102.6	31.6	1.7	1.3	12.9	33.0	80.5	0.0	46.0	267.3	111.4	378.7
1975	5.0	13.7	18.7	101.5	32.0	1.0	1.4	6.9	22.8	64.1	0.0	63.5	247.8	153.1	400.9
1980	7.3	10.1	17.3	121.1	34.1	1.1	1.0	1.6	9.6	47.5	0.0	74.2	260.1	180.5	440.5
1981	6.6	13.2	19.7	131.4	30.1	1.0	1.2	3.5	10.0	45.8	0.0	76.3	273.3	182.0	455.2
1982	10.1	10.5	20.7	129.1	27.5	1.3	1.1	2.6	7.0	39.5	0.0	77.3	266.5	185.6	452.2
1983	8.8	9.1	18.0	118.6	33.3	2.1	1.3	3.5	9.6	49.8	0.0	78.6	264.9	188.3	453.2
1984	8.3	10.2	18.4	130.5	34.1	0.9	1.5	2.1	13.1	51.6	0.0	81.8	282.3	190.3	472.6
1985	7.9	7.2	15.1	119.3	28.7	2.0	1.5	2.4	8.9	43.5	0.0	84.0	261.8	197.3	459.1
1986	9.3	8.4	17.7	118.6	35.0	2.2	1.3	2.4	5.9	46.8	0.0	88.4	271.6	203.4	475.0
1987	11.4	9.0	20.4	118.9	32.9	1.9	1.4	R 2.6	7.6	46.3	0.0	92.4	278.0	211.0	489.0
1988	9.7	8.4	18.1	132.0	32.5	2.4	1.5	2.5	7.2	46.1	0.0	97.0	293.2	219.3	512.5
1989	10.0	8.9	18.9	137.3	42.5	1.6	1.6	2.4	5.7	53.9	0.0	100.6	310.7	R 226.1	R 536.8
1990	5.4	9.8	15.2	130.3	32.6	0.9	1.6	3.7	5.1	R 43.8	<sup>e</sup> NA	103.2	292.5	R 225.7	R 518.2
1991	8.9	8.7	17.6	129.9	31.7	0.7	1.9	2.9	4.0	41.3	NA	108.1	296.9	R 235.2	R 532.0
1992	12.4	8.6	20.9	139.1	31.5	0.6	2.0	1.8	5.6	41.4	NA	108.7	310.1	R 232.2	R 542.4
1993	6.7	8.2	14.9	136.7	35.0	1.0	1.8	0.5	7.1	45.3	3.3	113.6	R 313.8	R 240.0	R 553.8
1994	4.2	9.0	13.2	143.5	40.3	1.9	1.9	0.5	8.7	53.2	3.9	117.5	R 331.3	R 245.2	R 576.4
1995	R 5.3	R 8.6	R 13.8	148.8	35.7	3.0	2.0	0.5	7.8	48.9	3.5	121.6	R 336.6	253.2	R 589.8
1996	2.0	8.6	10.6	159.9	36.3	3.1	2.0	0.5	8.3	50.3	3.7	124.4	349.0	258.9	607.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 248. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Pennsylvania

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	33,140	213	4,731	8,645	503	992	1,432	1,456	29,692	11,573	59,025	16	0	0	20,693	-	51,470	-
1965	40,010	285	6,201	11,641	858	1,383	2,419	1,480	29,434	14,972	68,387	15	0	0	29,075	-	69,421	-
1970	35,753	340	6,600	10,196	589	2,396	2,518	1,181	27,132	14,808	65,420	12	0	0	38,993	-	94,494	-
1975	28,510	263	5,663	11,033	1,198	3,439	2,255	1,098	21,941	15,678	62,305	1	0	0	41,256	-	99,516	-
1980	21,877	337	5,148	11,128	208	5,238	2,756	586	11,555	19,135	55,755	1	0	0	46,045	-	111,966	-
1981	19,045	333	5,424	10,081	476	5,251	2,644	1,218	7,777	15,618	48,489	1	0	0	46,596	-	111,052	-
1982	10,790	264	5,400	8,920	502	4,862	2,411	1,122	8,190	14,534	45,942	1	0	0	40,280	-	96,747	-
1983	12,319	246	3,985	6,238	211	4,467	2,524	732	3,888	15,830	37,875	1	0	0	41,047	-	98,340	-
1984	16,283	248	4,061	6,398	124	R 5,728	2,691	558	5,308	16,813	R 41,681	1	0	0	44,061	-	102,557	-
1985	13,716	231	4,913	5,762	345	4,624	2,508	1,276	2,624	15,615	37,668	1	0	0	42,520	-	99,898	-
1986	11,080	207	5,956	6,590	446	5,911	2,453	1,259	5,105	14,714	42,433	1	0	0	42,020	-	96,658	-
1987	12,591	232	6,572	7,709	441	R 5,604	2,773	R 1,314	5,547	16,160	R 46,120	1	0	0	43,989	-	100,512	-
1988	14,226	234	5,473	6,838	353	3,152	2,674	R 1,386	4,435	17,848	R 42,159	1	0	0	46,291	-	104,654	-
1989	14,016	247	6,718	6,332	253	3,825	2,743	R 1,343	5,612	18,012	44,837	1	0	0	45,916	-	R 103,137	-
1990	14,546	241	7,466	6,303	127	R 3,177	2,822	R 1,180	5,814	18,775	R 45,664	f NA	f NA	f NA	45,992	-	R 100,591	-
1991	12,860	235	6,192	5,354	143	3,938	2,525	R 1,254	4,467	17,272	R 41,145	NA	NA	NA	44,728	-	R 97,352	-
1992	14,041	240	6,036	6,260	142	R 5,330	2,574	R 1,342	4,205	19,891	R 45,781	NA	NA	NA	44,869	-	R 95,838	-
1993	14,644	246	6,087	6,101	227	R 2,222	2,621	959	4,302	18,031	40,551	NA	NA	NA	44,969	-	R 94,969	-
1994	14,894	240	7,610	5,151	254	1,874	2,740	908	4,125	18,774	41,435	NA	NA	NA	46,076	-	R 96,138	-
1995	14,885	253	7,808	4,253	169	1,687	2,693	934	2,933	18,911	39,387	NA	NA	NA	47,528	-	R 99,003	-
1996	15,155	247	7,472	4,526	150	2,032	2,613	855	3,348	17,983	38,978	NA	NA	NA	47,208	-	98,254	-

Trillion Btu

1960	873.1	220.0	31.4	50.4	2.9	4.0	8.7	7.6	186.7	69.3	360.9	0.2	0.0	0.0	70.6	1,524.8	175.6	1,700.4
1965	1,053.3	296.1	41.2	67.8	4.9	5.5	14.7	7.8	185.0	88.0	414.9	0.2	0.0	0.0	99.2	1,863.7	236.9	2,100.5
1970	932.1	351.2	43.8	59.4	3.3	9.1	15.3	6.2	170.6	87.0	394.7	0.1	0.0	0.0	133.0	1,811.2	322.4	2,133.6
1975	743.1	269.8	37.6	64.3	6.8	12.8	13.7	5.8	137.9	92.2	371.0	(s)	0.0	0.0	140.8	1,524.7	339.5	1,864.2
1980	573.1	344.0	34.2	64.8	1.2	19.2	16.7	3.1	72.6	110.5	322.3	(s)	0.0	0.0	157.1	1,396.5	382.0	1,778.5
1981	499.0	340.7	36.0	58.7	2.7	19.1	16.0	6.4	48.9	91.1	279.0	(s)	0.0	0.0	159.0	1,277.6	378.9	1,656.5
1982	280.5	271.3	35.8	52.0	2.8	17.6	14.6	5.9	51.5	85.4	265.6	(s)	0.0	0.0	137.4	954.9	330.1	1,285.0
1983	321.9	252.7	26.4	36.3	1.2	16.1	15.3	3.8	24.4	93.5	217.2	(s)	0.0	0.0	140.1	931.9	335.5	1,267.4
1984	426.5	256.6	26.9	37.3	0.7	20.6	16.3	2.9	33.4	97.6	235.8	(s)	0.0	0.0	150.3	1,069.2	349.9	1,419.1
1985	359.2	238.7	32.6	33.6	2.0	16.7	15.2	6.7	16.5	91.8	215.0	(s)	0.0	0.0	145.1	958.0	340.9	1,298.9
1986	289.3	214.3	39.5	38.4	2.5	21.5	14.9	6.6	32.1	87.7	243.2	(s)	0.0	0.0	143.4	890.3	329.8	1,220.1
1987	330.1	240.5	43.6	44.9	2.5	20.5	16.8	6.9	34.9	95.1	265.2	(s)	0.0	0.0	150.1	985.9	342.9	1,328.8
1988	373.9	242.0	36.3	39.8	2.0	11.5	16.2	7.3	27.9	104.9	245.9	(s)	0.0	0.0	157.9	1,019.8	357.1	1,376.9
1989	368.2	256.2	44.6	36.9	1.4	14.1	16.6	7.1	35.3	105.2	261.2	(s)	0.0	0.0	156.7	1,042.3	R 351.9	R 1,394.2
1990	382.1	250.3	49.5	36.7	0.7	11.5	17.1	6.2	36.6	109.6	267.9	f 2.9	f 72.8	f 0.0	156.9	R f 1,133.1	R 343.2	R f 1,476.3
1991	337.6	243.1	41.1	31.2	0.8	14.2	15.3	6.6	28.1	101.0	238.4	3.1	73.9	0.0	152.6	1,048.6	R 332.2	R 1,380.8
1992	369.2	248.7	40.1	36.5	0.8	19.3	15.6	7.1	26.4	115.5	261.2	4.6	82.9	0.0	153.1	1,119.7	R 327.0	R 1,446.7
1993	385.0	254.8	40.4	35.5	1.3	8.0	15.9	5.0	27.0	104.8	238.1	3.8	85.8	0.0	153.4	1,120.8	R 324.0	R 1,444.9
1994	392.4	248.3	50.5	30.0	1.4	6.8	16.6	4.8	25.9	109.2	245.2	4.1	R 88.2	0.0	157.2	R 1,135.4	R 328.0	R 1,463.4
1995	392.2	261.9	51.8	24.8	1.0	6.1	16.3	4.9	18.4	110.3	233.6	3.6	R 88.4	0.0	162.2	R 1,141.9	R 337.8	R 1,479.7
1996	398.4	255.2	49.6	26.4	0.8	7.3	15.8	4.5	21.0	104.0	229.5	4.7	93.8	0.0	161.1	1,142.7	335.2	1,477.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 249. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Pennsylvania**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	547	15	1,994	7,662	1,036	20	1,343	76,565	5,005	93,625	0	313	-	779	-
1965	127	19	1,922	8,900	3,406	60	1,121	81,658	4,554	101,622	0	222	-	530	-
1970	56	27	662	12,662	9,083	134	1,327	98,082	5,548	127,497	0	149	-	360	-
1975	5	18	426	16,566	8,469	157	1,094	106,357	5,788	138,857	0	196	-	472	-
1980	0	29	337	21,539	10,148	147	1,312	107,026	4,796	145,306	0	178	-	434	-
1981	0	34	278	18,709	9,017	234	1,259	102,264	5,177	136,939	0	177	-	422	-
1982	0	31	197	17,161	8,624	216	1,148	100,522	1,624	129,491	0	184	-	443	-
1983	0	29	210	18,041	9,152	257	1,202	101,281	1,638	131,781	0	256	-	614	-
1984	0	34	186	19,479	10,465	R 363	1,281	101,209	1,599	R 134,583	0	289	-	672	-
1985	0	33	208	20,087	10,126	249	1,194	R 100,255	2,139	R 134,258	0	335	-	788	-
1986	0	33	251	21,378	9,915	191	1,168	R 102,385	4,561	R 139,850	0	345	-	793	-
1987	0	36	147	23,731	10,530	152	1,320	R 104,829	5,898	R 146,608	0	324	-	740	-
1988	0	37	189	24,872	11,705	176	1,273	R 108,871	5,470	R 152,557	0	345	-	779	-
1989	0	27	177	23,728	9,661	R 171	1,306	R 107,119	4,119	R 146,280	0	346	-	R 776	-
1990	0	34	145	23,830	12,042	R 157	1,344	R 105,586	5,662	R 148,765	R e 8,510	344	-	R 753	-
1991	0	34	116	23,801	11,355	188	1,202	R 105,272	5,713	R 147,647	R e 6,746	342	-	R 745	-
1992	0	39	163	25,036	10,932	189	1,226	R 105,729	6,994	R 150,269	R e 8,199	307	-	R 655	-
1993	0	36	150	27,385	11,787	R 196	1,248	R 108,924	6,082	R 155,772	R e 9,150	279	-	R 590	-
1994	0	38	136	29,058	11,748	360	1,304	R 108,538	5,994	R 157,139	R 23,202	293	-	612	-
1995	0	38	125	30,520	12,313	188	1,282	111,261	4,843	160,533	R 71,190	294	-	612	-
1996	0	41	121	29,413	11,831	149	1,244	112,697	3,383	158,838	53,520	318	-	662	-

  

Trillion Btu															
1960	14.0	15.6	10.1	44.6	5.7	0.1	8.1	402.2	31.5	502.3	0.0	1.1	533.0	2.7	535.7
1965	3.2	20.1	9.7	51.8	19.2	0.2	6.8	429.0	28.6	545.4	0.0	0.8	569.4	1.8	571.2
1970	1.3	27.5	3.3	73.8	51.4	0.5	8.0	515.2	34.9	687.1	0.0	0.5	716.5	1.2	717.8
1975	0.1	18.1	2.1	96.5	47.9	0.6	6.6	558.7	36.4	748.9	0.0	0.7	767.8	1.6	769.4
1980	0.0	30.1	1.7	125.5	57.4	0.5	8.0	562.2	30.2	785.4	0.0	0.6	816.2	1.5	817.7
1981	0.0	34.5	1.4	109.0	51.0	0.9	7.6	537.2	32.6	739.6	0.0	0.6	774.7	1.4	776.2
1982	0.0	32.0	1.0	100.0	48.8	0.8	7.0	528.0	10.2	695.7	0.0	0.6	728.4	1.5	729.9
1983	0.0	30.1	1.1	105.1	51.8	0.9	7.3	532.0	10.3	708.4	0.0	0.9	739.4	2.1	741.5
1984	0.0	35.7	0.9	113.5	59.2	1.3	7.8	531.7	10.1	724.4	0.0	1.0	761.0	2.3	763.3
1985	0.0	34.1	1.1	117.0	57.3	0.9	7.2	R 526.6	13.4	R 723.5	0.0	1.1	R 758.8	2.7	R 761.5
1986	0.0	34.2	1.3	124.5	56.1	0.7	7.1	537.8	28.7	756.2	0.0	1.2	791.6	2.7	794.3
1987	0.0	37.3	0.7	138.2	59.6	0.6	8.0	R 550.7	37.1	R 794.9	0.0	1.1	R 833.3	2.5	R 835.8
1988	0.0	38.3	1.0	144.9	66.2	0.6	7.7	R 571.9	34.4	R 826.7	0.0	1.2	R 866.2	2.7	R 868.9
1989	0.0	28.4	0.9	138.2	54.6	0.6	7.9	R 562.7	25.9	R 790.9	0.0	1.2	R 820.4	2.6	R 823.1
1990	0.0	35.7	0.7	138.8	68.2	0.6	8.1	R 554.6	35.6	R 806.7	R e 0.7	1.2	R e 843.5	2.6	R e 846.1
1991	0.0	35.3	0.6	138.6	64.3	0.7	7.3	R 553.0	35.9	R 800.4	R e 0.5	1.2	R e 836.9	2.5	R e 839.4
1992	0.0	39.9	0.8	145.8	61.9	0.7	7.4	R 555.4	44.0	R 816.0	R e 0.6	1.0	R e 857.0	2.2	R e 859.2
1993	0.0	37.6	0.8	159.5	66.7	0.7	7.6	R 572.2	38.2	R 845.6	R e 0.7	1.0	R e 884.2	2.0	R e 886.3
1994	0.0	39.3	0.7	169.3	66.5	1.3	7.9	R 570.1	37.7	R 853.5	R e 1.8	1.0	R e 893.9	2.1	R e 896.0
1995	0.0	39.2	0.6	177.8	69.8	0.7	7.8	584.5	30.5	871.6	R e 5.4	1.0	911.8	2.1	913.9
1996	0.0	42.1	0.6	171.3	67.1	0.5	7.5	592.0	21.3	860.4	4.1	1.1	903.5	2.3	905.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 250. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Pennsylvania

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	15,435	2,627	18,062	6	2,747	485	0	3,232	230	1,810	0	0	0	--
1965	21,024	2,158	23,182	1	3,351	591	0	3,943	313	1,313	0	0	0	--
1970	27,245	1,897	29,141	9	22,502	3,959	0	26,460	465	1,354	0	0	0	--
1975	35,180	1,480	36,659	1	10,273	3,419	0	13,691	15,869	1,575	0	0	0	--
1980	41,515	951	42,466	3	17,226	2,238	316	19,780	12,091	734	0	0	0	--
1981	38,656	1,029	39,685	3	15,334	1,735	337	17,405	14,276	659	0	0	0	--
1982	38,898	1,075	39,972	2	9,949	1,442	459	11,850	16,472	1,828	0	0	0	--
1983	39,010	1,036	40,046	2	17,049	2,182	950	20,182	14,718	1,169	0	0	0	--
1984	39,766	1,070	40,836	3	13,967	2,073	904	16,944	21,564	1,446	0	0	0	--
1985	40,681	1,033	41,713	2	11,622	1,423	782	13,827	26,232	971	0	0	0	--
1986	39,760	829	40,589	1	13,005	1,436	891	15,332	39,820	1,452	0	0	0	--
1987	40,291	972	41,263	2	11,231	1,567	1,085	13,882	34,982	1,131	0	0	0	--
1988	42,103	1,063	43,166	3	10,980	1,673	1,230	13,883	37,862	705	0	0	0	--
1989	42,191	1,049	43,241	4	11,228	1,979	1,135	14,342	39,166	1,290	0	0	0	--
1990	40,434	1,031	41,465	2	5,406	1,185	1,005	7,596	57,787	1,703	0	0	0	--
1991	39,667	994	40,662	2	5,153	907	986	7,046	57,476	656	0	0	0	--
1992	39,421	986	40,407	3	2,820	719	1,022	4,560	60,133	1,217	0	0	0	--
1993	39,306	951	40,257	8	6,758	845	932	8,535	59,331	1,124	0	0	0	--
1994	36,921	1,123	38,044	13	7,478	1,402	1,103	9,982	67,207	1,512	0	0	0	--
1995	38,274	978	39,252	25	3,770	1,256	1,310	6,336	66,462	444	0	0	0	--
1996	40,067	1,009	41,076	7	3,983	1,418	1,363	6,764	68,672	1,791	0	0	0	--

Trillion Btu

1960	377.3	46.0	423.3	6.2	17.3	2.8	0.0	20.1	2.7	19.5	0.0	0.0	0.0	471.7
1965	520.8	37.8	558.6	1.3	21.1	3.4	0.0	24.5	3.7	13.7	0.0	0.0	0.0	601.8
1970	647.0	33.2	680.2	9.7	141.5	23.1	0.0	164.5	5.1	14.2	0.0	0.0	0.0	873.7
1975	836.2	25.2	861.4	1.2	64.6	19.9	0.0	84.5	174.8	16.4	0.0	0.0	0.0	1,138.3
1980	1,009.9	16.8	1,026.7	2.9	108.3	13.0	1.9	123.2	131.9	7.6	0.0	0.0	0.0	1,292.3
1981	935.3	18.7	954.0	3.3	96.4	10.1	2.0	108.5	157.5	6.9	0.0	0.0	0.0	1,230.2
1982	949.5	19.5	969.0	1.6	62.5	8.4	2.8	73.7	182.4	19.1	0.0	0.0	0.0	1,245.8
1983	962.1	17.1	979.2	1.7	107.2	12.7	5.7	125.6	160.5	12.3	0.0	0.0	0.0	1,279.3
1984	979.5	18.2	997.7	2.6	87.8	12.1	5.4	105.3	233.8	15.1	0.0	0.0	0.0	1,354.6
1985	1,002.3	17.3	1,019.7	1.6	73.1	8.3	4.7	86.1	283.6	10.1	0.0	0.0	0.0	1,401.1
1986	980.9	12.9	993.8	0.7	81.8	8.4	5.4	95.5	430.0	15.2	0.0	0.0	0.0	1,535.2
1987	995.5	15.5	1,011.0	2.1	70.6	9.1	6.5	86.3	377.0	11.8	0.0	0.0	0.0	1,488.1
1988	1,037.9	18.4	1,056.3	2.7	69.0	9.7	7.4	86.2	406.8	7.3	0.0	0.0	0.0	1,559.2
1989	1,040.8	17.1	1,057.9	4.1	70.6	11.5	6.8	89.0	420.0	R 13.5	0.0	0.0	0.0	R 1,584.5
1990	995.7	16.6	1,012.3	2.4	34.0	6.9	6.1	46.9	617.2	R 17.7	0.0	0.0	0.0	R 1,696.5
1991	976.0	15.8	991.8	2.1	32.4	5.3	5.9	43.6	617.3	6.8	0.0	0.0	0.0	1,661.6
1992	981.4	16.7	998.1	3.2	17.7	4.2	6.2	28.1	642.1	R 12.6	0.0	0.0	0.0	1,684.0
1993	978.2	15.7	993.9	8.6	42.5	4.9	5.6	53.0	633.8	11.6	0.0	0.0	0.0	1,700.8
1994	919.9	16.5	936.4	13.1	47.0	8.2	6.6	61.8	717.5	R 15.6	0.0	0.0	0.0	1,744.4
1995	951.5	14.3	965.7	25.4	23.7	7.3	7.9	38.9	708.3	4.6	0.0	0.0	0.0	1,743.0
1996	994.9	14.5	1,009.4	7.4	25.0	8.3	8.2	41.5	729.5	18.5	0.0	0.0	0.0	1,806.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 251. Energy Consumption Estimates by Source, Selected Years 1960-1996, Rhode Island

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Interstate Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	598	12	735	19	8,106	38	886	207	155	5,975	9,827	221	26,170	0	9	0	0	467	-
1965	419	16	907	63	6,879	49	666	223	153	6,492	6,276	337	22,045	0	2	0	0	4,095	-
1970	10	25	937	148	8,631	137	432	375	125	8,009	9,727	313	28,833	0	3	0	0	7,135	-
1975	7	23	1,330	285	8,003	271	128	498	97	8,972	4,389	149	24,122	0	3	0	0	12,289	-
1980	7	28	1,041	269	5,032	348	84	293	132	8,416	2,525	539	18,680	0	1	0	0	14,042	-
1981	8	29	996	23	3,983	303	54	278	126	8,519	2,204	182	16,668	0	(s)	0	0	13,969	-
1982	8	28	1,203	28	3,972	281	125	328	115	8,415	1,649	138	16,254	0	3	0	0	14,943	-
1983	7	29	1,212	23	4,706	329	60	330	121	8,299	1,465	115	16,661	0	3	0	0	15,254	-
1984	9	32	1,336	21	4,901	571	40	314	129	8,562	1,690	130	17,693	0	2	0	0	15,553	-
1985	9	30	2,974	30	4,452	498	135	501	120	R 8,665	2,232	127	R 19,735	0	421	0	0	14,794	-
1986	28	26	1,479	35	5,302	387	168	585	117	8,938	3,771	71	20,853	0	6	0	0	15,916	-
1987	5	36	1,773	42	6,055	528	110	669	133	R 9,140	2,318	79	R 20,845	0	9	0	0	16,351	-
1988	175	31	1,741	46	5,935	636	115	564	128	R 9,277	3,042	62	R 21,547	0	678	0	0	15,346	-
1989	27	34	1,605	46	5,902	724	63	502	131	R 8,874	1,701	59	R 19,606	0	96	0	0	18,393	-
1990	5	36	1,634	42	4,636	776	54	501	135	R 8,765	1,439	58	R 18,040	0	i NA	i NA	i NA	R 17,593	-
1991	4	54	461	30	5,065	656	52	466	121	R 8,681	1,099	13	R 16,642	0	NA	NA	NA	R 19,028	-
1992	5	78	1,502	30	5,307	556	51	456	123	R 8,756	1,204	14	R 17,999	0	NA	NA	NA	R 16,684	-
1993	3	76	819	8	5,470	527	50	513	125	R 8,883	1,320	15	R 17,730	0	NA	NA	NA	R 16,884	-
1994	3	71	1,256	10	5,930	529	50	501	131	R 8,630	1,180	15	R 18,233	0	NA	NA	NA	R 18,304	-
1995	3	70	990	22	5,732	500	64	461	129	8,927	949	15	17,789	0	NA	NA	NA	R 14,110	-
1996	3	83	337	37	6,051	540	35	524	125	9,006	1,001	18	17,674	0	NA	NA	NA	8,992	-
Trillion Btu																			
1960	16.8	12.3	4.9	0.1	47.2	0.2	5.0	0.8	0.9	31.4	61.8	1.3	153.7	0.0	0.1	0.0	0.0	1.6	184.4
1965	11.5	17.0	6.0	0.3	40.1	0.3	3.8	0.9	0.9	34.1	39.5	1.9	127.8	0.0	(s)	0.0	0.0	14.0	170.2
1970	0.2	25.6	6.2	0.7	50.3	0.8	2.4	1.4	0.8	42.1	61.2	1.8	167.6	0.0	(s)	0.0	0.0	24.3	217.8
1975	0.1	23.5	8.8	1.4	46.6	1.5	0.7	1.8	0.6	47.1	27.6	0.8	137.1	0.0	(s)	0.0	0.0	41.9	202.7
1980	0.2	28.2	6.9	1.4	29.3	2.0	0.5	1.1	0.8	44.2	15.9	3.0	104.9	0.0	(s)	0.0	0.0	47.9	181.2
1981	0.2	29.8	6.6	0.1	23.2	1.7	0.3	1.0	0.8	44.8	13.9	1.0	93.3	0.0	(s)	0.0	0.0	47.7	171.0
1982	0.2	28.9	8.0	0.1	23.1	1.6	0.7	1.2	0.7	44.2	10.4	0.8	90.8	0.0	(s)	0.0	0.0	51.0	170.8
1983	0.2	30.1	8.0	0.1	27.4	1.9	0.3	1.2	0.7	43.6	9.2	0.6	93.1	0.0	(s)	0.0	0.0	52.0	175.5
1984	0.2	32.6	8.9	0.1	28.5	3.2	0.2	1.1	0.8	45.0	10.6	0.7	99.2	0.0	(s)	0.0	0.0	53.1	185.1
1985	0.2	30.9	19.7	0.2	25.9	2.8	0.8	1.8	0.7	45.5	14.0	0.7	112.2	0.0	4.4	0.0	0.0	50.5	198.1
1986	0.7	27.1	9.8	0.2	30.9	2.2	1.0	2.1	0.7	47.0	23.7	0.4	117.9	0.0	0.1	0.0	0.0	54.3	200.1
1987	0.1	36.9	11.8	0.2	35.3	3.0	0.6	2.4	0.8	R 48.0	14.6	0.4	117.1	0.0	0.1	0.0	0.0	55.8	R 210.0
1988	4.4	31.6	11.6	0.2	34.6	3.6	0.7	2.1	0.8	R 48.7	19.1	0.3	121.6	0.0	7.0	0.0	0.0	52.4	R 217.0
1989	0.7	34.9	10.6	0.2	34.4	4.1	0.4	1.8	0.8	R 46.6	10.7	0.3	110.0	0.0	1.0	0.0	0.0	62.8	R 209.3
1990	0.1	36.8	10.8	0.2	27.0	4.4	0.3	1.8	0.8	R 46.0	9.0	0.3	100.8	0.0	i 1.5	i 4.5	i (s)	60.0	R i 204.1
1991	0.1	55.8	3.1	0.2	29.5	3.7	0.3	1.7	0.7	45.6	6.9	0.1	91.7	0.0	1.5	5.0	(s)	64.9	R 219.5
1992	0.1	79.2	10.0	0.2	30.9	3.1	0.3	1.7	0.7	46.0	7.6	0.1	100.5	0.0	R 7.7	5.1	(s)	56.9	R 251.9
1993	0.1	77.8	5.4	(s)	31.9	3.0	0.3	1.9	0.8	R 46.7	8.3	0.1	98.2	0.0	8.6	R 5.7	(s)	57.6	R 250.6
1994	0.1	73.3	8.3	0.1	34.5	3.0	0.3	1.8	0.8	R 45.3	7.4	0.1	101.7	0.0	3.6	R 6.8	(s)	62.5	R 250.1
1995	0.1	72.0	6.6	0.1	33.4	2.8	0.4	1.7	0.8	46.9	6.0	0.1	98.7	0.0	10.5	R 7.1	(s)	48.1	R 242.0
1996	0.1	87.7	2.2	0.2	35.2	3.1	0.2	1.9	0.8	47.3	6.3	0.1	97.3	0.0	9.4	7.5	(s)	30.7	235.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 252. Residential Energy Consumption Estimates, Selected Years 1960-1996, Rhode Island**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	0	12	12	7	5,507	770	149	6,426	0	0	620	—	1,542	—
1965	0	8	8	9	4,828	534	134	5,496	0	0	871	—	2,080	—
1970	0	5	5	12	5,835	335	158	6,328	0	0	1,390	—	3,368	—
1975	0	3	3	13	5,395	87	148	5,629	0	0	1,684	—	4,063	—
1980	0	2	2	14	3,297	54	115	3,466	0	0	1,840	—	4,474	—
1981	0	4	4	14	2,567	47	121	2,735	0	0	1,817	—	4,332	—
1982	0	5	5	15	2,466	123	120	2,709	0	0	1,832	—	4,400	—
1983	(s)	4	4	14	2,893	57	143	3,093	0	0	1,913	—	4,582	—
1984	0	4	4	15	2,967	36	163	3,166	0	0	1,957	—	4,554	—
1985	0	3	3	15	3,419	131	279	3,828	0	0	1,971	—	4,630	—
1986	0	3	3	16	2,998	162	256	3,416	0	0	2,064	—	4,747	—
1987	0	2	2	17	3,195	102	304	3,601	0	0	2,186	—	4,994	—
1988	0	2	2	18	3,602	96	264	3,961	0	0	2,319	—	5,243	—
1989	0	2	2	18	3,179	57	272	3,508	0	0	2,370	—	5,324	R
1990	0	3	3	18	2,554	38	277	2,869	<sup>e</sup> 152	<sup>e</sup> 10	2,376	—	5,197	R
1991	0	2	2	17	2,688	35	280	3,003	160	11	2,369	—	5,156	R
1992	0	3	3	20	3,270	37	267	3,574	168	11	2,363	—	5,048	R
1993	0	2	2	20	3,280	40	319	3,639	173	11	2,412	—	5,096	R
1994	0	2	2	17	3,517	38	313	3,868	170	11	2,457	—	5,126	R
1995	0	2	2	17	3,355	27	283	3,665	188	11	2,472	—	5,149	R
1996	0	2	2	19	3,529	30	338	3,897	188	11	2,481	—	5,163	—
<b>Trillion Btu</b>														
1960	0.0	0.3	0.3	6.9	32.1	4.4	0.6	37.0	0.0	0.0	2.1	46.4	5.3	51.7
1965	0.0	0.2	0.2	9.3	28.1	3.0	0.5	31.7	0.0	0.0	3.0	44.2	7.1	51.3
1970	0.0	0.1	0.1	12.2	34.0	1.9	0.6	36.5	0.0	0.0	4.7	53.5	11.5	65.0
1975	0.0	0.1	0.1	13.2	31.4	0.5	0.5	32.5	0.0	0.0	5.7	51.5	13.9	65.4
1980	0.0	(s)	(s)	14.3	19.2	0.3	0.4	19.9	0.0	0.0	6.3	40.5	15.3	55.8
1981	0.0	0.1	0.1	14.7	15.0	0.3	0.4	15.7	0.0	0.0	6.2	36.7	14.8	51.5
1982	0.0	0.1	0.1	15.4	14.4	0.7	0.4	15.5	0.0	0.0	6.3	37.2	15.0	52.2
1983	(s)	0.1	0.1	14.2	16.9	0.3	0.5	17.7	0.0	0.0	6.5	38.5	15.6	54.2
1984	0.0	0.1	0.1	15.5	17.3	0.2	0.6	18.1	0.0	0.0	6.7	40.3	15.5	55.9
1985	0.0	0.1	0.1	15.5	19.9	0.7	1.0	21.7	0.0	0.0	6.7	43.9	15.8	59.7
1986	0.0	0.1	0.1	16.6	17.5	0.9	0.9	19.3	0.0	0.0	7.0	43.0	16.2	59.2
1987	0.0	0.1	0.1	17.2	18.6	0.6	1.1	20.3	0.0	0.0	7.5	45.0	17.0	62.1
1988	0.0	(s)	(s)	18.2	21.0	0.5	1.0	22.5	0.0	0.0	7.9	48.6	17.9	66.5
1989	0.0	(s)	(s)	18.8	18.5	0.3	1.0	19.8	0.0	0.0	8.1	46.7	18.2	64.9
1990	0.0	0.1	0.1	18.2	14.9	0.2	1.0	16.1	<sup>e</sup> 3.0	<sup>e</sup> (s)	8.1	<sup>e</sup> 45.6	17.7	<sup>e</sup> 63.3
1991	0.0	0.1	0.1	17.9	15.7	0.2	1.0	16.9	3.2	(s)	8.1	46.1	17.6	63.7
1992	0.0	0.1	0.1	20.4	19.1	0.2	1.0	20.2	3.4	(s)	8.1	52.1	17.2	69.3
1993	0.0	(s)	(s)	20.3	19.1	0.2	1.2	20.5	3.5	(s)	8.2	52.5	17.4	69.9
1994	0.0	(s)	(s)	17.9	20.5	0.2	1.1	21.8	3.4	(s)	8.4	51.6	17.5	69.1
1995	0.0	(s)	(s)	17.8	19.5	0.2	1.0	20.7	3.8	(s)	8.4	50.8	17.6	68.4
1996	0.0	(s)	(s)	20.2	20.6	0.2	1.2	22.0	3.8	(s)	8.5	54.5	17.6	72.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 253. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Rhode Island**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	8	8	2	1,381	17	26	26	1,237	2,688	0	376	-	935	-
1965	0	5	5	3	1,211	12	24	32	634	1,913	0	546	-	1,304	-
1970	0	3	3	5	1,464	7	28	36	971	2,506	0	1,285	-	3,114	-
1975	0	2	2	4	1,353	2	26	41	602	2,024	0	1,576	-	3,801	-
1980	0	1	1	7	617	0	20	49	180	866	0	1,892	-	4,601	-
1981	0	2	2	7	381	1	21	52	190	645	0	1,878	-	4,476	-
1982	0	3	3	7	433	2	21	56	225	737	0	1,884	-	4,524	-
1983	1	2	3	7	577	3	25	41	300	946	0	1,978	-	4,739	-
1984	0	3	3	7	592	3	29	29	410	1,063	0	2,075	-	4,830	-
1985	0	2	2	8	441	4	49	32	552	1,078	0	2,159	-	5,073	-
1986	0	2	2	7	806	4	45	35	1,141	2,031	0	2,268	-	5,216	-
1987	0	2	2	9	891	5	54	36	509	R 1,495	0	2,396	-	5,474	-
1988	0	1	1	8	808	3	47	35	620	1,512	0	2,539	-	5,741	-
1989	0	1	1	9	779	5	48	R 38	457	1,327	0	2,630	-	R 5,906	-
1990	0	2	2	8	673	2	49	R 39	605	1,367	e NA	2,688	-	R 5,880	-
1991	0	2	2	8	775	1	49	36	588	1,451	NA	2,671	-	R 5,814	-
1992	0	2	2	9	603	3	47	32	523	1,208	NA	2,670	-	R 5,703	-
1993	0	1	1	9	640	2	56	10	642	1,350	18	2,718	-	R 5,742	-
1994	0	1	1	12	809	5	55	10	633	1,512	23	2,737	-	R 5,710	-
1995	0	1	1	12	717	30	50	10	506	1,314	21	2,790	-	5,812	-
1996	0	1	1	12	820	2	60	10	679	1,570	25	2,773	-	5,771	-

Trillion Btu

1960	0.0	0.2	0.2	1.8	8.0	0.1	0.1	0.1	7.8	16.2	0.0	1.3	19.4	3.2	22.6
1965	0.0	0.1	0.1	2.7	7.1	0.1	0.1	0.2	4.0	11.4	0.0	1.9	16.0	4.4	20.5
1970	0.0	0.1	0.1	5.2	8.5	(s)	0.1	0.2	6.1	15.0	0.0	4.4	24.6	10.6	35.2
1975	0.0	(s)	(s)	4.3	7.9	(s)	0.1	0.2	3.8	12.0	0.0	5.4	21.7	13.0	34.7
1980	0.0	(s)	(s)	6.9	3.6	0.0	0.1	0.3	1.1	5.1	0.0	6.5	18.4	15.7	34.1
1981	0.0	0.1	0.1	7.0	2.2	(s)	0.1	0.3	1.2	3.8	0.0	6.4	17.3	15.3	32.5
1982	0.0	0.1	0.1	7.4	2.5	(s)	0.1	0.3	1.4	4.3	0.0	6.4	18.2	15.4	33.7
1983	(s)	0.1	0.1	7.2	3.4	(s)	0.1	0.2	1.9	5.6	0.0	6.7	19.6	16.2	35.8
1984	0.0	0.1	0.1	7.7	3.4	(s)	0.1	0.2	2.6	6.3	0.0	7.1	21.1	16.5	37.6
1985	0.0	(s)	(s)	7.8	2.6	(s)	0.2	0.2	3.5	6.4	0.0	7.4	21.7	17.3	39.0
1986	0.0	(s)	(s)	6.9	4.7	(s)	0.2	0.2	7.2	12.2	0.0	7.7	26.9	17.8	44.7
1987	0.0	(s)	(s)	9.7	5.2	(s)	0.2	0.2	3.2	8.8	0.0	8.2	26.7	18.7	45.4
1988	0.0	(s)	(s)	8.6	4.7	(s)	0.2	0.2	3.9	9.0	0.0	8.7	26.2	19.6	45.8
1989	0.0	(s)	(s)	9.0	4.5	(s)	0.2	0.2	2.9	7.8	0.0	9.0	25.8	R 20.2	R 46.0
1990	0.0	0.1	0.1	8.3	3.9	(s)	0.2	0.2	3.8	8.1	e NA	9.2	25.6	R 20.1	45.7
1991	0.0	(s)	(s)	8.5	4.5	(s)	0.2	0.2	3.7	8.6	NA	9.1	26.2	19.8	46.1
1992	0.0	(s)	(s)	9.2	3.5	(s)	0.2	0.2	3.3	7.2	NA	9.1	25.6	R 19.5	45.0
1993	0.0	(s)	(s)	9.5	3.7	(s)	0.2	0.1	4.0	8.0	0.4	9.3	R 27.2	19.6	R 46.8
1994	0.0	(s)	(s)	12.4	4.7	(s)	0.2	0.1	4.0	9.0	0.5	9.3	R 31.2	19.5	R 50.7
1995	0.0	(s)	(s)	12.4	4.2	0.2	0.2	0.1	3.2	7.8	0.4	9.5	R 30.1	19.8	R 49.9
1996	0.0	(s)	(s)	13.2	4.8	(s)	0.2	0.1	4.3	9.3	0.5	9.5	32.5	19.7	52.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 254. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Rhode Island**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	4	3	735	367	99	31	52	6	4,051	221	5,561	1	0	0	916	-	2,277	-
1965	4	4	907	431	120	61	85	5	2,135	337	4,082	(s)	0	0	1,274	-	3,042	-
1970	2	6	937	672	89	162	49	3	3,246	313	5,470	0	0	0	1,253	-	3,036	-
1975	2	6	1,330	440	40	297	40	3	1,916	149	4,215	0	0	0	1,191	-	2,874	-
1980	4	5	1,041	415	30	149	62	2	654	539	2,892	0	0	0	1,399	-	3,402	-
1981	2	5	996	321	6	126	59	2	738	182	2,430	0	0	0	1,342	-	3,198	-
1982	0	5	1,203	323	0	168	54	2	620	138	2,508	0	0	0	1,185	-	2,845	-
1983	0	5	1,212	364	(s)	146	57	2	472	115	2,367	0	0	0	1,266	-	3,034	-
1984	2	5	1,336	374	(s)	91	60	10	644	130	2,645	0	0	0	1,342	-	3,124	-
1985	4	5	2,974	247	(s)	150	56	26	973	127	4,555	0	0	0	1,300	-	3,054	-
1986	23	3	1,479	287	2	266	55	31	1,165	71	3,356	0	0	0	1,326	-	3,051	-
1987	1	4	1,773	543	3	303	62	28	837	79	3,627	0	0	0	1,360	-	3,108	-
1988	172	4	1,741	271	17	234	60	R 33	633	62	3,051	0	0	0	1,361	-	3,077	-
1989	24	5	1,605	312	1	163	62	35	497	59	2,733	0	0	0	1,360	-	R 3,054	-
1990	(s)	4	1,634	235	14	156	63	R 35	459	58	2,654	f NA	f NA	f NA	1,354	-	R 2,962	-
1991	0	27	461	229	15	122	57	26	379	13	1,302	NA	NA	NA	1,363	-	R 2,967	-
1992	0	48	1,502	282	11	128	58	26	460	14	2,480	NA	NA	NA	1,359	-	R 2,903	-
1993	0	46	819	289	8	129	59	49	601	15	1,968	NA	NA	NA	1,419	-	R 2,997	-
1994	0	41	1,256	306	7	118	61	49	471	15	2,283	NA	NA	NA	1,378	-	R 2,876	-
1995	0	35	990	271	7	119	60	54	378	15	1,895	NA	NA	NA	1,374	-	2,862	-
1996	0	26	337	298	3	119	59	47	320	18	1,201	NA	NA	NA	1,351	-	2,812	-

**Trillion Btu**

1960	0.1	3.0	4.9	2.1	0.6	0.1	0.3	(s)	25.5	1.3	34.8	(s)	0.0	0.0	3.1	41.0	7.8	48.8
1965	0.1	4.4	6.0	2.5	0.7	0.2	0.5	(s)	13.4	1.9	25.3	(s)	0.0	0.0	4.3	34.2	10.4	44.6
1970	(s)	5.9	6.2	3.9	0.5	0.6	0.3	(s)	20.4	1.8	33.7	0.0	0.0	0.0	4.3	43.9	10.4	54.3
1975	0.1	5.9	8.8	2.6	0.2	1.1	0.2	(s)	12.0	0.8	25.9	0.0	0.0	0.0	4.1	35.9	9.8	45.7
1980	0.1	5.2	6.9	2.4	0.2	0.5	0.4	(s)	4.1	3.0	17.5	0.0	0.0	0.0	4.8	27.6	11.6	39.2
1981	(s)	5.3	6.6	1.9	(s)	0.5	0.4	(s)	4.6	1.0	15.0	0.0	0.0	0.0	4.6	24.9	10.9	35.8
1982	0.0	5.1	8.0	1.9	0.0	0.6	0.3	(s)	3.9	0.8	15.5	0.0	0.0	0.0	4.0	24.6	9.7	34.3
1983	0.0	5.3	8.0	2.1	(s)	0.5	0.3	(s)	3.0	0.6	14.6	0.0	0.0	0.0	4.3	24.2	10.4	34.6
1984	(s)	5.6	8.9	2.2	(s)	0.3	0.4	0.1	4.0	0.7	16.5	0.0	0.0	0.0	4.6	26.7	10.7	37.4
1985	0.1	4.8	19.7	1.4	(s)	0.5	0.3	0.1	6.1	0.7	29.0	0.0	0.0	0.0	4.4	38.3	10.4	48.7
1986	0.6	3.6	9.8	1.7	(s)	1.0	0.3	0.2	7.3	0.4	20.7	0.0	0.0	0.0	4.5	29.3	10.4	39.7
1987	(s)	4.5	11.8	3.2	(s)	1.1	0.4	0.1	5.3	0.4	22.2	0.0	0.0	0.0	4.6	31.4	10.6	42.0
1988	4.3	4.6	11.6	1.6	0.1	0.9	0.4	0.2	4.0	0.3	18.9	0.0	0.0	0.0	4.6	32.5	10.5	42.9
1989	0.6	4.7	10.6	1.8	(s)	0.6	0.4	0.2	3.1	0.3	17.1	0.0	0.0	0.0	4.6	27.0	10.4	37.5
1990	(s)	4.5	10.8	1.4	0.1	0.6	0.4	0.2	2.9	0.3	16.6	f 0.0	f 1.4	f 0.0	4.6	f 27.2	10.1	f 37.3
1991	0.0	27.6	3.1	1.3	0.1	0.4	0.3	0.1	2.4	0.1	7.9	0.0	1.8	0.0	4.7	41.9	10.1	52.0
1992	0.0	48.8	10.0	1.6	0.1	0.5	0.4	0.1	2.9	0.1	15.6	0.1	1.7	0.0	4.6	70.8	9.9	80.7
1993	0.0	47.4	5.4	1.7	(s)	0.5	0.4	0.3	3.8	0.1	12.1	0.1	1.9	0.0	4.8	66.3	10.2	76.5
1994	0.0	42.1	8.3	1.8	(s)	0.4	0.4	0.3	3.0	0.1	14.3	0.1	R 2.9	0.0	4.7	R 64.1	9.8	R 73.9
1995	0.0	36.0	6.6	1.6	(s)	0.4	0.4	0.3	2.4	0.1	11.7	0.1	R 2.9	0.0	4.7	R 55.4	9.8	R 65.2
1996	0.0	27.7	2.2	1.7	(s)	0.4	0.4	0.2	2.0	0.1	7.1	0.1	3.2	0.0	4.6	42.8	9.6	52.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 255. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Rhode Island**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	0	(s)	19	838	38	1	103	5,943	3,826	10,768	0	0	-	0	-
1965	0	(s)	63	393	49	4	69	6,455	2,637	9,669	0	0	-	0	-
1970	0	(s)	148	604	137	28	77	7,970	2,519	11,482	0	0	-	0	-
1975	(s)	(s)	285	788	271	27	57	8,929	329	10,685	0	0	-	0	-
1980	0	(s)	269	675	348	9	70	8,365	58	9,794	0	0	-	0	-
1981	0	(s)	23	695	303	9	67	8,465	49	9,611	0	0	-	0	-
1982	0	(s)	28	733	281	18	61	8,357	18	9,496	0	0	-	0	-
1983	0	(s)	23	853	329	16	64	8,256	0	9,542	0	0	-	0	-
1984	0	(s)	21	942	571	31	68	8,523	0	10,157	0	0	-	0	-
1985	0	(s)	30	326	498	22	64	R 8,606	0	R 9,545	0	0	-	0	-
1986	0	(s)	35	1,182	387	18	62	8,872	6	10,563	0	0	-	0	-
1987	0	(s)	42	1,399	528	8	70	R 9,076	168	R 11,291	0	0	-	0	-
1988	0	(s)	46	1,213	636	21	68	R 9,208	293	R 11,484	0	0	-	0	-
1989	0	(s)	46	1,598	724	19	70	R 8,801	68	R 11,325	0	0	-	0	-
1990	0	(s)	42	1,156	776	19	72	R 8,692	35	R 10,791	e 0	0	-	0	-
1991	0	(s)	30	1,353	656	15	64	R 8,618	9	R 10,745	0	0	-	0	-
1992	0	(s)	30	1,136	556	14	65	R 8,697	59	R 10,558	0	0	-	0	-
1993	0	(s)	8	1,244	527	9	66	R 8,824	22	R 10,701	0	0	-	0	-
1994	0	(s)	10	1,282	529	16	69	R 8,572	10	R 10,489	0	0	-	0	-
1995	0	1	22	1,368	500	8	68	8,864	2	10,832	0	0	-	0	-
1996	0	1	37	1,329	540	7	66	8,950	2	10,932	0	0	-	0	-

**Trillion Btu**

1960	0.0	0.2	0.1	4.9	0.2	(s)	0.6	31.2	24.1	61.1	0.0	0.0	61.3	0.0	61.3
1965	0.0	0.1	0.3	2.3	0.3	(s)	0.4	33.9	16.6	53.8	0.0	0.0	53.9	0.0	53.9
1970	0.0	(s)	0.7	3.5	0.8	0.1	0.5	41.9	15.8	63.3	0.0	0.0	63.3	0.0	63.3
1975	(s)	(s)	1.4	4.6	1.5	0.1	0.3	46.9	2.1	57.0	0.0	0.0	57.0	0.0	57.0
1980	0.0	0.2	1.4	3.9	2.0	(s)	0.4	43.9	0.4	52.0	0.0	0.0	52.2	0.0	52.2
1981	0.0	0.1	0.1	4.1	1.7	(s)	0.4	44.5	0.3	51.1	0.0	0.0	51.2	0.0	51.2
1982	0.0	0.2	0.1	4.3	1.6	0.1	0.4	43.9	0.1	50.4	0.0	0.0	50.6	0.0	50.6
1983	0.0	0.2	0.1	5.0	1.9	0.1	0.4	43.4	0.0	50.8	0.0	0.0	50.9	0.0	50.9
1984	0.0	0.1	0.1	5.5	3.2	0.1	0.4	44.8	0.0	54.1	0.0	0.0	54.3	0.0	54.3
1985	0.0	0.1	0.2	1.9	2.8	0.1	0.4	45.2	0.0	50.5	0.0	0.0	50.7	0.0	50.7
1986	0.0	0.1	0.2	6.9	2.2	0.1	0.4	46.6	(s)	56.3	0.0	0.0	56.4	0.0	56.4
1987	0.0	0.1	0.2	8.1	3.0	(s)	0.4	R 47.7	1.1	R 60.5	0.0	0.0	R 60.6	0.0	R 60.6
1988	0.0	0.1	0.2	7.1	3.6	0.1	0.4	48.4	1.8	R 61.6	0.0	0.0	R 61.7	0.0	R 61.7
1989	0.0	0.1	0.2	9.3	4.1	0.1	0.4	46.2	0.4	60.8	0.0	0.0	60.9	0.0	60.9
1990	0.0	0.1	0.2	6.7	4.4	0.1	0.4	R 45.7	0.2	R 57.7	e 0.0	0.0	R e 57.8	0.0	R e 57.8
1991	0.0	0.2	0.2	7.9	3.7	0.1	0.4	45.3	0.1	57.5	0.0	0.0	57.7	0.0	57.7
1992	0.0	0.4	0.2	6.6	3.1	0.1	0.4	45.7	0.4	56.4	0.0	0.0	56.8	0.0	56.8
1993	0.0	0.2	(s)	7.2	3.0	(s)	0.4	R 46.4	0.1	57.2	0.0	0.0	57.4	0.0	57.4
1994	0.0	0.4	0.1	7.5	3.0	0.1	0.4	45.0	0.1	56.1	0.0	0.0	56.5	0.0	56.5
1995	0.0	0.6	0.1	8.0	2.8	(s)	0.4	46.6	(s)	57.9	0.0	0.0	58.6	0.0	58.6
1996	0.0	0.7	0.2	7.7	3.1	(s)	0.4	47.0	(s)	58.4	0.0	0.0	59.2	0.0	59.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 256. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Rhode Island**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	574	0	574	(s)	714	13	0	727	0	8	0	0	0	-
1965	403	0	403	(s)	870	16	0	886	0	1	0	0	0	-
1970	0	0	0	2	2,990	56	0	3,047	0	3	0	0	0	-
1975	0	0	0	(s)	1,542	26	0	1,568	0	3	0	0	0	-
1980	0	0	0	2	1,634	28	0	1,662	0	1	0	0	0	-
1981	0	0	0	3	1,228	19	0	1,246	0	(s)	0	0	0	-
1982	0	0	0	1	786	18	0	804	0	3	0	0	0	-
1983	0	0	0	3	694	19	0	713	0	3	0	0	0	-
1984	0	0	0	4	637	26	0	663	0	2	0	0	0	-
1985	0	0	0	3	708	20	0	728	0	421	0	0	0	-
1986	0	0	0	0	1,459	28	0	1,487	0	6	0	0	0	-
1987	0	0	0	5	805	27	0	832	0	9	0	0	0	-
1988	0	0	0	(s)	1,496	42	0	1,538	0	678	0	0	0	-
1989	0	0	0	2	679	35	0	713	0	96	0	0	0	-
1990	0	0	0	5	340	19	0	358	0	142	0	0	0	-
1991	0	0	0	2	123	19	0	142	0	142	0	0	0	-
1992	0	0	0	(s)	162	17	0	178	0	732	0	0	0	-
1993	0	0	0	(s)	55	18	0	72	0	828	0	0	0	-
1994	0	0	0	1	65	16	0	82	0	335	0	0	0	-
1995	0	0	0	5	63	20	0	83	0	1,006	0	0	0	-
1996	0	0	0	25	0	75	0	75	0	894	0	0	0	-

**Trillion Btu**

1960	16.1	0.0	16.1	0.4	4.5	0.1	0.0	4.6	0.0	0.1	0.0	0.0	0.0	21.2
1965	11.1	0.0	11.1	0.5	5.5	0.1	0.0	5.6	0.0	(s)	0.0	0.0	0.0	17.1
1970	0.0	0.0	0.0	2.4	18.8	0.3	0.0	19.1	0.0	(s)	0.0	0.0	0.0	21.5
1975	0.0	0.0	0.0	(s)	9.7	0.2	0.0	9.8	0.0	(s)	0.0	0.0	0.0	9.9
1980	0.0	0.0	0.0	1.7	10.3	0.2	0.0	10.4	0.0	(s)	0.0	0.0	0.0	12.2
1981	0.0	0.0	0.0	2.7	7.7	0.1	0.0	7.8	0.0	(s)	0.0	0.0	0.0	10.5
1982	0.0	0.0	0.0	0.8	4.9	0.1	0.0	5.0	0.0	(s)	0.0	0.0	0.0	5.9
1983	0.0	0.0	0.0	3.2	4.4	0.1	0.0	4.5	0.0	(s)	0.0	0.0	0.0	7.7
1984	0.0	0.0	0.0	3.8	4.0	0.2	0.0	4.2	0.0	(s)	0.0	0.0	0.0	7.9
1985	0.0	0.0	0.0	2.6	4.4	0.1	0.0	4.6	0.0	4.4	0.0	0.0	0.0	11.6
1986	0.0	0.0	0.0	0.0	9.2	0.2	0.0	9.3	0.0	0.1	0.0	0.0	0.0	9.4
1987	0.0	0.0	0.0	5.5	5.1	0.2	0.0	5.2	0.0	0.1	0.0	0.0	0.0	10.8
1988	0.0	0.0	0.0	0.2	9.4	0.2	0.0	9.7	0.0	7.0	0.0	0.0	0.0	16.8
1989	0.0	0.0	0.0	2.2	4.3	0.2	0.0	4.5	0.0	1.0	0.0	0.0	0.0	7.7
1990	0.0	0.0	0.0	5.7	2.1	0.1	0.0	2.2	0.0	1.5	0.0	0.0	0.0	9.8
1991	0.0	0.0	0.0	1.7	0.8	0.1	0.0	0.9	0.0	1.5	0.0	0.0	0.0	4.5
1992	0.0	0.0	0.0	0.5	1.0	0.1	0.0	1.1	0.0	R 7.6	0.0	0.0	0.0	R 11.5
1993	0.0	0.0	0.0	0.4	0.3	0.1	0.0	0.4	0.0	8.5	0.0	0.0	0.0	11.9
1994	0.0	0.0	0.0	0.6	0.4	0.1	0.0	0.5	0.0	R 3.5	0.0	0.0	0.0	R 6.8
1995	0.0	0.0	0.0	5.1	0.4	0.1	0.0	0.5	0.0	10.4	0.0	0.0	0.0	21.7
1996	0.0	0.0	0.0	25.8	0.0	0.4	0.0	0.4	0.0	9.2	0.0	0.0	0.0	38.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 257. Energy Consumption Estimates by Source, Selected Years 1960-1996, South Carolina**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	3,718	59	1,636	215	5,234	3,131	4,488	1,376	375	18,094	4,732	380	39,661	0	3,611	0	0	9,266	-	
1965	4,760	87	1,721	354	4,849	2,958	3,297	2,097	351	21,430	3,916	372	41,344	75	3,517	0	0	11,622	-	
1970	5,817	160	2,220	228	9,423	3,170	2,377	2,927	386	28,756	5,335	512	55,335	7	2,293	0	0	22,290	-	
1975	5,842	123	2,440	142	8,376	2,692	1,024	3,204	461	35,429	7,666	982	62,415	19,458	4,413	0	0	-18,555	-	
1980	9,929	142	1,535	149	10,660	3,062	1,352	3,178	543	35,517	7,205	3,883	67,083	17,404	3,025	0	0	-974	-	
1981	10,858	142	1,455	134	9,822	2,865	679	2,826	521	35,600	5,349	5,048	64,299	17,327	1,257	0	0	5,984	-	
1982	10,989	98	1,203	119	9,485	2,745	605	2,606	475	35,446	3,133	3,877	59,694	13,156	2,429	0	0	23,723	-	
1983	9,362	102	1,901	133	10,553	2,529	635	2,621	497	35,896	3,933	2,960	61,659	25,581	3,098	0	0	-1,172	-	
1984	9,768	108	1,242	122	11,510	3,080	427	2,520	530	37,133	5,013	3,539	65,117	23,235	3,177	0	0	12,080	-	
1985	10,479	97	1,367	136	11,731	3,184	1,484	3,161	494	R 37,719	2,921	3,553	R 65,750	31,826	1,835	0	0	-9,917	-	
1986	10,461	99	2,068	156	11,696	3,168	1,181	2,880	483	R 39,283	2,401	4,055	R 67,371	35,625	1,266	0	0	-11,680	-	
1987	11,701	106	2,425	119	11,850	3,193	1,359	3,620	546	R 38,522	2,458	4,622	R 68,715	39,290	2,209	0	0	-27,206	-	
1988	11,937	112	3,297	127	12,606	3,229	1,484	3,536	527	R 42,828	3,274	4,720	R 75,627	40,746	680	0	0	-27,480	-	
1989	11,981	117	2,313	120	12,499	3,117	1,426	3,672	541	R 42,171	2,743	4,593	R 73,194	40,780	2,065	0	0	-30,862	-	
1990	11,447	130	1,983	101	14,538	2,939	659	2,914	556	R 43,264	2,450	5,444	R 74,848	42,881	i NA	i NA	i NA	-35,205	-	
1991	11,451	134	1,941	180	15,289	3,442	851	3,606	498	R 42,561	2,433	7,028	R 77,830	43,108	NA	NA	NA	-33,987	-	
1992	11,285	138	2,067	226	13,737	2,586	524	3,597	507	R 43,441	2,394	7,908	R 76,988	45,537	NA	NA	NA	-36,590	-	
1993	12,914	142	2,358	169	13,652	2,024	760	3,660	517	R 45,081	3,812	7,262	R 79,292	46,189	NA	NA	NA	-40,092	-	
1994	12,993	145	1,993	114	15,516	1,451	474	3,871	540	R 45,249	2,607	7,551	R 79,368	44,466	NA	NA	NA	-36,004	-	
1995	12,279	152	2,641	123	14,902	1,027	574	3,826	531	46,973	2,689	7,355	80,641	49,173	NA	NA	NA	-39,572	-	
1996	13,852	150	2,407	59	15,600	1,292	673	3,586	515	47,427	3,033	7,702	82,295	43,571	NA	NA	NA	-25,073	-	
Trillion Btu																				
1960	96.4	60.6	10.9	1.1	30.5	16.8	25.4	5.5	2.3	95.0	29.7	2.2	219.5	0.0	38.8	0.0	0.0	31.6	446.9	
1965	121.5	90.5	11.4	1.8	28.2	15.8	18.7	8.4	2.1	112.6	24.6	2.1	225.8	0.9	36.8	0.0	0.0	39.7	515.1	
1970	140.1	164.3	14.7	1.2	54.9	17.1	13.5	11.1	2.3	151.1	33.5	2.8	302.2	0.1	24.1	0.0	0.0	76.1	706.8	
1975	140.2	125.9	16.2	0.7	48.8	14.5	5.8	11.9	2.8	186.1	48.2	5.5	340.5	214.3	45.9	0.0	0.0	-63.3	803.5	
1980	245.8	146.9	10.2	0.8	62.1	16.6	7.7	11.7	3.3	186.6	45.3	21.6	365.8	189.8	31.4	0.0	0.0	-3.3	976.4	
1981	266.5	145.2	9.7	0.7	57.2	15.5	3.8	10.3	3.2	187.0	33.6	28.3	349.3	191.1	13.1	0.0	0.0	20.4	985.7	
1982	271.5	101.0	8.0	0.6	55.3	14.8	3.4	9.4	2.9	186.2	19.7	21.7	322.0	145.7	25.4	0.0	0.0	80.9	946.6	
1983	233.9	104.4	12.6	0.7	61.5	13.7	3.6	9.5	3.0	188.6	24.7	16.7	334.6	279.0	32.6	0.0	0.0	-4.0	980.3	
1984	244.0	111.2	8.2	0.6	67.0	16.6	2.4	9.1	3.2	195.1	31.5	19.6	353.4	251.9	33.2	0.0	0.0	41.2	1,035.0	
1985	262.7	100.2	9.1	0.7	68.3	17.2	8.4	11.4	3.0	198.1	18.4	19.8	354.4	344.1	19.2	0.0	0.0	-33.8	1,046.7	
1986	263.9	101.5	13.7	0.8	68.1	17.2	6.7	10.5	2.9	206.4	15.1	22.6	364.0	384.7	13.2	0.0	0.0	-39.9	1,087.6	
1987	295.3	108.6	16.1	0.6	69.0	17.3	7.7	13.2	3.3	R 202.4	15.5	25.9	R 371.1	423.4	23.0	0.0	0.0	-92.8	R 1,128.6	
1988	301.8	115.3	21.9	0.6	73.4	17.5	8.4	12.9	3.2	R 225.0	20.6	26.5	R 410.1	437.7	7.0	0.0	0.0	-93.8	R 1,178.2	
1989	301.5	119.9	15.3	0.6	72.8	16.9	8.1	13.5	3.3	R 221.5	17.2	25.8	R 395.1	437.3	R 21.5	0.0	0.0	-105.3	R 1,170.0	
1990	289.3	134.1	13.2	0.5	84.7	16.0	3.7	10.6	3.4	R 227.3	15.4	30.7	R 405.5	458.0	R i 28.8	i 68.0	i (s)	R i 1,263.5	R i 1,263.5	
1991	290.9	137.4	12.9	0.9	89.1	18.7	4.8	13.0	3.0	R 223.6	15.3	39.1	R 420.5	463.0	R 26.5	67.9	(s)	R -116.0	R 1,290.2	
1992	288.3	141.8	13.7	1.1	80.0	14.1	3.0	13.0	3.1	R 228.2	15.1	44.1	R 415.4	486.2	R 28.7	72.6	(s)	R -124.8	R 1,308.2	
1993	329.5	145.6	15.6	0.9	79.5	11.1	4.3	13.2	3.1	R 236.8	24.0	40.2	R 428.7	493.4	R 28.0	R 73.0	(s)	R -136.8	R 1,361.4	
1994	330.7	149.0	13.2	0.6	90.4	8.1	2.7	14.1	3.3	R 237.7	16.4	41.8	R 428.2	474.7	R 24.9	R 71.4	(s)	R -122.8	R 1,356.2	
1995	314.5	156.0	17.5	0.6	86.8	5.8	3.3	13.9	3.2	246.7	16.9	40.8	435.5	524.1	28.8	R 71.7	(s)	R -135.0	R 1,395.7	
1996	352.5	154.1	16.0	0.3	90.9	7.3	3.8	13.0	3.1	249.1	19.1	42.5	445.1	462.9	23.6	74.2	(s)	-85.6	1,426.8	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 258. Residential Energy Consumption Estimates, Selected Years 1960-1996, South Carolina**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	117	0	117	7	1,595	3,475	926	5,996	0	0	3,272	—	8,139	—
1965	80	0	80	12	1,178	2,606	1,419	5,203	0	0	4,371	—	10,437	—
1970	86	0	86	19	2,400	2,011	1,778	6,188	0	0	7,347	—	17,805	—
1975	84	0	84	18	1,695	858	1,750	4,304	0	0	9,837	—	23,728	—
1980	69	0	69	19	1,580	1,200	1,510	4,290	0	0	12,580	—	30,590	—
1981	37	0	37	19	1,429	553	1,561	3,542	0	0	13,067	—	31,143	—
1982	41	0	41	18	1,133	526	1,305	2,963	0	0	13,493	—	32,408	—
1983	60	0	60	19	1,174	506	1,551	3,231	0	0	13,819	—	33,106	—
1984	40	0	40	19	1,204	366	1,576	3,146	0	0	14,568	—	33,909	—
1985	23	1	23	16	1,153	1,211	1,859	4,223	0	0	14,661	—	34,445	—
1986	77	0	77	17	1,175	992	1,678	3,845	0	0	16,122	—	37,085	—
1987	42	0	42	20	1,400	1,154	1,969	4,523	0	0	16,913	—	38,644	—
1988	44	(s)	44	21	1,120	1,280	1,970	4,371	0	0	17,172	—	38,821	—
1989	6	(s)	6	20	1,282	1,186	2,089	4,556	0	0	17,464	—	39,227	—
1990	2	(s)	2	18	1,010	550	1,682	3,241	<sup>e</sup> 390	<sup>e</sup> 4	18,258	—	39,932	—
1991	8	(s)	8	20	998	731	1,970	3,698	411	4	18,707	—	40,716	—
1992	11	(s)	11	22	690	441	2,117	3,248	432	4	18,940	—	40,454	—
1993	34	7	41	24	833	645	2,141	3,619	470	4	20,687	—	43,707	—
1994	19	4	23	23	668	372	2,185	3,224	461	4	19,903	—	41,528	—
1995	5	2	7	25	670	470	2,106	3,246	512	4	21,392	—	44,561	—
1996	7	0	7	29	722	561	1,860	3,144	511	4	22,514	—	46,858	—
<b>Trillion Btu</b>														
1960	2.9	0.0	2.9	7.1	9.3	19.7	3.7	32.7	0.0	0.0	11.2	53.9	27.8	81.6
1965	2.0	0.0	2.0	12.4	6.9	14.8	5.7	27.3	0.0	0.0	14.9	56.6	35.6	92.3
1970	2.0	0.0	2.0	19.5	14.0	11.4	6.7	32.1	0.0	0.0	25.1	78.7	60.7	139.4
1975	2.0	0.0	2.0	18.6	9.9	4.9	6.5	21.2	0.0	0.0	33.6	75.4	81.0	156.4
1980	1.7	0.0	1.7	19.5	9.2	6.8	5.5	21.6	0.0	0.0	42.9	85.7	104.4	190.0
1981	0.9	0.0	0.9	19.4	8.3	3.1	5.7	17.1	0.0	0.0	44.6	82.0	106.3	188.3
1982	1.0	0.0	1.0	18.1	6.6	3.0	4.7	14.3	0.0	0.0	46.0	79.4	110.6	190.0
1983	1.5	0.0	1.5	19.2	6.8	2.9	5.6	15.3	0.0	0.0	47.1	83.2	113.0	196.2
1984	1.0	0.0	1.0	19.7	7.0	2.1	5.7	14.8	0.0	0.0	49.7	85.2	115.7	200.9
1985	0.6	(s)	0.6	16.9	6.7	6.9	6.7	20.3	0.0	0.0	50.0	87.8	117.5	205.3
1986	1.9	0.0	1.9	18.0	6.8	5.6	6.1	18.6	0.0	0.0	55.0	93.5	126.5	220.0
1987	1.1	0.0	1.1	20.8	8.2	6.5	7.2	21.9	0.0	0.0	57.7	101.4	131.9	233.3
1988	1.1	(s)	1.1	21.3	6.5	7.3	7.2	21.0	0.0	0.0	58.6	102.0	132.5	234.5
1989	0.1	(s)	0.2	21.0	7.5	6.7	7.7	21.9	0.0	0.0	59.6	102.6	133.8	236.5
1990	0.1	(s)	0.1	18.9	5.9	3.1	6.1	15.1	<sup>e</sup> 7.8	<sup>e</sup> (s)	62.3	<sup>e</sup> 104.2	136.2	<sup>R e</sup> 240.4
1991	0.2	(s)	0.2	20.1	5.8	4.1	7.1	17.1	8.2	(s)	63.8	109.5	138.9	<sup>R</sup> 248.4
1992	0.3	(s)	0.3	23.0	4.0	2.5	7.7	14.2	8.6	(s)	64.6	110.7	138.0	<sup>R</sup> 248.8
1993	0.8	0.2	1.0	25.1	4.9	3.7	7.7	16.2	9.4	(s)	70.6	122.3	149.1	<sup>R</sup> 271.4
1994	0.5	0.1	0.6	24.2	3.9	2.1	7.9	13.9	9.2	(s)	67.9	115.9	141.7	<sup>R</sup> 257.6
1995	0.1	(s)	0.2	25.8	3.9	2.7	7.6	14.2	10.2	(s)	73.0	123.5	152.0	275.5
1996	0.2	0.0	0.2	30.3	4.2	3.2	6.7	14.1	10.2	(s)	76.8	131.6	159.9	291.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
R=Revised data.  
— =Not applicable.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 259. Commercial Energy Consumption Estimates, Selected Years 1960-1996, South Carolina**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	217	0	217	5	474	93	163	275	176	1,182	0	1,957	-	4,867	-
1965	148	0	148	7	350	70	250	301	121	1,092	0	2,531	-	6,043	-
1970	160	0	160	14	714	54	314	204	80	1,366	0	4,237	-	10,267	-
1975	157	0	157	17	504	23	309	225	160	1,221	0	7,121	-	17,177	-
1980	128	0	128	23	481	25	266	240	35	1,047	0	8,705	-	21,168	-
1981	68	0	68	19	433	29	275	256	101	1,094	0	8,404	-	20,029	-
1982	76	0	76	16	404	25	230	253	27	939	0	9,156	-	21,992	-
1983	112	0	112	17	832	24	274	304	75	1,509	0	9,294	-	22,266	-
1984	75	0	75	17	853	12	278	210	103	1,456	0	9,205	-	21,424	-
1985	42	(s)	42	15	841	48	328	230	80	1,527	0	9,778	-	22,973	-
1986	142	0	142	16	702	55	296	240	33	1,326	0	10,506	-	24,166	-
1987	78	0	78	17	868	53	347	R 249	34	R 1,551	0	11,018	-	25,174	-
1988	82	(s)	82	17	1,054	26	348	235	47	1,710	0	11,524	-	26,054	-
1989	11	(s)	11	17	925	71	369	R 206	37	R 1,608	0	12,092	-	R 27,161	-
1990	4	(s)	4	15	607	12	297	R 256	17	R 1,189	e NA	12,693	-	R 27,761	-
1991	14	(s)	14	16	523	12	348	119	25	1,026	NA	13,002	-	R 28,299	-
1992	20	(s)	20	17	671	14	374	103	53	1,214	NA	13,156	-	R 28,101	-
1993	63	5	68	17	849	20	378	31	28	1,306	24	13,979	-	R 29,535	-
1994	35	3	38	18	651	26	386	31	66	1,161	18	14,195	-	R 29,617	-
1995	9	1	10	19	970	26	372	32	39	1,438	28	14,863	-	R 30,961	-
1996	12	0	12	20	978	23	328	32	38	1,399	29	15,388	-	32,027	-

  

Trillion Btu															
1960	5.4	0.0	5.4	4.8	2.8	0.5	0.7	1.4	1.1	6.5	0.0	6.7	23.4	16.6	40.0
1965	3.7	0.0	3.7	7.3	2.0	0.4	1.0	1.6	0.8	5.8	0.0	8.6	25.4	20.6	46.0
1970	3.8	0.0	3.8	14.2	4.2	0.3	1.2	1.1	0.5	7.2	0.0	14.5	39.7	35.0	74.7
1975	3.7	0.0	3.7	17.6	2.9	0.1	1.1	1.2	1.0	6.4	0.0	24.3	52.0	58.6	110.6
1980	3.1	0.0	3.1	23.6	2.8	0.1	1.0	1.3	0.2	5.4	0.0	29.7	61.9	72.2	134.1
1981	1.6	0.0	1.6	19.9	2.5	0.2	1.0	1.3	0.6	5.7	0.0	28.7	55.9	68.3	124.2
1982	1.9	0.0	1.9	16.0	2.4	0.1	0.8	1.3	0.2	4.8	0.0	31.2	53.9	75.0	129.0
1983	2.8	0.0	2.8	17.0	4.8	0.1	1.0	1.6	0.5	8.0	0.0	31.7	59.5	76.0	135.5
1984	1.8	0.0	1.8	17.1	5.0	0.1	1.0	1.1	0.6	7.8	0.0	31.4	58.1	73.1	131.2
1985	1.0	(s)	1.1	15.7	4.9	0.3	1.2	1.2	0.5	8.1	0.0	33.4	58.2	78.4	136.6
1986	3.6	0.0	3.6	16.4	4.1	0.3	1.1	1.3	0.2	6.9	0.0	35.8	62.7	82.5	145.2
1987	2.0	0.0	2.0	17.7	5.1	0.3	1.3	1.3	0.2	8.1	0.0	37.6	65.4	85.9	151.3
1988	2.0	(s)	2.1	17.9	6.1	0.1	1.3	1.2	0.3	9.1	0.0	39.3	68.4	88.9	157.3
1989	0.3	(s)	0.3	17.0	5.4	0.4	1.4	1.1	0.2	8.5	0.0	41.3	67.0	R 92.7	R 159.6
1990	0.1	(s)	0.1	15.8	3.5	0.1	1.1	1.3	0.1	6.1	e NA	43.3	65.4	R 94.7	R 160.1
1991	0.4	(s)	0.4	16.2	3.0	0.1	1.3	0.6	0.2	5.1	NA	44.4	66.1	R 96.6	R 162.7
1992	0.5	(s)	0.5	17.1	3.9	0.1	1.4	0.5	0.3	6.2	NA	44.9	68.7	R 95.9	R 164.6
1993	1.6	0.1	1.7	17.5	4.9	0.1	1.4	0.2	0.2	6.8	0.5	47.7	R 74.1	R 100.8	R 174.9
1994	0.9	0.1	0.9	18.4	3.8	0.1	1.4	0.2	0.4	5.9	0.4	48.4	R 74.1	R 101.1	R 175.2
1995	0.2	(s)	0.3	19.4	5.7	0.1	1.3	0.2	0.2	7.6	0.6	50.7	R 78.5	105.6	R 184.1
1996	0.3	0.0	0.3	20.9	5.7	0.1	1.2	0.2	0.2	7.4	0.6	52.5	81.8	109.3	191.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 260. Industrial Energy Consumption Estimates, Selected Years 1960-1996, South Carolina**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	1,758	23	1,636	1,959	920	273	86	614	3,392	380	9,261	97	0	0	6,234	-	15,506	-
1965	1,835	47	1,721	1,748	621	415	108	517	2,438	372	7,941	79	0	0	7,450	-	17,789	-
1970	1,861	79	2,220	2,655	313	775	149	332	1,608	512	8,564	37	0	0	10,110	-	24,499	-
1975	1,200	70	2,440	2,040	143	1,066	248	209	2,687	982	9,813	48	0	0	12,766	-	30,793	-
1980	1,805	92	1,535	1,875	127	1,368	282	96	4,245	3,883	13,412	49	0	0	15,979	-	38,855	-
1981	2,074	95	1,455	1,798	97	919	271	73	2,580	5,048	12,241	49	0	0	18,016	-	42,938	-
1982	2,292	62	1,203	1,501	54	997	247	54	2,013	3,877	9,946	49	0	0	17,622	-	42,326	-
1983	2,200	63	1,901	1,472	106	702	259	28	2,915	2,960	10,342	49	0	0	18,658	-	44,702	-
1984	2,226	70	1,242	1,510	49	R 527	276	R 297	3,979	3,539	R 11,418	49	0	0	21,429	-	49,878	-
1985	2,525	63	1,367	1,699	225	834	257	R 702	2,233	3,553	10,870	49	0	0	21,829	-	51,286	-
1986	2,465	61	2,068	1,532	134	830	251	634	1,759	4,055	11,264	49	0	0	22,805	-	52,459	-
1987	2,562	65	2,425	1,395	152	1,234	284	R 666	1,835	4,622	R 12,613	49	0	0	24,036	-	54,921	-
1988	2,602	69	3,297	1,671	177	1,131	274	642	2,454	4,720	R 14,366	49	0	0	24,113	-	54,513	-
1989	2,491	75	2,313	1,907	170	1,126	281	R 733	2,000	4,593	13,123	49	0	0	24,301	-	R 54,585	-
1990	2,310	87	1,983	1,950	97	R 849	289	R 703	1,915	5,444	R 13,230	f NA	f NA	f NA	24,701	-	R 54,025	-
1991	2,212	86	1,941	2,102	109	1,194	259	672	1,606	7,028	14,910	NA	NA	NA	25,361	-	R 55,199	-
1992	2,177	94	2,067	1,779	69	1,020	264	716	1,793	7,908	15,616	NA	NA	NA	26,305	-	R 56,185	-
1993	2,395	96	2,358	1,564	94	1,058	269	387	3,089	7,262	R 16,081	NA	NA	NA	26,867	-	R 56,764	-
1994	2,334	98	1,993	1,339	76	1,159	281	414	2,456	7,551	R 15,269	NA	NA	NA	27,760	-	R 57,923	-
1995	2,188	98	2,641	1,843	77	1,272	276	426	2,143	7,355	16,033	NA	NA	NA	28,819	-	R 60,031	-
1996	2,000	95	2,407	2,155	88	1,353	268	452	2,284	7,702	16,708	NA	NA	NA	29,185	-	60,742	-

**Trillion Btu**

1960	44.7	23.3	10.9	11.4	5.2	1.1	0.5	3.2	21.3	2.2	55.9	1.0	0.0	0.0	21.3	146.2	52.9	199.1
1965	46.2	48.7	11.4	10.2	3.5	1.7	0.7	2.7	15.3	2.1	47.6	0.8	0.0	0.0	25.4	168.8	60.7	229.5
1970	44.2	80.9	14.7	15.5	1.8	2.9	0.9	1.7	10.1	2.8	50.5	0.4	0.0	0.0	34.5	210.5	83.6	294.0
1975	28.2	72.0	16.2	11.9	0.8	4.0	1.5	1.1	16.9	5.5	57.8	0.5	0.0	0.0	43.6	202.0	105.1	307.1
1980	44.0	95.1	10.2	10.9	0.7	5.0	1.7	0.5	26.7	21.6	77.4	0.5	0.0	0.0	54.5	271.6	132.6	404.1
1981	50.4	97.5	9.7	10.5	0.5	3.3	1.6	0.4	16.2	28.3	70.6	0.5	0.0	0.0	61.5	280.5	146.5	427.0
1982	56.1	63.4	8.0	8.7	0.3	3.6	1.5	0.3	12.7	21.7	56.8	0.5	0.0	0.0	60.1	237.0	144.4	381.4
1983	54.4	64.5	12.6	8.6	0.6	2.5	1.6	0.1	18.3	16.7	61.1	0.5	0.0	0.0	63.7	244.2	152.5	396.7
1984	55.1	71.3	8.2	8.8	0.3	1.9	1.7	1.6	25.0	19.6	67.1	0.5	0.0	0.0	73.1	267.1	170.2	437.3
1985	62.8	64.8	9.1	9.9	1.3	3.0	1.6	3.7	14.0	19.8	62.3	0.5	0.0	0.0	74.5	264.9	175.0	439.9
1986	61.5	63.3	13.7	8.9	0.8	3.0	1.5	3.3	11.1	22.6	65.0	0.5	0.0	0.0	77.8	268.1	179.0	447.1
1987	64.2	67.2	16.1	8.1	0.9	4.5	1.7	3.5	11.5	25.9	72.3	0.5	0.0	0.0	82.0	286.1	187.4	473.5
1988	65.2	71.0	21.9	9.7	1.0	4.1	1.7	3.4	15.4	26.5	83.8	0.5	0.0	0.0	82.3	302.7	186.0	488.7
1989	62.0	76.5	15.3	11.1	1.0	4.1	1.7	3.9	12.6	25.8	75.5	0.5	0.0	0.0	82.9	297.4	R 186.2	R 483.6
1990	58.0	89.3	13.2	11.4	0.5	3.1	1.8	3.7	12.0	30.7	76.3	f 0.4	f 60.2	f 0.0	84.3	f 368.5	R 184.3	R f 552.9
1991	55.8	88.1	12.9	12.2	0.6	4.3	1.6	3.5	10.1	39.1	84.4	0.4	59.7	0.0	86.5	374.9	R 188.3	R 563.3
1992	54.8	96.9	13.7	10.4	0.4	3.7	1.6	3.8	11.3	44.1	88.9	0.7	64.0	0.0	89.8	395.0	R 191.7	R 586.7
1993	60.3	98.3	15.6	9.1	0.5	3.8	1.6	2.0	19.4	40.2	92.4	0.6	R 63.1	0.0	91.7	406.4	R 193.7	R 600.1
1994	58.5	100.5	13.2	7.8	0.4	4.2	1.7	2.2	15.4	41.8	86.8	0.7	R 61.8	0.0	94.7	R 403.2	R 197.6	R 600.8
1995	55.1	101.0	17.5	10.7	0.4	4.6	1.7	2.2	13.5	40.8	91.5	0.7	R 61.0	0.0	98.3	R 407.6	R 204.8	R 612.4
1996	50.1	98.4	16.0	12.6	0.5	4.9	1.6	2.4	14.4	42.5	94.8	0.6	63.4	0.0	99.6	406.8	207.3	614.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 261. Transportation Energy Consumption Estimates, Selected Years 1960-1996, South Carolina**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	30	1	215	1,196	3,131	13	289	17,205	1,139	23,188	0	0	-	0	-
1965	6	2	354	1,556	2,958	12	243	20,612	1,313	27,048	0	0	-	0	-
1970	3	3	228	2,899	3,170	60	237	28,220	1,605	36,420	0	0	-	0	-
1975	(s)	3	142	4,019	2,692	79	213	34,995	419	42,560	0	0	-	0	-
1980	0	3	149	6,156	3,062	33	261	35,181	844	45,686	0	0	-	0	-
1981	0	3	134	5,661	2,865	70	250	35,272	1,066	45,318	0	0	-	0	-
1982	0	3	119	6,253	2,745	74	228	35,138	811	45,369	0	0	-	0	-
1983	0	3	133	6,943	2,529	94	239	35,564	935	46,437	0	0	-	0	-
1984	0	3	122	7,800	3,080	139	255	36,627	932	48,954	0	0	-	0	-
1985	0	2	136	7,855	3,184	140	237	36,787	606	48,945	0	0	-	0	-
1986	0	2	156	8,171	3,168	76	232	38,409	607	50,819	0	0	-	0	-
1987	0	2	119	8,073	3,193	70	262	37,607	588	49,913	0	0	-	0	-
1988	0	2	127	8,567	3,229	86	253	41,952	772	54,985	0	0	-	0	-
1989	0	3	120	8,132	3,117	89	260	41,232	672	53,622	0	0	-	0	-
1990	0	3	101	10,855	2,939	87	267	42,305	509	57,063	0	0	-	0	-
1991	0	3	180	11,535	3,442	95	239	41,770	791	58,052	0	0	-	0	-
1992	0	3	226	10,454	2,586	87	244	42,622	534	56,751	0	0	-	0	-
1993	0	3	169	10,266	2,024	83	248	44,663	634	58,087	0	0	-	0	-
1994	0	3	114	12,590	1,451	142	259	44,804	76	59,437	0	0	-	0	-
1995	0	3	123	11,219	1,027	77	255	46,515	439	59,655	0	0	-	0	-
1996	0	3	59	11,478	1,292	45	247	46,944	673	60,738	0	0	-	0	-

**Trillion Btu**

1960	0.8	1.3	1.1	7.0	16.8	0.1	1.8	90.4	7.2	124.2	0.0	0.0	126.2	0.0	126.2
1965	0.1	2.4	1.8	9.1	15.8	(s)	1.5	108.3	8.3	144.8	0.0	0.0	147.3	0.0	147.3
1970	0.1	3.4	1.2	16.9	17.1	0.2	1.4	148.2	10.1	195.2	0.0	0.0	198.6	0.0	198.6
1975	(s)	2.7	0.7	23.4	14.5	0.3	1.3	183.8	2.6	226.7	0.0	0.0	229.4	0.0	229.4
1980	0.0	3.1	0.8	35.9	16.6	0.1	1.6	184.8	5.3	245.0	0.0	0.0	248.1	0.0	248.1
1981	0.0	3.3	0.7	33.0	15.5	0.3	1.5	185.3	6.7	242.9	0.0	0.0	246.2	0.0	246.2
1982	0.0	3.0	0.6	36.4	14.8	0.3	1.4	184.6	5.1	243.2	0.0	0.0	246.2	0.0	246.2
1983	0.0	2.7	0.7	40.4	13.7	0.3	1.4	186.8	5.9	249.3	0.0	0.0	252.0	0.0	252.0
1984	0.0	2.7	0.6	45.4	16.6	0.5	1.5	192.4	5.9	263.0	0.0	0.0	265.6	0.0	265.6
1985	0.0	2.3	0.7	45.8	17.2	0.5	1.4	193.2	3.8	262.7	0.0	0.0	265.0	0.0	265.0
1986	0.0	2.4	0.8	47.6	17.2	0.3	1.4	201.8	3.8	272.8	0.0	0.0	275.3	0.0	275.3
1987	0.0	2.5	0.6	47.0	17.3	0.3	1.6	197.6	3.7	268.1	0.0	0.0	270.5	0.0	270.5
1988	0.0	2.6	0.6	49.9	17.5	0.3	1.5	220.4	4.9	295.1	0.0	0.0	297.7	0.0	297.7
1989	0.0	2.6	0.6	47.4	16.9	0.3	1.6	216.6	4.2	287.6	0.0	0.0	290.3	0.0	290.3
1990	0.0	2.9	0.5	63.2	16.0	0.3	1.6	222.2	3.2	307.2	0.0	0.0	310.1	0.0	310.1
1991	0.0	2.9	0.9	67.2	18.7	0.3	1.4	219.4	5.0	313.0	0.0	0.0	315.9	0.0	315.9
1992	0.0	3.0	1.1	60.9	14.1	0.3	1.5	223.9	3.4	305.2	0.0	0.0	308.2	0.0	308.2
1993	0.0	2.8	0.9	59.8	11.1	0.3	1.5	234.6	4.0	312.1	0.0	0.0	315.0	0.0	315.0
1994	0.0	2.7	0.6	73.3	8.1	0.5	1.6	235.4	0.5	319.9	0.0	0.0	322.7	0.0	322.7
1995	0.0	3.0	0.6	65.4	5.8	0.3	1.5	244.3	2.8	320.7	0.0	0.0	323.7	0.0	323.7
1996	0.0	3.2	0.3	66.9	7.3	0.2	1.5	246.6	4.2	327.0	0.0	0.0	330.2	0.0	330.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 262. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, South Carolina**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	1,596	0	1,596	23	24	9	0	33	0	3,513	0	0	0	--
1965	2,690	0	2,690	19	44	16	0	60	75	3,438	0	0	0	--
1970	3,708	0	3,708	45	2,042	756	0	2,798	7	2,256	0	0	0	--
1975	4,401	0	4,401	15	4,400	118	0	4,517	19,458	4,366	0	0	0	--
1980	7,927	0	7,927	5	2,080	567	0	2,647	17,404	2,976	0	0	0	--
1981	8,679	0	8,679	5	1,601	502	0	2,104	17,327	1,208	0	0	0	--
1982	8,581	0	8,581	1	281	196	0	477	13,156	2,380	0	0	0	--
1983	6,989	0	6,989	1	8	132	0	140	25,581	3,049	0	0	0	--
1984	7,428	0	7,428	(s)	0	143	0	143	23,235	3,128	0	0	0	--
1985	7,888	0	7,888	(s)	1	183	0	184	31,826	1,786	0	0	0	--
1986	7,777	0	7,777	1	2	116	0	118	35,625	1,217	0	0	0	--
1987	9,019	0	9,019	1	2	114	0	116	39,290	2,160	0	0	0	--
1988	9,210	0	9,210	2	2	193	0	195	40,746	631	0	0	0	--
1989	9,472	0	9,472	3	33	252	0	285	40,780	2,016	0	0	0	--
1990	9,131	0	9,131	7	8	117	0	125	42,881	2,729	0	0	0	--
1991	9,218	0	9,218	10	11	132	0	144	43,108	2,497	0	0	0	--
1992	9,078	0	9,078	2	15	144	0	159	45,537	2,710	0	0	0	--
1993	10,410	0	10,410	2	60	139	0	199	46,189	2,651	0	0	0	--
1994	10,597	0	10,597	3	9	268	0	277	44,466	2,347	0	0	0	--
1995	10,074	0	10,074	7	68	200	0	268	49,173	2,734	0	0	0	--
1996	11,832	0	11,832	1	39	267	0	306	43,571	2,231	0	0	0	--

**Trillion Btu**

1960	42.7	0.0	42.7	24.1	0.2	0.1	0.0	0.2	0.0	37.8	0.0	0.0	0.0	104.8
1965	69.5	0.0	69.5	19.6	0.3	0.1	0.0	0.4	0.9	35.9	0.0	0.0	0.0	126.2
1970	90.0	0.0	90.0	46.3	12.8	4.4	0.0	17.2	0.1	23.7	0.0	0.0	0.0	177.3
1975	106.3	0.0	106.3	15.0	27.7	0.7	0.0	28.3	214.3	45.4	0.0	0.0	0.0	409.4
1980	196.9	0.0	196.9	5.6	13.1	3.3	0.0	16.4	189.8	30.9	0.0	0.0	0.0	439.6
1981	213.6	0.0	213.6	5.1	10.1	2.9	0.0	13.0	191.1	12.6	0.0	0.0	0.0	435.4
1982	212.5	0.0	212.5	0.5	1.8	1.1	0.0	2.9	145.7	24.9	0.0	0.0	0.0	386.5
1983	175.2	0.0	175.2	1.0	(s)	0.8	0.0	0.8	279.0	32.1	0.0	0.0	0.0	488.0
1984	186.1	0.0	186.1	0.4	0.0	0.8	0.0	0.8	251.9	32.7	0.0	0.0	0.0	472.0
1985	198.2	0.0	198.2	0.5	(s)	1.1	0.0	1.1	344.1	18.7	0.0	0.0	0.0	562.6
1986	197.0	0.0	197.0	1.4	(s)	0.7	0.0	0.7	384.7	12.7	0.0	0.0	0.0	596.5
1987	228.2	0.0	228.2	0.6	(s)	0.7	0.0	0.7	423.4	22.5	0.0	0.0	0.0	675.3
1988	233.5	0.0	233.5	2.5	(s)	1.1	0.0	1.1	437.7	6.5	0.0	0.0	0.0	681.3
1989	239.0	0.0	239.0	2.8	0.2	1.5	0.0	1.7	437.3	R 21.0	0.0	0.0	0.0	R 701.8
1990	231.1	0.0	231.1	7.1	(s)	0.7	0.0	0.7	458.0	R 28.4	0.0	0.0	0.0	R 725.3
1991	234.6	0.0	234.6	10.1	0.1	0.8	0.0	0.8	463.0	R 26.0	0.0	0.0	0.0	R 734.5
1992	232.7	0.0	232.7	1.8	0.1	0.8	0.0	0.9	486.2	R 28.0	0.0	0.0	0.0	R 749.7
1993	266.5	0.0	266.5	1.9	0.4	0.8	0.0	1.2	493.4	R 27.3	0.0	0.0	0.0	R 790.3
1994	270.7	0.0	270.7	3.1	0.1	1.6	0.0	1.6	474.7	R 24.2	0.0	0.0	0.0	R 774.3
1995	258.9	0.0	258.9	6.8	0.4	1.2	0.0	1.6	524.1	28.2	0.0	0.0	0.0	819.6
1996	301.9	0.0	301.9	1.2	0.2	1.6	0.0	1.8	462.9	23.1	0.0	0.0	0.0	790.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 263. Energy Consumption Estimates by Source, Selected Years 1960-1996, South Dakota**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	374	25	724	106	2,941	1,145	975	1,370	193	8,561	102	0	16,118	0	1,156	0	0	-979	-	
1965	310	27	588	128	3,766	1,111	563	1,541	158	8,955	71	0	16,881	0	3,872	0	0	-7,049	-	
1970	338	36	894	99	4,375	1,173	16	2,712	166	9,903	328	0	19,666	0	6,579	0	0	-13,856	-	
1975	1,888	33	862	77	3,841	1,056	5	2,930	160	10,636	218	0	19,784	0	7,927	0	0	-18,221	-	
1980	2,827	24	638	97	4,801	1,311	15	2,530	160	9,688	122	0	19,362	0	5,818	0	0	-10,269	-	
1981	2,759	22	528	103	4,414	1,136	24	1,779	153	9,192	158	0	17,487	0	5,306	0	0	-8,872	-	
1982	2,746	25	638	107	5,076	1,138	37	2,231	140	9,060	51	0	18,477	0	5,426	0	0	-8,220	-	
1983	2,409	23	534	98	4,473	956	35	2,245	146	8,952	136	0	17,574	0	5,526	0	0	-6,535	-	
1984	2,719	25	805	85	4,892	1,024	40	1,019	156	8,885	91	0	16,997	0	5,722	0	0	-7,907	-	
1985	2,703	25	841	87	5,003	1,019	41	1,241	145	R 9,279	36	0	R 17,693	0	5,333	0	0	-5,993	-	
1986	2,281	23	815	85	6,060	516	36	1,567	142	9,004	60	0	18,284	0	5,736	0	0	-6,017	-	
1987	1,101	21	674	80	5,915	669	19	2,358	161	R 9,016	55	0	R 18,947	0	5,386	0	0	-728	-	
1988	2,591	24	878	89	6,227	875	19	1,579	155	R 9,175	85	0	R 19,081	0	5,286	0	0	-4,607	-	
1989	2,541	26	776	88	5,439	1,024	14	3,623	159	R 9,126	66	0	R 20,315	0	4,614	0	0	R -1,736	-	
1990	2,571	25	790	93	5,525	1,097	8	3,691	163	R 8,986	61	0	R 20,414	0	i NA	i NA	i NA	R -308	-	
1991	2,863	26	768	61	5,860	367	7	1,794	146	R 9,119	67	18	R 18,209	0	NA	NA	NA	R -72	-	
1992	2,670	27	887	62	5,595	1,272	8	1,930	149	R 9,345	144	19	R 19,412	0	NA	NA	NA	R -1	-	
1993	2,696	31	644	53	6,222	1,190	7	2,591	152	R 9,565	117	21	R 20,562	0	NA	NA	NA	R 5,177	-	
1994	3,036	31	629	48	6,994	1,305	5	2,298	159	R 9,839	89	21	R 21,386	0	NA	NA	NA	R -3,665	-	
1995	2,537	34	821	46	6,662	1,463	6	2,294	156	10,007	14	21	21,490	0	NA	NA	NA	R -4,383	-	
1996	1,852	37	1,136	53	6,694	1,014	9	2,645	151	10,148	41	25	21,916	0	NA	NA	NA	-8,299	-	
Trillion Btu																				
1960	6.7	25.4	4.8	0.5	17.1	6.1	5.5	5.5	1.2	45.0	0.6	0.0	86.4	0.0	12.4	0.0	0.0	-3.3	127.6	
1965	5.7	26.9	3.9	0.6	21.9	6.0	3.2	6.2	1.0	47.0	0.4	0.0	90.3	0.0	40.5	0.0	0.0	-24.1	139.2	
1970	5.7	36.5	5.9	0.5	25.5	6.3	0.1	10.2	1.0	52.0	2.1	0.0	103.7	0.0	69.0	0.0	0.0	-47.3	167.6	
1975	24.3	32.5	5.7	0.4	22.4	5.7	(s)	10.9	1.0	55.9	1.4	0.0	103.3	0.0	82.5	0.0	0.0	-62.2	180.5	
1980	36.6	24.0	4.2	0.5	28.0	7.1	0.1	9.3	1.0	50.9	0.8	0.0	101.8	0.0	60.4	0.0	0.0	-35.0	187.8	
1981	36.2	22.1	3.5	0.5	25.7	6.1	0.1	6.5	0.9	48.3	1.0	0.0	92.7	0.0	55.5	0.0	0.0	-30.3	176.2	
1982	37.0	25.1	4.2	0.5	29.6	6.1	0.2	8.1	0.8	47.6	0.3	0.0	97.5	0.0	56.7	0.0	0.0	-28.0	188.2	
1983	30.7	23.6	3.5	0.5	26.1	5.2	0.2	8.1	0.9	47.0	0.9	0.0	92.3	0.0	58.1	0.0	0.0	-22.3	182.5	
1984	34.4	24.9	5.3	0.4	28.5	5.5	0.2	3.7	0.9	46.7	0.6	0.0	91.9	0.0	59.7	0.0	0.0	-27.0	183.9	
1985	34.5	25.5	5.6	0.4	29.1	5.5	0.2	4.5	0.9	48.7	0.2	0.0	95.2	0.0	55.7	0.0	0.0	-20.4	190.5	
1986	29.2	23.4	5.4	0.4	35.3	2.8	0.2	5.7	0.9	47.3	0.4	0.0	98.4	0.0	59.9	0.0	0.0	-20.5	190.4	
1987	14.6	21.4	4.5	0.4	34.5	3.6	0.1	8.6	1.0	R 47.4	0.3	0.0	R 100.4	0.0	56.1	0.0	0.0	-2.5	R 189.9	
1988	33.8	24.7	5.8	0.4	36.3	4.7	0.1	5.8	0.9	R 48.2	0.5	0.0	R 102.8	0.0	54.6	0.0	0.0	-15.7	R 200.2	
1989	32.5	25.9	5.2	0.4	31.7	5.5	0.1	13.3	1.0	47.9	0.4	0.0	105.6	0.0	R 48.1	0.0	0.0	R -5.9	R 206.2	
1990	32.5	25.5	5.2	0.5	32.2	5.9	(s)	13.4	1.0	R 47.2	0.4	0.0	R 105.8	0.0	R i 40.9	R i 4.2	i (s)	R -1.1	R i 206.4	
1991	36.1	26.7	5.1	0.3	34.1	2.0	(s)	6.5	0.9	47.9	0.4	0.1	97.4	0.0	R 41.0	R 3.9	(s)	R -0.2	R 204.1	
1992	33.6	27.0	5.9	0.3	32.6	6.9	(s)	7.0	0.9	49.1	0.9	0.1	103.7	0.0	R 39.6	R 4.3	(s)	R (s)	R 207.7	
1993	34.4	31.7	4.3	0.3	36.2	6.4	(s)	9.3	0.9	50.2	0.7	0.1	108.6	0.0	R 26.7	R 4.3	(s)	17.7	R 221.9	
1994	39.2	31.3	4.2	0.2	40.7	7.1	(s)	8.4	1.0	51.7	0.6	0.1	113.9	0.0	R 55.1	R 4.8	(s)	R -12.5	R 231.5	
1995	36.7	34.8	5.4	0.2	38.8	7.9	(s)	8.3	0.9	52.6	0.1	0.1	114.5	0.0	61.9	R 4.8	(s)	R -15.0	R 236.2	
1996	33.2	37.4	7.5	0.3	39.0	5.7	(s)	9.6	0.9	53.3	0.3	0.1	116.7	0.0	82.5	4.4	(s)	-28.3	244.7	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 264. Residential Energy Consumption Estimates, Selected Years 1960-1996, South Dakota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	43	0	43	8	567	903	1,067	2,537	0	0	847	—	2,107	—
1965	24	0	24	10	677	524	1,198	2,398	0	0	1,183	—	2,824	—
1970	11	0	11	14	763	14	2,010	2,787	0	0	1,586	—	3,843	—
1975	8	0	8	12	574	3	1,994	2,571	0	0	2,068	—	4,987	—
1980	6	0	6	11	762	10	1,165	1,937	0	0	2,623	—	6,378	—
1981	20	0	20	10	700	14	927	1,641	0	0	2,503	—	5,966	—
1982	7	0	7	12	873	22	947	1,842	0	0	2,616	—	6,283	—
1983	1	0	1	11	608	27	1,126	1,761	0	0	2,769	—	6,635	—
1984	2	0	2	11	656	29	604	1,289	0	0	2,766	—	6,437	—
1985	6	0	6	11	743	35	703	1,481	0	0	2,769	—	6,505	—
1986	8	0	8	11	1,040	23	841	1,905	0	0	2,754	—	6,336	—
1987	1	0	1	9	856	15	1,299	2,170	0	0	2,680	—	6,125	—
1988	1	0	1	11	920	14	945	1,878	0	0	2,913	—	6,586	—
1989	1	(s)	1	11	900	9	1,420	2,329	0	0	2,923	—	R 6,566	—
1990	1	0	1	10	805	4	1,731	2,540	<sup>e</sup> 89	<sup>e</sup> (s)	2,866	—	R 6,269	—
1991	1	(s)	1	11	804	4	1,061	1,869	94	(s)	3,040	—	R 6,616	—
1992	(s)	(s)	(s)	11	474	4	1,006	1,484	98	(s)	2,843	—	R 6,071	—
1993	(s)	0	(s)	12	592	6	1,355	1,952	83	(s)	3,109	—	R 6,569	—
1994	5	(s)	5	12	536	4	1,278	1,818	81	(s)	3,147	—	R 6,566	—
1995	2	0	2	13	542	4	1,384	1,929	90	(s)	3,268	—	R 6,808	—
1996	1	0	1	14	632	5	1,646	2,283	90	(s)	3,426	—	7,131	—
<b>Trillion Btu</b>														
1960	0.8	0.0	0.8	7.9	3.3	5.1	4.3	12.7	0.0	0.0	2.9	24.4	7.2	31.5
1965	0.5	0.0	0.5	10.1	3.9	3.0	4.8	11.7	0.0	0.0	4.0	26.3	9.6	35.9
1970	0.2	0.0	0.2	13.8	4.4	0.1	7.6	12.1	0.0	0.0	5.4	31.6	13.1	44.7
1975	0.1	0.0	0.1	12.0	3.3	(s)	7.4	10.8	0.0	0.0	7.1	29.9	17.0	47.0
1980	0.1	0.0	0.1	10.5	4.4	0.1	4.3	8.8	0.0	0.0	8.9	28.4	21.8	50.1
1981	0.4	0.0	0.4	9.8	4.1	0.1	3.4	7.5	0.0	0.0	8.5	26.2	20.4	46.6
1982	0.1	0.0	0.1	11.6	5.1	0.1	3.4	8.6	0.0	0.0	8.9	29.3	21.4	50.7
1983	(s)	0.0	(s)	10.8	3.5	0.2	4.1	7.8	0.0	0.0	9.4	28.0	22.6	50.6
1984	0.1	0.0	0.1	11.1	3.8	0.2	2.2	6.2	0.0	0.0	9.4	26.8	22.0	48.7
1985	0.1	0.0	0.1	11.5	4.3	0.2	2.5	7.1	0.0	0.0	9.4	28.1	22.2	50.3
1986	0.2	0.0	0.2	10.6	6.1	0.1	3.1	9.3	0.0	0.0	9.4	29.4	21.6	51.0
1987	(s)	0.0	(s)	9.4	5.0	0.1	4.8	9.8	0.0	0.0	9.1	28.4	20.9	49.3
1988	(s)	0.0	(s)	10.9	5.4	0.1	3.4	8.9	0.0	0.0	9.9	29.8	22.5	52.2
1989	(s)	(s)	(s)	11.5	5.2	(s)	5.2	10.5	0.0	0.0	10.0	32.1	22.4	R 54.5
1990	(s)	0.0	(s)	10.4	4.7	(s)	6.3	11.0	<sup>e</sup> 1.8	<sup>e</sup> (s)	9.8	<sup>e</sup> 32.9	21.4	<sup>e</sup> 54.3
1991	(s)	(s)	(s)	11.4	4.7	(s)	3.8	8.5	1.9	(s)	10.4	32.2	22.6	54.8
1992	(s)	(s)	(s)	11.0	2.8	(s)	3.6	6.4	2.0	(s)	9.7	29.1	20.7	49.8
1993	(s)	0.0	(s)	12.6	3.4	(s)	4.9	8.4	1.7	(s)	10.6	33.2	22.4	55.6
1994	0.1	(s)	0.1	12.2	3.1	(s)	4.6	7.8	1.6	(s)	10.7	32.4	22.4	54.8
1995	(s)	0.0	(s)	12.8	3.2	(s)	5.0	8.2	1.8	(s)	11.2	34.0	23.2	57.2
1996	(s)	0.0	(s)	14.3	3.7	(s)	5.9	9.7	1.8	(s)	11.7	37.4	24.3	61.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 265. Commercial Energy Consumption Estimates, Selected Years 1960-1996, South Dakota**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	79	0	79	7	226	0	188	37	16	466	0	409	-	1,016	-
1965	44	0	44	9	269	0	211	46	8	534	0	645	-	1,540	-
1970	20	0	20	11	303	0	355	50	16	724	0	937	-	2,270	-
1975	16	0	16	11	228	0	352	58	20	658	0	995	-	2,400	-
1980	11	0	11	9	365	0	206	65	19	655	0	1,139	-	2,770	-
1981	37	0	37	8	250	0	164	70	14	498	0	1,203	-	2,867	-
1982	13	0	13	9	284	11	167	76	13	551	0	1,235	-	2,967	-
1983	3	0	3	9	218	1	199	98	64	579	0	1,267	-	3,036	-
1984	5	0	5	9	235	(s)	107	138	43	523	0	1,791	-	4,169	-
1985	11	0	11	10	278	1	124	98	19	519	0	1,863	-	4,377	-
1986	15	0	15	9	271	1	148	9	7	578	0	1,603	-	3,687	-
1987	3	0	3	8	414	1	229	R 130	7	R 781	0	1,629	-	3,721	-
1988	3	0	3	8	345	(s)	167	126	22	660	0	1,760	-	3,978	-
1989	2	(s)	2	9	220	(s)	251	118	23	R 612	0	1,803	-	R 4,050	-
1990	2	0	2	9	208	(s)	305	R 78	25	616	e NA	1,811	-	R 3,960	-
1991	3	(s)	3	9	192	(s)	187	54	35	468	NA	1,919	-	R 4,177	-
1992	(s)	(s)	1	9	245	(s)	178	54	36	513	NA	1,874	-	R 4,003	-
1993	1	0	1	11	248	1	239	11	1	499	7	1,948	-	R 4,116	-
1994	10	(s)	10	10	266	(s)	226	11	6	509	8	2,265	-	R 4,726	-
1995	5	0	5	11	325	1	244	11	2	584	9	2,424	-	5,048	-
1996	1	0	1	12	254	1	291	11	0	556	8	2,525	-	5,256	-

**Trillion Btu**

1960	1.5	0.0	1.5	7.5	1.3	0.0	0.8	0.2	0.1	2.4	0.0	1.4	12.8	3.5	16.2
1965	0.9	0.0	0.9	8.8	1.6	0.0	0.8	0.2	(s)	2.7	0.0	2.2	14.5	5.3	19.8
1970	0.4	0.0	0.4	11.4	1.8	0.0	1.3	0.3	0.1	3.5	0.0	3.2	18.5	7.7	26.2
1975	0.3	0.0	0.3	11.5	1.3	0.0	1.3	0.3	0.1	3.1	0.0	3.4	18.2	8.2	26.4
1980	0.2	0.0	0.2	8.5	2.1	0.0	0.8	0.3	0.1	3.3	0.0	3.9	15.9	9.5	25.4
1981	0.7	0.0	0.7	8.2	1.5	0.0	0.6	0.4	0.1	2.5	0.0	4.1	15.5	9.8	25.3
1982	0.2	0.0	0.2	9.4	1.7	0.1	0.6	0.4	0.1	2.8	0.0	4.2	16.6	10.1	26.7
1983	0.1	0.0	0.1	8.7	1.3	(s)	0.7	0.5	0.4	2.9	0.0	4.3	16.0	10.4	26.4
1984	0.1	0.0	0.1	9.2	1.4	(s)	0.4	0.7	0.3	2.7	0.0	6.1	18.2	14.2	32.4
1985	0.2	0.0	0.2	10.1	1.6	(s)	0.4	0.5	0.1	2.7	0.0	6.4	19.4	14.9	34.3
1986	0.3	0.0	0.3	9.2	1.6	(s)	0.5	0.8	(s)	3.0	0.0	5.5	18.0	12.6	30.5
1987	(s)	0.0	(s)	8.3	2.4	(s)	0.8	0.7	(s)	4.0	0.0	5.6	17.9	12.7	30.6
1988	(s)	0.0	(s)	8.6	2.0	(s)	0.6	0.7	0.1	3.4	0.0	6.0	18.0	13.6	31.6
1989	(s)	(s)	(s)	9.0	1.3	(s)	0.9	0.6	0.1	3.0	0.0	6.2	18.1	13.8	31.9
1990	(s)	0.0	(s)	8.7	1.2	(s)	1.1	0.4	0.2	2.9	e NA	6.2	17.8	13.5	31.3
1991	(s)	(s)	(s)	9.6	1.1	(s)	0.7	0.3	0.2	2.3	NA	6.5	18.5	R 14.3	32.8
1992	(s)	(s)	(s)	9.3	1.4	(s)	0.6	0.3	0.2	2.6	NA	6.4	18.2	13.7	31.9
1993	(s)	0.0	(s)	10.8	1.4	(s)	0.9	0.1	(s)	2.4	0.1	6.6	R 20.0	14.0	R 34.0
1994	0.2	(s)	0.2	10.4	1.5	(s)	0.8	0.1	(s)	2.5	0.2	7.7	R 20.9	16.1	R 37.0
1995	0.1	0.0	0.1	10.8	1.9	(s)	0.9	0.1	(s)	2.9	0.2	8.3	R 22.2	17.2	R 39.5
1996	(s)	0.0	(s)	11.8	1.5	(s)	1.0	0.1	0.0	2.6	0.2	8.6	23.1	17.9	41.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable. NA=Not available.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 266. Industrial Energy Consumption Estimates, Selected Years 1960-1996, South Dakota**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	5	5	724	1,780	72	93	19	2,615	35	0	5,339	20	0	0	258	-	642	-
1965	4	5	588	2,177	39	108	15	2,455	15	0	5,397	38	0	0	246	-	588	-
1970	5	7	894	2,332	2	298	14	2,209	35	0	5,784	35	0	0	281	-	680	-
1975	59	6	862	1,635	2	527	20	1,626	52	0	4,725	36	0	0	994	-	2,397	-
1980	127	5	638	1,640	5	1,090	4	1,473	95	0	4,943	32	0	0	1,322	-	3,215	-
1981	166	4	528	1,589	10	634	3	1,215	144	0	4,123	32	0	0	1,253	-	2,986	-
1982	293	4	638	1,735	4	1,063	3	1,129	37	0	4,608	32	0	0	1,280	-	3,075	-
1983	204	4	534	1,443	7	855	3	1,198	72	0	4,111	32	0	0	1,388	-	3,326	-
1984	225	4	805	1,558	11	281	4	907	48	0	3,613	32	0	0	991	-	2,306	-
1985	279	4	841	1,670	5	389	3	694	16	0	3,619	32	0	0	1,019	-	2,393	-
1986	240	3	815	2,544	11	552	3	594	52	0	4,570	32	0	0	1,316	-	3,028	-
1987	232	3	674	2,394	4	783	4	R 631	46	0	R 4,535	32	0	0	1,402	-	3,203	-
1988	199	5	878	2,666	5	448	3	544	52	0	4,597	32	0	0	1,562	-	3,531	-
1989	257	5	776	2,044	6	1,932	4	541	44	0	5,346	32	0	0	1,612	-	R 3,622	-
1990	223	6	790	2,046	3	1,632	4	R 489	36	0	R 5,000	f NA	f NA	f NA	1,657	-	R 3,624	-
1991	289	5	768	2,340	3	532	3	484	32	18	4,180	NA	NA	NA	1,726	-	R 3,757	-
1992	267	5	887	2,181	4	728	3	429	109	19	4,359	NA	NA	NA	1,777	-	R 3,796	-
1993	335	5	644	2,522	1	972	3	539	116	21	4,818	NA	NA	NA	1,847	-	R 3,903	-
1994	451	6	629	2,824	1	755	4	463	83	21	4,780	NA	NA	NA	1,762	-	R 3,677	-
1995	393	7	821	2,380	2	652	4	534	11	21	4,424	NA	NA	NA	1,722	-	3,587	-
1996	397	8	1,136	2,316	3	695	3	540	41	25	4,759	NA	NA	NA	1,785	-	3,715	-

**Trillion Btu**

1960	0.1	5.3	4.8	10.4	0.4	0.4	0.1	13.7	0.2	0.0	30.0	0.2	0.0	0.0	0.9	36.6	2.2	38.8
1965	0.1	4.7	3.9	12.7	0.2	0.4	0.1	12.9	0.1	0.0	30.3	0.4	0.0	0.0	0.8	36.3	2.0	38.3
1970	0.1	6.8	5.9	13.6	(s)	1.1	0.1	11.6	0.2	0.0	32.6	0.4	0.0	0.0	1.0	40.8	2.3	43.1
1975	1.1	5.8	5.7	9.5	(s)	2.0	0.1	8.5	0.3	0.0	26.2	0.4	0.0	0.0	3.4	36.9	8.2	45.1
1980	2.4	4.7	4.2	9.6	(s)	4.0	(s)	7.7	0.6	0.0	26.2	0.3	0.0	0.0	4.5	38.1	11.0	49.1
1981	3.1	4.0	3.5	9.3	0.1	2.3	(s)	6.4	0.9	0.0	22.4	0.3	0.0	0.0	4.3	34.2	10.2	44.4
1982	5.7	4.0	4.2	10.1	(s)	3.8	(s)	5.9	0.2	0.0	24.4	0.3	0.0	0.0	4.4	38.8	10.5	49.3
1983	3.6	3.9	3.5	8.4	(s)	3.1	(s)	6.3	0.5	0.0	21.8	0.3	0.0	0.0	4.7	34.4	11.3	45.7
1984	3.9	4.4	5.3	9.1	0.1	1.0	(s)	4.8	0.3	0.0	20.6	0.3	0.0	0.0	3.4	32.5	7.9	40.4
1985	4.8	3.6	5.6	9.7	(s)	1.4	(s)	3.6	0.1	0.0	20.5	0.3	0.0	0.0	3.5	32.8	8.2	40.9
1986	4.2	3.4	5.4	14.8	0.1	2.0	(s)	3.1	0.3	0.0	25.8	0.3	0.0	0.0	4.5	38.2	10.3	48.5
1987	4.0	3.4	4.5	13.9	(s)	2.9	(s)	3.3	0.3	0.0	24.9	0.3	0.0	0.0	4.8	37.5	10.9	48.4
1988	3.5	4.9	5.8	15.5	(s)	1.6	(s)	2.9	0.3	0.0	26.2	0.3	0.0	0.0	5.3	40.2	12.0	52.3
1989	4.5	5.2	5.2	11.9	(s)	7.1	(s)	2.8	0.3	0.0	27.3	0.3	0.0	0.0	5.5	42.8	R 12.4	55.1
1990	3.9	6.0	5.2	11.9	(s)	5.9	(s)	2.6	0.2	0.0	25.9	f 0.0	f 1.0	f 0.0	5.7	f 42.5	f 12.4	f 54.8
1991	5.0	5.1	5.1	13.6	(s)	1.9	(s)	2.5	0.2	0.1	23.5	0.0	1.0	0.0	5.9	40.6	12.8	53.4
1992	4.6	5.0	5.9	12.7	(s)	2.6	(s)	2.3	0.7	0.1	24.3	0.0	1.0	0.0	6.1	41.0	R 13.0	53.9
1993	5.8	5.5	4.3	14.7	(s)	3.5	(s)	2.8	0.7	0.1	26.2	0.0	1.0	0.0	6.3	44.8	13.3	58.1
1994	7.8	6.0	4.2	16.5	(s)	2.7	(s)	2.4	0.5	0.1	26.5	0.0	R 1.3	0.0	6.0	R 47.6	12.5	R 60.1
1995	6.8	7.4	5.4	13.9	(s)	2.4	(s)	2.8	0.1	0.1	24.7	0.0	R 1.2	0.0	5.9	R 46.0	12.2	R 58.3
1996	6.9	7.7	7.5	13.5	(s)	2.5	(s)	2.8	0.3	0.1	26.8	0.0	1.3	0.0	6.1	48.8	12.7	61.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 267. Transportation Energy Consumption Estimates, Selected Years 1960-1996, South Dakota**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	(s)	(s)	106	362	1,145	22	174	5,909	11	7,729	0	0	-	0	-
1965	(s)	(s)	128	635	1,111	24	143	6,454	1	8,496	0	0	-	0	-
1970	(s)	(s)	99	929	1,173	50	151	7,645	6	10,052	0	0	-	0	-
1975	(s)	(s)	77	1,337	1,056	57	140	8,952	1	11,618	0	0	-	0	-
1980	0	(s)	97	1,977	1,311	69	156	8,150	0	11,760	0	0	-	0	-
1981	0	(s)	103	1,821	1,136	54	150	7,907	0	11,170	0	0	-	0	-
1982	0	(s)	107	2,132	1,138	54	136	7,855	0	11,422	0	0	-	0	-
1983	0	(s)	98	2,163	956	64	143	7,656	0	11,081	0	0	-	0	-
1984	0	(s)	85	2,416	1,024	28	152	7,839	0	11,545	0	0	-	0	-
1985	0	(s)	87	2,274	1,019	24	142	R 8,487	0	R 12,033	0	0	-	0	-
1986	0	(s)	85	2,166	516	25	139	8,260	0	11,191	0	0	-	0	-
1987	0	(s)	80	2,230	669	46	157	R 8,256	0	R 11,438	0	0	-	0	-
1988	0	(s)	89	2,248	875	19	151	R 8,506	0	R 11,888	0	0	-	0	-
1989	0	(s)	88	2,241	1,024	20	155	R 8,467	(s)	R 11,996	0	0	-	0	-
1990	0	(s)	93	2,434	1,097	23	160	R 8,419	(s)	R 12,226	R e 18,443	0	-	0	-
1991	0	(s)	61	2,490	367	14	143	R 8,581	0	R 11,656	R 14,619	0	-	0	-
1992	0	2	62	2,676	1,272	18	146	R 8,863	0	R 13,036	R 17,768	0	-	0	-
1993	0	3	53	2,829	1,190	26	148	R 9,015	0	R 13,261	R 19,828	0	-	0	-
1994	0	3	48	3,317	1,305	39	155	R 9,365	0	R 14,229	R 22,527	0	-	0	-
1995	0	3	46	3,368	1,463	15	152	9,462	0	14,506	R 20,836	0	-	0	-
1996	0	3	53	3,459	1,014	13	148	9,596	0	14,284	14,723	0	-	0	-

**Trillion Btu**

1960	(s)	(s)	0.5	2.1	6.1	0.1	1.1	31.0	0.1	41.0	0.0	0.0	41.1	0.0	41.1
1965	(s)	(s)	0.6	3.7	6.0	0.1	0.9	33.9	(s)	45.2	0.0	0.0	45.2	0.0	45.2
1970	(s)	(s)	0.5	5.4	6.3	0.2	0.9	40.2	(s)	53.5	0.0	0.0	53.6	0.0	53.6
1975	(s)	(s)	0.4	7.8	5.7	0.2	0.8	47.0	(s)	62.0	0.0	0.0	62.0	0.0	62.0
1980	0.0	0.1	0.5	11.5	7.1	0.3	0.9	42.8	0.0	63.1	0.0	0.0	63.2	0.0	63.2
1981	0.0	0.1	0.5	10.6	6.1	0.2	0.9	41.5	0.0	59.9	0.0	0.0	60.0	0.0	60.0
1982	0.0	0.1	0.5	12.4	6.1	0.2	0.8	41.3	0.0	61.4	0.0	0.0	61.5	0.0	61.5
1983	0.0	0.1	0.5	12.6	5.2	0.2	0.9	40.2	0.0	59.6	0.0	0.0	59.7	0.0	59.7
1984	0.0	0.1	0.4	14.1	5.5	0.1	0.9	41.2	0.0	62.2	0.0	0.0	62.3	0.0	62.3
1985	0.0	0.2	0.4	13.2	5.5	0.1	0.9	44.6	0.0	64.7	0.0	0.0	R 65.0	0.0	R 65.0
1986	0.0	0.1	0.4	12.6	2.8	0.1	0.8	43.4	0.0	60.2	0.0	0.0	60.3	0.0	60.3
1987	0.0	0.1	0.4	13.0	3.6	0.2	1.0	R 43.4	0.0	R 61.5	0.0	0.0	R 61.6	0.0	R 61.6
1988	0.0	0.1	0.4	13.1	4.7	0.1	0.9	44.7	0.0	R 63.9	0.0	0.0	64.1	0.0	64.1
1989	0.0	0.1	0.4	13.1	5.5	0.1	0.9	44.5	(s)	64.5	0.0	0.0	R 64.7	0.0	R 64.7
1990	0.0	0.1	0.5	14.2	5.9	0.1	1.0	R 44.2	(s)	R 65.9	R e 1.4	0.0	R e 66.0	0.0	R e 66.0
1991	0.0	0.3	0.3	14.5	2.0	(s)	0.9	45.1	0.0	62.8	R 1.1	0.0	63.2	0.0	63.2
1992	0.0	1.8	0.3	15.6	6.9	0.1	0.9	46.6	0.0	70.3	R 1.4	0.0	R 72.0	0.0	R 72.0
1993	0.0	2.6	0.3	16.5	6.4	0.1	0.9	R 47.4	0.0	71.5	R 1.5	0.0	74.1	0.0	74.1
1994	0.0	2.6	0.2	19.3	7.1	0.1	0.9	49.2	0.0	76.9	R 1.7	0.0	79.5	0.0	79.5
1995	0.0	2.8	0.2	19.6	7.9	0.1	0.9	49.7	0.0	78.5	R 1.6	0.0	81.2	0.0	81.2
1996	0.0	2.9	0.3	20.2	5.7	(s)	0.9	50.4	0.0	77.5	1.1	0.0	80.4	0.0	80.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 268. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, South Dakota**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	246	0	246	4	40	7	0	47	0	1,136	0	0	0	--
1965	237	0	237	3	47	8	0	55	0	3,835	0	0	0	--
1970	301	0	301	4	270	48	0	318	0	6,544	0	0	0	--
1975	1,804	0	1,804	3	145	67	0	212	0	7,890	0	0	0	--
1980	2,683	0	2,683	(s)	9	58	0	67	0	5,786	0	0	0	--
1981	2,536	0	2,536	(s)	1	54	0	54	0	5,274	0	0	0	--
1982	2,433	0	2,433	(s)	2	52	0	53	0	5,394	0	0	0	--
1983	2,201	0	2,201	(s)	1	42	0	42	0	5,494	0	0	0	--
1984	2,487	0	2,487	(s)	1	26	0	27	0	5,690	0	0	0	--
1985	2,407	0	2,407	(s)	1	39	0	40	0	5,301	0	0	0	--
1986	2,018	0	2,018	(s)	1	38	0	39	0	5,704	0	0	0	--
1987	865	0	865	(s)	1	21	0	23	0	5,354	0	0	0	--
1988	2,388	0	2,388	(s)	10	48	0	58	0	5,254	0	0	0	--
1989	2,281	0	2,281	(s)	0	33	0	33	0	4,583	0	0	0	--
1990	2,345	0	2,345	(s)	0	32	0	32	0	3,934	0	0	0	--
1991	2,570	0	2,570	(s)	0	35	0	35	0	3,936	0	0	0	--
1992	2,402	0	2,402	(s)	0	19	0	19	0	3,833	0	0	0	--
1993	2,360	0	2,360	(s)	0	32	0	32	0	2,591	0	0	0	--
1994	2,570	0	2,570	(s)	0	50	0	50	0	5,343	0	0	0	--
1995	2,137	0	2,137	1	0	48	0	48	0	6,010	0	0	0	--
1996	1,453	0	1,453	1	0	33	0	33	0	7,978	0	0	0	--
<b>Trillion Btu</b>														
1960	4.2	0.0	4.2	4.6	0.3	(s)	0.0	0.3	0.0	12.2	0.0	0.0	0.0	21.4
1965	4.2	0.0	4.2	3.3	0.3	(s)	0.0	0.3	0.0	40.1	0.0	0.0	0.0	48.0
1970	5.0	0.0	5.0	4.4	1.7	0.3	0.0	2.0	0.0	68.7	0.0	0.0	0.0	80.0
1975	22.8	0.0	22.8	3.2	0.9	0.4	0.0	1.3	0.0	82.1	0.0	0.0	0.0	109.4
1980	33.8	0.0	33.8	0.3	0.1	0.3	0.0	0.4	0.0	60.1	0.0	0.0	0.0	94.6
1981	32.0	0.0	32.0	0.1	(s)	0.3	0.0	0.3	0.0	55.1	0.0	0.0	0.0	87.5
1982	30.9	0.0	30.9	(s)	(s)	0.3	0.0	0.3	0.0	56.4	0.0	0.0	0.0	87.6
1983	27.1	0.0	27.1	(s)	(s)	0.2	0.0	0.2	0.0	57.8	0.0	0.0	0.0	85.2
1984	30.4	0.0	30.4	0.1	(s)	0.2	0.0	0.2	0.0	59.4	0.0	0.0	0.0	90.0
1985	29.4	0.0	29.4	(s)	(s)	0.2	0.0	0.2	0.0	55.4	0.0	0.0	0.0	85.0
1986	24.6	0.0	24.6	(s)	(s)	0.2	0.0	0.2	0.0	59.6	0.0	0.0	0.0	84.4
1987	10.5	0.0	10.5	0.1	(s)	0.1	0.0	0.1	0.0	55.8	0.0	0.0	0.0	66.5
1988	30.3	0.0	30.3	0.2	0.1	0.3	0.0	0.3	0.0	54.2	0.0	0.0	0.0	85.1
1989	28.0	0.0	28.0	0.1	0.0	0.2	0.0	0.2	0.0	R 47.8	0.0	0.0	0.0	R 76.1
1990	28.6	0.0	28.6	0.2	0.0	0.2	0.0	0.2	0.0	R 40.9	0.0	0.0	0.0	R 69.9
1991	31.0	0.0	31.0	0.2	0.0	0.2	0.0	0.2	0.0	R 41.0	0.0	0.0	0.0	R 72.7
1992	29.0	0.0	29.0	(s)	0.0	0.1	0.0	0.1	0.0	R 39.6	0.0	0.0	0.0	R 69.5
1993	28.6	0.0	28.6	0.2	0.0	0.2	0.0	0.2	0.0	R 26.7	0.0	0.0	0.0	R 55.7
1994	31.1	0.0	31.1	0.2	0.0	0.3	0.0	0.3	0.0	R 55.1	0.0	0.0	0.0	R 88.1
1995	29.8	0.0	29.8	0.9	0.0	0.3	0.0	0.3	0.0	61.9	0.0	0.0	0.0	92.9
1996	26.3	0.0	26.3	0.7	0.0	0.2	0.0	0.2	0.0	82.5	0.0	0.0	0.0	109.6

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 269. Energy Consumption Estimates by Source, Selected Years 1960-1996, Tennessee**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum												Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	
1960	15,436	147	1,785	1,040	5,291	570	2,624	1,311	760	27,268	188	1,458	42,295	0	8,676	0	0	20,917	-	
1965	14,171	202	3,441	1,024	7,295	1,174	2,540	1,912	800	32,481	287	4,403	55,356	0	8,750	0	0	46,329	-	
1970	17,726	256	3,628	116	10,952	3,335	4,135	3,182	825	41,869	597	6,324	74,964	0	8,067	0	0	50,754	-	
1975	21,308	217	3,765	70	17,479	3,936	2,289	3,830	1,328	53,735	714	5,596	92,743	0	11,806	0	0	73,642	-	
1980	24,687	230	3,378	290	19,176	4,154	1,534	2,787	1,241	54,948	1,499	8,336	97,342	519	8,764	0	0	74,740	-	
1981	24,212	224	2,732	232	19,545	3,486	1,524	1,515	1,190	54,603	1,227	8,704	94,757	4,704	5,915	0	0	67,135	-	
1982	19,829	207	4,173	171	18,812	2,289	1,099	2,299	1,085	54,521	721	6,964	92,134	10,104	9,769	0	0	46,262	-	
1983	23,088	195	3,000	179	20,151	2,060	1,085	2,313	1,136	53,855	1,042	5,694	90,514	14,051	9,952	0	0	30,517	-	
1984	23,355	206	3,816	164	21,948	3,636	1,221	2,228	1,211	57,390	695	6,752	99,063	12,501	10,181	0	0	36,510	-	
1985	25,167	190	4,408	154	22,285	4,862	1,107	2,281	1,129	R 58,047	539	6,356	R 101,169	9,672	6,539	0	0	35,536	-	
1986	25,272	188	4,158	201	22,649	5,925	478	2,678	1,104	R 60,296	581	8,925	R 106,994	-105	5,326	0	0	60,476	-	
1987	24,750	201	4,565	186	22,590	5,686	674	2,613	1,248	R 67,490	320	9,164	R 104,534	-108	7,566	0	0	60,596	-	
1988	25,219	214	4,048	183	23,584	4,231	999	3,108	1,203	R 69,302	445	9,597	R 106,700	3,940	4,591	0	0	62,295	-	
1989	23,561	221	5,703	182	23,329	4,366	807	3,476	1,234	R 60,057	464	9,393	R 109,001	15,603	11,853	0	0	R 23,486	-	
1990	24,878	220	5,798	174	23,872	4,181	438	2,906	1,270	R 58,001	311	10,744	R 107,695	14,003	i NA	i NA	i NA	R 26,412	-	
1991	23,107	227	5,349	145	22,618	3,413	342	3,208	1,136	R 56,162	406	11,359	R 104,140	16,587	NA	NA	NA	R 27,131	-	
1992	24,106	242	5,281	343	24,044	4,479	442	4,787	1,159	R 58,587	397	12,607	R 112,127	15,654	NA	NA	NA	R 23,225	-	
1993	27,854	254	4,922	395	23,976	6,569	410	3,566	1,180	R 61,213	528	12,080	R 114,839	3,305	NA	NA	NA	R 40,466	-	
1994	25,440	246	5,448	392	24,805	7,762	544	3,482	1,233	R 62,897	461	12,824	R 119,848	11,932	NA	NA	NA	R 32,983	-	
1995	27,399	257	5,434	397	27,388	8,096	490	3,416	1,212	64,822	368	12,461	124,083	15,708	NA	NA	NA	R 10,790	-	
1996	26,744	280	5,171	231	27,554	9,317	585	3,915	1,176	64,868	214	13,505	126,535	22,924	NA	NA	NA	5,419	-	
Trillion Btu																				
1960	374.4	151.7	11.8	5.2	30.8	3.1	14.9	5.3	4.6	143.2	1.2	8.6	228.8	0.0	93.4	0.0	0.0	71.4	919.6	
1965	338.8	211.1	22.8	5.2	42.5	6.5	14.4	7.7	4.8	170.6	1.8	25.2	301.6	0.0	91.5	0.0	0.0	158.1	1,101.1	
1970	403.7	261.8	24.1	0.6	63.8	18.8	23.4	12.0	5.0	219.9	3.8	35.9	407.4	0.0	84.7	0.0	0.0	173.2	1,330.7	
1975	471.9	224.1	25.0	0.4	101.8	22.2	13.0	14.2	8.1	282.3	4.5	32.4	503.8	0.0	122.9	0.0	0.0	251.3	1,573.9	
1980	576.9	233.3	22.4	1.5	111.7	23.4	8.7	10.2	7.5	288.6	9.4	46.9	530.4	5.7	91.0	0.0	0.0	255.0	1,692.4	
1981	565.9	227.1	18.1	1.2	113.8	19.7	8.6	5.5	7.2	286.8	7.7	49.4	518.1	51.9	61.8	0.0	0.0	229.1	1,653.9	
1982	470.7	212.1	27.7	0.9	109.6	12.9	6.2	8.3	6.6	286.4	4.5	39.6	502.6	111.9	102.1	0.0	0.0	157.8	1,557.3	
1983	547.1	199.1	19.9	0.9	117.4	11.6	6.2	8.4	6.9	282.9	6.6	32.7	493.3	153.2	104.7	0.0	0.0	104.1	1,601.5	
1984	555.3	211.3	25.3	0.8	127.8	20.5	6.9	8.0	7.3	301.5	4.4	38.0	540.7	135.6	106.3	0.0	0.0	124.6	1,673.6	
1985	599.7	196.7	29.3	0.8	129.8	27.5	6.3	8.2	6.8	304.9	3.4	35.9	R 552.9	104.6	68.3	0.0	0.0	121.3	1,643.4	
1986	605.7	194.0	27.6	1.0	131.9	33.5	2.7	9.7	6.7	316.7	3.7	50.0	583.6	-1.1	55.6	0.0	0.0	206.3	1,644.2	
1987	596.5	207.0	30.3	0.9	131.6	32.1	3.8	9.6	7.6	R 302.0	2.0	51.0	R 570.9	-1.2	78.8	0.0	0.0	206.8	R 1,658.9	
1988	610.6	220.9	26.9	0.9	137.4	23.9	5.7	11.4	7.3	R 311.5	2.8	53.7	R 581.4	42.3	47.4	0.0	0.0	216.6	R 1,715.1	
1989	564.4	228.6	37.8	0.9	135.9	24.6	4.6	12.8	7.5	R 315.5	2.9	52.4	R 594.9	167.3	R 123.6	0.0	0.0	R 80.1	R 1,759.0	
1990	600.3	227.5	38.5	0.9	139.1	23.6	2.5	10.5	7.7	R 304.7	2.0	60.2	R 589.5	149.5	R 99.2	i 65.0	i 0.1	R 90.1	R 1,819.5	
1991	565.5	234.6	35.5	0.7	131.8	19.3	1.9	11.6	6.9	R 295.0	2.6	63.6	R 568.9	178.1	R 109.4	64.5	0.1	R 92.6	R 1,812.2	
1992	590.6	249.2	35.0	1.7	140.1	25.3	2.5	17.3	7.0	307.8	2.5	70.6	R 609.8	167.1	R 99.2	R 67.3	0.1	R 79.2	R 1,860.8	
1993	685.9	263.1	32.7	2.0	139.7	37.2	2.3	12.9	7.2	R 321.6	3.3	67.4	R 626.1	35.3	R 86.5	R 63.7	0.1	R 138.1	R 1,897.0	
1994	622.9	254.0	36.2	2.0	144.5	44.0	3.1	12.7	7.5	R 330.4	2.9	71.7	R 654.8	127.4	R 118.0	65.4	0.1	R 112.5	R 1,952.3	
1995	668.2	264.8	36.1	2.0	159.5	45.9	2.8	12.4	7.4	340.5	2.3	69.7	678.5	167.4	92.9	R 64.2	0.1	36.8	R 1,971.7	
1996	648.6	289.3	34.3	1.2	160.5	52.8	3.3	14.1	7.1	340.7	1.3	75.4	690.9	243.5	111.6	65.6	0.1	18.5	2,067.9	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 270. Residential Energy Consumption Estimates, Selected Years 1960-1996, Tennessee**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	331	4	336	34	80	797	862	1,740	0	0	8,683	-	21,599	-
1965	231	3	233	37	100	881	1,136	2,117	0	0	12,134	-	28,971	-
1970	189	2	191	47	169	2,027	2,316	4,512	0	0	17,942	-	43,479	-
1975	113	1	114	44	237	1,316	2,767	4,320	0	0	23,034	-	55,561	-
1980	82	1	82	45	308	549	1,501	2,358	0	0	26,207	-	63,727	-
1981	50	0	50	42	471	901	767	2,139	0	0	24,631	-	58,703	-
1982	62	0	62	42	403	541	1,086	2,030	0	0	24,639	-	59,178	-
1983	168	0	168	41	262	729	1,291	2,282	0	0	24,758	-	59,314	-
1984	108	0	108	44	283	881	1,160	2,323	0	0	26,236	-	61,068	-
1985	59	0	59	39	259	737	1,209	2,205	0	0	25,546	-	60,018	-
1986	28	0	28	40	166	329	1,425	1,920	0	0	25,884	-	59,541	-
1987	34	0	34	43	228	451	1,405	2,084	0	0	27,460	-	62,743	-
1988	66	(s)	66	48	226	626	1,752	2,604	0	0	27,960	-	63,210	-
1989	75	3	78	49	245	616	1,980	2,840	0	0	28,355	-	63,691	-
1990	73	5	78	46	237	324	1,716	2,277	e 918	e 15	28,757	-	62,895	-
1991	57	6	63	49	268	268	1,936	2,472	967	15	29,605	-	64,437	-
1992	55	(s)	55	52	259	361	2,094	2,715	1,017	16	29,498	-	63,006	-
1993	39	(s)	39	59	205	311	2,201	2,716	775	16	30,199	-	63,805	-
1994	31	1	32	57	302	439	2,112	2,853	760	16	32,797	-	68,431	-
1995	50	1	51	60	281	372	2,129	2,782	844	16	30,967	-	64,505	-
1996	39	0	39	70	272	456	2,533	3,261	842	17	35,333	-	73,540	-

  

Trillion Btu														
1960	8.2	0.1	8.3	35.1	0.5	4.5	3.5	8.4	0.0	0.0	29.6	81.4	73.7	155.1
1965	5.7	0.1	5.7	38.9	0.6	5.0	4.6	10.1	0.0	0.0	41.4	96.1	98.8	195.0
1970	4.5	(s)	4.5	47.6	1.0	11.5	8.8	21.2	0.0	0.0	61.2	134.6	148.3	282.9
1975	2.7	(s)	2.7	45.4	1.4	7.5	10.3	19.1	0.0	0.0	78.6	145.8	189.6	335.4
1980	2.0	(s)	2.0	45.6	1.8	3.1	5.5	10.4	0.0	0.0	89.4	147.4	217.4	364.9
1981	1.2	0.0	1.2	42.5	2.7	5.1	2.8	10.6	0.0	0.0	84.0	138.4	200.3	338.7
1982	1.5	0.0	1.5	43.0	2.3	3.1	3.9	9.3	0.0	0.0	84.1	137.9	201.9	339.8
1983	4.1	0.0	4.1	41.5	1.5	4.1	4.7	10.3	0.0	0.0	84.5	140.5	202.4	342.8
1984	2.6	0.0	2.6	45.1	1.6	5.0	4.2	10.8	0.0	0.0	89.5	148.1	208.4	356.4
1985	1.4	0.0	1.4	40.8	1.5	4.2	4.4	10.0	0.0	0.0	87.2	139.4	204.8	344.2
1986	0.7	0.0	0.7	41.5	1.0	1.9	5.2	8.0	0.0	0.0	88.3	138.5	203.2	341.7
1987	0.8	0.0	0.8	44.9	1.3	2.6	5.1	9.0	0.0	0.0	93.7	148.4	214.1	362.5
1988	1.6	(s)	1.6	49.1	1.3	3.6	6.4	11.3	0.0	0.0	95.4	157.4	215.7	373.1
1989	1.8	0.1	1.9	50.8	1.4	3.5	7.3	12.2	0.0	0.0	96.7	161.6	217.3	379.0
1990	1.8	0.1	1.9	48.0	1.4	1.8	6.2	9.4	e 18.4	e 0.1	98.1	e 175.9	R 214.6	Re 390.5
1991	1.4	0.1	1.6	51.0	1.6	1.5	7.0	10.1	19.3	0.1	101.0	183.0	R 219.9	R 402.9
1992	1.3	(s)	1.3	53.8	1.5	2.0	7.6	11.1	20.3	0.1	100.6	187.4	R 215.0	R 402.3
1993	1.0	(s)	1.0	61.0	1.2	1.8	7.9	10.9	15.5	0.1	103.0	191.5	R 217.7	R 409.2
1994	0.8	(s)	0.8	59.2	1.8	2.5	7.7	11.9	15.2	0.1	111.9	199.1	R 233.5	R 432.5
1995	1.3	(s)	1.3	61.9	1.6	2.1	7.7	11.5	16.9	0.1	105.7	197.2	220.1	417.3
1996	1.0	0.0	1.0	72.7	1.6	2.6	9.2	13.3	16.8	0.1	120.6	224.4	250.9	475.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 271. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Tennessee**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	615	3	618	24	200	157	152	173	(s)	682	0	2,796	-	6,956	-
1965	428	2	430	28	248	173	200	277	(s)	899	0	4,274	-	10,204	-
1970	351	1	352	43	422	399	409	392	1	1,622	0	6,352	-	15,393	-
1975	211	1	211	42	589	259	488	419	1	1,757	0	7,440	-	17,947	-
1980	151	(s)	152	44	1,015	104	265	465	48	1,897	0	14,216	-	34,568	-
1981	92	0	92	43	1,118	72	135	499	76	1,901	0	15,423	-	36,758	-
1982	114	0	114	39	1,115	133	192	489	102	2,031	0	15,730	-	37,782	-
1983	312	0	312	43	1,989	190	228	528	125	3,060	0	16,184	-	38,772	-
1984	200	0	200	47	2,148	186	205	592	83	3,214	0	9,948	-	23,156	-
1985	110	0	110	43	3,086	167	213	337	98	3,901	0	9,856	-	23,156	-
1986	51	0	51	43	1,412	91	251	401	129	2,283	0	9,727	-	22,375	-
1987	64	0	64	44	1,161	127	248	374	66	1,976	0	10,200	-	23,305	-
1988	123	(s)	123	46	1,103	242	309	517	76	2,247	0	10,481	-	23,695	-
1989	140	2	142	48	664	155	349	R 516	53	1,737	0	12,237	-	R 27,487	-
1990	136	3	140	44	636	69	303	R 464	33	R 1,504	e NA	13,075	-	R 28,597	-
1991	106	4	109	46	602	32	342	418	17	R 1,410	NA	13,117	-	R 28,550	-
1992	102	(s)	102	47	1,042	69	370	346	57	1,883	NA	7,391	-	R 15,787	-
1993	72	(s)	72	51	937	61	388	203	34	1,622	26	6,102	-	R 12,893	-
1994	58	(s)	58	51	1,006	73	373	49	33	1,533	28	6,122	-	R 12,773	-
1995	94	(s)	94	51	798	80	376	50	14	1,318	23	6,235	-	12,987	-
1996	72	0	72	58	918	89	447	49	28	1,531	28	6,543	-	13,619	-

  

Trillion Btu															
1960	15.2	0.1	15.3	25.1	1.2	0.9	0.6	0.9	(s)	3.6	0.0	9.5	53.5	23.7	77.2
1965	10.5	(s)	10.6	29.6	1.4	1.0	0.8	1.5	(s)	4.7	0.0	14.6	59.4	34.8	94.3
1970	8.3	(s)	8.4	43.7	2.5	2.3	1.5	2.1	(s)	8.3	0.0	21.7	82.0	52.5	134.6
1975	5.0	(s)	5.0	43.8	3.4	1.5	1.8	2.2	(s)	8.9	0.0	25.4	83.1	61.2	144.3
1980	3.6	(s)	3.6	44.8	5.9	0.6	1.0	2.4	0.3	10.2	0.0	48.5	107.1	117.9	225.1
1981	2.2	0.0	2.2	43.4	6.5	0.4	0.5	2.6	0.5	10.5	0.0	52.6	108.7	125.4	234.2
1982	2.7	0.0	2.7	39.6	6.5	0.8	0.7	2.6	0.6	11.2	0.0	53.7	107.2	128.9	236.1
1983	7.7	0.0	7.7	43.9	11.6	1.1	0.8	2.8	0.8	17.0	0.0	55.2	123.8	132.3	256.1
1984	4.9	0.0	4.9	47.7	12.5	1.1	0.7	3.1	0.5	17.9	0.0	33.9	104.4	79.0	183.4
1985	2.7	0.0	2.7	44.9	18.0	0.9	0.8	1.8	0.6	22.1	0.0	33.6	103.3	79.0	182.3
1986	1.2	0.0	1.2	44.0	8.2	0.5	0.9	2.1	0.8	12.6	0.0	33.2	90.9	76.3	167.3
1987	1.6	0.0	1.6	45.6	6.8	0.7	0.9	2.0	0.4	10.8	0.0	34.8	92.7	79.5	172.2
1988	3.0	(s)	3.0	47.3	6.4	1.4	1.1	2.7	0.5	12.1	0.0	35.8	98.2	80.8	179.0
1989	3.4	0.1	3.5	49.0	3.9	0.9	1.3	2.7	0.3	9.1	0.0	41.8	103.3	R 93.8	R 197.1
1990	3.4	0.1	3.5	45.1	3.7	0.4	1.1	2.4	0.2	7.8	e NA	44.6	101.0	R 97.6	R 198.5
1991	2.6	0.1	2.7	47.5	3.5	0.2	1.2	2.2	0.1	7.2	NA	44.8	102.2	R 97.4	R 199.6
1992	2.5	(s)	2.5	48.0	6.1	0.4	1.3	1.8	0.4	10.0	NA	25.2	85.6	R 53.9	139.5
1993	1.8	(s)	1.8	52.5	5.5	0.3	1.4	1.1	0.2	8.5	0.5	20.8	R 84.2	44.0	R 128.1
1994	1.5	(s)	1.5	52.4	5.9	0.4	1.4	0.3	0.2	8.1	0.6	20.9	R 83.4	43.6	R 127.0
1995	2.4	(s)	2.4	52.8	4.6	0.5	1.4	0.3	0.1	6.8	0.5	21.3	R 83.7	44.3	R 128.1
1996	1.8	0.0	1.8	60.4	5.3	0.5	1.6	0.3	0.2	7.9	0.6	22.3	93.0	46.5	139.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 272. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Tennessee**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,307	76	1,785	2,096	1,670	275	256	627	180	1,458	8,346	0	0	0	27,514	-	68,438	-
1965	2,862	97	3,441	2,601	1,486	522	321	484	264	4,403	13,521	0	0	0	28,362	-	67,716	-
1970	2,452	123	3,628	3,172	1,709	363	334	235	593	6,324	16,360	0	0	0	27,776	-	67,310	-
1975	2,134	112	3,765	4,712	714	455	522	117	523	5,596	16,405	0	0	0	37,904	-	91,429	-
1980	2,774	123	3,378	4,252	881	960	565	36	1,445	8,336	19,853	0	0	0	32,968	-	80,167	-
1981	3,573	121	2,732	3,685	551	522	542	28	1,074	8,704	17,838	0	0	0	31,070	-	74,049	-
1982	3,122	110	4,173	3,341	425	868	494	26	598	6,964	16,888	0	0	0	25,455	-	61,138	-
1983	3,936	100	3,000	2,675	166	611	517	17	917	5,694	13,597	0	0	0	28,424	-	68,098	-
1984	3,941	103	3,816	2,889	154	625	551	451	612	6,752	R 15,851	0	0	0	35,925	-	83,620	-
1985	4,145	97	4,408	3,482	203	693	514	642	441	6,356	16,740	0	0	0	33,624	-	78,997	-
1986	4,142	92	4,158	3,684	58	801	502	578	452	8,925	19,158	0	0	0	32,196	-	74,060	-
1987	3,954	98	4,565	3,479	96	R 839	568	R 610	253	9,164	R 19,574	0	0	0	32,071	-	73,279	-
1988	4,020	103	4,048	3,390	131	900	548	R 561	356	9,597	R 19,531	0	0	0	34,431	-	77,840	-
1989	4,058	107	5,703	2,360	36	992	562	R 605	400	9,393	20,051	0	0	0	34,520	-	R 77,538	-
1990	3,846	110	5,798	2,925	46	R 761	578	R 583	273	10,744	R 21,708	f NA	f NA	f NA	35,313	-	R 77,234	-
1991	3,720	116	5,349	2,702	43	796	517	557	339	11,359	21,662	NA	NA	NA	35,667	-	R 77,631	-
1992	3,686	126	5,281	3,659	12	R 2,204	527	575	295	12,607	25,160	NA	NA	NA	41,695	-	R 89,058	-
1993	3,942	124	4,922	3,389	38	R 829	537	R 724	479	12,080	R 22,999	NA	NA	NA	43,530	-	R 91,971	-
1994	4,097	119	5,448	3,746	32	758	561	R 785	426	12,824	R 24,580	NA	NA	NA	43,614	-	R 91,002	-
1995	3,777	126	5,434	3,980	37	777	552	865	351	12,461	24,457	NA	NA	NA	44,828	-	R 93,379	-
1996	3,670	127	5,171	3,784	41	810	535	890	184	13,505	24,921	NA	NA	NA	45,781	-	95,286	-

  

Trillion Btu																		
1960	58.1	78.6	11.8	12.2	9.5	1.1	1.5	3.3	1.1	8.6	49.2	0.0	0.0	0.0	93.9	279.7	233.5	513.3
1965	71.4	101.9	22.8	15.2	8.4	2.1	1.9	2.5	1.7	25.2	79.9	0.0	0.0	0.0	96.8	350.0	231.0	581.0
1970	58.0	125.9	24.1	18.5	9.7	1.4	2.0	1.2	3.7	35.9	96.6	0.0	0.0	0.0	94.8	375.2	229.7	604.9
1975	49.9	115.1	25.0	27.4	4.1	1.7	3.2	0.6	3.3	32.4	97.6	0.0	0.0	0.0	129.3	392.0	312.0	704.0
1980	67.2	125.1	22.4	24.8	5.0	3.5	3.4	0.2	9.1	46.9	115.3	0.0	0.0	0.0	112.5	420.0	273.5	693.6
1981	86.4	123.1	18.1	21.5	3.1	1.9	3.3	0.1	6.8	49.4	104.2	0.0	0.0	0.0	106.0	419.7	252.7	672.4
1982	75.9	112.5	27.7	19.5	2.4	3.1	3.0	0.1	3.8	39.6	99.2	0.0	0.0	0.0	86.9	374.5	208.6	583.1
1983	95.5	102.4	19.9	15.6	0.9	R 2.2	3.1	0.1	5.8	32.7	80.3	0.0	0.0	0.0	97.0	375.1	232.4	R 607.5
1984	96.7	105.5	25.3	16.8	0.9	R 2.3	3.3	2.4	3.8	38.0	92.8	0.0	0.0	0.0	122.6	417.6	285.3	R 703.0
1985	102.2	100.6	29.3	20.3	1.1	2.5	3.1	3.4	2.8	35.9	98.4	0.0	0.0	0.0	114.7	415.9	269.5	685.4
1986	102.5	94.5	27.6	21.5	0.3	2.9	3.0	3.0	2.8	50.0	111.2	0.0	0.0	0.0	109.9	418.1	252.7	670.8
1987	98.3	100.8	30.3	20.3	0.5	3.1	3.4	3.2	1.6	51.0	R 113.5	0.0	0.0	0.0	109.4	421.9	250.0	672.0
1988	99.8	106.6	26.9	19.7	0.7	3.3	3.3	R 2.9	2.2	53.7	112.9	0.0	0.0	0.0	117.5	436.8	265.6	R 702.3
1989	100.3	110.4	37.8	13.7	0.2	3.7	3.4	R 3.2	2.5	52.4	117.0	0.0	0.0	0.0	117.8	445.4	R 264.6	R 710.0
1990	96.8	113.6	38.5	17.0	0.3	2.8	3.5	R 3.1	1.7	60.2	127.0	f 0.0	f 44.9	f 0.0	120.5	f 502.7	R 263.5	R f 766.2
1991	93.5	119.7	35.5	15.7	0.2	2.9	3.1	2.9	2.1	63.6	126.2	0.0	43.7	0.0	121.7	504.7	R 264.9	R 769.6
1992	93.1	130.2	35.0	21.3	0.1	8.0	3.2	3.0	1.9	70.6	143.0	0.0	45.3	0.0	142.3	553.9	R 303.9	R 857.7
1993	99.2	128.7	32.7	19.7	0.2	3.0	3.3	3.8	3.0	67.4	133.1	0.0	45.8	0.0	148.5	555.3	R 313.8	R 869.1
1994	102.7	122.7	36.2	21.8	0.2	2.8	3.4	4.1	2.7	71.7	142.8	10.8	R 46.9	0.0	148.8	R 574.6	R 310.5	R 885.1
1995	94.9	129.8	36.1	23.2	0.2	2.8	3.3	4.5	2.2	69.7	142.0	8.6	R 45.7	0.0	153.0	R 574.0	R 318.6	R 892.6
1996	91.8	130.6	34.3	22.0	0.2	2.9	3.2	4.7	1.2	75.4	144.0	9.2	48.2	0.0	156.2	580.0	325.1	905.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 273. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Tennessee**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	38	5	1,040	2,914	570	22	505	26,468	8	31,527	0	(s)	-	(s)	-
1965	9	23	1,024	4,346	1,174	54	479	31,721	22	38,819	0	(s)	-	(s)	-
1970	4	26	116	7,189	3,335	94	491	41,241	3	52,469	0	(s)	-	(s)	-
1975	(s)	19	70	10,631	3,936	120	807	53,199	191	68,953	0	(s)	-	(s)	-
1980	0	16	290	13,196	4,154	61	676	54,446	6	72,828	0	(s)	-	(s)	-
1981	0	18	232	13,949	3,486	90	648	54,076	76	72,557	0	(s)	-	1	-
1982	0	17	171	13,667	2,289	154	591	54,006	21	70,899	0	(s)	-	(s)	-
1983	0	11	179	14,934	2,060	182	619	53,310	0	71,285	0	(s)	-	(s)	-
1984	0	13	164	16,422	3,636	R 238	660	56,348	0	R 77,468	0	(s)	-	1	-
1985	0	10	154	15,221	4,862	166	615	R 57,068	0	R 78,087	0	(s)	-	1	-
1986	0	14	201	17,156	5,925	R 201	601	R 59,317	0	R 83,400	0	(s)	-	1	-
1987	0	15	186	17,500	5,686	R 120	680	R 56,506	(s)	R 80,678	0	(s)	-	1	-
1988	0	17	183	18,500	4,231	147	656	R 58,224	13	R 81,953	0	(s)	-	1	-
1989	0	18	182	19,704	4,356	R 156	673	R 58,937	11	R 84,018	0	(s)	-	1	-
1990	0	20	174	19,842	4,181	R 126	692	R 56,954	5	R 81,974	R <sup>e</sup> 23,233	(s)	-	1	-
1991	0	16	145	18,774	3,413	135	619	R 55,187	50	R 78,324	R 18,417	(s)	-	1	-
1992	0	16	343	18,860	4,479	R 120	631	R 57,667	44	R 82,144	R 22,383	(s)	-	(s)	-
1993	0	19	395	19,033	6,569	R 147	643	R 60,286	15	R 87,089	R 24,979	(s)	-	(s)	-
1994	0	18	392	19,231	7,762	240	672	R 62,062	3	R 90,362	R 35,094	1	-	2	-
1995	0	18	397	21,874	8,096	135	660	R 63,907	2	R 95,070	R 14,750	1	-	2	-
1996	0	24	231	22,119	9,317	124	641	63,928	2	96,362	272	1	-	2	-

  

Trillion Btu															
1960	0.9	5.5	5.2	17.0	3.1	0.1	3.1	139.0	0.1	167.6	0.0	(s)	174.0	(s)	174.0
1965	0.2	23.7	5.2	25.3	6.5	0.2	2.9	166.6	0.1	206.9	0.0	(s)	230.9	(s)	230.9
1970	0.1	27.0	0.6	41.9	18.8	0.4	3.0	216.6	(s)	281.2	0.0	(s)	308.4	(s)	308.4
1975	(s)	19.7	0.4	61.9	22.2	0.4	4.9	279.5	1.2	370.5	0.0	(s)	390.2	(s)	390.2
1980	0.0	16.8	1.5	76.9	23.4	0.2	4.1	286.0	(s)	392.1	0.0	(s)	408.9	(s)	408.9
1981	0.0	17.8	1.2	81.3	19.7	0.3	3.9	284.1	0.5	390.9	0.0	(s)	408.7	(s)	408.7
1982	0.0	17.0	0.9	79.6	12.9	0.6	3.6	283.7	0.1	381.3	0.0	(s)	398.3	(s)	398.3
1983	0.0	11.1	0.9	87.0	11.6	0.7	3.8	280.0	0.0	R 383.9	0.0	(s)	395.1	(s)	395.1
1984	0.0	13.0	0.8	95.7	20.5	0.9	4.0	296.0	0.0	R 417.8	0.0	(s)	430.9	(s)	430.9
1985	0.0	10.5	0.8	88.7	27.5	0.6	3.7	R 299.8	0.0	R 421.0	0.0	(s)	431.5	(s)	431.5
1986	0.0	14.0	1.0	99.9	33.5	0.7	3.6	311.6	0.0	450.4	0.0	(s)	464.4	(s)	464.4
1987	0.0	15.8	0.9	101.9	32.1	0.4	4.1	R 296.8	(s)	R 436.4	0.0	(s)	R 452.2	(s)	R 452.2
1988	0.0	17.6	0.9	107.8	23.9	0.5	4.0	R 305.9	0.1	R 443.0	0.0	(s)	R 460.6	(s)	R 460.6
1989	0.0	18.4	0.9	114.8	24.6	0.6	4.1	R 309.6	0.1	R 454.6	0.0	(s)	R 473.0	(s)	R 473.0
1990	0.0	20.3	0.9	115.6	23.6	0.5	4.2	R 299.2	(s)	R 443.9	R <sup>e</sup> 1.8	(s)	R <sup>e</sup> 464.2	(s)	R <sup>e</sup> 464.2
1991	0.0	16.3	0.7	109.4	19.3	0.5	3.8	R 289.9	0.3	R 423.8	R 1.4	(s)	R 440.1	(s)	R 440.1
1992	0.0	16.9	1.7	109.9	25.3	0.4	3.8	R 302.9	0.3	444.4	R 1.7	(s)	461.3	(s)	461.3
1993	0.0	19.3	2.0	110.9	37.2	0.5	3.9	R 316.7	0.1	R 471.2	R 1.9	(s)	R 490.5	(s)	R 490.6
1994	0.0	18.7	2.0	112.0	44.0	0.9	4.1	R 326.0	(s)	R 488.9	R 2.7	(s)	R 507.6	(s)	R 507.6
1995	0.0	18.2	2.0	127.4	45.9	0.5	4.0	335.7	(s)	515.5	R 1.1	(s)	533.8	(s)	533.8
1996	0.0	25.0	1.2	128.8	52.8	0.4	3.9	335.8	(s)	523.0	(s)	(s)	548.0	(s)	548.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 274. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Tennessee**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	12,138	0	12,138	7	0	(s)	0	(s)	0	8,676	0	0	0	--
1965	10,637	0	10,637	16	0	0	0	0	0	8,750	0	0	0	--
1970	14,727	0	14,727	17	0	0	0	0	0	8,067	0	0	0	--
1975	18,848	0	18,848	0	0	1,310	0	1,310	0	11,806	0	0	0	--
1980	21,679	0	21,679	1	0	406	0	406	519	8,764	0	0	0	--
1981	20,497	0	20,497	(s)	0	322	0	322	4,704	5,915	0	0	0	--
1982	16,532	0	16,532	0	0	287	0	287	10,104	9,769	0	0	0	--
1983	18,672	0	18,672	(s)	0	291	0	291	14,051	9,952	0	0	0	--
1984	19,106	0	19,106	0	0	207	0	207	12,501	10,181	0	0	0	--
1985	20,853	0	20,853	0	0	237	0	237	9,672	6,539	0	0	0	--
1986	21,051	0	21,051	0	0	232	0	232	-105	5,326	0	0	0	--
1987	20,697	0	20,697	0	0	222	0	222	-108	7,566	0	0	0	--
1988	21,010	0	21,010	(s)	0	365	0	365	3,940	4,591	0	0	0	--
1989	19,283	0	19,283	(s)	0	356	0	356	15,603	11,853	0	0	0	--
1990	20,814	0	20,814	1	0	232	0	232	14,003	9,537	0	0	0	--
1991	19,216	0	19,216	(s)	0	272	0	272	16,587	10,497	0	0	0	--
1992	20,263	0	20,263	(s)	0	225	0	225	15,654	9,590	0	0	0	--
1993	23,801	0	23,801	2	0	413	0	413	3,305	8,394	0	0	0	--
1994	21,253	0	21,253	1	0	519	0	519	11,932	10,399	0	0	0	--
1995	23,477	0	23,477	2	0	455	0	455	15,708	8,186	0	0	0	--
1996	22,963	0	22,963	1	0	460	0	460	22,924	9,900	0	0	0	--

**Trillion Btu**

1960	291.8	0.0	291.8	7.5	0.0	(s)	0.0	(s)	0.0	93.4	0.0	0.0	0.0	392.6
1965	250.9	0.0	250.9	17.0	0.0	0.0	0.0	0.0	0.0	91.5	0.0	0.0	0.0	359.4
1970	332.7	0.0	332.7	17.6	0.0	0.0	0.0	0.0	0.0	84.7	0.0	0.0	0.0	435.0
1975	414.3	0.0	414.3	0.0	0.0	7.6	0.0	7.6	0.0	122.9	0.0	0.0	0.0	544.8
1980	504.1	0.0	504.1	1.1	0.0	2.4	0.0	2.4	5.7	91.0	0.0	0.0	0.0	604.3
1981	476.1	0.0	476.1	0.3	0.0	1.9	0.0	1.9	51.9	61.8	0.0	0.0	0.0	592.0
1982	390.5	0.0	390.5	0.0	0.0	1.7	0.0	1.7	111.9	102.1	0.0	0.0	0.0	606.2
1983	439.9	0.0	439.9	0.1	0.0	1.7	0.0	1.7	153.2	104.7	0.0	0.0	0.0	699.6
1984	451.1	0.0	451.1	0.0	0.0	1.2	0.0	1.2	135.6	106.3	0.0	0.0	0.0	694.1
1985	493.3	0.0	493.3	0.0	0.0	1.4	0.0	1.4	104.6	68.3	0.0	0.0	0.0	667.6
1986	501.4	0.0	501.4	0.0	0.0	1.3	0.0	1.3	-1.1	55.6	0.0	0.0	0.0	557.2
1987	495.8	0.0	495.8	0.0	0.0	1.3	0.0	1.3	-1.2	78.8	0.0	0.0	0.0	574.8
1988	506.1	0.0	506.1	0.2	0.0	2.1	0.0	2.1	42.3	47.4	0.0	0.0	0.0	598.2
1989	458.7	0.0	458.7	(s)	0.0	2.1	0.0	2.1	167.3	R 123.6	0.0	0.0	0.0	R 751.8
1990	498.1	0.0	498.1	0.6	0.0	1.4	0.0	1.4	149.5	R 99.2	0.0	0.0	0.0	R 748.8
1991	467.7	0.0	467.7	0.2	0.0	1.6	0.0	1.6	178.1	R 109.4	0.0	0.0	0.0	R 757.0
1992	493.7	0.0	493.7	0.3	0.0	1.3	0.0	1.3	167.1	R 99.2	0.0	0.0	0.0	R 761.6
1993	584.0	0.0	584.0	1.6	0.0	2.4	0.0	2.4	35.3	R 86.5	0.0	0.0	0.0	R 709.8
1994	518.0	0.0	518.0	1.1	0.0	3.0	0.0	3.0	127.4	R 107.2	0.0	0.0	0.0	R 756.6
1995	569.5	0.0	569.5	2.1	0.0	2.7	0.0	2.7	167.4	R 84.4	0.0	0.0	0.0	826.1
1996	554.0	0.0	554.0	0.6	0.0	2.7	0.0	2.7	243.5	102.3	0.0	0.0	0.0	903.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 275. Energy Consumption Estimates by Source, Selected Years 1960-1996, Texas**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
			Thousand Barrels																
1960	1,067	2,720	6,284	3,261	24,400	10,842	3,391	73,297	3,493	91,841	22,584	55,526	294,919	0	927	0	0	-1,996	-
1965	1,146	3,068	7,811	3,457	24,854	15,365	3,459	109,109	3,788	107,851	14,322	80,151	370,167	0	661	87	0	-2,853	-
1970	1,154	4,093	11,885	2,007	32,410	24,430	7,500	151,223	4,204	141,393	14,146	100,047	489,244	0	883	97	0	4,903	-
1975	12,765	3,944	8,150	1,312	54,706	27,308	7,196	157,246	4,321	175,538	38,536	123,687	598,001	0	1,584	89	0	-5,489	-
1980	48,602	4,091	10,906	1,264	72,513	30,934	15,355	189,802	5,340	180,997	65,070	218,150	790,331	0	398	79	0	-20,069	-
1981	56,364	3,927	7,923	1,301	90,679	30,922	10,745	204,321	5,121	185,175	67,308	170,372	773,869	0	856	75	0	-21,188	-
1982	61,217	3,394	7,855	903	90,523	42,809	10,128	195,305	4,670	190,663	59,968	141,958	744,783	0	1,022	61	0	-11,762	-
1983	68,201	3,242	11,721	762	96,961	47,270	14,276	196,447	4,890	195,020	43,198	137,880	748,425	0	1,153	75	0	2,561	-
1984	72,452	3,433	10,729	963	97,238	64,626	13,720	263,521	5,214	196,755	35,390	148,405	836,562	0	1,075	110	0	17,954	-
1985	77,017	3,386	11,808	1,317	94,121	74,500	776	256,932	4,859	R 205,419	28,713	142,516	R 820,961	0	1,397	300	0	30,397	-
1986	79,259	3,186	13,645	1,539	86,354	80,214	678	250,171	4,751	R 209,513	27,842	145,157	R 819,865	0	1,962	308	0	40,151	-
1987	82,915	3,303	12,601	1,150	88,345	84,562	585	272,281	5,372	R 205,338	21,971	151,875	R 844,079	0	2,118	233	0	47,710	-
1988	86,644	3,531	14,434	1,013	86,408	94,793	233	292,960	5,180	R 208,680	24,328	165,356	R 893,384	3,792	1,203	0	0	42,573	-
1989	90,989	3,624	9,682	820	87,946	93,265	703	306,174	5,313	R 203,520	28,801	164,701	R 900,925	9,990	1,383	189	(s)	R 21,212	-
1990	91,415	3,602	14,013	838	82,338	95,903	200	293,043	5,468	R 205,402	27,843	178,929	R 903,977	15,859	i NA	i NA	i NA	R 20,806	-
1991	92,064	3,560	9,371	655	84,708	90,674	93	320,936	4,891	R 198,780	28,600	179,338	R 918,048	19,800	NA	NA	NA	R 18,601	-
1992	91,568	3,476	11,800	783	90,279	90,029	173	333,233	4,987	R 200,686	30,937	193,254	R 956,161	24,496	NA	NA	NA	R 5,961	-
1993	96,809	3,741	12,734	693	91,759	86,961	152	322,305	5,078	R 207,441	22,859	188,032	R 938,015	12,407	NA	NA	NA	R 18,287	-
1994	93,829	3,666	10,947	773	89,545	83,397	148	358,599	5,308	R 218,772	21,946	197,614	R 987,048	28,745	NA	NA	NA	R 7,739	-
1995	92,612	3,802	11,794	645	82,610	83,002	196	370,395	5,216	R 213,428	22,894	190,030	R 980,210	36,151	NA	NA	NA	R 1,308	-
1996	98,997	3,991	11,962	625	92,763	99,870	237	405,354	5,062	226,381	20,630	206,201	1,069,086	35,767	NA	NA	NA	22,723	-
Trillion Btu																			
1960	25.0	2,815.5	41.7	16.5	142.1	58.6	19.2	294.0	21.2	482.4	142.0	331.6	1,549.3	0.0	10.0	0.0	0.0	-6.8	4,392.9
1965	29.2	3,181.5	51.8	17.5	144.8	84.3	19.6	437.6	23.0	566.5	90.0	471.5	1,906.7	0.0	6.9	0.9	0.0	-9.7	5,115.4
1970	30.8	4,203.9	78.9	10.1	188.8	135.9	42.5	571.5	25.5	742.7	88.9	582.8	2,467.7	0.0	9.3	1.0	0.0	16.7	6,729.3
1975	196.2	4,046.9	54.1	6.6	318.7	152.7	40.8	584.2	26.2	922.1	242.3	719.4	3,067.0	0.0	16.5	0.9	0.0	-18.7	7,308.8
1980	734.1	4,226.1	72.4	6.4	422.4	173.3	87.1	697.3	32.4	950.8	409.1	1,240.4	4,091.5	0.0	4.1	0.8	0.0	-68.5	8,988.2
1981	858.5	4,052.3	52.6	6.6	528.2	173.4	60.9	744.3	31.1	972.7	423.2	970.6	3,963.6	0.0	8.9	0.8	0.0	-72.3	8,811.9
1982	931.1	3,503.0	52.1	4.6	527.3	240.7	57.4	706.0	28.3	1,001.6	377.0	812.4	3,807.4	0.0	10.7	0.6	0.0	-40.1	8,212.7
1983	1,016.8	3,335.5	77.8	3.8	564.8	266.0	80.9	710.0	29.7	1,024.4	271.6	801.7	3,830.8	0.0	12.1	0.8	0.0	8.7	8,204.7
1984	1,074.9	3,556.2	71.2	4.9	566.4	364.3	77.8	948.4	31.6	1,033.6	222.5	842.8	4,163.4	0.0	11.2	1.2	0.0	61.3	8,868.2
1985	1,149.0	3,514.4	78.4	6.6	548.3	420.5	4.4	925.7	29.5	R 1,079.1	180.5	816.4	R 4,089.4	0.0	14.6	3.1	0.0	103.7	R 8,874.2
1986	1,162.7	3,312.9	90.5	7.8	503.0	453.0	3.8	910.6	28.8	1,100.6	175.0	835.8	4,109.1	0.0	20.5	3.2	0.0	137.0	R 8,745.4
1987	1,203.9	3,435.4	83.6	5.8	514.6	477.6	3.3	996.3	32.6	R 1,078.6	138.1	866.3	R 4,196.9	0.0	22.1	2.4	0.0	162.8	R 9,023.5
1988	1,264.1	3,665.2	95.8	5.1	503.3	535.5	1.3	1,069.9	31.4	R 1,096.2	153.0	945.8	R 4,437.3	40.7	12.4	0.0	0.0	145.3	R 9,565.0
1989	1,326.1	3,761.3	64.2	4.1	512.3	526.9	4.0	1,127.6	32.2	R 1,069.1	181.1	937.7	R 4,459.3	107.1	R 14.4	2.0	(s)	R 72.4	R 9,742.6
1990	1,333.9	3,745.9	93.0	4.2	479.6	542.1	1.1	1,062.3	33.2	R 1,079.0	175.1	1,018.1	R 4,487.7	169.4	R i 18.7	R i 53.8	i 0.3	R 71.0	R i 9,879.6
1991	1,333.1	3,691.8	62.2	3.3	493.4	512.8	0.5	1,159.9	29.7	R 1,044.2	179.8	1,019.2	R 4,505.0	212.7	R 23.2	R 53.9	0.4	R 63.5	R 9,878.4
1992	1,324.2	3,625.8	78.3	4.0	525.9	509.1	1.0	1,207.6	30.2	R 1,054.2	194.5	1,091.4	R 4,696.2	261.6	R 27.3	R 55.9	0.4	R 20.3	R 10,001.3
1993	1,413.2	3,846.0	84.5	3.5	534.5	492.0	0.9	1,162.2	30.8	R 1,089.7	143.7	1,063.2	R 4,605.1	132.5	R 18.4	R 55.8	0.4	R 26.4	R 10,125.1
1994	1,382.8	3,802.0	72.6	3.9	521.6	472.5	0.8	1,303.5	32.2	R 1,149.2	138.0	1,116.3	R 4,810.6	306.9	R 15.8	R 61.1	0.4	R 62.4	R 10,394.8
1995	1,361.7	3,943.2	78.3	3.3	481.2	470.5	1.1	1,341.9	31.6	1,121.1	143.9	1,073.3	4,746.3	385.3	R 17.6	R 59.6	0.4	R 4.5	R 10,505.2
1996	1,475.4	4,123.0	79.4	3.2	540.3	566.2	1.3	1,464.5	30.7	1,189.2	129.7	1,161.8	5,166.4	379.9	9.9	56.7	1.3	77.5	11,278.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 276. Residential Energy Consumption Estimates, Selected Years 1960-1996, Texas**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	6	0	6	172	96	6	10,083	10,185	0	0	11,316	—	28,146	—
1965	2	0	2	183	71	7	13,052	13,131	0	0	18,745	—	44,755	—
1970	1	0	1	232	134	33	15,397	15,565	0	0	32,591	—	78,980	—
1975	0	0	0	232	270	39	11,419	11,728	0	0	40,892	—	98,636	—
1980	(s)	0	(s)	225	8	198	6,131	6,337	0	0	57,178	—	139,037	—
1981	2	0	2	209	7	114	6,245	6,366	0	0	57,621	—	137,326	—
1982	2	1	3	221	29	356	4,729	5,114	0	0	60,733	—	145,871	—
1983	0	0	0	214	344	112	5,624	6,081	0	0	60,326	—	144,529	—
1984	0	0	0	230	338	457	5,135	5,931	0	0	68,363	—	159,121	—
1985	2	0	2	213	39	112	7,262	7,414	0	0	71,740	—	168,547	—
1986	5	0	5	195	21	46	6,611	6,677	0	0	72,392	—	166,523	—
1987	10	0	10	211	82	59	7,046	7,187	0	0	74,369	—	169,928	—
1988	16	1	17	210	32	58	6,208	6,298	0	0	77,255	—	174,656	—
1989	4	1	5	230	13	49	6,534	6,596	0	0	79,620	—	178,841	—
1990	4	0	4	211	3	26	6,133	6,162	e 746	e 95	82,548	—	180,543	—
1991	4	(s)	4	222	3	34	4,040	4,078	786	107	84,088	—	183,020	—
1992	3	(s)	4	215	2	23	3,448	3,473	827	108	81,934	—	175,005	—
1993	2	(s)	2	232	3	30	3,674	3,707	725	111	87,686	—	185,262	—
1994	(s)	(s)	(s)	213	6	20	3,627	3,653	711	120	89,793	—	187,355	—
1995	0	0	0	206	5	22	3,319	3,346	789	126	92,831	—	193,372	—
1996	0	0	0	229	(s)	38	2,312	2,351	787	134	99,656	—	207,416	—

Trillion Btu														
1960	0.1	0.0	0.1	177.7	0.6	(s)	40.4	41.0	0.0	0.0	38.6	257.4	96.0	353.4
1965	(s)	0.0	(s)	189.3	0.4	(s)	52.4	52.8	0.0	0.0	64.0	306.1	152.7	458.8
1970	(s)	0.0	(s)	238.5	0.8	0.2	58.2	59.2	0.0	0.0	111.2	408.8	269.5	678.3
1975	0.0	0.0	0.0	239.2	1.6	0.2	42.4	44.2	0.0	0.0	139.5	422.9	336.5	759.5
1980	(s)	0.0	(s)	231.7	(s)	1.1	22.5	23.7	0.0	0.0	195.1	450.5	474.4	924.9
1981	(s)	0.0	(s)	216.0	(s)	0.6	22.8	23.4	0.0	0.0	196.6	436.0	468.6	904.6
1982	(s)	(s)	0.1	228.3	0.2	2.0	17.1	19.3	0.0	0.0	207.2	454.9	497.7	952.6
1983	0.0	0.0	0.0	221.3	2.0	0.6	20.3	23.0	0.0	0.0	205.8	450.1	493.1	943.3
1984	0.0	0.0	0.0	239.4	2.0	2.6	18.5	23.0	0.0	0.0	233.3	495.7	542.9	1,038.6
1985	0.1	0.0	0.1	221.0	0.2	0.6	26.2	27.0	0.0	0.0	244.8	492.9	575.1	1,067.9
1986	0.1	0.0	0.1	202.9	0.1	0.3	24.1	24.4	0.0	0.0	247.0	474.5	568.2	1,042.6
1987	0.2	0.0	0.2	219.6	0.5	0.3	25.8	26.6	0.0	0.0	253.7	500.2	579.8	1,080.0
1988	0.4	(s)	0.4	218.4	0.2	0.3	22.7	23.2	0.0	0.0	263.6	505.5	595.9	1,101.5
1989	0.1	(s)	0.1	239.2	0.1	0.3	24.1	24.4	0.0	0.0	271.7	535.4	610.2	1,145.6
1990	0.1	0.0	0.1	219.5	(s)	0.1	22.2	22.4	e 14.9	e 0.3	281.7	e 538.9	R 610.2	R e 1,154.9
1991	0.1	(s)	0.1	231.0	(s)	0.2	14.6	14.8	15.7	0.4	286.9	548.9	R 624.5	R 1,173.4
1992	0.1	(s)	0.1	225.3	(s)	0.1	12.5	12.6	16.5	0.4	279.6	534.5	R 597.1	R 1,131.6
1993	(s)	(s)	(s)	238.5	(s)	0.2	13.2	13.4	14.5	0.4	299.2	566.0	R 632.1	R 1,198.1
1994	(s)	(s)	(s)	222.5	(s)	0.1	13.2	13.3	14.2	0.4	306.4	556.9	R 639.3	R 1,196.1
1995	0.0	0.0	0.0	215.2	(s)	0.1	12.0	12.2	15.8	0.4	316.7	560.3	R 659.8	R 1,220.1
1996	0.0	0.0	0.0	237.7	(s)	0.2	8.4	8.6	15.7	0.5	340.0	602.5	707.7	1,310.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 — =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 277. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Texas**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	11	0	11	60	595	656	1,779	663	191	3,884	0	9,800	-	24,377	-
1965	4	0	4	81	440	788	2,303	711	64	4,307	0	14,804	-	35,347	-
1970	1	0	1	146	830	3,603	2,717	692	78	7,920	0	22,869	-	55,420	-
1975	0	0	0	117	1,669	4,192	2,015	687	677	9,240	0	33,884	-	81,733	-
1980	1	0	1	169	2,842	3,251	1,082	3,299	2,569	13,043	0	44,062	-	107,144	-
1981	3	0	3	157	3,740	6,808	1,102	781	2,525	14,956	0	47,253	-	112,616	-
1982	4	(s)	4	189	4,880	1,298	835	870	1,816	9,698	0	49,337	-	118,499	-
1983	0	0	0	157	8,952	11,780	993	2,430	1,018	25,172	0	51,228	-	122,733	-
1984	0	0	0	166	8,791	10,033	906	1,747	681	22,158	0	57,151	-	133,025	-
1985	5	0	5	152	9,582	250	1,282	1,954	252	13,320	0	60,150	-	141,317	-
1986	9	0	9	147	5,412	177	1,167	2,087	247	9,090	0	61,350	-	141,122	-
1987	19	0	19	157	8,188	82	1,243	R 2,296	536	R 12,345	0	62,459	-	142,715	-
1988	30	(s)	30	175	5,586	41	1,095	R 2,440	543	R 9,706	0	65,511	-	148,106	-
1989	8	(s)	8	183	3,894	405	1,153	R 2,334	298	R 8,084	0	67,426	-	R 151,451	-
1990	7	0	7	172	3,274	25	1,082	R 2,294	72	R 6,746	e NA	70,781	-	R 154,807	-
1991	7	(s)	7	181	2,950	12	713	1,623	217	R 5,516	NA	72,141	-	R 157,018	-
1992	6	(s)	6	185	3,104	68	609	R 1,446	16	R 5,242	NA	72,076	-	R 153,951	-
1993	4	(s)	4	176	2,343	25	648	159	0	3,174	65	75,466	-	R 159,444	-
1994	(s)	(s)	(s)	180	2,524	29	640	160	1	3,355	71	78,058	-	R 162,870	-
1995	0	0	0	210	2,207	46	586	164	(s)	3,003	63	80,354	-	R 167,382	-
1996	0	0	0	179	2,352	38	408	163	0	2,961	71	83,479	-	173,746	-

Trillion Btu															
1960	0.2	0.0	0.2	61.8	3.5	3.7	7.1	3.5	1.2	19.0	0.0	33.4	114.4	83.2	197.6
1965	0.1	0.0	0.1	83.6	2.6	4.5	9.2	3.7	0.4	20.4	0.0	50.5	154.6	120.6	275.2
1970	(s)	0.0	(s)	150.0	4.8	20.4	10.3	3.6	0.5	39.7	0.0	78.0	267.7	189.1	456.8
1975	0.0	0.0	0.0	120.2	9.7	23.8	7.5	3.6	4.3	48.8	0.0	115.6	284.7	278.9	563.5
1980	(s)	0.0	(s)	173.7	16.6	18.4	4.0	17.3	16.2	72.4	0.0	150.3	396.5	365.6	762.1
1981	0.1	0.0	0.1	162.4	21.8	38.6	4.0	4.1	15.9	84.4	0.0	161.2	408.1	384.2	792.3
1982	0.1	(s)	0.1	195.4	28.4	7.4	3.0	4.6	11.4	54.8	0.0	168.3	418.6	404.3	822.9
1983	0.0	0.0	0.0	162.5	52.1	66.8	3.6	12.8	6.4	141.7	0.0	174.8	479.0	418.8	897.7
1984	0.0	0.0	0.0	172.2	51.2	56.9	3.3	9.2	4.3	124.8	0.0	195.0	492.1	453.9	945.9
1985	0.1	0.0	0.1	157.7	55.8	1.4	4.6	10.3	1.6	73.7	0.0	205.2	436.7	482.2	918.9
1986	0.2	0.0	0.2	153.2	31.5	1.0	4.2	11.0	1.6	49.3	0.0	209.3	412.1	481.5	893.6
1987	0.4	0.0	0.4	163.1	47.7	0.5	4.5	R 12.1	3.4	68.1	0.0	213.1	444.8	486.9	R 931.8
1988	0.7	(s)	0.7	182.4	32.5	0.2	4.0	12.8	3.4	53.0	0.0	223.5	R 459.6	505.3	965.0
1989	0.2	(s)	0.2	189.9	22.7	2.3	4.2	12.3	1.9	43.4	0.0	230.1	463.5	R 516.8	R 980.3
1990	0.2	0.0	0.2	179.6	19.1	0.1	3.9	12.0	0.5	35.6	e NA	241.5	R 456.9	R 528.2	R 985.1
1991	0.2	(s)	0.2	188.2	17.2	0.1	2.6	8.5	1.4	29.7	NA	246.1	464.2	R 535.7	R 1,000.0
1992	0.1	(s)	0.1	193.8	18.1	0.4	2.2	7.6	0.1	28.4	NA	245.9	468.3	R 525.3	R 993.5
1993	0.1	(s)	0.1	181.1	13.6	0.1	2.3	0.8	0.0	17.0	1.3	257.5	R 456.9	R 544.0	R 1,000.9
1994	(s)	(s)	(s)	187.9	14.7	0.2	2.3	0.8	(s)	18.0	1.4	266.3	R 473.7	R 555.7	R 1,029.4
1995	0.0	0.0	0.0	218.5	12.9	0.3	2.1	0.9	(s)	16.1	1.3	274.2	R 510.0	571.1	R 1,081.1
1996	0.0	0.0	0.0	185.1	13.7	0.2	1.5	0.9	0.0	16.2	1.4	284.8	487.6	592.8	1,080.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 278. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Texas**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro- electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	1,031	2,029	6,284	10,118	2,729	59,411	1,712	3,798	4,615	55,526	144,194	0	0	0	14,602	-	36,320	-
1965	1,136	2,098	7,811	8,519	2,663	89,166	1,974	2,563	1,879	80,151	194,725	0	0	0	23,685	-	56,550	-
1970	1,150	2,557	11,885	8,947	3,863	127,521	2,581	1,410	2,297	100,047	258,551	0	0	0	40,274	-	97,598	-
1975	3,720	2,160	8,150	15,301	2,965	138,844	2,583	997	11,070	123,687	303,596	5	0	0	54,712	-	131,973	-
1980	3,250	2,163	10,906	20,250	11,906	181,940	3,431	470	16,029	218,150	463,082	0	0	0	78,190	-	190,131	-
1981	5,217	2,080	7,923	28,539	3,823	195,601	3,290	750	28,370	170,372	438,668	0	0	0	79,905	-	190,436	-
1982	4,670	1,595	7,855	27,280	8,474	188,544	3,000	637	26,848	141,958	404,596	0	0	0	76,055	-	182,671	-
1983	4,194	1,573	11,721	32,172	2,385	188,409	3,141	535	14,395	137,880	390,637	0	0	0	79,629	-	190,773	-
1984	5,495	1,663	10,729	31,595	3,229	R 256,650	3,350	R 2,250	9,622	148,405	R 465,830	0	0	0	82,742	-	192,591	-
1985	5,192	1,732	11,808	27,327	414	247,779	3,122	R 4,704	5,969	142,516	R 443,638	0	0	0	81,235	-	190,854	-
1986	4,488	1,655	13,645	27,484	455	241,630	3,052	4,542	1,680	145,157	437,646	0	0	0	79,527	-	182,935	-
1987	4,083	1,805	12,601	26,272	444	R 263,540	3,451	R 4,224	1,344	151,875	R 463,750	0	0	0	79,238	-	181,052	-
1988	3,708	1,994	14,434	27,628	134	285,193	3,328	R 4,123	1,040	165,356	R 501,236	0	0	0	81,579	-	184,432	-
1989	4,275	2,080	9,682	25,161	248	R 298,034	3,413	R 4,517	507	164,701	R 506,264	0	0	0	82,615	-	R 185,569	-
1990	4,157	2,105	14,013	25,890	149	R 285,349	3,513	R 4,336	1,291	178,929	R 513,468	f NA	f NA	f NA	84,087	-	R 183,910	-
1991	4,198	2,070	9,371	23,134	47	315,838	3,142	R 4,618	1,101	179,338	R 536,588	NA	NA	NA	84,122	-	R 183,095	-
1992	4,225	2,028	11,800	23,048	82	R 328,866	3,204	R 4,338	822	193,254	565,415	NA	NA	NA	85,421	-	R 182,454	-
1993	4,667	2,179	12,734	22,326	97	R 317,635	3,262	R 3,438	2,444	187,713	R 549,650	NA	NA	NA	86,933	-	R 183,672	-
1994	5,350	2,128	10,947	18,918	99	353,718	3,410	R 3,750	2,424	197,612	R 590,878	NA	NA	NA	90,329	-	R 188,475	-
1995	4,255	2,257	11,794	16,503	128	366,168	3,351	3,944	2,497	190,030	594,416	NA	NA	NA	90,093	-	R 187,668	-
1996	4,808	2,469	11,962	20,353	161	402,344	3,252	4,040	2,127	206,201	650,441	NA	NA	NA	95,308	-	198,367	-

Trillion Btu																		
1960	24.4	2,100.3	41.7	58.9	15.5	238.3	10.4	19.9	29.0	331.6	745.4	0.0	0.0	0.0	49.8	2,919.9	123.9	3,043.8
1965	29.0	2,175.3	51.8	49.6	15.1	357.6	12.0	13.5	11.8	471.5	982.9	0.0	0.0	0.0	80.8	3,268.0	192.9	3,461.0
1970	30.7	2,626.3	78.9	52.1	21.9	481.9	15.7	7.4	14.4	582.8	1,255.1	0.0	0.0	0.0	137.4	4,049.5	333.0	4,382.5
1975	77.7	2,224.0	54.1	89.1	16.8	515.8	15.7	5.2	69.6	719.4	1,485.8	0.1	0.0	0.0	186.7	3,974.1	450.3	4,424.4
1980	63.3	2,229.7	72.4	118.0	67.5	668.4	20.8	2.5	100.8	1,240.4	2,290.7	0.0	0.0	0.0	266.8	4,850.5	648.7	5,499.3
1981	91.4	2,149.3	52.6	166.2	21.7	712.6	20.0	3.9	178.4	970.6	2,125.9	0.0	0.0	0.0	272.6	4,639.2	649.8	5,289.0
1982	83.8	1,644.6	52.1	158.9	48.0	681.6	18.2	3.3	168.8	812.4	1,943.4	0.0	0.0	0.0	259.5	3,931.3	623.3	4,554.6
1983	65.9	1,623.3	77.8	187.4	13.5	680.9	19.1	2.8	90.5	801.7	1,873.7	0.0	0.0	0.0	271.7	3,834.6	650.9	4,485.5
1984	93.1	1,729.0	71.2	184.0	18.3	923.7	20.3	11.8	60.5	842.8	2,132.6	0.0	0.0	0.0	282.3	4,237.0	657.1	R 4,894.2
1985	85.4	1,799.3	78.4	159.2	2.3	892.7	18.9	24.7	37.5	816.4	2,030.2	0.0	0.0	0.0	277.2	4,192.1	651.2	4,843.3
1986	72.2	1,726.0	90.5	160.1	2.6	879.5	18.5	23.9	10.6	835.8	2,021.5	0.0	0.0	0.0	271.3	4,091.1	624.2	4,715.3
1987	61.9	1,881.7	83.6	153.0	2.5	964.3	20.9	R 22.2	8.4	866.3	R 2,121.4	0.0	0.0	0.0	270.4	4,335.3	617.7	R 4,953.1
1988	52.2	2,074.2	95.8	160.9	0.8	1,041.5	20.2	21.7	6.5	945.8	R 2,293.1	0.0	0.0	0.0	278.3	4,697.9	629.3	5,327.2
1989	62.3	2,162.2	64.2	146.6	1.4	1,097.7	20.7	23.7	3.2	937.7	2,295.1	0.0	0.0	0.0	281.9	4,801.5	R 633.2	R 5,434.6
1990	61.5	2,193.7	93.0	150.8	0.8	1,034.4	21.3	R 22.8	8.1	1,018.1	R 2,349.4	f 0.0	f 35.6	f 0.0	286.9	R f 4,927.0	R 627.5	R f 5,554.5
1991	63.2	2,152.2	62.2	134.8	0.3	1,141.4	19.1	24.3	6.9	1,019.2	2,408.1	0.0	34.9	0.0	287.0	4,945.4	R 624.7	R 5,570.2
1992	60.5	2,128.3	78.3	134.3	0.5	1,191.8	19.4	22.8	5.2	1,091.4	2,543.7	0.0	36.1	0.0	291.5	5,060.0	R 622.5	R 5,682.5
1993	70.9	2,241.5	84.5	130.1	0.6	1,145.4	19.8	18.1	15.4	1,061.3	2,475.0	0.0	R 36.5	0.0	296.6	5,120.5	R 626.7	R 5,747.1
1994	82.8	2,218.4	72.6	110.2	0.6	1,285.8	20.7	19.7	15.2	1,116.3	2,641.1	0.0	R 41.1	0.0	308.2	R 5,291.7	R 643.1	R 5,934.8
1995	63.7	2,352.8	78.3	96.1	0.7	1,326.6	20.3	20.7	15.7	1,073.3	2,631.8	0.0	R 38.8	0.0	307.4	R 5,394.5	R 640.3	R 6,034.8
1996	73.8	2,558.9	79.4	118.6	0.9	1,453.7	19.7	21.2	13.4	1,161.8	2,868.6	0.1	R 38.2	0.9	325.2	5,865.5	676.8	6,542.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 279. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Texas**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	18	52	3,261	13,571	10,842	2,024	1,780	87,381	17,736	136,595	0	8	-	21	-
1965	4	68	3,457	15,810	15,365	4,588	1,814	104,577	12,346	157,957	0	4	-	9	-
1970	2	96	2,007	22,454	24,430	5,587	1,623	139,292	11,667	207,059	0	0	-	0	-
1975	1	82	1,312	37,391	27,308	4,969	1,738	173,854	25,049	271,622	0	0	-	0	-
1980	0	105	1,264	48,286	30,934	649	1,909	177,228	45,812	306,082	0	0	-	0	-
1981	0	102	1,301	57,479	30,922	1,373	1,831	183,644	35,827	312,378	0	0	-	0	-
1982	0	103	903	57,045	42,809	1,197	1,670	189,156	30,391	323,171	0	0	-	0	-
1983	0	106	762	53,712	47,270	1,421	1,748	192,055	25,716	322,685	0	0	-	0	-
1984	0	108	963	55,883	64,626	R 829	1,864	192,758	24,764	R 341,687	0	0	-	0	-
1985	0	92	1,317	56,398	74,500	609	1,738	R 198,761	21,610	R 354,933	0	0	-	0	-
1986	0	82	1,539	52,964	80,214	764	1,699	R 202,884	25,541	R 365,605	0	0	-	0	-
1987	0	81	1,150	53,300	84,562	R 452	1,921	R 198,817	19,522	R 359,724	0	0	-	0	-
1988	0	108	1,013	52,508	94,793	464	1,852	R 202,116	22,015	R 374,760	0	0	-	0	-
1989	0	107	820	56,560	93,265	R 452	1,900	R 196,670	26,059	R 375,726	0	0	-	0	-
1990	0	106	838	52,471	95,903	R 479	1,955	R 198,773	26,227	R 376,646	R e 5,865	0	-	0	-
1991	0	82	655	58,273	90,674	345	1,749	R 192,539	27,179	R 371,414	R 4,649	0	-	0	-
1992	0	81	783	63,829	90,029	310	1,783	R 194,901	29,922	R 381,557	R 5,651	0	-	0	-
1993	0	82	693	66,848	86,961	R 348	1,816	R 203,844	20,088	R 380,598	R 6,306	(s)	-	(s)	-
1994	0	96	773	67,876	83,397	R 614	1,898	R 214,861	19,178	R 388,597	R 15,489	0	-	0	-
1995	0	82	645	63,563	83,002	322	1,865	R 209,319	20,335	R 379,053	R 50,013	0	-	0	-
1996	0	76	625	69,386	99,870	290	1,810	222,177	18,169	412,327	18,654	6	-	13	-

**Trillion Btu**

1960	0.3	54.1	16.5	79.1	58.6	8.1	10.8	459.0	111.5	743.5	0.0	(s)	798.0	0.1	798.0
1965	0.1	70.0	17.5	92.1	84.3	18.4	11.0	549.3	77.6	850.3	0.0	(s)	920.4	(s)	920.4
1970	(s)	98.8	10.1	130.8	135.9	21.1	9.8	731.7	73.3	1,112.9	0.0	0.0	1,211.7	0.0	1,211.7
1975	(s)	84.6	6.6	217.8	152.7	18.5	10.5	913.3	157.5	1,476.8	0.0	0.0	1,561.4	0.0	1,561.4
1980	0.0	108.1	6.4	281.3	173.3	2.4	11.6	931.0	288.0	1,693.9	0.0	0.0	1,801.9	0.0	1,801.9
1981	0.0	105.1	6.6	334.8	173.4	5.0	11.1	964.7	225.2	1,720.8	0.0	0.0	1,826.0	0.0	1,826.0
1982	0.0	106.0	4.6	332.3	240.7	4.3	10.1	993.6	191.1	1,776.7	0.0	0.0	1,882.6	0.0	1,882.6
1983	0.0	109.2	3.8	312.9	266.0	5.1	10.6	1,008.9	161.7	1,769.0	0.0	0.0	1,878.2	0.0	1,878.2
1984	0.0	112.2	4.9	325.5	364.3	3.0	11.3	1,012.6	155.7	1,877.3	0.0	0.0	1,989.4	0.0	1,989.4
1985	0.0	95.6	6.6	328.5	420.5	2.2	10.5	R 1,044.1	135.9	R 1,948.4	0.0	0.0	R 2,044.0	0.0	R 2,044.0
1986	0.0	85.2	7.8	308.5	453.0	2.8	10.3	1,065.8	160.6	2,008.7	0.0	0.0	R 2,093.9	0.0	R 2,093.9
1987	0.0	84.4	5.8	310.5	477.6	R 1.7	11.6	R 1,044.4	122.7	R 1,974.3	0.0	0.0	R 2,058.7	0.0	R 2,058.7
1988	0.0	111.8	5.1	305.9	535.5	1.7	11.2	R 1,061.7	138.4	R 2,059.5	0.0	0.0	R 2,171.4	0.0	R 2,171.4
1989	0.0	111.4	4.1	329.5	526.9	R 1.7	11.5	R 1,033.1	163.8	R 2,070.7	0.0	0.0	R 2,182.1	0.0	R 2,182.1
1990	0.0	110.5	4.2	305.6	542.1	R 1.7	11.9	R 1,044.2	164.9	R 2,074.6	R e 0.4	0.0	R e 2,185.2	0.0	R e 2,185.2
1991	0.0	85.2	3.3	339.4	512.8	1.2	10.6	R 1,011.4	170.9	R 2,049.7	R 0.4	0.0	R 2,134.9	0.0	R 2,134.9
1992	0.0	84.9	4.0	371.8	509.1	1.1	10.8	R 1,023.8	188.1	R 2,108.7	R 0.4	0.0	R 2,193.6	0.0	R 2,193.6
1993	0.0	84.6	3.5	389.4	492.0	R 1.3	11.0	R 1,070.8	126.3	R 2,094.3	R 0.5	(s)	R 2,178.9	(s)	R 2,178.9
1994	0.0	99.8	3.9	395.4	472.5	2.2	11.5	R 1,128.7	120.6	R 2,134.7	R 1.2	0.0	R 2,234.5	0.0	R 2,234.5
1995	0.0	85.4	3.3	370.3	470.5	1.2	11.3	1,099.6	127.8	2,083.9	R 3.8	0.0	R 2,169.2	0.0	R 2,169.2
1996	0.0	78.4	3.2	404.2	566.2	1.0	11.0	1,167.1	114.2	2,266.9	1.4	(s)	2,345.3	(s)	2,345.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 280. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Texas**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	0	0	0	407	43	18	0	61	0	927	0	0	0	--
1965	0	0	0	640	33	14	0	47	0	661	87	0	0	--
1970	0	0	0	1,062	104	45	0	149	0	883	97	0	0	--
1975	9,044	0	9,044	1,353	1,740	75	0	1,815	0	1,579	89	0	0	--
1980	45,351	0	45,351	1,430	660	1,126	0	1,786	0	398	79	0	0	--
1981	51,142	0	51,142	1,378	587	914	0	1,500	0	856	75	0	0	--
1982	56,540	0	56,540	1,286	914	1,290	0	2,204	0	1,022	61	0	0	--
1983	64,007	0	64,007	1,191	2,069	1,781	0	3,850	0	1,153	75	0	0	--
1984	66,957	0	66,957	1,265	324	631	0	955	0	1,075	110	0	0	--
1985	71,818	0	71,818	1,198	881	775	0	1,657	0	1,397	300	0	0	--
1986	74,757	0	74,757	1,107	373	473	0	847	0	1,962	308	0	0	--
1987	78,802	0	78,802	1,050	570	503	0	1,073	0	2,118	233	0	0	--
1988	82,889	0	82,889	1,044	730	654	0	1,384	3,792	1,203	0	0	0	--
1989	86,701	0	86,701	1,024	1,937	2,318	0	4,255	9,990	1,383	189	0	(s)	--
1990	87,248	0	87,248	1,007	254	701	0	954	15,859	1,794	279	0	(s)	--
1991	87,856	0	87,856	1,005	104	348	0	452	19,800	2,225	276	0	(s)	--
1992	87,333	0	87,333	968	177	296	0	473	24,496	2,638	281	0	(s)	--
1993	92,135	0	92,135	1,073	328	239	319	885	12,407	1,786	295	0	(s)	--
1994	88,479	0	88,479	1,049	343	220	2	565	28,745	1,530	303	0	(s)	--
1995	88,358	0	88,358	1,047	62	331	0	393	36,151	1,703	0	0	(s)	--
1996	94,190	0	94,190	1,039	335	672	0	1,006	35,767	954	0	0	(s)	--

**Trillion Btu**

1960	0.0	0.0	0.0	421.6	0.3	0.1	0.0	0.4	0.0	10.0	0.0	0.0	0.0	431.9
1965	0.0	0.0	0.0	663.2	0.2	0.1	0.0	0.3	0.0	6.9	0.9	0.0	0.0	671.3
1970	0.0	0.0	0.0	1,090.3	0.7	0.3	0.0	0.9	0.0	9.3	1.0	0.0	0.0	1,101.5
1975	118.5	0.0	118.5	1,379.0	10.9	0.4	0.0	11.4	0.0	16.4	0.9	0.0	0.0	1,526.3
1980	670.8	0.0	670.8	1,482.9	4.2	6.6	0.0	10.7	0.0	4.1	0.8	0.0	0.0	2,169.4
1981	767.0	0.0	767.0	1,419.6	3.7	5.3	0.0	9.0	0.0	8.9	0.8	0.0	0.0	2,205.3
1982	847.2	0.0	847.2	1,328.7	5.7	7.5	0.0	13.3	0.0	10.7	0.6	0.0	0.0	2,200.5
1983	950.9	0.0	950.9	1,219.2	13.0	10.4	0.0	23.4	0.0	12.1	0.8	0.0	0.0	2,206.4
1984	981.8	0.0	981.8	1,303.3	2.0	3.7	0.0	5.7	0.0	11.2	1.2	0.0	0.0	2,303.2
1985	1,063.4	0.0	1,063.4	1,240.7	5.5	4.5	0.0	10.1	0.0	14.6	3.1	0.0	0.0	2,331.9
1986	1,090.2	0.0	1,090.2	1,145.6	2.3	2.8	0.0	5.1	0.0	20.5	3.2	0.0	0.0	2,264.5
1987	1,141.4	0.0	1,141.4	1,086.5	3.6	2.9	0.0	6.5	0.0	22.1	2.4	0.0	0.0	2,258.9
1988	1,210.8	0.0	1,210.8	1,078.4	4.6	3.8	0.0	8.4	40.7	12.4	0.0	0.0	0.0	2,350.8
1989	1,263.5	0.0	1,263.5	1,058.6	12.2	13.5	0.0	25.7	107.1	R 14.4	2.0	0.0	(s)	R 2,471.3
1990	1,272.2	0.0	1,272.2	1,042.6	1.6	4.1	0.0	5.7	169.4	R 18.7	2.9	0.0	(s)	R 2,510.8
1991	1,269.6	0.0	1,269.6	1,035.2	0.7	2.0	0.0	2.7	212.7	R 23.2	2.9	0.0	(s)	R 2,541.5
1992	1,263.5	0.0	1,263.5	993.3	1.1	1.7	0.0	2.8	261.6	R 27.3	2.9	0.0	(s)	2,541.5
1993	1,342.2	0.0	1,342.2	1,100.4	2.1	1.4	1.9	5.4	132.5	18.4	3.0	0.0	(s)	2,593.7
1994	1,299.9	0.0	1,299.9	1,073.3	2.2	1.3	(s)	3.5	306.9	R 15.8	3.1	0.0	(s)	2,692.5
1995	1,298.1	0.0	1,298.1	1,071.4	0.4	1.9	0.0	2.3	385.3	R 17.6	0.0	0.0	(s)	2,765.1
1996	1,401.6	0.0	1,401.6	1,063.1	2.1	3.9	0.0	6.0	379.9	9.9	0.0	0.0	(s)	2,849.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 281. Energy Consumption Estimates by Source, Selected Years 1960-1996, Utah

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	3,451	70	813	595	3,775	1,003	36	452	214	7,813	5,715	1,820	22,235	0	304	0	0	2,036	-	
1965	2,857	108	838	383	4,193	1,244	474	677	251	9,001	5,662	2,046	24,769	0	913	0	0	3,082	-	
1970	3,025	122	1,576	178	5,107	1,808	250	939	256	12,308	4,656	2,163	29,241	0	741	0	0	8,216	-	
1975	4,636	124	1,219	161	9,165	1,903	146	1,169	232	15,063	4,603	2,702	36,362	0	1,074	0	0	8,635	-	
1980	7,106	115	1,477	139	8,401	2,637	102	1,301	299	15,534	3,495	2,729	36,113	0	821	0	0	-278	-	
1981	7,432	102	927	140	7,098	2,424	155	1,546	287	15,548	1,022	1,762	30,910	0	623	0	0	4,032	-	
1982	6,787	118	933	76	6,438	2,801	192	1,523	262	15,793	855	1,844	30,715	0	1,024	0	0	4,610	-	
1983	6,873	110	820	103	6,387	3,284	58	1,577	274	15,954	1,600	2,364	32,421	0	1,394	0	0	5,019	-	
1984	7,905	116	1,340	78	6,894	3,413	49	1,387	292	16,151	953	2,417	32,974	0	1,391	0	38	-617	-	
1985	8,303	115	1,576	94	5,941	3,808	31	1,486	272	R 16,240	431	2,231	R 32,111	0	1,019	0	110	-4,107	-	
1986	8,112	105	1,295	110	7,312	4,335	24	1,542	266	17,541	360	2,123	34,907	0	1,413	0	172	-8,321	-	
1987	11,807	99	1,429	99	6,768	4,969	30	1,652	301	R 17,623	357	2,379	R 35,607	0	893	0	164	-36,251	-	
1988	14,513	109	1,069	112	7,328	4,977	25	1,432	290	R 18,148	288	2,747	R 36,418	0	593	0	174	-40,295	-	
1989	15,044	114	1,671	106	6,179	5,095	11	1,386	298	R 17,311	252	2,879	R 35,188	0	562	0	173	-40,495	-	
1990	15,738	117	1,378	106	7,339	5,281	13	1,074	307	R 16,724	372	2,883	R 35,476	0	i NA	i NA	i NA	-45,032	-	
1991	14,834	133	2,870	118	7,789	5,917	17	747	274	R 17,395	201	2,508	R 37,836	0	NA	NA	NA	-40,473	-	
1992	15,719	123	1,633	133	8,062	5,607	4	696	280	R 17,905	248	2,999	R 37,566	0	NA	NA	NA	-45,594	-	
1993	15,848	138	1,730	114	8,000	5,518	9	779	285	R 18,837	288	2,691	R 38,250	0	NA	NA	NA	-47,181	-	
1994	16,216	137	1,819	88	8,401	5,270	9	784	298	R 19,433	349	2,724	R 39,173	0	NA	NA	NA	-47,201	-	
1995	15,307	157	2,179	64	9,164	5,658	6	1,531	292	R 20,771	299	2,619	R 42,582	0	NA	NA	NA	-39,745	-	
1996	15,237	161	2,361	52	9,921	6,303	9	2,689	284	21,170	88	3,142	46,020	0	NA	NA	NA	-36,074	-	
Trillion Btu																				
1960	91.0	72.4	5.4	3.0	22.0	5.4	0.2	1.8	1.3	41.0	35.9	10.9	127.0	0.0	3.3	0.0	0.0	6.9	300.7	
1965	75.5	99.8	5.6	1.9	24.4	6.8	2.7	2.7	1.5	47.3	35.6	12.3	140.8	0.0	9.5	0.0	0.0	10.5	336.1	
1970	78.8	114.4	10.5	0.9	29.8	10.0	1.4	3.5	1.6	64.7	29.3	13.0	164.5	0.0	7.8	0.0	0.0	28.0	393.5	
1975	115.7	118.0	8.1	0.8	53.4	10.6	0.8	4.3	1.4	79.1	28.9	16.2	203.7	0.0	11.2	0.0	0.0	29.5	478.1	
1980	168.3	125.0	9.8	0.7	48.9	14.6	0.6	4.8	1.8	81.6	22.0	16.4	201.2	0.0	8.5	0.0	0.0	-0.9	502.0	
1981	175.7	109.7	6.2	0.7	41.3	13.5	0.9	5.6	1.7	81.7	6.4	11.0	169.0	0.0	6.5	0.0	0.0	13.8	474.7	
1982	159.6	110.5	6.2	0.4	37.5	15.6	1.1	5.5	1.6	83.0	5.4	11.4	167.6	0.0	10.7	0.0	0.0	15.7	464.1	
1983	160.2	118.4	5.4	0.5	37.2	18.3	0.3	5.7	1.7	83.8	10.1	14.4	177.4	0.0	14.7	0.0	0.0	17.1	487.9	
1984	185.6	124.2	8.9	0.4	40.2	19.0	0.3	5.0	1.8	84.8	6.0	14.6	181.0	0.0	14.5	0.0	0.8	-2.1	504.1	
1985	199.4	123.8	10.5	0.5	34.6	21.3	0.2	5.4	1.7	85.3	2.7	13.7	R 175.8	0.0	10.6	0.0	2.3	-14.0	497.8	
1986	189.0	99.7	8.6	0.6	42.6	24.3	0.1	5.6	1.6	92.1	2.3	13.3	191.1	0.0	14.8	0.0	3.6	-28.4	469.7	
1987	273.8	106.9	9.5	0.5	39.4	27.9	0.2	6.0	1.8	R 92.6	2.2	14.6	R 194.8	0.0	9.3	0.0	3.5	-123.7	R 464.6	
1988	338.0	117.8	7.1	0.6	42.7	28.0	0.1	5.2	1.8	R 95.3	1.8	16.7	R 199.3	0.0	6.1	0.0	3.7	-137.5	R 527.3	
1989	345.5	123.4	11.1	0.5	36.0	28.6	0.1	5.1	1.8	90.9	1.6	17.3	R 193.1	0.0	R 5.9	0.0	3.7	-138.2	R 533.3	
1990	366.3	126.9	9.1	0.5	42.7	29.7	0.1	3.9	1.9	R 87.9	2.3	17.4	R 195.5	0.0	i 5.1	R i 5.5	i 3.2	R -153.6	R i 548.9	
1991	345.0	142.5	19.0	0.6	45.4	33.2	0.1	2.7	1.7	R 91.4	1.3	15.2	R 210.6	0.0	R 6.4	5.5	3.9	R -138.1	R 575.7	
1992	362.6	132.2	10.8	0.7	47.0	31.5	(s)	2.5	1.7	94.1	1.6	18.0	207.8	0.0	6.2	5.7	3.9	-155.6	R 563.0	
1993	368.4	149.1	11.5	0.6	46.6	31.1	0.1	2.8	1.7	98.9	1.8	16.3	211.3	0.0	R 8.9	R 5.8	3.1	-161.0	R 585.6	
1994	376.5	146.3	12.1	0.4	48.9	29.7	(s)	2.8	1.8	102.1	2.2	16.4	R 216.5	0.0	7.7	R 7.7	4.1	-161.1	R 597.8	
1995	357.2	166.7	14.5	0.3	53.4	31.8	(s)	5.5	1.8	109.1	1.9	15.8	234.2	0.0	10.0	R 7.9	R 3.0	-135.6	R 643.2	
1996	355.0	167.8	15.7	0.3	57.8	35.7	0.1	9.7	1.7	111.2	0.6	18.9	251.6	0.0	10.8	8.3	4.1	-123.1	674.4	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. - =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 282. Residential Energy Consumption Estimates, Selected Years 1960-1996, Utah**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	87	0	87	23	100	1	249	349	0	0	1,012	—	2,518	—
1965	63	0	63	31	98	20	505	624	0	0	1,243	—	2,969	—
1970	38	0	38	45	143	6	694	844	0	0	1,688	—	4,091	—
1975	46	0	46	60	357	4	564	925	0	0	2,493	—	6,013	—
1980	83	0	83	58	112	0	349	460	0	0	3,116	—	7,577	—
1981	69	0	69	55	73	26	384	483	0	0	3,436	—	8,190	—
1982	62	0	62	46	125	46	430	600	0	0	3,785	—	9,091	—
1983	67	0	67	55	164	40	526	730	0	0	3,804	—	9,115	—
1984	91	0	91	55	167	34	641	842	0	0	3,856	—	8,976	—
1985	88	0	88	59	74	10	631	715	0	0	3,985	—	9,362	—
1986	67	0	67	58	75	4	624	703	0	0	3,989	—	9,175	—
1987	43	0	43	42	101	9	648	758	0	0	3,980	—	9,094	—
1988	68	(s)	69	42	131	6	634	772	0	0	4,151	—	9,385	—
1989	81	0	81	45	183	5	467	655	0	0	4,163	—	R 9,350	—
1990	93	0	93	43	137	5	424	566	e 148	e 10	4,246	—	R 9,287	—
1991	107	(s)	107	51	161	5	415	581	156	10	4,460	—	R 9,707	—
1992	78	0	78	45	115	2	334	452	164	10	4,505	—	R 9,623	—
1993	42	0	42	52	148	3	202	354	156	10	4,726	—	R 9,985	—
1994	37	(s)	37	49	113	5	162	280	153	13	5,009	—	R 10,451	—
1995	27	R 0	27	49	84	3	210	296	169	13	5,041	—	10,500	—
1996	33	0	33	54	100	4	251	355	169	14	5,481	—	11,408	—
<b>Trillion Btu</b>														
1960	2.3	0.0	2.3	23.4	0.6	(s)	1.0	1.6	0.0	0.0	3.5	30.7	8.6	39.3
1965	1.6	0.0	1.6	28.4	0.6	0.1	2.0	2.7	0.0	0.0	4.2	37.0	10.1	47.1
1970	1.0	0.0	1.0	41.9	0.8	(s)	2.6	3.5	0.0	0.0	5.8	52.1	14.0	66.0
1975	1.1	0.0	1.1	56.8	2.1	(s)	2.1	4.2	0.0	0.0	8.5	70.6	20.5	91.1
1980	1.9	0.0	1.9	62.9	0.6	0.0	1.3	1.9	0.0	0.0	10.6	77.4	25.9	103.3
1981	1.6	0.0	1.6	59.0	0.4	0.1	1.4	2.0	0.0	0.0	11.7	74.3	27.9	102.3
1982	1.4	0.0	1.4	43.2	0.7	0.3	1.6	2.5	0.0	0.0	12.9	60.0	31.0	91.1
1983	1.5	0.0	1.5	59.1	1.0	0.2	1.9	3.1	0.0	0.0	13.0	76.7	31.1	107.8
1984	2.1	0.0	2.1	58.7	1.0	0.2	2.3	3.5	0.0	0.0	13.2	77.5	30.6	108.1
1985	2.1	0.0	2.1	63.1	0.4	0.1	2.3	2.8	0.0	0.0	13.6	81.6	31.9	113.5
1986	1.6	0.0	1.6	54.6	0.4	(s)	2.3	2.7	0.0	0.0	13.6	72.5	31.3	103.8
1987	1.0	0.0	1.0	44.9	0.6	0.1	2.4	3.0	0.0	0.0	13.6	62.5	31.0	93.5
1988	1.6	(s)	1.6	45.7	0.8	(s)	2.3	3.1	0.0	0.0	14.2	64.5	32.0	R 96.5
1989	1.8	0.0	1.8	49.1	1.1	(s)	1.7	2.8	0.0	0.0	14.2	68.0	31.9	R 99.9
1990	2.2	0.0	2.2	47.3	0.8	(s)	1.5	2.4	e 3.0	e (s)	14.5	e 69.3	31.7	R e 101.0
1991	2.5	(s)	2.5	54.3	0.9	(s)	1.5	2.5	3.1	(s)	15.2	77.6	33.1	110.7
1992	1.8	0.0	1.8	48.2	0.7	(s)	1.2	1.9	3.3	(s)	15.4	70.6	32.8	103.4
1993	1.0	0.0	1.0	56.0	0.9	(s)	0.7	1.6	3.1	(s)	16.1	77.8	R 34.1	111.9
1994	0.9	(s)	0.9	52.3	0.7	(s)	0.6	1.3	3.1	(s)	17.1	74.6	R 35.7	R 110.3
1995	0.6	R 0.0	0.6	52.1	0.5	(s)	0.8	1.3	3.4	(s)	17.2	74.6	35.8	110.4
1996	0.8	0.0	0.8	56.7	0.6	(s)	0.9	1.5	3.4	(s)	18.7	81.1	38.9	120.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 283. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Utah**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	162	0	162	10	362	6	44	281	656	1,349	0	640	-	1,592	-
1965	118	0	118	16	356	148	89	234	1,072	1,899	0	1,128	-	2,693	-
1970	71	0	71	10	521	46	122	202	795	1,687	0	1,890	-	4,579	-
1975	85	0	85	6	1,300	28	99	210	1,098	2,736	0	2,479	-	5,981	-
1980	154	0	154	(s)	1,028	34	62	81	1,051	2,255	0	3,141	-	7,638	-
1981	127	0	127	(s)	206	60	68	88	0	421	0	2,999	-	7,147	-
1982	115	0	115	22	382	46	76	99	38	641	0	3,207	-	7,702	-
1983	124	0	124	8	786	8	93	131	222	1,240	0	3,350	-	8,025	-
1984	168	0	168	9	803	7	113	77	135	1,136	0	4,269	-	9,937	-
1985	164	0	164	9	541	19	111	88	45	804	0	4,596	-	10,797	-
1986	124	0	124	5	910	6	110	90	42	1,158	0	4,682	-	10,770	-
1987	81	0	81	15	736	18	114	93	113	1,075	0	4,863	-	11,111	-
1988	127	(s)	127	18	697	5	112	89	47	951	0	5,035	-	11,382	-
1989	150	0	150	17	459	4	82	89	14	648	0	5,173	-	R 11,620	-
1990	174	0	174	16	360	5	75	R 96	74	610	e NA	5,389	-	R 11,787	-
1991	198	(s)	198	19	469	8	73	82	23	656	NA	5,571	-	R 12,126	-
1992	145	0	145	17	470	1	59	73	21	623	NA	5,850	-	R 12,495	-
1993	79	0	79	23	366	3	36	20	55	480	10	5,920	-	R 12,508	-
1994	68	(s)	68	27	484	2	29	20	20	554	14	6,340	-	R 13,229	-
1995	50	R 0	50	27	443	1	37	21	13	515	13	6,462	-	R 13,461	-
1996	61	0	61	30	504	3	44	21	14	586	15	6,717	-	13,980	-

  

Trillion Btu															
1960	4.2	0.0	4.2	10.5	2.1	(s)	0.2	1.5	4.1	7.9	0.0	2.2	24.8	5.4	30.2
1965	3.0	0.0	3.0	14.4	2.1	0.8	0.4	1.2	6.7	11.2	0.0	3.8	32.5	9.2	41.7
1970	1.8	0.0	1.8	9.5	3.0	0.3	0.5	1.1	5.0	9.8	0.0	6.4	27.6	15.6	43.2
1975	2.0	0.0	2.0	5.8	7.6	0.2	0.4	1.1	6.9	16.1	0.0	8.5	32.3	20.4	52.8
1980	3.6	0.0	3.6	0.4	6.0	0.2	0.2	0.4	6.6	13.4	0.0	10.7	28.1	26.1	54.1
1981	2.9	0.0	2.9	0.4	1.2	0.3	0.2	0.5	0.0	2.2	0.0	10.2	15.8	24.4	40.2
1982	2.7	0.0	2.7	20.5	2.2	0.3	0.3	0.5	0.2	3.5	0.0	10.9	37.6	26.3	63.9
1983	2.9	0.0	2.9	8.6	4.6	(s)	0.3	0.7	1.4	7.0	0.0	11.4	29.9	27.4	57.3
1984	3.9	0.0	3.9	9.2	4.7	(s)	0.4	0.4	0.9	6.4	0.0	14.6	34.1	33.9	68.0
1985	3.9	0.0	3.9	9.1	3.1	0.1	0.4	0.5	0.3	4.4	0.0	15.7	33.1	36.8	69.9
1986	2.9	0.0	2.9	4.4	5.3	(s)	0.4	0.5	0.3	6.5	0.0	16.0	29.7	36.7	66.5
1987	1.9	0.0	1.9	16.0	4.3	0.1	0.4	0.5	0.7	6.0	0.0	16.6	40.5	37.9	78.4
1988	2.9	(s)	2.9	19.4	4.1	(s)	0.4	0.5	0.3	5.3	0.0	17.2	44.7	38.8	83.6
1989	3.4	0.0	3.4	18.0	2.7	(s)	0.3	0.5	0.1	3.6	0.0	17.7	42.6	39.6	82.2
1990	4.0	0.0	4.0	17.7	2.1	(s)	0.3	0.5	0.5	3.4	e NA	18.4	43.4	40.2	R 83.7
1991	4.6	(s)	4.6	20.7	2.7	(s)	0.3	0.4	0.1	3.6	NA	19.0	47.9	R 41.4	R 89.3
1992	3.3	0.0	3.3	17.9	2.7	(s)	0.2	0.4	0.1	3.5	NA	20.0	44.7	42.6	87.3
1993	1.8	0.0	1.8	24.4	2.1	(s)	0.1	0.1	0.3	2.7	0.2	20.2	R 49.4	42.7	R 92.0
1994	1.6	(s)	1.6	28.3	2.8	(s)	0.1	0.1	0.1	3.2	0.3	21.6	R 55.0	45.1	R 100.1
1995	1.2	R 0.0	1.2	28.5	2.6	(s)	0.1	0.1	0.1	2.9	0.3	22.0	R 54.9	45.9	R 100.8
1996	1.4	0.0	1.4	30.8	2.9	(s)	0.2	0.1	0.1	3.3	0.3	22.9	58.8	47.7	106.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 284. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Utah

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	2,640	33	813	990	29	124	62	299	2,399	1,820	6,536	(s)	0	0	1,822	--	4,531	--
1965	2,306	57	838	1,163	305	70	101	233	2,895	2,046	7,651	3	0	0	1,404	--	3,353	--
1970	2,477	63	1,576	1,564	197	116	95	261	2,068	2,163	8,040	3	0	0	1,648	--	3,993	--
1975	2,478	55	1,219	3,356	114	495	73	266	3,285	2,702	11,511	0	0	0	2,968	--	7,159	--
1980	1,974	51	1,477	2,220	68	876	106	165	2,386	2,729	10,027	0	0	0	4,448	--	10,816	--
1981	2,281	43	927	2,269	69	1,038	101	167	1,002	1,762	7,335	0	0	0	5,451	--	12,990	--
1982	1,663	46	933	2,093	100	932	93	181	816	1,844	6,991	0	0	0	5,399	--	12,969	--
1983	1,458	45	820	1,825	10	853	97	199	1,088	2,364	7,257	0	0	0	6,040	--	14,470	--
1984	1,934	51	1,340	1,864	8	518	103	151	665	2,417	7,067	0	0	0	4,592	--	10,689	--
1985	1,726	46	1,576	1,104	3	668	96	220	360	2,231	6,259	0	0	0	4,458	--	10,473	--
1986	1,165	42	1,295	1,942	14	730	94	211	311	2,123	6,720	0	0	0	4,318	--	9,934	--
1987	507	42	1,429	1,535	3	R 831	106	R 204	244	2,379	6,731	0	0	0	4,555	--	10,407	--
1988	1,773	47	1,069	1,917	14	621	103	209	241	2,747	6,922	0	0	0	5,321	--	12,029	--
1989	1,865	50	1,671	1,543	2	780	105	195	239	2,879	7,414	0	0	0	5,629	--	12,644	--
1990	1,907	55	1,378	1,504	4	R 524	108	R 198	249	2,883	R 6,848	f NA	f NA	f NA	5,766	--	R 12,612	--
1991	1,700	57	2,870	1,892	3	215	97	211	179	2,508	7,974	NA	NA	NA	5,876	--	R 12,789	--
1992	1,639	53	1,633	1,947	1	263	99	206	227	2,999	7,375	NA	NA	NA	6,212	--	R 13,268	--
1993	1,732	55	1,730	1,828	2	498	101	247	233	2,691	R 7,330	NA	NA	NA	6,221	--	R 13,144	--
1994	1,842	50	1,819	1,787	2	536	105	316	329	2,724	7,618	NA	NA	NA	6,498	--	R 13,558	--
1995	1,905	69	2,179	1,601	2	1,252	103	323	286	2,619	8,365	NA	NA	NA	6,957	--	14,492	--
1996	1,558	69	2,361	1,833	2	2,367	100	331	74	3,142	10,211	NA	NA	NA	7,660	--	15,943	--

Trillion Btu

1960	70.5	34.7	5.4	5.8	0.2	0.5	0.4	1.6	15.1	10.9	39.8	(s)	0.0	0.0	6.2	151.2	15.5	166.6
1965	61.5	52.3	5.6	6.8	1.7	0.3	0.6	1.2	18.2	12.3	46.7	(s)	0.0	0.0	4.8	165.3	11.4	176.7
1970	65.2	59.2	10.5	9.1	1.1	0.4	0.6	1.4	13.0	13.0	49.1	(s)	0.0	0.0	5.6	179.1	13.6	192.7
1975	64.7	52.3	8.1	19.6	0.6	1.8	0.4	1.4	20.7	16.2	68.8	0.0	0.0	0.0	10.1	196.0	24.4	220.4
1980	50.7	55.8	9.8	12.9	0.4	3.2	0.6	0.9	15.0	16.4	59.2	0.0	0.0	0.0	15.2	180.9	36.9	217.8
1981	57.6	46.6	6.2	13.2	0.4	3.8	0.6	0.9	6.3	11.0	42.3	0.0	0.0	0.0	18.6	165.1	44.3	209.4
1982	41.2	43.0	6.2	12.2	0.6	3.4	0.6	1.0	5.1	11.4	40.4	0.0	0.0	0.0	18.4	143.0	44.2	187.3
1983	36.4	48.2	5.4	10.6	0.1	3.1	0.6	1.0	6.8	14.4	42.1	0.0	0.0	0.0	20.6	147.3	49.4	196.7
1984	49.1	54.9	8.9	10.9	(s)	1.9	0.6	0.8	4.2	14.6	41.9	0.0	0.0	0.0	15.7	161.6	36.5	198.1
1985	44.1	49.9	10.5	6.4	(s)	2.4	0.6	1.2	2.3	13.7	37.1	0.0	0.0	0.0	15.2	146.3	35.7	182.1
1986	29.3	39.4	8.6	11.3	0.1	2.7	0.6	1.1	2.0	13.3	39.6	0.0	0.0	0.0	14.7	123.0	33.9	156.9
1987	11.2	44.9	9.5	8.9	(s)	3.0	0.6	1.1	1.5	14.6	39.3	0.0	0.0	0.0	15.5	111.0	35.5	146.5
1988	45.2	51.1	7.1	11.2	0.1	2.3	0.6	1.1	1.5	16.7	40.5	0.0	0.0	0.0	18.2	154.9	41.0	196.0
1989	47.0	54.5	11.1	9.0	(s)	2.9	0.6	1.0	1.5	17.3	43.5	0.0	0.0	0.0	19.2	164.2	43.1	207.3
1990	48.7	60.1	9.1	8.8	(s)	1.9	0.7	1.0	1.6	17.4	40.4	f 0.1	f 2.4	f 0.0	19.7	f 171.4	43.0	R f 214.5
1991	43.7	61.0	19.0	11.0	(s)	0.8	0.6	1.1	1.1	15.2	48.9	0.1	2.3	0.0	20.0	176.1	43.6	219.7
1992	42.0	57.7	10.8	11.3	(s)	1.0	0.6	1.1	1.4	18.0	44.3	0.2	2.4	0.0	21.2	167.7	R 45.3	213.0
1993	44.0	59.3	11.5	10.6	(s)	1.8	0.6	1.3	1.5	16.3	43.6	0.4	2.4	0.0	21.2	171.0	R 44.8	215.8
1994	46.1	53.3	12.1	10.4	(s)	1.9	0.6	1.7	2.1	16.4	45.2	0.4	R 4.4	0.0	22.2	R 171.6	R 46.3	R 217.8
1995	47.6	73.8	14.5	9.3	(s)	4.5	0.6	1.7	1.8	15.8	48.3	0.4	R 4.2	0.0	23.7	R 198.0	49.4	R 247.5
1996	40.0	72.3	15.7	10.7	(s)	8.6	0.6	1.7	0.5	18.9	56.6	0.3	4.5	0.0	26.1	199.8	54.4	254.2

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

--=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 285. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Utah**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	46	(s)	595	2,312	1,003	35	152	7,232	370	11,698	0	0	-	0	-
1965	8	(s)	383	2,569	1,244	12	151	8,534	98	12,991	0	0	-	0	-
1970	4	(s)	178	2,870	1,808	6	161	11,845	25	16,893	0	0	-	0	-
1975	(s)	(s)	161	4,141	1,903	11	158	14,586	68	21,028	0	0	-	0	-
1980	0	1	139	4,974	2,637	14	194	15,288	0	23,245	0	0	-	0	-
1981	0	1	140	4,492	2,424	56	186	15,294	0	22,592	0	0	-	0	-
1982	0	1	76	3,780	2,801	85	169	15,513	0	22,424	0	0	-	0	-
1983	0	1	103	3,533	3,284	104	177	15,624	290	23,115	0	0	-	0	-
1984	0	1	78	4,003	3,413	115	189	15,922	153	23,871	0	0	-	0	-
1985	0	1	94	4,168	3,808	76	176	15,932	0	24,254	0	0	-	0	-
1986	0	1	110	4,256	4,335	78	172	17,240	0	26,191	0	0	-	0	-
1987	0	1	99	4,208	4,969	58	195	17,326	0	26,855	0	0	-	0	-
1988	0	1	112	4,480	4,977	65	188	17,849	0	27,671	0	0	-	0	-
1989	0	1	106	3,909	5,095	56	193	17,027	(s)	26,386	0	0	-	0	-
1990	0	1	106	5,254	5,281	51	198	16,430	48	27,368	R <sup>e</sup> 760	0	-	0	-
1991	0	1	118	5,184	5,917	44	177	17,102	0	28,543	R 602	0	-	0	-
1992	0	1	133	5,468	5,607	39	181	17,626	0	29,054	R 732	0	-	0	-
1993	0	3	114	5,603	5,518	R 43	184	18,569	0	30,031	R 817	0	-	0	-
1994	0	3	88	5,964	5,270	57	192	19,097	0	30,667	R	0	-	0	-
1995	0	3	64	6,975	5,658	32	189	20,428	0	33,345	0	0	-	0	-
1996	0	4	52	7,429	6,303	27	184	20,818	0	34,813	892	0	-	0	-

  

Trillion Btu															
1960	1.2	0.1	3.0	13.5	5.4	0.1	0.9	38.0	2.3	63.2	0.0	0.0	64.5	0.0	64.5
1965	0.2	0.4	1.9	15.0	6.8	(s)	0.9	44.8	0.6	70.1	0.0	0.0	70.6	0.0	70.6
1970	0.1	0.5	0.9	16.7	10.0	(s)	1.0	62.2	0.2	91.0	0.0	0.0	91.5	0.0	91.5
1975	(s)	0.3	0.8	24.1	10.6	(s)	1.0	76.6	0.4	113.6	0.0	0.0	113.8	0.0	113.8
1980	0.0	0.9	0.7	29.0	14.6	0.1	1.2	80.3	0.0	125.8	0.0	0.0	126.8	0.0	126.8
1981	0.0	0.8	0.7	26.2	13.5	0.2	1.1	80.3	0.0	122.0	0.0	0.0	122.8	0.0	122.8
1982	0.0	1.1	0.4	22.0	15.6	0.3	1.0	81.5	0.0	120.8	0.0	0.0	121.9	0.0	121.9
1983	0.0	1.3	0.5	20.6	18.3	0.4	1.1	82.1	1.8	124.8	0.0	0.0	126.1	0.0	126.1
1984	0.0	1.1	0.4	23.3	19.0	0.4	1.1	83.6	1.0	128.9	0.0	0.0	130.0	0.0	130.0
1985	0.0	1.3	0.5	24.3	21.3	0.3	1.1	83.7	0.0	R 131.1	0.0	0.0	132.3	0.0	132.3
1986	0.0	1.0	0.6	24.8	24.3	0.3	1.0	90.6	0.0	141.5	0.0	0.0	142.6	0.0	142.6
1987	0.0	0.9	0.5	24.5	27.9	0.2	1.2	R 91.0	0.0	R 145.3	0.0	0.0	R 146.2	0.0	R 146.2
1988	0.0	1.5	0.6	26.1	28.0	0.2	1.1	R 93.8	0.0	R 149.7	0.0	0.0	R 151.2	0.0	R 151.2
1989	0.0	1.1	0.5	22.8	28.6	0.2	1.2	89.4	(s)	R 142.8	0.0	0.0	R 143.9	0.0	R 143.9
1990	0.0	1.0	0.5	30.6	29.7	0.2	1.2	R 86.3	0.3	R 148.9	R <sup>e</sup> 0.1	0.0	R <sup>e</sup> 149.8	0.0	R <sup>e</sup> 149.8
1991	0.0	0.9	0.6	30.2	33.2	0.2	1.1	R 89.8	0.0	R 155.1	R (s)	0.0	R 156.0	0.0	R 156.0
1992	0.0	1.4	0.7	31.8	31.5	0.1	1.1	92.6	0.0	R 157.8	R 0.1	0.0	R 159.2	0.0	R 159.2
1993	0.0	2.8	0.6	32.6	31.1	0.2	1.1	97.5	0.0	163.1	R 0.1	0.0	165.8	0.0	165.8
1994	0.0	3.1	0.4	34.7	29.7	0.2	1.2	R 100.3	0.0	166.6	0.0	0.0	169.6	0.0	169.6
1995	0.0	3.1	0.3	40.6	31.8	0.1	1.1	107.3	0.0	181.4	0.0	0.0	184.5	0.0	184.5
1996	0.0	3.9	0.3	43.3	35.7	0.1	1.1	109.4	0.0	189.8	0.1	0.0	193.7	0.0	193.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 286. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Utah**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	515	0	515	4	2,291	12	0	2,302	0	304	0	0	0	--
1965	363	0	363	5	1,597	8	0	1,605	0	910	0	0	0	--
1970	435	0	435	4	1,768	9	0	1,777	0	738	0	0	0	--
1975	2,026	0	2,026	3	152	10	0	162	0	1,074	0	0	0	--
1980	4,895	0	4,895	5	58	67	0	126	0	821	0	0	0	--
1981	4,956	0	4,956	3	20	59	0	79	0	623	0	0	0	--
1982	4,947	0	4,947	3	1	59	0	59	0	1,024	0	0	0	--
1983	5,223	0	5,223	1	(s)	79	0	79	0	1,394	0	0	0	--
1984	5,712	0	5,712	(s)	0	58	0	58	0	1,391	0	38	0	--
1985	6,325	0	6,325	(s)	25	55	0	80	0	1,019	0	110	0	--
1986	6,756	0	6,756	(s)	6	129	0	135	0	1,413	0	172	0	--
1987	11,175	0	11,175	(s)	0	187	0	187	0	893	0	164	0	--
1988	12,544	0	12,544	(s)	0	103	0	103	0	593	0	174	0	--
1989	12,949	0	12,949	1	0	86	0	86	0	562	0	173	0	--
1990	13,563	0	13,563	1	0	84	0	84	0	486	0	152	0	--
1991	12,829	0	12,829	5	0	82	0	82	0	604	0	186	0	--
1992	13,857	0	13,857	7	0	62	0	62	0	580	0	186	0	--
1993	13,995	0	13,995	6	0	55	0	55	0	818	0	148	0	--
1994	14,269	0	14,269	9	0	53	0	53	0	716	0	195	0	--
1995	13,325	0	13,325	9	0	61	0	61	0	926	0	140	0	--
1996	13,585	0	13,585	4	0	55	0	55	0	1,019	0	192	0	--

**Trillion Btu**

1960	12.8	0.0	12.8	3.8	14.4	0.1	0.0	14.5	0.0	3.3	0.0	0.0	0.0	34.4
1965	9.1	0.0	9.1	4.4	10.0	(s)	0.0	10.1	0.0	9.5	0.0	0.0	0.0	33.1
1970	10.8	0.0	10.8	3.3	11.1	0.1	0.0	11.2	0.0	7.7	0.0	0.0	0.0	33.0
1975	47.9	0.0	47.9	2.9	1.0	0.1	0.0	1.0	0.0	11.2	0.0	0.0	0.0	63.0
1980	112.1	0.0	112.1	4.9	0.4	0.4	0.0	0.8	0.0	8.5	0.0	0.0	0.0	126.3
1981	113.6	0.0	113.6	2.9	0.1	0.3	0.0	0.5	0.0	6.5	0.0	0.0	0.0	123.4
1982	114.2	0.0	114.2	2.8	(s)	0.3	0.0	0.3	0.0	10.7	0.0	0.0	0.0	128.1
1983	119.4	0.0	119.4	1.2	(s)	0.5	0.0	0.5	0.0	14.7	0.0	0.0	0.0	135.7
1984	130.6	0.0	130.6	0.3	0.0	0.3	0.0	0.3	0.0	14.5	0.0	0.8	0.0	146.5
1985	149.3	0.0	149.3	0.3	0.2	0.3	0.0	0.5	0.0	10.6	0.0	2.3	0.0	163.0
1986	155.2	0.0	155.2	0.2	(s)	0.8	0.0	0.8	0.0	14.8	0.0	3.6	0.0	174.7
1987	259.7	0.0	259.7	0.3	0.0	1.1	0.0	1.1	0.0	9.3	0.0	3.5	0.0	273.8
1988	288.3	0.0	288.3	0.2	0.0	0.6	0.0	0.6	0.0	6.1	0.0	3.7	0.0	298.9
1989	293.2	0.0	293.2	0.7	0.0	0.5	0.0	0.5	0.0	R 5.9	0.0	3.7	0.0	303.9
1990	311.5	0.0	311.5	0.9	0.0	0.5	0.0	0.5	0.0	R 5.1	0.0	3.2	0.0	321.1
1991	294.3	0.0	294.3	5.5	0.0	0.5	0.0	0.5	0.0	6.3	0.0	3.9	0.0	310.5
1992	315.5	0.0	315.5	7.1	0.0	0.4	0.0	0.4	0.0	6.0	0.0	3.9	0.0	332.8
1993	321.6	0.0	321.6	6.7	0.0	0.3	0.0	0.3	0.0	8.4	0.0	3.1	0.0	340.1
1994	327.9	0.0	327.9	9.3	0.0	0.3	0.0	0.3	0.0	7.4	0.0	4.1	0.0	349.0
1995	307.8	0.0	307.8	9.2	0.0	0.4	0.0	0.4	0.0	9.5	0.0	2.9	0.0	329.8
1996	312.8	0.0	312.8	4.2	0.0	0.3	0.0	0.3	0.0	10.5	0.0	4.0	0.0	331.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 287. Energy Consumption Estimates by Source, Selected Years 1960-1996, Vermont

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum										Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>							Total
			Thousand Barrels																Million Kilowatthours
1960	137	0	224	19	2,958	82	819	404	70	3,332	478	46	8,431	0	938	0	0	128	-
1965	105	0	171	25	4,285	79	760	450	63	3,789	910	39	10,572	0	755	0	0	1,950	-
1970	87	3	271	14	5,741	121	502	542	66	5,077	905	45	13,285	0	835	0	0	5,662	-
1975	31	4	28	11	4,642	177	317	833	56	5,698	796	90	12,647	3,561	1,013	0	0	-4,571	-
1980	22	4	43	25	4,095	155	283	666	67	5,437	471	89	11,331	2,979	1,000	49	0	807	-
1981	42	4	49	16	3,819	82	212	626	64	5,506	348	87	10,811	3,569	1,187	26	0	-2,618	-
1982	50	4	74	19	2,699	91	187	862	59	5,529	359	68	9,946	4,174	1,046	43	0	-4,114	-
1983	46	4	63	25	3,439	106	258	866	62	5,579	318	74	10,791	2,870	1,203	50	0	152	-
1984	55	5	226	17	3,721	173	150	646	66	5,821	434	74	11,328	3,336	1,188	178	0	-912	-
1985	80	5	330	22	4,193	201	577	791	61	R 5,813	122	75	R 12,183	2,999	1,243	280	0	-801	-
1986	26	5	419	27	3,974	133	380	867	60	5,966	471	81	12,377	2,058	2,715	85	0	-2,742	-
1987	12	5	491	21	4,369	181	316	1,101	68	R 6,530	338	87	R 13,502	3,536	3,272	156	0	-8,087	-
1988	11	6	396	17	4,670	143	455	1,157	65	R 6,797	238	88	R 14,026	4,114	3,700	100	0	-9,968	-
1989	9	6	453	17	4,628	220	362	1,504	67	R 6,554	192	87	R 14,085	3,607	2,972	184	0	R -6,025	-
1990	8	7	27	15	4,045	180	223	1,401	69	R 6,696	241	86	R 12,982	3,616	i NA	i NA	i NA	R -4,037	-
1991	12	7	527	15	4,258	162	274	1,634	62	R 6,772	265	0	R 13,970	4,108	NA	NA	NA	R -8,275	-
1992	20	8	335	15	4,993	116	230	1,912	63	R 6,879	280	0	R 14,823	3,735	NA	NA	NA	R -3,604	-
1993	6	7	31	12	5,357	124	277	1,641	64	R 7,096	480	0	R 15,082	3,372	NA	NA	NA	R -5,939	-
1994	5	7	230	11	5,064	138	213	1,663	67	R 7,154	286	0	R 14,827	4,316	NA	NA	NA	R -4,600	-
1995	3	7	253	12	5,352	127	204	1,673	66	7,211	218	0	15,116	3,859	NA	NA	NA	R -5,912	-
1996	2	7	290	10	5,859	99	239	1,794	64	7,331	287	0	15,973	3,799	NA	NA	NA	-9,799	-
Trillion Btu																			
1960	3.5	0.0	1.5	0.1	17.2	0.4	4.6	1.6	0.4	17.5	3.0	0.3	46.7	0.0	10.1	0.0	0.0	0.4	60.7
1965	2.7	0.0	1.1	0.1	25.0	0.4	4.3	1.8	0.4	19.9	5.7	0.2	59.0	0.0	7.9	0.0	0.0	6.7	76.2
1970	2.1	2.7	1.8	0.1	33.4	0.7	2.8	2.0	0.4	26.7	5.7	0.3	73.9	0.0	8.8	0.0	0.0	19.3	106.8
1975	0.7	4.0	0.2	0.1	27.0	1.0	1.8	3.1	0.3	29.9	5.0	0.5	68.9	39.2	10.5	0.0	0.0	-15.6	107.8
1980	0.5	4.0	0.3	0.1	23.9	0.9	1.6	2.4	0.4	28.6	3.0	0.5	61.6	32.5	10.4	0.5	0.0	2.8	112.2
1981	1.0	4.4	0.3	0.1	22.2	0.5	1.2	2.3	0.4	28.9	2.2	0.5	58.6	39.4	12.4	0.3	0.0	-8.9	107.1
1982	1.3	4.3	0.5	0.1	15.7	0.5	1.1	3.1	0.4	29.0	2.3	0.4	53.0	46.2	10.9	0.5	0.0	-14.0	102.2
1983	1.2	4.3	0.4	0.1	20.0	0.6	1.5	3.1	0.4	29.3	2.0	0.4	57.8	31.3	12.7	0.5	0.0	0.5	108.3
1984	1.4	4.8	1.5	0.1	21.7	1.0	0.9	2.3	0.4	30.6	2.7	0.4	61.5	36.2	12.4	1.9	0.0	-3.1	115.1
1985	2.0	5.0	2.2	0.1	24.4	1.1	3.3	2.8	0.4	30.5	0.8	0.4	66.0	32.4	13.0	2.9	0.0	-2.7	118.6
1986	0.7	5.0	2.8	0.1	23.1	0.7	2.2	3.2	0.4	31.3	3.0	0.4	67.2	22.2	28.4	0.9	0.0	-9.4	114.9
1987	0.3	5.1	3.3	0.1	25.5	1.0	1.8	4.0	0.4	R 34.3	2.1	0.5	R 73.0	38.1	34.1	1.6	0.0	-27.6	R 124.6
1988	0.3	5.5	2.6	0.1	27.2	0.8	2.6	4.2	0.4	R 35.7	1.5	0.5	75.6	44.2	38.2	1.0	0.0	-34.0	130.8
1989	0.2	6.1	3.0	0.1	27.0	1.2	2.1	5.5	0.4	34.4	1.2	0.5	75.4	38.7	R 31.0	1.9	0.0	R -20.6	132.7
1990	0.2	6.7	0.2	0.1	23.6	1.0	1.3	5.1	0.4	R 35.2	1.5	0.5	R 68.7	38.6	i 24.9	i 10.3	i (s)	R -13.8	R i 137.1
1991	0.3	7.0	3.5	0.1	24.8	0.9	1.6	5.9	0.4	35.6	1.7	0.0	74.3	44.1	R 30.6	10.3	(s)	R -28.2	R 141.8
1992	0.5	7.6	2.2	0.1	29.1	0.6	1.3	6.9	0.4	36.1	1.8	0.0	78.5	39.9	R 28.5	10.8	(s)	R -12.3	R 149.7
1993	0.1	7.2	0.2	0.1	31.2	0.7	1.6	5.9	0.4	37.3	3.0	0.0	80.3	36.0	R 34.8	R 12.6	(s)	R -20.3	R 154.0
1994	0.1	7.3	1.5	0.1	29.5	0.8	1.2	6.0	0.4	37.6	1.8	0.0	78.9	46.1	R 20.5	R 13.1	(s)	R -15.7	R 153.2
1995	0.1	7.2	1.7	0.1	31.2	0.7	1.2	6.1	0.4	37.9	1.4	0.0	80.5	41.1	27.6	13.5	(s)	-20.2	R 154.8
1996	(s)	7.4	1.9	0.1	34.1	0.6	1.4	6.5	0.4	38.5	1.8	0.0	85.2	40.4	41.0	14.3	(s)	-33.4	162.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 288. Residential Energy Consumption Estimates, Selected Years 1960-1996, Vermont

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	0	46	46	0	2,044	701	258	3,003	0	0	451	—	1,121	—
1965	0	29	29	0	3,110	649	316	4,075	0	0	678	—	1,619	—
1970	0	17	17	1	3,873	436	356	4,665	0	0	1,216	—	2,947	—
1975	0	9	9	1	3,101	235	555	3,891	0	0	1,427	—	3,443	—
1980	0	7	7	1	2,171	230	356	2,757	0	0	1,781	—	4,331	—
1981	0	15	15	1	2,008	177	381	2,566	0	0	1,707	—	4,069	—
1982	0	9	9	1	1,395	154	416	1,965	0	0	1,738	—	4,174	—
1983	1	7	8	1	2,004	215	495	2,714	0	0	1,766	—	4,231	—
1984	0	9	9	1	2,055	133	501	2,690	0	0	1,849	—	4,304	—
1985	12	7	19	1	2,222	514	601	3,338	0	0	1,538	—	3,613	—
1986	(s)	6	6	2	1,848	291	607	2,746	0	0	1,156	—	2,659	—
1987	0	6	6	2	1,877	251	764	2,892	0	0	1,409	—	3,220	—
1988	0	5	5	2	1,941	308	906	3,155	0	0	1,572	—	3,554	—
1989	(s)	2	2	2	2,163	278	1,160	3,601	0	0	1,664	—	R 3,737	—
1990	0	4	4	2	1,930	193	1,109	3,232	<sup>e</sup> 99	<sup>e</sup> 2	1,809	—	R 3,956	—
1991	0	3	3	2	2,036	248	1,188	3,472	104	2	1,783	—	R 3,882	—
1992	0	4	4	3	2,191	210	1,424	3,825	110	2	1,927	—	R 4,116	—
1993	0	4	4	3	2,372	235	1,204	3,810	114	2	1,971	—	R 4,165	—
1994	2	0	2	2	2,168	183	1,227	3,578	111	3	2,009	—	R 4,193	—
1995	0	2	2	2	2,247	180	1,223	3,650	124	4	1,973	—	4,110	—
1996	0	1	1	3	2,402	203	1,314	3,919	123	5	2,006	—	4,176	—
Trillion Btu														
1960	0.0	1.1	1.1	0.0	11.9	4.0	1.0	16.9	0.0	0.0	1.5	19.6	3.8	23.4
1965	0.0	0.7	0.7	0.0	18.1	3.7	1.3	23.1	0.0	0.0	2.3	26.1	5.5	31.6
1970	0.0	0.4	0.4	1.1	22.6	2.5	1.3	26.4	0.0	0.0	4.1	32.0	10.1	42.0
1975	0.0	0.2	0.2	1.1	18.1	1.3	2.1	21.5	0.0	0.0	4.9	27.7	11.7	39.4
1980	0.0	0.1	0.1	1.3	12.6	1.3	1.3	15.3	0.0	0.0	6.1	22.8	14.8	37.5
1981	0.0	0.4	0.4	1.3	11.7	1.0	1.4	14.1	0.0	0.0	5.8	21.6	13.9	35.4
1982	0.0	0.2	0.2	1.3	8.1	0.9	1.5	10.5	0.0	0.0	5.9	17.9	14.2	32.2
1983	(s)	0.2	0.2	1.2	11.7	1.2	1.8	14.7	0.0	0.0	6.0	22.1	14.4	36.6
1984	0.0	0.2	0.2	1.3	12.0	0.8	1.8	14.5	0.0	0.0	6.3	22.4	14.7	37.1
1985	0.3	0.2	0.5	1.4	12.9	2.9	2.2	18.0	0.0	0.0	5.2	25.2	12.3	37.5
1986	(s)	0.1	0.2	1.6	10.8	1.6	2.2	14.6	0.0	0.0	3.9	20.3	9.1	29.4
1987	0.0	0.2	0.2	1.6	10.9	1.4	2.8	15.1	0.0	0.0	4.8	21.8	11.0	32.7
1988	0.0	0.1	0.1	1.8	11.3	1.7	3.3	16.4	0.0	0.0	5.4	23.7	12.1	35.8
1989	(s)	0.1	0.1	2.1	12.6	1.6	4.3	18.4	0.0	0.0	5.7	26.3	12.7	39.0
1990	0.0	0.1	0.1	2.1	11.2	1.1	4.0	16.4	<sup>e</sup> 2.0	<sup>e</sup> (s)	6.2	<sup>e</sup> 26.7	13.5	<sup>e</sup> 40.2
1991	0.0	0.1	0.1	2.2	11.9	1.4	4.3	17.6	2.1	(s)	6.1	28.0	13.2	41.2
1992	0.0	0.1	0.1	2.5	12.8	1.2	5.2	19.1	2.2	(s)	6.6	30.5	14.0	44.5
1993	0.0	0.1	0.1	2.5	13.8	1.3	4.3	19.5	2.3	(s)	6.7	31.1	14.2	45.3
1994	(s)	0.0	(s)	2.4	12.6	1.0	4.5	18.1	2.2	(s)	6.9	29.7	14.3	44.0
1995	0.0	(s)	(s)	2.3	13.1	1.0	4.4	18.5	2.5	(s)	6.7	30.1	14.0	44.1
1996	0.0	(s)	(s)	2.6	14.0	1.2	4.7	19.9	2.5	(s)	6.8	31.8	14.2	46.1

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 289. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Vermont**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	0	30	30	0	418	43	46	127	225	859	0	233	-	580	-
1965	0	19	19	0	636	40	56	24	422	1,177	0	303	-	723	-
1970	0	12	12	1	792	27	63	25	414	1,320	0	609	-	1,475	-
1975	0	6	6	1	634	15	98	30	373	1,149	0	709	-	1,710	-
1980	0	4	4	1	620	44	63	33	237	996	0	923	-	2,244	-
1981	0	10	10	1	554	26	67	36	153	836	0	851	-	2,029	-
1982	0	6	6	1	507	26	73	37	115	758	0	890	-	2,137	-
1983	1	5	6	1	423	9	87	58	48	625	0	935	-	2,239	-
1984	0	6	6	1	434	4	88	36	65	628	0	927	-	2,157	-
1985	22	5	27	2	530	36	106	40	24	735	0	959	-	2,253	-
1986	1	4	5	2	537	60	107	40	135	880	0	995	-	2,290	-
1987	0	4	4	2	652	33	135	41	92	952	0	1,424	-	3,253	-
1988	0	3	3	2	691	63	160	R 38	61	1,013	0	1,499	-	3,389	-
1989	(s)	2	2	2	722	58	205	36	84	1,105	0	1,537	-	R 3,452	-
1990	0	3	3	2	563	12	196	41	121	933	e NA	1,526	-	R 3,339	-
1991	0	2	2	2	700	15	210	27	131	1,084	NA	1,531	-	R 3,333	-
1992	0	2	2	2	816	14	251	33	106	1,221	NA	1,574	-	R 3,361	-
1993	0	2	2	2	746	34	212	6	174	1,173	21	1,614	-	R 3,409	-
1994	3	0	3	3	770	19	217	7	87	1,099	22	1,622	-	R 3,385	-
1995	0	1	1	3	670	14	216	7	72	978	19	1,647	-	3,430	-
1996	0	1	1	3	807	13	232	7	74	1,133	24	1,696	-	3,530	-

**Trillion Btu**

1960	0.0	0.8	0.8	0.0	2.4	0.2	0.2	0.7	1.4	4.9	0.0	0.8	6.5	2.0	8.5
1965	0.0	0.5	0.5	0.0	3.7	0.2	0.2	0.1	2.7	6.9	0.0	1.0	8.4	2.5	10.9
1970	0.0	0.3	0.3	0.6	4.6	0.2	0.2	0.1	2.6	7.7	0.0	2.1	10.6	5.0	15.7
1975	0.0	0.1	0.1	0.8	3.7	0.1	0.4	0.2	2.3	6.6	0.0	2.4	10.0	5.8	15.8
1980	0.0	0.1	0.1	0.8	3.6	0.2	0.2	0.2	1.5	5.7	0.0	3.1	9.8	7.7	17.5
1981	0.0	0.2	0.2	0.8	3.2	0.1	0.2	0.2	1.0	4.8	0.0	2.9	8.7	6.9	15.7
1982	0.0	0.1	0.1	0.8	3.0	0.1	0.3	0.2	0.7	4.3	0.0	3.0	8.3	7.3	15.6
1983	(s)	0.1	0.1	0.8	2.5	0.1	0.3	0.3	0.3	3.4	0.0	3.2	7.6	7.6	15.3
1984	0.0	0.2	0.2	1.5	2.5	(s)	0.3	0.2	0.4	3.5	0.0	3.2	8.2	7.4	15.6
1985	0.5	0.1	0.7	1.6	3.1	0.2	0.4	0.2	0.1	4.0	0.0	3.3	9.5	7.7	17.2
1986	(s)	0.1	0.1	1.7	3.1	0.3	0.4	0.2	0.8	4.9	0.0	3.4	10.1	7.8	17.9
1987	0.0	0.1	0.1	1.8	3.8	0.2	0.5	0.2	0.6	5.3	0.0	4.9	12.0	11.1	23.1
1988	0.0	0.1	0.1	1.9	4.0	0.4	0.6	0.2	0.4	R 5.5	0.0	5.1	12.7	11.6	24.2
1989	(s)	(s)	(s)	2.1	4.2	0.3	0.8	0.2	0.5	6.0	0.0	5.2	13.3	11.8	25.1
1990	0.0	0.1	0.1	2.0	3.3	0.1	0.7	0.2	0.8	5.0	e NA	5.2	12.3	11.4	23.7
1991	0.0	0.1	0.1	2.0	4.1	0.1	0.8	0.1	0.8	5.9	NA	5.2	13.2	11.4	24.6
1992	0.0	0.1	0.1	2.3	4.8	0.1	0.9	0.2	0.7	6.6	NA	5.4	14.3	11.5	25.8
1993	0.0	0.1	0.1	2.4	4.3	0.2	0.8	(s)	1.1	6.4	0.4	5.5	R 14.8	11.6	R 26.4
1994	0.1	0.0	0.1	2.7	4.5	0.1	0.8	(s)	0.5	6.0	0.4	5.5	R 14.7	11.5	R 26.2
1995	0.0	(s)	(s)	2.7	3.9	0.1	0.8	(s)	0.5	5.2	0.4	5.6	R 13.9	11.7	R 25.6
1996	0.0	(s)	(s)	2.9	4.7	0.1	0.8	(s)	0.5	6.1	0.5	5.8	15.3	12.0	27.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

Table 290. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Vermont

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	41	0	224	234	75	99	2	0	252	46	931	64	0	0	191	–	474	–
1965	14	0	171	316	71	77	19	100	484	39	1,278	53	0	0	352	–	841	–
1970	3	1	271	463	39	121	17	68	466	45	1,489	62	0	0	787	–	1,907	–
1975	2	2	28	364	68	179	10	77	421	90	1,237	67	0	0	858	–	2,071	–
1980	2	2	43	501	9	245	15	19	235	89	1,155	70	0	0	1,247	–	3,032	–
1981	3	2	49	468	9	157	15	12	194	87	991	70	0	0	1,172	–	2,794	–
1982	4	2	74	420	7	366	13	13	244	68	1,205	70	0	0	1,152	–	2,768	–
1983	4	2	63	288	34	277	14	10	271	74	1,031	70	0	0	1,210	–	2,899	–
1984	3	2	226	296	12	39	15	68	369	74	1,099	70	0	0	1,450	–	3,376	–
1985	6	2	330	448	26	70	14	117	98	75	1,178	70	0	0	1,518	–	3,567	–
1986	3	2	419	504	30	143	14	120	336	81	1,645	70	0	0	1,576	–	3,625	–
1987	2	2	491	475	33	191	15	R 120	244	87	1,656	70	0	0	1,264	–	2,888	–
1988	3	2	396	578	84	79	15	123	177	88	1,541	70	0	0	1,345	–	3,040	–
1989	5	2	453	502	27	128	15	127	102	87	1,441	70	0	0	1,373	–	R 3,084	–
1990	1	2	27	466	17	85	16	R 81	116	86	R 895	f NA	f NA	f NA	1,381	–	R 3,021	–
1991	7	2	527	447	11	226	14	88	131	0	1,444	NA	NA	NA	1,390	–	R 3,025	–
1992	14	2	335	508	6	226	14	90	169	0	1,349	NA	NA	NA	1,440	–	R 3,076	–
1993	0	2	31	511	8	217	14	76	306	0	1,163	NA	NA	NA	1,431	–	R 3,023	–
1994	0	2	230	347	12	199	15	84	199	0	R 1,085	NA	NA	NA	1,435	–	R 2,994	–
1995	0	2	253	317	10	220	15	89	146	0	1,050	NA	NA	NA	1,484	–	3,091	–
1996	0	2	290	331	22	231	14	90	213	0	1,193	NA	NA	NA	1,537	–	3,199	–

## Trillion Btu

1960	1.1	0.0	1.5	1.4	0.4	0.4	(s)	0.0	1.6	0.3	5.5	0.7	0.0	0.0	0.7	8.0	1.6	9.6
1965	0.4	0.0	1.1	1.8	0.4	0.3	0.1	0.5	3.0	0.2	7.6	0.6	0.0	0.0	1.2	9.7	2.9	12.6
1970	0.1	1.1	1.8	2.7	0.2	0.5	0.1	0.4	2.9	0.3	8.8	0.6	0.0	0.0	2.7	13.3	6.5	19.8
1975	0.1	1.5	0.2	2.1	0.4	0.7	0.1	0.4	2.6	0.5	7.0	0.7	0.0	0.0	2.9	12.2	7.1	19.3
1980	(s)	1.6	0.3	2.9	0.1	0.9	0.1	0.1	1.5	0.5	6.3	0.7	0.0	0.0	4.3	12.9	10.3	23.3
1981	0.1	2.1	0.3	2.7	0.1	0.6	0.1	0.1	1.2	0.5	5.5	0.7	0.0	0.0	4.0	12.4	9.5	21.9
1982	0.1	2.1	0.5	2.4	(s)	1.3	0.1	0.1	1.5	0.4	6.4	0.7	0.0	0.0	3.9	13.2	9.4	22.7
1983	0.1	2.0	0.4	1.7	0.2	1.0	0.1	0.1	1.7	0.4	5.5	0.7	0.0	0.0	4.1	12.5	9.9	22.4
1984	0.1	1.8	1.5	1.7	0.1	0.1	0.1	0.4	2.3	0.4	6.6	0.7	0.0	0.0	4.9	14.1	11.5	25.6
1985	0.1	1.9	2.2	2.6	0.1	0.3	0.1	0.6	0.6	0.4	6.9	0.7	0.0	0.0	5.2	14.8	12.2	27.0
1986	0.1	1.7	2.8	2.9	0.2	0.5	0.1	0.6	2.1	0.4	9.7	0.7	0.0	0.0	5.4	17.6	12.4	29.9
1987	0.1	1.7	3.3	2.8	0.2	0.7	0.1	0.6	1.5	0.5	9.6	0.7	0.0	0.0	4.3	16.4	9.9	26.3
1988	0.1	1.7	2.6	3.4	0.5	0.3	0.1	0.6	1.1	0.5	9.1	0.7	0.0	0.0	4.6	16.2	10.4	26.6
1989	0.1	1.9	3.0	2.9	0.2	0.5	0.1	0.7	0.6	0.5	8.4	0.7	0.0	0.0	4.7	15.8	10.5	R 26.4
1990	(s)	1.9	0.2	2.7	0.1	0.3	0.1	0.4	0.7	0.5	5.0	f 1.5	f 7.4	f 0.0	4.7	f 20.5	10.3	f 30.8
1991	0.2	1.7	3.5	2.6	0.1	0.8	0.1	0.5	0.8	0.0	8.4	1.2	7.0	0.0	4.7	23.2	10.3	R 33.6
1992	0.4	1.9	2.2	3.0	(s)	0.8	0.1	0.5	1.1	0.0	7.7	1.2	7.7	0.0	4.9	23.7	10.5	34.2
1993	0.0	2.0	0.2	3.0	(s)	0.8	0.1	0.4	1.9	0.0	6.4	1.5	9.3	0.0	4.9	24.1	10.3	34.4
1994	0.0	2.0	1.5	2.0	0.1	0.7	0.1	0.4	1.2	0.0	6.1	1.5	R 9.7	0.0	4.9	R 24.2	10.2	R 34.4
1995	0.0	2.2	1.7	1.8	0.1	0.8	0.1	0.5	0.9	0.0	5.9	1.4	R 9.4	0.0	5.1	R 23.9	10.5	R 34.4
1996	0.0	2.0	1.9	1.9	0.1	0.8	0.1	0.5	1.3	0.0	6.7	1.8	10.0	0.0	5.2	25.7	10.9	36.7

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

– =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 291. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Vermont**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	1	0	19	254	82	(s)	68	3,205	0	3,629	0	0	-	0	-
1965	(s)	0	25	185	79	1	44	3,665	0	4,000	0	0	-	0	-
1970	(s)	0	14	346	121	3	49	4,985	2	5,519	0	0	-	0	-
1975	(s)	0	11	504	129	1	45	5,591	2	6,284	0	0	-	0	-
1980	0	0	25	757	137	2	52	5,386	0	6,359	0	0	-	0	-
1981	0	0	16	772	75	21	50	5,459	0	6,394	0	0	-	0	-
1982	0	(s)	19	362	84	6	45	5,479	0	5,995	0	0	-	0	-
1983	0	(s)	25	708	106	7	48	5,511	0	6,405	0	0	-	0	-
1984	0	(s)	17	905	173	17	51	5,716	0	6,880	0	0	-	0	-
1985	0	(s)	22	959	201	13	47	R 5,656	0	R 6,898	0	0	-	0	-
1986	0	(s)	27	1,038	133	10	46	5,806	0	7,060	0	0	-	0	-
1987	0	0	21	1,295	181	11	52	R 6,369	2	R 7,931	0	0	-	0	-
1988	0	0	17	1,385	143	11	50	R 6,635	0	R 8,242	0	0	-	0	-
1989	0	(s)	17	1,191	220	11	52	R 6,391	7	R 7,888	0	0	-	0	-
1990	0	(s)	15	1,079	180	11	53	R 6,574	3	R 7,915	e 0	0	-	0	-
1991	0	(s)	15	1,060	162	11	48	R 6,656	3	R 7,955	0	0	-	0	-
1992	0	(s)	15	1,470	116	11	49	R 6,756	4	R 8,420	0	0	-	0	-
1993	0	(s)	12	1,711	124	8	49	R 7,014	0	R 8,919	0	0	-	0	-
1994	0	(s)	11	1,756	138	21	52	R 7,064	0	R 9,042	0	0	-	0	-
1995	0	(s)	12	2,079	127	15	51	7,116	0	9,399	0	0	-	0	-
1996	0	(s)	10	2,303	99	16	49	7,234	0	9,712	0	0	-	0	-

  

Trillion Btu															
1960	(s)	0.0	0.1	1.5	0.4	(s)	0.4	16.8	0.0	19.3	0.0	0.0	19.3	0.0	19.3
1965	(s)	0.0	0.1	1.1	0.4	(s)	0.3	19.3	0.0	21.2	0.0	0.0	21.2	0.0	21.2
1970	(s)	0.0	0.1	2.0	0.7	(s)	0.3	26.2	(s)	29.3	0.0	0.0	29.3	0.0	29.3
1975	(s)	0.0	0.1	2.9	0.7	(s)	0.3	29.4	(s)	33.4	0.0	0.0	33.4	0.0	33.4
1980	0.0	0.0	0.1	4.4	0.8	(s)	0.3	28.3	0.0	33.9	0.0	0.0	33.9	0.0	33.9
1981	0.0	0.0	0.1	4.5	0.4	0.1	0.3	28.7	0.0	34.0	0.0	0.0	34.0	0.0	34.0
1982	0.0	(s)	0.1	2.1	0.5	(s)	0.3	28.8	0.0	31.7	0.0	0.0	31.7	0.0	31.7
1983	0.0	(s)	0.1	4.1	0.6	(s)	0.3	29.0	0.0	34.1	0.0	0.0	34.1	0.0	34.1
1984	0.0	(s)	0.1	5.3	1.0	0.1	0.3	30.0	0.0	36.7	0.0	0.0	36.7	0.0	36.7
1985	0.0	(s)	0.1	5.6	1.1	(s)	0.3	29.7	0.0	R 36.9	0.0	0.0	R 36.9	0.0	R 36.9
1986	0.0	(s)	0.1	6.0	0.7	(s)	0.3	30.5	0.0	37.7	0.0	0.0	37.7	0.0	37.7
1987	0.0	0.0	0.1	7.5	1.0	(s)	0.3	R 33.5	(s)	R 42.5	0.0	0.0	R 42.5	0.0	R 42.5
1988	0.0	0.0	0.1	8.1	0.8	(s)	0.3	34.9	0.0	R 44.1	0.0	0.0	R 44.1	0.0	R 44.1
1989	0.0	(s)	0.1	6.9	1.2	(s)	0.3	33.6	(s)	42.2	0.0	0.0	42.2	0.0	42.2
1990	0.0	(s)	0.1	6.3	1.0	(s)	0.3	R 34.5	(s)	R 42.3	e 0.0	0.0	R 42.3	0.0	R 42.3
1991	0.0	(s)	0.1	6.2	0.9	(s)	0.3	35.0	(s)	R 42.5	0.0	0.0	42.5	0.0	42.5
1992	0.0	(s)	0.1	8.6	0.6	(s)	0.3	35.5	(s)	45.1	0.0	0.0	45.1	0.0	45.1
1993	0.0	(s)	0.1	10.0	0.7	(s)	0.3	36.8	0.0	47.9	0.0	0.0	47.9	0.0	47.9
1994	0.0	(s)	0.1	10.2	0.8	0.1	0.3	37.1	0.0	48.6	0.0	0.0	48.6	0.0	48.6
1995	0.0	(s)	0.1	12.1	0.7	0.1	0.3	37.4	0.0	50.6	0.0	0.0	50.6	0.0	50.6
1996	0.0	(s)	0.1	13.4	0.6	0.1	0.3	38.0	0.0	52.4	0.0	0.0	52.4	0.0	52.4

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 292. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Vermont**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	19	0	19	0	1	8	0	9	0	873	0	0	0	-
1965	43	0	43	0	3	38	0	42	0	702	0	0	0	-
1970	55	0	55	0	23	268	0	291	0	773	0	0	0	-
1975	13	0	13	1	(s)	86	0	87	3,561	946	0	0	0	-
1980	9	0	9	(s)	0	63	0	63	2,979	930	49	0	0	-
1981	14	0	14	(s)	0	24	0	24	3,569	1,117	26	0	0	-
1982	31	0	31	(s)	0	23	0	23	4,174	976	43	0	0	-
1983	28	0	28	(s)	0	16	0	16	2,870	1,133	50	0	0	-
1984	37	0	37	(s)	0	31	0	31	3,336	1,118	178	0	0	-
1985	28	0	28	(s)	0	34	0	34	2,999	1,173	280	0	0	-
1986	12	0	12	(s)	0	46	0	46	2,058	2,645	85	0	0	-
1987	0	0	0	0	0	71	0	71	3,536	3,202	156	0	0	-
1988	0	0	0	0	0	75	0	75	4,114	3,630	100	0	0	-
1989	0	0	0	(s)	0	50	0	50	3,607	2,902	184	0	0	-
1990	0	0	0	1	0	8	0	8	3,616	2,249	94	0	0	-
1991	0	0	0	1	0	15	0	15	4,108	2,813	109	0	0	-
1992	0	0	0	1	0	8	0	8	3,735	2,643	92	0	0	-
1993	0	0	0	(s)	0	17	0	17	3,372	3,232	64	0	0	-
1994	0	0	0	(s)	0	23	0	23	4,316	1,839	72	0	0	-
1995	0	0	0	(s)	0	39	0	39	3,859	2,540	127	0	0	-
1996	0	0	0	(s)	0	16	0	16	3,799	3,787	135	0	0	-

**Trillion Btu**

1960	0.5	0.0	0.5	0.0	(s)	(s)	0.0	0.1	0.0	9.4	0.0	0.0	0.0	10.0
1965	1.2	0.0	1.2	0.0	(s)	0.2	0.0	0.2	0.0	7.3	0.0	0.0	0.0	8.8
1970	1.4	0.0	1.4	0.0	0.1	1.6	0.0	1.7	0.0	8.1	0.0	0.0	0.0	11.2
1975	0.3	0.0	0.3	0.6	(s)	0.5	0.0	0.5	39.2	9.8	0.0	0.0	0.0	50.5
1980	0.2	0.0	0.2	0.2	0.0	0.4	0.0	0.4	32.5	9.7	0.5	0.0	0.0	43.5
1981	0.4	0.0	0.4	0.2	0.0	0.1	0.0	0.1	39.4	11.7	0.3	0.0	0.0	52.0
1982	0.8	0.0	0.8	0.1	0.0	0.1	0.0	0.1	46.2	10.2	0.5	0.0	0.0	57.9
1983	0.7	0.0	0.7	0.2	0.0	0.1	0.0	0.1	31.3	11.9	0.5	0.0	0.0	44.8
1984	0.9	0.0	0.9	0.3	0.0	0.2	0.0	0.2	36.2	11.7	1.9	0.0	0.0	51.1
1985	0.7	0.0	0.7	0.1	0.0	0.2	0.0	0.2	32.4	12.3	2.9	0.0	0.0	48.6
1986	0.3	0.0	0.3	(s)	0.0	0.3	0.0	0.3	22.2	27.6	0.9	0.0	0.0	51.3
1987	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	38.1	33.4	1.6	0.0	0.0	73.5
1988	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.4	44.2	37.5	1.0	0.0	0.0	83.1
1989	0.0	0.0	0.0	(s)	0.0	0.3	0.0	0.3	38.7	R 30.3	1.9	0.0	0.0	R 71.2
1990	0.0	0.0	0.0	0.7	0.0	(s)	0.0	(s)	38.6	R 23.4	1.0	0.0	0.0	R 65.1
1991	0.0	0.0	0.0	1.1	0.0	0.1	0.0	0.1	44.1	R 29.3	1.1	0.0	0.0	R 79.2
1992	0.0	0.0	0.0	0.8	0.0	(s)	0.0	(s)	39.9	R 27.3	R 1.0	0.0	0.0	R 65.2
1993	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.1	36.0	R 33.3	0.7	0.0	0.0	R 73.5
1994	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.1	46.1	R 19.0	0.7	0.0	0.0	R 69.1
1995	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.2	41.1	26.2	1.3	0.0	0.0	73.9
1996	0.0	0.0	0.0	(s)	0.0	0.1	0.0	0.1	40.4	39.2	1.4	0.0	0.0	88.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 293. Energy Consumption Estimates by Source, Selected Years 1960-1996, Virginia**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum												Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	
1960	12,142	66	1,753	382	14,146	4,441	5,038	1,146	633	31,077	17,825	1,308	77,751	0	1,267	0	0	-13,165	-	
1965	14,904	96	2,681	721	18,609	6,504	5,544	1,658	664	36,104	16,780	2,053	91,318	0	883	0	0	-4,629	-	
1970	11,294	137	2,250	356	24,640	11,093	5,029	2,412	720	48,684	33,373	3,472	132,030	0	691	0	0	16,309	-	
1975	7,130	121	2,328	251	22,996	11,602	2,264	3,077	734	59,293	40,953	2,320	145,818	8,970	1,311	0	0	22,851	-	
1980	9,291	158	2,618	218	24,599	12,279	1,716	3,131	952	59,035	24,651	10,015	139,213	11,466	892	0	0	56,966	-	
1981	10,666	152	2,357	185	23,613	11,255	1,172	2,945	913	59,241	13,590	5,992	121,264	17,818	365	0	0	52,182	-	
1982	10,419	151	2,013	180	21,913	11,090	1,268	2,958	833	58,355	9,377	4,907	112,893	17,420	940	0	0	59,425	-	
1983	10,888	143	2,823	163	24,890	10,869	1,345	2,975	872	59,687	8,128	4,610	116,361	18,674	1,210	0	0	63,690	-	
1984	12,168	144	3,658	127	25,795	10,465	1,071	3,697	930	61,916	8,911	5,274	121,844	17,045	1,182	0	0	67,345	-	
1985	11,656	139	4,033	131	25,252	11,038	4,032	3,932	866	R 62,979	8,571	4,895	R 125,729	22,303	845	0	0	62,743	-	
1986	11,857	141	4,444	155	28,423	13,228	2,808	3,380	847	R 65,184	12,403	3,398	R 134,270	21,215	75	0	0	76,894	-	
1987	13,227	159	4,406	74	29,301	14,432	2,504	4,126	958	R 69,895	10,845	3,563	R 140,103	18,145	834	0	0	88,537	-	
1988	13,430	164	3,604	74	32,591	15,700	3,049	4,251	923	R 71,098	10,077	3,631	R 144,999	21,037	-191	0	(s)	91,187	-	
1989	14,279	174	4,203	75	29,079	15,768	2,692	4,472	947	R 70,930	11,925	3,614	R 143,705	14,264	428	0	(s)	R 107,604	-	
1990	13,105	181	4,701	70	27,940	15,806	1,374	4,088	975	R 70,333	7,896	3,896	R 137,077	23,820	i NA	i NA	i NA	R 89,078	-	
1991	13,980	175	3,734	116	26,819	11,824	1,562	4,643	872	R 70,526	9,195	4,909	R 134,200	23,886	NA	NA	NA	R 90,773	-	
1992	13,418	200	3,759	101	26,447	11,670	1,466	4,727	889	R 71,533	8,083	5,196	R 133,872	23,334	NA	NA	NA	R 92,919	-	
1993	13,584	218	3,697	105	28,181	11,915	1,735	4,829	905	R 73,827	8,503	5,158	R 138,855	22,689	NA	NA	NA	R 97,617	-	
1994	12,792	231	3,935	101	29,230	12,003	1,459	4,928	946	R 75,047	7,982	5,275	R 140,906	25,429	NA	NA	NA	R 95,401	-	
1995	R 13,378	247	3,639	85	30,552	10,589	1,618	4,783	930	R 78,828	5,543	5,106	141,673	25,135	NA	NA	NA	R 103,892	-	
1996	14,983	239	3,512	79	36,148	9,204	1,935	5,043	903	79,164	4,138	5,420	145,546	26,286	NA	NA	NA	100,064	-	

  

Trillion Btu																			
1960	316.4	68.4	11.6	1.9	82.4	24.0	28.6	4.6	3.8	163.2	112.1	7.8	440.1	0.0	13.6	0.0	0.0	-44.9	793.6
1965	386.3	98.6	17.8	3.6	108.4	35.8	31.4	6.6	4.0	189.7	105.5	11.8	514.7	0.0	9.2	0.0	0.0	-15.8	993.0
1970	275.3	140.1	14.9	1.8	143.5	61.9	28.5	9.1	4.4	255.7	209.8	20.0	749.7	0.0	7.3	0.0	0.0	55.6	1,228.0
1975	169.2	123.6	15.4	1.3	133.9	64.9	12.8	11.4	4.5	311.5	257.5	13.3	826.6	98.8	13.6	0.0	0.0	78.0	1,309.8
1980	231.8	161.0	17.4	1.1	143.3	68.8	9.7	11.5	5.8	310.1	155.0	55.5	778.1	125.1	9.3	0.0	0.0	194.4	1,499.7
1981	264.3	155.4	15.6	0.9	137.5	62.9	6.6	10.7	5.5	311.2	85.4	33.1	669.7	196.5	3.8	0.0	0.0	178.0	1,467.8
1982	259.7	155.0	13.4	0.9	127.6	61.9	7.2	10.7	5.0	306.5	59.0	27.2	619.4	192.9	9.8	0.0	0.0	202.8	1,439.6
1983	275.5	147.2	18.7	0.8	145.0	60.8	7.6	10.8	5.3	313.5	51.1	25.9	639.6	203.6	12.7	0.0	0.0	217.3	1,495.9
1984	306.9	148.8	24.3	0.6	150.3	58.4	6.1	13.3	5.6	325.2	56.0	28.9	668.7	184.8	12.3	0.0	0.0	229.8	1,551.3
1985	297.1	144.9	26.8	0.7	147.1	61.7	22.9	14.2	5.3	R 330.8	53.9	27.0	R 690.2	241.2	8.8	0.0	0.0	214.1	R 1,596.3
1986	303.3	146.7	29.5	0.8	165.6	74.1	15.9	12.3	5.1	342.4	78.0	19.0	742.7	229.1	0.8	0.0	0.0	262.4	1,684.8
1987	337.9	165.3	29.2	0.4	170.7	80.9	14.2	15.1	5.8	R 367.2	68.2	19.8	R 771.4	195.5	8.7	0.0	0.0	302.1	R 1,780.9
1988	342.9	170.2	23.9	0.4	189.8	87.9	17.3	15.5	5.6	R 373.5	63.4	20.3	R 797.6	226.0	-2.0	0.0	(s)	311.1	R 1,845.9
1989	362.3	180.8	27.9	0.4	169.4	88.3	15.3	16.5	5.7	R 372.6	75.0	20.2	R 791.1	153.0	R 4.5	0.0	(s)	R 367.1	R 1,858.8
1990	333.0	188.7	31.2	0.4	162.7	88.5	7.8	14.8	5.9	R 369.5	49.6	21.7	R 752.2	254.4	i 4.7	R i 52.0	i 0.1	R i 1,888.9	R i 1,888.9
1991	356.6	182.0	24.8	0.6	156.2	66.7	8.9	16.8	5.3	R 370.5	57.8	27.3	R 734.8	256.5	0.2	R 53.9	0.1	R 309.7	R 1,893.7
1992	343.6	207.8	24.9	0.5	154.1	65.9	8.3	17.1	5.4	R 375.8	50.8	28.7	R 731.6	249.2	4.4	R 57.0	0.1	R 317.0	R 1,910.6
1993	347.6	227.5	24.5	0.5	164.2	67.3	9.8	17.4	5.4	R 387.8	53.5	28.5	R 759.1	242.4	R 5.6	R 56.3	0.1	R 333.1	R 1,971.4
1994	326.5	239.3	26.1	0.5	170.3	68.0	8.3	17.9	5.7	R 394.2	50.2	29.2	R 770.3	271.5	4.2	R 62.5	0.1	R 325.5	R 1,999.1
1995	R 341.1	254.9	24.1	0.4	178.0	60.0	9.2	17.3	5.6	414.1	34.8	28.2	771.9	267.9	2.3	R 63.9	0.1	354.5	R 2,056.5
1996	378.8	248.4	23.3	0.4	210.6	52.2	11.0	18.2	5.5	415.8	26.0	29.9	792.9	279.2	6.2	71.1	0.1	341.4	2,115.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 294. Residential Energy Consumption Estimates, Selected Years 1960-1996, Virginia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	450	8	458	27	6,520	4,655	734	11,909	0	0	4,099	-	10,196	-
1965	276	5	281	36	7,471	4,847	1,133	13,452	0	0	6,557	-	15,655	-
1970	163	3	166	50	9,734	4,544	1,430	15,708	0	0	11,546	-	27,979	-
1975	112	2	114	49	9,091	2,056	1,561	12,708	0	0	15,871	-	38,283	-
1980	67	1	68	55	7,380	1,403	1,506	10,289	0	0	19,731	-	47,979	-
1981	45	1	46	51	5,572	919	1,391	7,882	0	0	20,579	-	49,044	-
1982	85	1	86	48	5,035	1,048	1,309	7,393	0	0	20,343	-	48,862	-
1983	88	1	89	47	5,396	1,182	1,557	8,135	0	0	21,588	-	51,719	-
1984	100	2	102	51	5,534	987	1,741	8,262	0	0	21,711	-	50,536	-
1985	94	1	95	49	5,139	3,611	1,805	10,554	0	0	22,568	-	53,021	-
1986	85	1	86	52	6,494	2,474	1,531	10,499	0	0	25,235	-	58,048	-
1987	113	1	114	55	6,639	2,181	1,870	10,690	0	0	26,875	-	61,408	-
1988	101	1	102	59	6,971	2,629	1,785	11,386	0	0	28,192	-	63,736	-
1989	68	1	68	62	6,286	2,271	2,083	10,640	0	0	29,223	-	65,641	-
1990	82	1	83	51	5,108	1,160	2,124	8,392	<sup>e</sup> 684	<sup>e</sup> 33	28,130	-	61,523	-
1991	48	1	49	54	4,593	1,322	2,320	8,235	721	33	29,607	-	64,441	-
1992	66	2	68	62	4,781	1,283	2,429	8,494	758	33	29,780	-	63,609	-
1993	108	1	109	65	4,958	1,489	2,391	8,839	820	33	32,472	-	68,607	-
1994	110	1	111	65	4,914	1,256	2,440	8,610	804	34	32,343	-	67,485	-
1995	99	1	100	69	4,997	1,220	2,874	9,091	892	36	33,472	-	69,723	-
1996	138	1	139	76	5,853	1,544	3,039	10,436	890	37	34,651	-	72,119	-
<b>Trillion Btu</b>														
1960	11.1	0.2	11.4	27.9	38.0	26.4	2.9	67.3	0.0	0.0	14.0	120.5	34.8	155.3
1965	6.8	0.1	6.9	37.4	43.5	27.5	4.5	75.5	0.0	0.0	22.4	142.3	53.4	195.7
1970	3.9	0.1	4.0	50.8	56.7	25.8	5.4	87.9	0.0	0.0	39.4	182.1	95.5	277.5
1975	2.6	(s)	2.7	49.7	53.0	11.7	5.8	70.4	0.0	0.0	54.2	176.9	130.6	307.6
1980	1.6	(s)	1.7	55.6	43.0	8.0	5.5	56.5	0.0	0.0	67.3	181.1	163.7	344.8
1981	1.1	(s)	1.1	52.2	32.5	5.2	5.1	42.7	0.0	0.0	70.2	166.2	167.3	333.6
1982	2.1	(s)	2.1	49.5	29.3	5.9	4.7	40.0	0.0	0.0	69.4	161.0	166.7	327.8
1983	2.2	(s)	2.2	48.7	31.4	6.7	5.6	43.8	0.0	0.0	73.7	168.3	176.5	344.8
1984	2.5	(s)	2.5	53.3	32.2	5.6	6.3	44.1	0.0	0.0	74.1	174.0	172.4	346.4
1985	2.3	(s)	2.4	50.7	29.9	20.5	6.5	56.9	0.0	0.0	77.0	186.9	180.9	367.8
1986	2.1	(s)	2.2	53.6	37.8	14.0	5.6	57.4	0.0	0.0	86.1	199.3	198.1	397.3
1987	2.8	(s)	2.9	57.6	38.7	12.4	6.8	57.9	0.0	0.0	91.7	210.1	209.5	419.6
1988	2.5	(s)	2.6	60.9	40.6	14.9	6.5	62.0	0.0	0.0	96.2	221.7	217.5	439.2
1989	1.7	(s)	1.7	64.2	36.6	12.9	7.7	57.2	0.0	0.0	99.7	222.8	224.0	446.8
1990	2.1	(s)	2.1	53.6	29.8	6.6	7.7	44.0	<sup>e</sup> 13.7	<sup>e</sup> 0.1	96.0	<sup>e</sup> 209.5	209.9	419.4
1991	1.2	(s)	1.2	56.5	26.8	7.5	8.4	42.6	14.4	0.1	101.0	215.9	219.9	435.8
1992	1.7	0.1	1.7	64.8	27.9	7.3	8.8	43.9	15.2	0.1	101.6	227.4	217.0	444.4
1993	2.7	(s)	2.7	68.4	28.9	8.4	8.6	45.9	16.4	0.1	110.8	244.4	234.1	478.5
1994	2.7	(s)	2.8	67.7	28.6	7.1	8.9	44.6	16.1	0.1	110.4	241.6	230.3	471.8
1995	2.5	(s)	2.5	70.8	29.1	6.9	10.4	46.4	17.8	0.1	114.2	251.9	237.9	489.8
1996	3.5	(s)	3.5	79.1	34.1	8.8	11.0	53.8	17.8	0.1	118.2	272.6	246.1	518.7

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>b</sup> Includes supplemental gaseous fuels.  
<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.  
<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.  
<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.  
 R=Revised data.  
 - =Not applicable.  
 (s)=Btu value less than 0.05 and physical unit value less than 0.5.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 295. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Virginia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	835	6	841	11	1,388	93	130	223	175	2,009	0	3,676	-	9,143	-
1965	512	3	515	15	1,591	97	200	275	211	2,373	0	6,192	-	14,784	-
1970	303	2	305	30	2,072	91	252	210	118	2,744	0	10,804	-	26,181	-
1975	208	1	209	32	1,935	41	275	310	245	2,807	0	14,014	-	33,802	-
1980	124	1	125	38	1,634	46	266	371	443	2,759	0	16,970	-	41,265	-
1981	84	(s)	85	35	1,396	37	245	517	380	2,576	0	18,201	-	43,377	-
1982	159	(s)	159	38	1,483	34	231	346	518	2,612	0	18,493	-	44,416	-
1983	163	1	164	38	2,741	58	275	653	484	4,210	0	19,186	-	45,964	-
1984	185	1	186	35	2,811	31	307	410	661	4,219	0	20,638	-	48,038	-
1985	175	1	176	34	2,460	214	319	456	443	3,892	0	21,496	-	50,504	-
1986	159	(s)	159	35	2,830	144	270	397	975	4,616	0	23,513	-	54,087	-
1987	211	(s)	211	39	2,600	197	330	R 509	991	R 4,628	0	24,999	-	57,121	-
1988	188	1	189	42	2,599	270	315	502	404	R 4,090	0	26,156	-	59,134	-
1989	125	(s)	126	44	2,352	280	368	R 504	211	3,714	0	27,768	-	R 62,373	-
1990	153	(s)	153	41	2,370	139	375	R 478	221	R 3,582	e NA	28,093	-	R 61,443	-
1991	90	(s)	90	44	2,132	148	409	341	115	R 3,146	NA	29,399	-	R 63,988	-
1992	122	2	124	51	1,955	127	429	R 345	224	R 3,079	NA	29,877	-	R 63,814	-
1993	201	(s)	201	53	2,422	159	422	121	182	3,307	67	31,436	-	R 66,418	-
1994	204	(s)	205	53	2,464	101	431	137	157	3,290	70	31,643	-	R 66,024	-
1995	185	(s)	185	57	2,572	275	507	132	208	3,694	74	33,070	-	R 68,887	-
1996	256	1	256	59	3,447	277	536	130	258	4,648	104	33,856	-	70,466	-

  

Trillion Btu															
1960	20.7	0.1	20.8	11.7	8.1	0.5	0.5	1.2	1.1	11.4	0.0	12.5	56.5	31.2	87.7
1965	12.6	0.1	12.7	15.3	9.3	0.5	0.8	1.4	1.3	13.4	0.0	21.1	62.5	50.4	112.9
1970	7.2	(s)	7.3	30.9	12.1	0.5	1.0	1.1	0.7	15.4	0.0	36.9	90.4	89.3	179.7
1975	4.9	(s)	4.9	33.0	11.3	0.2	1.0	1.6	1.5	15.7	0.0	47.8	101.4	115.3	216.7
1980	3.0	(s)	3.1	39.0	9.5	0.3	1.0	1.9	2.8	15.5	0.0	57.9	115.5	140.8	256.3
1981	2.1	(s)	2.1	36.1	8.1	0.2	0.9	2.7	2.4	14.3	0.0	62.1	114.6	148.0	262.6
1982	3.9	(s)	3.9	39.1	8.6	0.2	0.8	1.8	3.3	14.7	0.0	63.1	120.9	151.5	272.4
1983	4.1	(s)	4.1	39.6	16.0	0.3	1.0	3.4	3.0	23.8	0.0	65.5	132.9	156.8	289.7
1984	4.6	(s)	4.6	36.1	16.4	0.2	1.1	2.2	4.2	24.0	0.0	70.4	135.1	163.9	299.0
1985	4.3	(s)	4.4	35.3	14.3	1.2	1.1	2.4	2.8	21.9	0.0	73.3	134.9	172.3	307.2
1986	4.0	(s)	4.0	36.9	16.5	0.8	1.0	2.1	6.1	26.5	0.0	80.2	147.6	184.5	332.1
1987	5.3	(s)	5.3	41.0	15.1	1.1	1.2	2.7	6.2	26.4	0.0	85.3	157.9	194.9	352.8
1988	4.7	(s)	4.7	43.7	15.1	1.5	1.2	2.6	2.5	23.0	0.0	89.2	160.7	201.8	362.5
1989	3.1	(s)	3.1	46.0	13.7	1.6	1.4	2.6	1.3	20.6	0.0	94.7	164.5	R 212.8	R 377.3
1990	3.8	(s)	3.8	42.8	13.8	0.8	1.4	2.5	1.4	19.8	e NA	95.9	162.3	R 209.6	R 372.0
1991	2.3	(s)	2.3	45.9	12.4	0.8	1.5	1.8	0.7	17.3	NA	100.3	165.7	R 218.3	R 384.1
1992	3.1	(s)	3.1	52.7	11.4	0.7	1.6	R 1.8	1.4	R 16.9	NA	101.9	R 174.6	R 217.7	R 392.4
1993	5.0	(s)	5.0	55.2	14.1	0.9	1.5	0.6	1.1	18.3	1.3	107.3	R 187.2	R 226.6	R 413.8
1994	5.1	(s)	5.1	55.0	14.4	0.6	1.6	0.7	1.0	18.2	1.4	108.0	R 187.6	R 225.3	R 412.9
1995	4.6	(s)	4.6	58.7	15.0	1.6	1.8	0.7	1.3	20.4	1.5	112.8	R 198.0	235.0	R 433.1
1996	6.4	(s)	6.4	61.5	20.1	1.6	1.9	0.7	1.6	25.9	2.1	115.5	211.4	240.4	451.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 296. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Virginia**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	4,503	22	1,753	2,133	291	275	182	882	5,739	1,308	12,564	79	0	0	3,786	-	9,418	-
1965	5,824	36	2,681	2,977	600	301	236	838	6,754	2,053	16,440	87	0	0	5,834	-	13,929	-
1970	4,172	45	2,250	4,415	395	682	289	653	4,170	2,616	15,470	41	0	0	7,467	-	18,095	-
1975	2,816	37	2,328	3,128	167	1,184	307	460	7,611	2,320	17,504	38	0	0	9,437	-	22,764	-
1980	3,538	55	2,618	3,573	267	1,312	422	278	5,203	10,015	23,688	27	0	0	11,637	-	28,297	-
1981	3,985	53	2,357	3,768	216	1,210	405	232	2,736	5,992	16,916	27	0	0	11,931	-	28,435	-
1982	3,577	51	2,013	3,830	186	1,340	369	205	2,803	4,907	15,652	27	0	0	12,300	-	29,543	-
1983	4,057	47	2,823	2,990	105	1,051	387	159	2,686	4,610	14,810	27	0	0	12,733	-	30,506	-
1984	4,557	48	3,658	3,066	53	R 1,510	412	399	3,667	5,274	18,038	27	0	0	13,200	-	30,725	-
1985	4,219	51	4,033	3,035	207	1,707	384	686	3,408	4,895	18,355	27	0	0	13,561	-	31,861	-
1986	4,268	48	4,444	3,348	190	1,522	376	689	3,790	3,398	17,756	27	0	0	14,449	-	33,236	-
1987	4,605	56	4,406	3,497	125	1,844	425	R 740	2,822	3,563	R 17,422	27	0	0	14,899	-	34,042	-
1988	4,670	54	3,604	3,888	149	2,053	410	R 689	2,859	3,631	17,282	27	0	0	15,690	-	35,472	-
1989	4,512	58	4,203	3,465	140	R 1,929	420	768	2,911	3,614	17,451	27	0	0	16,395	-	R 36,827	-
1990	4,641	75	4,701	3,051	75	R 1,526	432	R 705	2,893	3,896	R 17,279	f NA	f NA	f NA	16,399	-	R 35,866	-
1991	5,273	60	3,734	2,936	92	1,812	387	671	2,491	4,909	17,032	NA	NA	NA	16,029	-	R 34,887	-
1992	4,564	69	3,759	2,527	56	1,767	394	668	2,945	5,196	R 17,313	NA	NA	NA	16,714	-	R 35,700	-
1993	3,826	74	3,697	2,962	87	R 1,906	402	635	2,745	5,158	17,592	NA	NA	NA	17,390	-	R 36,742	-
1994	R 3,807	87	3,935	2,476	101	R 1,876	420	666	2,499	5,275	R 17,249	NA	NA	NA	18,154	-	R 37,878	-
1995	R 3,551	99	3,639	3,545	122	1,338	412	718	1,804	5,106	16,684	NA	NA	NA	18,554	-	R 38,649	-
1996	3,594	86	3,512	4,429	114	1,411	400	766	1,820	5,420	17,872	NA	NA	NA	19,021	-	39,588	-

**Trillion Btu**

1960	114.9	23.3	11.6	12.4	1.6	1.1	1.1	4.6	36.1	7.8	76.4	0.8	0.0	0.0	12.9	228.3	32.1	260.4
1965	147.4	36.6	17.8	17.3	3.4	1.2	1.4	4.4	42.5	11.8	99.8	0.9	0.0	0.0	19.9	304.7	47.5	352.2
1970	99.3	46.0	14.9	25.7	2.2	2.6	1.8	3.4	26.2	14.9	91.7	0.4	0.0	0.0	25.5	262.9	61.7	324.7
1975	66.1	37.3	15.4	18.2	0.9	4.4	1.9	2.4	47.9	13.3	104.5	0.4	0.0	0.0	32.2	240.4	77.7	318.1
1980	88.1	55.4	17.4	20.8	1.5	4.8	2.6	1.5	32.7	55.5	136.7	0.3	0.0	0.0	39.7	320.2	96.6	416.8
1981	98.7	53.8	15.6	21.9	1.2	4.4	2.5	1.2	17.2	33.1	97.2	0.3	0.0	0.0	40.7	290.8	97.0	387.8
1982	89.0	51.9	13.4	22.3	1.1	4.8	2.2	1.1	17.6	27.2	89.7	0.3	0.0	0.0	42.0	272.8	100.8	373.6
1983	102.7	48.0	18.7	17.4	0.6	3.8	2.3	0.8	16.9	25.9	86.5	0.3	0.0	0.0	43.4	280.9	104.1	385.0
1984	115.0	49.3	24.3	17.9	0.3	5.4	2.5	2.1	23.1	28.9	104.4	0.3	0.0	0.0	45.0	314.0	104.8	418.8
1985	106.7	52.8	26.8	17.7	1.2	6.1	2.3	3.6	21.4	27.0	106.1	0.3	0.0	0.0	46.3	312.2	108.7	420.9
1986	108.3	50.3	29.5	19.5	1.1	5.5	2.3	3.6	23.8	19.0	104.3	0.3	0.0	0.0	49.3	312.5	113.4	425.9
1987	117.1	58.2	29.2	20.4	0.7	6.7	2.6	3.9	17.7	19.8	R 101.1	0.3	0.0	0.0	50.8	327.5	116.2	R 443.7
1988	118.8	55.8	23.9	22.6	0.8	7.5	2.5	3.6	18.0	20.3	99.3	0.3	0.0	0.0	53.5	327.7	121.0	448.7
1989	114.4	60.6	27.9	20.2	0.8	7.1	2.5	4.0	18.3	20.2	101.0	0.3	0.0	0.0	55.9	332.2	R 125.7	R 457.9
1990	117.9	78.3	31.2	17.8	0.4	5.5	2.6	3.7	18.2	21.7	101.2	f 0.2	f 38.2	f 0.0	56.0	f 391.8	R 122.4	R f 514.1
1991	134.3	62.8	24.8	17.1	0.5	6.5	2.3	3.5	15.7	27.3	97.8	0.4	39.4	0.0	54.7	389.4	R 119.0	R 508.5
1992	116.6	72.1	24.9	14.7	0.3	6.4	2.4	3.5	18.5	28.7	99.5	R 0.7	41.7	0.0	57.0	387.7	R 121.8	R 509.5
1993	97.7	77.4	24.5	17.3	0.5	6.9	2.4	3.3	17.3	28.5	100.7	0.7	38.4	0.0	59.3	374.2	R 125.4	R 499.6
1994	97.1	90.2	26.1	14.4	0.6	6.8	2.5	3.5	15.7	29.2	98.9	0.8	R 44.2	0.0	61.9	R 393.0	R 129.2	R 522.2
1995	R 90.7	101.9	24.1	20.6	0.7	4.8	2.5	3.8	11.3	28.2	96.2	0.8	R 44.6	0.0	63.3	R 397.5	R 131.9	R 529.3
1996	91.9	88.8	23.3	25.8	0.6	5.1	2.4	4.0	11.4	29.9	102.6	0.9	48.2	0.0	64.9	397.4	135.1	532.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 297. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Virginia**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	79	4	382	4,099	4,441	7	451	29,972	11,780	51,134	0	0	-	0	-
1965	19	7	721	6,564	6,504	24	428	34,992	9,645	58,877	0	0	-	0	-
1970	7	8	356	7,698	11,093	47	430	47,821	12,000	79,446	0	0	-	0	-
1975	(s)	3	251	8,217	11,602	57	427	58,524	6,356	85,436	0	0	-	0	-
1980	0	8	218	11,219	12,279	47	530	58,386	4,419	87,098	0	31	-	75	-
1981	0	11	185	12,274	11,255	99	508	58,492	4,202	87,015	0	37	-	89	-
1982	0	11	180	11,241	11,090	78	463	57,804	3,057	83,913	0	36	-	85	-
1983	0	7	163	13,486	10,869	92	485	58,876	2,511	86,482	0	37	-	88	-
1984	0	7	127	14,074	10,465	R 140	517	61,107	2,267	R 88,698	0	40	-	94	-
1985	0	4	131	14,278	11,038	102	482	R 61,837	3,419	R 91,287	0	55	-	129	-
1986	0	5	155	15,477	13,228	56	471	R 64,098	3,003	R 96,489	0	68	-	157	-
1987	0	6	74	16,242	14,432	82	533	R 68,645	2,756	R 102,764	0	74	-	169	-
1988	0	8	74	18,798	15,700	98	514	R 69,907	2,793	R 107,885	0	77	-	173	-
1989	0	6	75	16,382	15,768	92	527	R 69,658	2,611	R 105,114	0	74	-	R 167	-
1990	0	7	70	16,930	15,806	R 63	542	R 69,150	3,362	R 105,922	R e 2,017	75	-	164	-
1991	0	7	116	16,856	11,824	101	485	R 69,513	3,780	R 102,675	R 1,598	76	-	165	-
1992	0	6	101	16,915	11,670	R 102	495	R 70,521	2,872	R 102,676	R 1,943	78	-	166	-
1993	0	6	105	17,616	11,915	R 109	504	R 73,071	2,396	R 105,715	R 2,168	74	-	155	-
1994	0	6	101	18,887	12,003	R 182	527	R 74,244	1,977	R 107,920	R 11,551	71	-	R 148	-
1995	0	6	85	19,113	10,589	64	518	R 77,978	1,953	R 110,299	R 35	67	-	139	-
1996	0	8	79	22,079	9,204	57	502	78,268	1,238	111,427	39,352	68	-	142	-

**Trillion Btu**

1960	2.0	4.1	1.9	23.9	24.0	(s)	2.7	157.4	74.1	284.1	0.0	0.0	290.2	0.0	290.2
1965	0.5	7.0	3.6	38.2	35.8	0.1	2.6	183.8	60.6	324.8	0.0	0.0	332.2	0.0	332.2
1970	0.2	8.0	1.8	44.8	61.9	0.2	2.6	251.2	75.4	438.0	0.0	0.0	446.1	0.0	446.1
1975	(s)	3.1	1.3	47.9	64.9	0.2	2.6	307.4	40.0	464.3	0.0	0.0	467.4	0.0	467.4
1980	0.0	8.4	1.1	65.3	68.8	0.2	3.2	306.7	27.8	473.1	0.0	0.1	481.6	0.3	481.8
1981	0.0	11.0	0.9	71.5	62.9	0.4	3.1	307.3	26.4	472.5	0.0	0.1	483.5	0.3	483.9
1982	0.0	11.2	0.9	65.5	61.9	0.3	2.8	303.6	19.2	454.2	0.0	0.1	465.6	0.3	465.9
1983	0.0	7.4	0.8	78.6	60.8	0.3	2.9	309.3	15.8	468.6	0.0	0.1	476.1	0.3	476.4
1984	0.0	6.8	0.6	82.0	58.4	0.5	3.1	321.0	14.3	479.9	0.0	0.1	486.8	0.3	487.1
1985	0.0	4.6	0.7	83.2	61.7	0.4	2.9	R 324.8	21.5	R 495.1	0.0	0.2	R 499.9	0.4	R 500.3
1986	0.0	5.1	0.8	90.2	74.1	0.2	2.9	336.7	18.9	R 523.6	0.0	0.2	528.9	0.5	529.5
1987	0.0	6.6	0.4	94.6	80.9	0.3	3.2	R 360.6	17.3	R 557.3	0.0	0.3	R 564.2	0.6	R 564.8
1988	0.0	8.6	0.4	109.5	87.9	0.4	3.1	R 367.2	17.6	R 586.1	0.0	0.3	R 594.9	0.6	R 595.5
1989	0.0	6.1	0.4	95.4	88.3	0.3	3.2	R 365.9	16.4	R 569.9	0.0	0.3	R 576.3	0.6	R 576.8
1990	0.0	7.2	0.4	98.6	88.5	0.2	3.3	R 363.2	21.1	R 575.4	R e 0.2	0.3	R e 582.9	0.6	R e 583.4
1991	0.0	6.9	0.6	98.2	66.7	0.4	2.9	R 365.2	23.8	R 557.7	R 0.1	0.3	R 564.9	0.6	R 565.4
1992	0.0	6.7	0.5	98.5	65.9	0.4	3.0	R 370.4	18.1	R 556.8	R 0.1	0.3	R 563.8	0.6	R 564.4
1993	0.0	6.0	0.5	102.6	67.3	0.4	3.1	R 383.8	15.1	R 572.8	R 0.2	0.3	R 579.0	0.5	R 579.6
1994	0.0	6.6	0.5	110.0	68.0	0.7	3.2	R 390.0	12.4	R 584.8	R 0.9	0.2	R 591.6	0.5	R 592.1
1995	0.0	6.5	0.4	111.3	60.0	0.2	3.1	409.6	12.3	597.1	(s)	0.2	603.8	0.5	604.3
1996	0.0	8.1	0.4	128.6	52.2	0.2	3.0	411.1	7.8	603.4	3.0	0.2	611.7	0.5	612.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 298. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Virginia**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	6,262	0	6,262	1	130	6	0	136	0	1,189	0	0	0	--
1965	8,265	0	8,265	2	170	7	0	178	0	797	0	0	0	--
1970	6,644	0	6,644	4	17,085	721	856	18,662	0	650	0	0	0	--
1975	3,991	0	3,991	(s)	26,741	624	0	27,364	8,970	1,273	0	0	0	--
1980	5,560	0	5,560	2	14,586	793	0	15,379	11,466	864	0	0	0	--
1981	6,550	0	6,550	2	6,272	604	0	6,876	17,818	338	0	0	0	--
1982	6,596	0	6,596	3	2,999	325	0	3,324	17,420	913	0	0	0	--
1983	6,577	0	6,577	3	2,447	278	0	2,724	18,674	1,182	0	0	0	--
1984	7,323	0	7,323	3	2,316	310	0	2,626	17,045	1,154	0	0	0	--
1985	7,166	0	7,166	2	1,301	340	0	1,641	22,303	818	0	0	0	--
1986	7,345	0	7,345	1	4,635	275	0	4,909	21,215	47	0	0	0	--
1987	8,297	0	8,297	2	4,276	323	0	4,599	18,145	807	0	0	0	--
1988	8,469	0	8,469	1	4,021	336	0	4,357	21,037	-218	0	0	(s)	--
1989	9,573	0	9,573	4	6,192	594	0	6,786	14,264	401	0	0	(s)	--
1990	8,228	0	8,228	7	1,421	482	0	1,902	23,820	428	0	0	(s)	--
1991	8,568	0	8,568	9	2,810	302	0	3,112	23,886	-26	0	0	(s)	--
1992	8,661	0	8,661	11	2,041	269	0	2,310	23,334	353	0	0	(s)	--
1993	9,447	0	9,447	20	3,180	222	0	3,402	22,689	473	0	0	(s)	--
1994	8,670	0	8,670	19	3,348	489	0	3,837	25,429	329	0	0	(s)	--
1995	9,543	0	9,543	16	1,577	326	0	1,903	25,135	149	0	0	(s)	--
1996	10,994	0	10,994	10	822	341	0	1,163	26,286	510	0	0	0	--

**Trillion Btu**

1960	167.4	0.0	167.4	1.5	0.8	(s)	0.0	0.9	0.0	12.8	0.0	0.0	0.0	182.5
1965	218.8	0.0	218.8	2.3	1.1	(s)	0.0	1.1	0.0	8.3	0.0	0.0	0.0	230.6
1970	164.6	0.0	164.6	4.4	107.4	4.2	5.2	116.8	0.0	6.8	0.0	0.0	0.0	292.6
1975	95.5	0.0	95.5	0.5	168.1	3.6	0.0	171.8	98.8	13.2	0.0	0.0	0.0	379.8
1980	139.1	0.0	139.1	2.5	91.7	4.6	0.0	96.3	125.1	9.0	0.0	0.0	0.0	372.0
1981	162.4	0.0	162.4	2.4	39.4	3.5	0.0	43.0	196.5	3.5	0.0	0.0	0.0	407.8
1982	164.7	0.0	164.7	3.3	18.9	1.9	0.0	20.7	192.9	9.5	0.0	0.0	0.0	391.2
1983	166.5	0.0	166.5	3.5	15.4	1.6	0.0	17.0	203.6	12.4	0.0	0.0	0.0	403.1
1984	184.9	0.0	184.9	3.3	14.6	1.8	0.0	16.4	184.8	12.1	0.0	0.0	0.0	401.4
1985	183.6	0.0	183.6	1.6	8.2	2.0	0.0	10.2	241.2	8.5	0.0	0.0	0.0	445.1
1986	188.8	0.0	188.8	0.9	29.1	1.6	0.0	30.7	229.1	0.5	0.0	0.0	0.0	450.0
1987	212.7	0.0	212.7	1.8	26.9	1.9	0.0	28.8	195.5	8.4	0.0	0.0	0.0	447.1
1988	216.8	0.0	216.8	1.2	25.3	2.0	0.0	27.2	226.0	-2.3	0.0	0.0	(s)	469.0
1989	243.0	0.0	243.0	4.0	38.9	3.5	0.0	42.4	153.0	R 4.2	0.0	0.0	(s)	446.5
1990	209.2	0.0	209.2	6.8	8.9	2.8	0.0	11.7	254.4	4.4	0.0	0.0	(s)	486.6
1991	218.8	0.0	218.8	9.9	17.7	1.8	0.0	19.4	256.5	-0.3	0.0	0.0	(s)	504.4
1992	222.3	0.0	222.3	11.5	12.8	1.6	0.0	14.4	249.2	3.6	0.0	0.0	(s)	500.9
1993	242.2	0.0	242.2	20.5	20.0	1.3	0.0	21.3	242.4	4.9	0.0	0.0	(s)	531.2
1994	221.6	0.0	221.6	19.9	21.1	2.8	0.0	23.9	271.5	3.4	0.0	0.0	(s)	540.3
1995	243.2	0.0	243.2	16.9	9.9	1.9	0.0	11.8	267.9	1.5	0.0	0.0	(s)	541.4
1996	277.0	0.0	277.0	10.9	5.2	2.0	0.0	7.2	279.2	5.3	0.0	0.0	0.0	579.5

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 299. Energy Consumption Estimates by Source, Selected Years 1960-1996, Washington**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	608	65	1,309	2,161	18,123	4,502	105	548	571	23,076	9,300	3,679	63,374	0	34,299	1	0	-17,081	-	
1965	488	108	1,683	434	17,116	6,919	34	1,227	597	26,906	9,140	8,048	72,104	0	48,814	0	0	-33,455	-	
1970	245	150	2,335	351	18,201	10,637	239	1,659	666	36,068	10,384	9,762	90,303	2,614	70,142	(s)	0	-60,750	-	
1975	4,492	164	2,910	274	16,970	14,037	346	763	620	41,007	8,459	11,962	97,349	3,308	85,438	0	0	-95,362	-	
1980	5,443	129	2,050	356	18,471	12,036	120	1,487	703	42,653	17,277	9,905	105,057	2,041	83,971	0	0	-46,955	-	
1981	5,448	125	1,800	305	17,617	12,081	748	1,565	674	43,029	16,346	11,686	105,850	2,042	102,382	0	0	-69,437	-	
1982	4,393	109	1,792	229	18,159	12,800	192	1,706	615	43,197	13,521	10,857	103,068	3,631	91,758	0	0	-53,847	-	
1983	4,794	107	2,310	200	16,302	12,830	1,602	1,705	644	44,713	4,936	9,159	94,401	3,494	87,947	47	0	-43,261	-	
1984	4,926	126	2,626	175	18,194	15,646	1,158	2,133	686	46,140	9,967	10,647	107,373	5,313	89,861	131	0	-53,457	-	
1985	5,616	135	2,039	202	20,360	15,417	1,212	2,466	640	44,020	11,406	10,574	108,337	8,038	77,956	282	0	-33,631	-	
1986	3,790	118	2,404	228	23,283	17,073	751	2,525	625	46,950	15,553	10,301	119,692	8,439	76,638	191	0	-28,660	-	
1987	5,819	132	2,268	275	21,226	18,596	860	3,345	707	51,252	13,771	14,531	126,830	5,528	70,964	348	0	-7,650	-	
1988	5,929	147	1,921	214	21,091	20,647	945	2,828	682	50,699	16,339	15,957	131,323	6,000	69,053	383	0	20,711	-	
1989	5,843	163	2,612	188	21,037	20,592	712	3,399	699	53,814	15,820	17,595	136,468	6,118	70,636	376	0	16,168	-	
1990	5,147	163	2,481	313	21,787	22,343	75	2,292	720	53,464	16,500	20,217	140,191	5,742	NA	NA	NA	-13,282	-	
1991	5,461	173	2,967	268	19,958	21,306	70	2,596	644	54,238	17,398	19,591	139,036	4,230	NA	NA	NA	-11,634	-	
1992	6,402	169	3,023	289	18,453	24,066	47	2,549	656	55,196	23,438	25,701	153,419	5,692	NA	NA	NA	25,383	-	
1993	5,934	198	2,941	198	15,469	22,226	63	2,582	668	57,385	15,928	22,248	139,707	7,135	NA	NA	NA	37,020	-	
1994	6,303	213	3,526	318	18,810	21,492	89	2,594	699	57,446	15,766	24,424	145,164	6,740	NA	NA	NA	25,999	-	
1995	4,158	220	3,558	229	18,846	23,039	121	2,913	687	58,836	17,575	24,573	150,377	6,942	NA	NA	NA	-5,934	-	
1996	5,682	239	3,696	292	18,978	22,323	142	3,278	666	61,611	12,984	26,298	150,268	5,588	NA	NA	NA	-78,208	-	
Trillion Btu																				
1960	15.2	67.2	8.7	10.9	105.6	24.4	0.6	2.2	3.5	121.2	58.5	22.1	357.6	0.0	369.1	(s)	0.0	-58.3	750.8	
1965	12.1	116.2	11.2	2.2	99.7	38.2	0.2	4.9	3.6	141.3	57.5	48.3	407.0	0.0	510.3	0.0	0.0	-114.1	931.5	
1970	5.9	158.2	15.5	1.8	106.0	59.3	1.4	6.3	4.0	189.5	65.3	58.5	507.5	28.7	736.1	(s)	0.0	-207.3	1,229.1	
1975	76.2	171.2	19.3	1.4	98.8	78.8	2.0	2.8	3.8	215.4	53.2	71.8	547.2	36.4	889.1	0.0	0.0	-325.4	1,394.8	
1980	91.0	135.5	13.6	1.8	107.6	67.5	0.7	5.5	4.3	224.1	108.6	59.3	592.8	22.3	872.3	0.0	0.0	-160.2	1,553.6	
1981	90.9	131.2	11.9	1.5	102.6	67.8	4.2	5.7	4.1	226.0	102.8	71.2	597.9	22.5	1,070.2	0.0	0.0	-236.9	1,675.8	
1982	74.1	114.4	11.9	1.2	105.8	71.9	1.1	6.2	3.7	226.9	85.0	66.2	579.8	40.2	959.2	0.0	0.0	-183.7	1,584.0	
1983	80.2	111.8	15.3	1.0	95.0	72.1	9.1	6.2	3.9	234.9	31.0	55.6	524.0	38.1	925.2	0.5	0.0	-147.6	1,532.2	
1984	82.3	132.0	17.4	0.9	106.0	87.9	6.6	7.7	4.2	242.4	62.7	64.3	600.0	57.6	938.2	1.4	0.0	-182.4	1,629.0	
1985	93.7	140.0	13.5	1.0	118.6	86.6	6.9	8.9	3.9	231.2	71.7	64.5	606.8	86.9	814.4	2.9	0.0	-114.8	1,630.0	
1986	63.3	121.8	16.0	1.2	135.6	96.1	4.3	9.2	3.8	246.6	97.8	63.3	673.7	91.1	800.6	2.0	0.0	-97.8	1,654.7	
1987	95.7	136.1	15.1	1.4	123.6	104.7	4.9	12.2	4.3	269.2	86.6	88.1	710.1	59.6	739.4	3.6	0.0	-26.1	1,718.4	
1988	99.1	150.6	12.7	1.1	122.9	116.3	5.4	10.3	4.1	266.3	102.7	96.4	738.2	64.5	712.9	4.0	0.0	70.7	1,839.9	
1989	96.9	168.0	17.3	1.0	122.5	116.0	4.0	12.5	4.2	282.7	99.5	105.8	765.6	65.6	736.9	3.9	0.0	55.2	1,892.1	
1990	85.6	167.6	16.5	1.6	126.9	126.0	0.4	8.3	4.4	280.8	103.7	121.6	790.3	61.3	889.5	NA	NA	-45.3	2,072.0	
1991	89.2	178.4	19.7	1.4	116.3	120.2	0.4	9.4	3.9	284.9	109.4	117.5	783.0	45.4	919.1	NA	NA	-39.7	2,087.7	
1992	106.1	174.7	20.1	1.5	107.5	136.0	0.3	9.2	4.0	289.9	147.4	153.5	869.3	60.8	695.1	NA	NA	86.6	2,122.7	
1993	97.8	205.7	19.5	1.0	90.1	125.6	0.4	9.3	4.1	301.4	100.1	133.1	784.7	76.2	665.9	NA	NA	126.3	2,072.6	
1994	106.9	221.5	23.4	1.6	109.6	121.7	0.5	9.4	4.2	301.8	99.1	146.0	817.4	72.0	659.6	NA	NA	88.7	2,082.4	
1995	69.8	229.2	23.6	1.2	109.8	130.4	0.7	10.6	4.2	309.1	110.5	147.0	846.9	74.0	833.4	NA	NA	-20.2	2,127.0	
1996	90.9	247.5	24.5	1.5	110.5	126.5	0.8	11.8	4.0	323.6	81.6	157.0	842.1	59.4	1,045.5	130.1	0.3	-266.8	2,135.3	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Through 1989, includes all net imports electricity, and, from 1990, includes only the portion of net imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 300. Residential Energy Consumption Estimates, Selected Years 1960-1996, Washington**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	63	0	63	8	7,303	0	347	7,650	0	0	8,755	-	21,776	-
1965	51	0	51	17	6,495	9	894	7,399	0	0	11,015	-	26,298	-
1970	12	0	12	32	7,035	115	1,145	8,296	0	0	15,355	-	37,209	-
1975	7	0	7	34	4,806	203	404	5,413	0	0	19,209	-	46,334	-
1980	56	0	56	30	3,422	65	626	4,113	0	0	24,445	-	59,442	-
1981	42	0	42	27	3,000	535	680	4,215	0	0	28,475	-	67,865	-
1982	58	0	58	29	3,247	72	692	4,012	0	0	29,157	-	70,030	-
1983	77	0	77	26	2,693	45	818	3,556	0	0	27,266	-	65,323	-
1984	73	0	73	29	3,044	74	481	3,599	0	0	26,725	-	62,204	-
1985	76	0	76	33	3,095	86	553	3,734	0	0	27,933	-	65,625	-
1986	31	0	31	30	3,071	50	428	3,548	0	0	26,503	-	60,965	-
1987	18	0	18	30	3,029	41	666	3,736	0	0	25,773	-	58,890	-
1988	41	(s)	41	35	3,025	59	532	3,616	0	0	27,203	-	61,500	-
1989	32	0	32	38	2,744	54	608	3,406	0	0	28,653	-	R 64,360	-
1990	23	0	23	40	2,998	49	657	3,704	e 949	e 94	28,809	-	R 63,009	-
1991	28	(s)	28	46	2,482	46	891	3,419	1,000	94	29,889	-	R 65,055	-
1992	32	(s)	32	43	1,827	29	880	2,737	1,052	97	28,436	-	R 60,737	-
1993	40	0	40	53	1,517	44	921	2,482	897	97	30,932	-	R 65,353	-
1994	30	0	30	53	1,523	66	944	2,532	879	98	29,673	-	R 61,913	-
1995	27	0	27	53	1,478	86	1,237	2,801	975	100	30,147	-	R 62,798	-
1996	8	0	8	63	1,499	110	1,258	2,867	974	102	32,012	-	66,628	-

  

Trillion Btu														
1960	1.4	0.0	1.4	8.3	42.5	0.0	1.4	43.9	0.0	0.0	29.9	83.5	74.3	157.8
1965	1.2	0.0	1.2	18.7	37.8	0.1	3.6	41.5	0.0	0.0	37.6	98.9	89.7	188.6
1970	0.3	0.0	0.3	33.7	41.0	0.7	4.3	46.0	0.0	0.0	52.4	132.3	127.0	259.3
1975	0.1	0.0	0.1	35.8	28.0	1.1	1.5	30.6	0.0	0.0	65.5	132.1	158.1	290.2
1980	1.3	0.0	1.3	31.3	19.9	0.4	2.3	22.6	0.0	0.0	83.4	138.6	202.8	341.4
1981	1.0	0.0	1.0	28.2	17.5	3.0	2.5	23.0	0.0	0.0	97.2	149.3	231.6	380.9
1982	1.3	0.0	1.3	30.7	18.9	0.4	2.5	21.8	0.0	0.0	99.5	153.3	238.9	392.3
1983	1.8	0.0	1.8	27.1	15.7	0.3	3.0	18.9	0.0	0.0	93.0	140.8	222.9	363.7
1984	1.7	0.0	1.7	30.6	17.7	0.4	1.7	19.9	0.0	0.0	91.2	143.3	212.2	355.5
1985	1.8	0.0	1.8	34.3	18.0	0.5	2.0	20.5	0.0	0.0	95.3	151.9	223.9	375.8
1986	0.7	0.0	0.7	31.1	17.9	0.3	1.6	19.7	0.0	0.0	90.4	141.9	208.0	349.9
1987	0.4	0.0	0.4	30.8	17.6	0.2	2.4	20.3	0.0	0.0	87.9	139.4	200.9	340.4
1988	0.9	(s)	0.9	35.9	17.6	0.3	1.9	19.9	0.0	0.0	92.8	149.5	209.8	359.3
1989	0.7	0.0	0.7	39.6	16.0	0.3	2.2	18.5	0.0	0.0	97.8	156.6	R 219.6	R 376.2
1990	0.5	0.0	0.5	41.6	17.5	0.3	2.4	20.1	e 19.0	e 0.3	98.3	e 179.8	R 215.0	R e 394.8
1991	0.6	(s)	0.6	47.7	14.5	0.3	3.2	17.9	20.0	0.3	102.0	188.5	R 222.0	R 410.5
1992	0.7	(s)	0.7	44.4	10.6	0.2	3.2	14.0	21.0	0.3	97.0	177.5	R 207.2	R 384.8
1993	0.9	0.0	0.9	55.2	8.8	0.2	3.3	12.4	17.9	0.3	105.5	192.3	R 223.0	R 415.3
1994	0.7	0.0	0.7	55.3	8.9	0.4	3.4	12.7	17.6	0.3	101.2	187.8	R 211.2	R 399.1
1995	0.6	0.0	0.6	54.9	8.6	0.5	4.5	13.6	19.5	0.3	102.9	191.8	214.3	406.0
1996	0.2	0.0	0.2	65.0	8.7	0.6	4.5	13.9	19.5	0.3	109.2	208.1	227.3	435.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 301. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Washington**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	117	0	117	6	2,308	0	61	222	441	3,032	0	3,220	-	8,010	-
1965	95	0	95	11	2,053	1	158	255	412	2,880	0	4,380	-	10,457	-
1970	23	0	23	18	2,224	15	202	304	481	3,226	0	6,724	-	16,294	-
1975	13	0	13	32	1,519	26	71	374	355	2,345	0	10,377	-	25,030	-
1980	105	0	105	31	1,073	18	111	478	426	2,105	0	13,845	-	33,667	-
1981	79	0	79	29	744	18	120	430	762	2,074	0	17,841	-	42,521	-
1982	109	0	109	31	1,990	18	122	472	921	3,523	0	18,144	-	43,580	-
1983	143	0	143	29	1,726	370	144	509	623	3,372	0	18,248	-	43,718	-
1984	136	0	136	32	1,950	258	85	283	1,570	4,147	0	18,001	-	41,899	-
1985	140	0	140	35	4,272	206	98	357	748	5,681	0	18,966	-	44,560	-
1986	57	0	57	32	2,419	52	75	309	140	2,995	0	18,817	-	43,285	-
1987	34	0	34	32	2,331	806	118	314	55	R 3,623	0	19,700	-	45,014	-
1988	75	(s)	75	37	2,644	869	94	R 278	220	4,105	0	20,708	-	46,817	-
1989	59	0	59	39	1,708	651	107	R 260	71	2,796	0	20,639	-	R 46,359	-
1990	43	0	43	39	2,090	14	116	R 281	53	R 2,555	e NA	21,512	-	R 47,049	-
1991	52	(s)	52	42	1,611	17	157	189	101	2,075	NA	21,969	-	R 47,817	-
1992	59	(s)	59	38	816	12	155	131	56	1,171	NA	22,535	-	R 48,134	-
1993	74	0	74	44	675	13	163	48	60	R 959	19	22,963	-	R 48,516	-
1994	56	0	56	43	721	16	167	48	48	1,000	20	23,380	-	R 48,784	-
1995	51	0	51	43	932	14	218	59	111	1,335	27	23,916	-	R 49,817	-
1996	15	0	15	48	673	8	222	60	170	1,134	20	25,145	-	52,336	-

  

Trillion Btu															
1960	2.7	0.0	2.7	6.7	13.4	0.0	0.2	1.2	2.8	17.6	0.0	11.0	38.0	27.3	65.3
1965	2.2	0.0	2.2	11.5	12.0	(s)	0.6	1.3	2.6	16.5	0.0	14.9	45.1	35.7	80.8
1970	0.5	0.0	0.5	19.5	13.0	0.1	0.8	1.6	3.0	18.4	0.0	22.9	61.4	55.6	117.0
1975	0.3	0.0	0.3	33.3	8.8	0.1	0.3	2.0	2.2	13.5	0.0	35.4	82.4	85.4	167.8
1980	2.4	0.0	2.4	32.4	6.2	0.1	0.4	2.5	2.7	11.9	0.0	47.2	93.9	114.9	208.8
1981	1.8	0.0	1.8	30.1	4.3	0.1	0.4	2.3	4.8	11.9	0.0	60.9	104.7	145.1	249.8
1982	2.5	0.0	2.5	32.2	11.6	0.1	0.4	2.5	5.8	20.4	0.0	61.9	117.0	148.7	265.7
1983	3.3	0.0	3.3	30.0	10.1	2.1	0.5	2.7	3.9	19.3	0.0	62.3	114.7	149.2	263.9
1984	3.1	0.0	3.1	33.8	11.4	1.5	0.3	1.5	9.9	24.5	0.0	61.4	122.8	143.0	265.8
1985	3.3	0.0	3.3	36.9	24.9	1.2	0.4	1.9	4.7	33.0	0.0	64.7	137.9	152.0	289.9
1986	1.3	0.0	1.3	33.0	14.1	0.3	0.3	1.6	0.9	17.2	0.0	64.2	115.6	147.7	263.3
1987	0.8	0.0	0.8	33.4	13.6	4.6	0.4	R 1.7	0.3	20.6	0.0	67.2	122.0	153.6	275.6
1988	1.7	(s)	1.7	37.6	15.4	4.9	0.3	1.5	1.4	23.5	0.0	70.7	133.5	159.7	293.2
1989	1.3	0.0	1.3	39.7	9.9	3.7	0.4	1.4	0.4	15.8	0.0	70.4	127.3	R 158.2	R 285.5
1990	0.9	0.0	0.9	39.8	12.2	0.1	0.4	1.5	0.3	14.5	e NA	73.4	128.6	R 160.5	R 289.2
1991	1.2	(s)	1.2	43.0	9.4	0.1	0.6	1.0	0.6	11.7	NA	75.0	130.8	R 163.2	R 294.0
1992	1.3	(s)	1.3	39.0	4.8	0.1	0.6	0.7	0.4	6.4	NA	76.9	123.7	R 164.2	R 287.9
1993	1.7	0.0	1.7	45.2	3.9	0.1	0.6	0.3	0.4	5.2	0.4	78.3	R 130.8	165.5	R 296.4
1994	1.3	0.0	1.3	44.7	4.2	0.1	0.6	0.3	0.3	5.5	0.4	79.8	R 131.6	R 166.5	R 298.1
1995	1.1	0.0	1.1	44.3	5.4	0.1	0.8	0.3	0.7	7.3	0.5	81.6	R 134.9	170.0	R 304.8
1996	0.4	0.0	0.4	49.9	3.9	(s)	0.8	0.3	1.1	6.2	0.4	85.8	142.6	178.6	321.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 302. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Washington**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	420	50	1,309	5,937	105	134	158	802	7,137	3,679	19,260	195	0	0	13,975	-	34,761	-
1965	341	79	1,683	5,546	23	155	216	765	7,281	8,048	23,718	190	0	0	18,703	-	44,656	-
1970	210	93	2,335	4,986	109	274	267	551	7,874	9,762	26,157	135	0	0	25,530	-	61,867	-
1975	463	92	2,910	4,025	118	250	192	438	5,924	11,962	25,820	181	0	0	27,416	-	66,132	-
1980	332	64	2,050	4,350	37	658	202	278	6,538	9,905	24,018	129	0	0	31,366	-	76,271	-
1981	363	67	1,800	4,197	195	555	193	251	7,416	11,686	26,293	129	0	0	34,726	-	82,763	-
1982	381	47	1,792	4,469	102	739	176	275	7,887	10,857	26,297	129	0	0	28,236	-	67,818	-
1983	276	51	2,310	3,875	1,187	563	185	211	2,672	9,159	20,160	129	0	0	30,824	-	73,848	-
1984	211	63	2,626	4,380	826	R 1,085	197	574	6,736	10,647	R 27,070	129	0	0	33,344	-	77,612	-
1985	208	63	2,039	2,766	920	1,487	184	692	5,167	10,574	23,829	129	0	0	29,431	-	69,146	-
1986	372	54	2,404	3,580	649	1,738	179	740	6,480	10,301	26,073	129	0	0	30,040	-	69,100	-
1987	298	66	2,268	3,736	14	2,315	203	R 736	5,584	14,531	R 29,387	129	0	0	31,597	-	72,196	-
1988	252	69	1,921	2,889	17	1,926	196	R 676	6,431	15,957	R 30,012	129	0	0	36,909	-	83,443	-
1989	238	73	2,612	3,681	7	2,436	201	697	2,044	17,595	29,273	129	0	0	37,369	-	R 83,939	-
1990	229	78	2,481	4,456	11	R 1,228	207	R 658	2,017	20,217	R 31,275	f NA	f NA	f NA	40,712	-	R 89,043	-
1991	197	80	2,967	3,985	7	1,302	185	R 794	1,340	19,591	30,170	NA	NA	NA	40,839	-	R 88,887	-
1992	163	80	3,023	3,404	6	1,307	188	806	996	25,701	35,432	NA	NA	NA	38,332	-	R 81,874	-
1993	174	92	2,941	2,670	6	R 1,284	192	526	859	22,248	30,727	NA	NA	NA	36,563	-	R 77,250	-
1994	201	108	3,526	2,870	8	1,172	200	532	907	24,424	33,640	NA	NA	NA	34,065	-	R 71,078	-
1995	223	110	3,558	2,748	21	1,278	197	555	654	24,573	33,584	NA	NA	NA	34,276	-	R 71,400	-
1996	152	114	3,696	2,519	24	1,642	191	565	328	26,298	35,263	NA	NA	NA	30,241	-	62,942	-

**Trillion Btu**

1960	10.9	51.8	8.7	34.6	0.6	0.5	1.0	4.2	44.9	22.1	116.5	2.1	0.0	0.0	47.7	229.0	118.6	347.6
1965	8.8	85.3	11.2	32.3	0.1	0.6	1.3	4.0	45.8	48.3	143.6	2.0	0.0	0.0	63.8	303.5	152.4	455.9
1970	5.1	98.3	15.5	29.0	0.6	1.0	1.6	2.9	49.5	58.5	158.7	1.4	0.0	0.0	87.1	350.6	211.1	561.7
1975	10.9	96.0	19.3	23.4	0.7	0.9	1.2	2.3	37.2	71.8	156.8	1.9	0.0	0.0	93.5	359.2	225.6	584.8
1980	7.1	67.0	13.6	25.3	0.2	2.4	1.2	1.5	41.1	59.3	144.6	1.3	0.0	0.0	107.0	327.1	260.2	587.3
1981	7.7	70.0	11.9	24.4	1.1	2.0	1.2	1.3	46.6	71.2	159.8	1.4	0.0	0.0	118.5	357.4	282.4	639.7
1982	7.9	49.6	11.9	26.0	0.6	2.7	1.1	1.4	49.6	66.2	159.4	1.4	0.0	0.0	96.3	314.7	231.4	546.1
1983	5.6	53.1	15.3	22.6	6.7	2.0	1.1	1.1	16.8	55.6	121.3	1.4	0.0	0.0	105.2	286.4	252.0	538.4
1984	4.5	65.6	17.4	25.5	4.7	3.9	1.2	3.0	42.3	64.3	162.4	1.4	0.0	0.0	113.8	347.6	264.8	R 612.5
1985	4.5	65.7	13.5	16.1	5.2	5.4	1.1	3.6	32.5	64.5	141.9	1.4	0.0	0.0	100.4	313.9	235.9	549.8
1986	7.4	55.6	16.0	20.9	3.7	6.3	1.1	3.9	40.7	63.3	155.8	1.4	0.0	0.0	102.5	322.6	235.8	558.4
1987	5.9	67.9	15.1	21.8	0.1	8.5	1.2	3.9	35.1	88.1	173.7	1.3	0.0	0.0	107.8	356.6	246.3	602.9
1988	5.3	71.2	12.7	16.8	0.1	7.0	1.2	3.6	40.4	96.4	178.2	1.3	0.0	0.0	125.9	382.0	284.7	666.7
1989	4.9	75.6	17.3	21.4	(s)	9.0	1.2	3.7	12.9	105.8	171.3	1.3	0.0	0.0	127.5	380.7	R 286.4	R 667.1
1990	5.2	80.8	16.5	26.0	0.1	R 4.5	1.3	R 3.5	12.7	121.6	185.9	f 3.8	f 94.6	f 0.0	138.9	f 509.3	R 303.8	R f 813.1
1991	4.3	82.2	19.7	23.2	(s)	4.7	1.1	4.2	8.4	117.5	178.8	4.1	91.3	0.0	139.3	500.0	R 303.3	R 803.3
1992	3.4	82.4	20.1	19.8	(s)	4.7	1.1	4.2	6.3	153.5	209.8	3.7	98.2	0.0	130.8	528.2	R 279.4	R 807.6
1993	3.5	95.7	19.5	15.6	(s)	4.6	1.2	2.8	5.4	133.1	182.2	3.4	98.7	0.0	124.8	R 508.2	R 263.6	R 771.8
1994	3.9	112.0	23.4	16.7	(s)	4.3	1.2	2.8	5.7	146.0	200.2	3.9	R 100.5	0.0	116.2	R 536.7	R 242.5	R 779.2
1995	4.2	114.4	23.6	16.0	0.1	4.6	1.2	2.9	4.1	147.0	199.6	4.9	R 97.0	0.0	117.0	R 537.0	243.6	R 780.7
1996	3.0	118.4	24.5	14.7	0.1	5.9	1.2	3.0	2.1	157.0	208.5	4.6	105.4	0.0	103.2	543.1	214.8	757.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 303. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Washington**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum								Ethanol <sup>c</sup> Thousand Gallons	Electricity <sup>a</sup> Million Kilowatthours	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
			Thousand Barrels												
1960	7	(s)	2,161	2,574	4,502	6	413	22,052	1,707	33,415	0	1	-	3	-
1965	1	1	434	3,022	6,919	21	381	25,886	1,443	38,104	0	1	-	4	-
1970	(s)	6	351	3,956	10,637	38	400	35,213	2,025	52,620	0	1	-	3	-
1975	(s)	6	274	6,616	14,036	37	428	40,196	2,109	63,696	0	2	-	4	-
1980	0	4	356	9,595	12,036	92	501	41,897	10,112	74,589	0	2	-	4	-
1981	0	2	305	9,643	12,081	210	481	42,348	8,164	73,231	0	5	-	11	-
1982	0	2	229	8,429	12,800	153	438	42,450	4,713	69,213	0	12	-	28	-
1983	0	2	200	7,985	12,830	181	459	43,993	1,642	67,290	0	12	-	29	-
1984	0	2	175	8,803	15,646	R 482	489	45,283	1,661	R 72,540	0	12	-	28	-
1985	0	3	202	10,210	15,417	329	456	R 42,971	5,492	R 75,076	0	12	-	29	-
1986	0	2	228	14,194	17,073	284	446	R 45,900	8,931	R 87,056	0	12	-	27	-
1987	0	4	275	12,113	18,596	R 246	504	R 50,202	8,131	R 90,066	0	12	-	27	-
1988	0	4	214	12,518	20,647	277	486	R 49,744	9,688	R 93,574	0	12	-	26	-
1989	0	4	188	12,862	20,592	R 249	499	R 52,856	13,556	R 100,801	0	13	-	29	-
1990	0	5	313	12,213	22,343	R 291	513	R 52,525	14,428	R 102,626	R e 76,162	14	-	30	-
1991	0	5	268	11,866	21,306	246	459	R 53,256	15,957	R 103,357	R 60,372	16	-	35	-
1992	0	3	289	12,394	24,066	207	468	R 54,259	22,385	R 114,067	R 73,375	17	-	35	-
1993	0	4	198	10,545	22,226	R 214	477	R 56,811	15,008	R 105,478	R 81,885	15	-	32	-
1994	0	7	318	13,685	21,492	R 312	498	R 56,866	14,810	R 107,981	R 93,651	15	-	31	-
1995	0	9	229	13,669	23,039	179	490	R 58,222	16,809	R 112,638	R 30,395	14	-	29	-
1996	0	7	292	14,269	22,323	157	475	60,986	12,485	110,988	13,512	14	-	29	-

**Trillion Btu**

1960	0.2	0.4	10.9	15.0	24.4	(s)	2.5	115.8	10.7	179.4	0.0	(s)	180.0	(s)	180.0
1965	(s)	0.7	2.2	17.6	38.2	0.1	2.3	136.0	9.1	205.4	0.0	(s)	206.2	(s)	206.2
1970	(s)	6.8	1.8	23.0	59.3	0.1	2.4	185.0	12.7	284.4	0.0	(s)	291.2	(s)	291.2
1975	(s)	6.1	1.4	38.5	78.7	0.1	2.6	211.1	13.3	345.8	0.0	(s)	351.9	(s)	351.9
1980	0.0	3.9	1.8	55.9	67.5	0.3	3.0	220.1	63.6	412.2	0.0	(s)	416.1	(s)	416.1
1981	0.0	2.4	1.5	56.2	67.8	0.8	2.9	222.5	51.3	403.0	0.0	(s)	405.4	(s)	405.4
1982	0.0	1.8	1.2	49.1	71.9	0.6	2.7	223.0	29.6	377.9	0.0	(s)	379.8	0.1	379.9
1983	0.0	1.6	1.0	46.5	72.1	0.7	2.8	231.1	10.3	364.5	0.0	(s)	366.1	0.1	366.2
1984	0.0	1.9	0.9	51.3	87.9	1.7	3.0	237.9	10.4	393.1	0.0	(s)	395.1	0.1	395.2
1985	0.0	3.0	1.0	59.5	86.6	1.2	2.8	225.7	34.5	411.3	0.0	(s)	R 414.4	0.1	414.4
1986	0.0	2.0	1.2	82.7	96.1	1.0	2.7	241.1	56.2	480.9	0.0	(s)	483.0	0.1	483.1
1987	0.0	3.9	1.4	70.6	104.7	0.9	3.1	R 263.7	51.1	R 495.4	0.0	(s)	R 499.4	0.1	R 499.5
1988	0.0	4.1	1.1	72.9	116.3	1.0	2.9	R 261.3	60.9	R 516.5	0.0	(s)	R 520.6	0.1	R 520.7
1989	0.0	4.5	1.0	74.9	116.0	0.9	3.0	R 277.7	85.2	R 558.7	0.0	(s)	R 563.3	0.1	R 563.4
1990	0.0	5.3	1.6	71.1	126.0	1.1	3.1	R 275.9	90.7	R 569.5	R e 5.8	(s)	R e 574.8	0.1	R e 574.9
1991	0.0	5.3	1.4	69.1	120.2	0.9	2.8	R 279.8	100.3	R 574.5	R 4.6	0.1	R 579.8	0.1	R 580.0
1992	0.0	3.3	1.5	72.2	136.0	R 0.7	2.8	R 285.0	140.7	R 639.0	R 5.6	0.1	642.3	0.1	R 642.4
1993	0.0	4.5	1.0	61.4	125.6	0.8	2.9	R 298.4	94.4	R 584.5	R 6.3	0.1	R 589.0	0.1	R 589.1
1994	0.0	6.9	1.6	79.7	121.7	1.1	3.0	R 298.7	93.1	R 599.0	R 7.2	0.1	R 605.9	0.1	R 606.0
1995	0.0	9.1	1.2	79.6	130.4	0.6	3.0	305.8	105.7	626.3	R 2.3	(s)	635.4	0.1	635.5
1996	0.0	7.2	1.5	83.1	126.5	0.6	2.9	320.4	78.5	613.4	1.0	(s)	620.7	0.1	620.8

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 304. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Washington**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	0	0	0	0	14	2	0	16	0	34,104	1	0	0	--
1965	0	0	0	0	3	(s)	0	3	0	48,624	0	0	0	--
1970	0	0	0	0	3	(s)	0	4	2,614	70,008	(s)	0	0	--
1975	4,009	0	4,009	0	71	4	0	75	3,308	85,257	0	0	0	--
1980	4,950	0	4,950	1	201	31	0	232	2,041	83,841	0	0	0	--
1981	4,964	0	4,964	(s)	4	33	0	37	2,042	102,252	0	0	0	--
1982	3,844	0	3,844	(s)	(s)	23	0	23	3,631	91,629	0	0	0	--
1983	4,298	0	4,298	(s)	(s)	22	0	23	3,494	87,818	47	0	0	--
1984	4,506	0	4,506	(s)	0	17	0	17	5,313	89,732	131	0	0	--
1985	5,192	0	5,192	(s)	0	17	0	17	8,038	77,827	282	0	0	--
1986	3,329	0	3,329	(s)	1	19	0	20	8,439	76,509	191	0	0	--
1987	5,468	0	5,468	(s)	1	17	0	18	5,528	70,834	348	0	0	--
1988	5,561	0	5,561	2	1	16	0	16	6,000	68,924	383	0	0	--
1989	5,514	0	5,514	8	150	42	0	192	6,118	70,507	376	0	0	--
1990	4,852	0	4,852	(s)	1	30	0	31	5,742	85,167	333	0	0	--
1991	5,184	0	5,184	(s)	1	15	0	16	4,230	87,771	274	0	0	--
1992	6,148	0	6,148	5	1	12	0	13	5,692	66,864	361	0	0	--
1993	5,646	0	5,646	5	1	62	0	62	7,135	64,263	395	0	0	--
1994	6,016	0	6,016	2	0	12	0	12	6,740	63,602	396	0	0	--
1995	3,857	0	3,857	6	0	18	0	18	6,942	80,406	261	0	0	--
1996	5,507	0	5,507	7	0	16	0	16	5,588	100,688	360	0	0	--

**Trillion Btu**

1960	0.0	0.0	0.0	0.0	0.1	(s)	0.0	0.1	0.0	367.0	(s)	0.0	0.0	367.1
1965	0.0	0.0	0.0	0.0	(s)	(s)	0.0	(s)	0.0	508.3	0.0	0.0	0.0	508.3
1970	0.0	0.0	0.0	0.0	(s)	(s)	0.0	(s)	28.7	734.7	(s)	0.0	0.0	763.4
1975	64.9	0.0	64.9	0.0	0.4	(s)	0.0	0.5	36.4	887.2	0.0	0.0	0.0	989.0
1980	80.2	0.0	80.2	1.0	1.3	0.2	0.0	1.4	22.3	870.9	0.0	0.0	0.0	975.8
1981	80.4	0.0	80.4	0.5	(s)	0.2	0.0	0.2	22.5	1,068.8	0.0	0.0	0.0	1,172.5
1982	62.3	0.0	62.3	0.1	(s)	0.1	0.0	0.1	40.2	957.9	0.0	0.0	0.0	1,060.6
1983	69.6	0.0	69.6	(s)	(s)	0.1	0.0	0.1	38.1	923.8	0.5	0.0	0.0	1,032.2
1984	73.0	0.0	73.0	(s)	0.0	0.1	0.0	0.1	57.6	936.8	1.4	0.0	0.0	1,068.9
1985	84.1	0.0	84.1	0.1	0.0	0.1	0.0	0.1	86.9	813.1	2.9	0.0	0.0	987.2
1986	53.9	0.0	53.9	0.1	(s)	0.1	0.0	0.1	91.1	799.2	2.0	0.0	0.0	946.5
1987	88.6	0.0	88.6	0.1	(s)	0.1	0.0	0.1	59.6	738.0	3.6	0.0	0.0	890.1
1988	91.3	0.0	91.3	1.8	(s)	0.1	0.0	0.1	64.5	711.6	4.0	0.0	0.0	873.2
1989	90.0	0.0	90.0	8.6	0.9	0.2	0.0	1.2	65.6	R 735.5	3.9	0.0	0.0	R 904.8
1990	78.9	0.0	78.9	0.2	(s)	0.2	0.0	0.2	61.3	R 885.6	R 3.5	0.0	0.0	R 1,035.4
1991	83.1	0.0	83.1	0.1	(s)	0.1	0.0	0.1	45.4	R 915.0	R 2.9	0.0	0.0	R 1,044.6
1992	100.7	0.0	100.7	5.7	(s)	0.1	0.0	0.1	60.8	R 691.4	3.7	0.0	0.0	R 869.1
1993	91.7	0.0	91.7	5.1	(s)	0.4	0.0	0.4	76.2	R 662.5	4.1	0.0	0.0	R 834.6
1994	101.1	0.0	101.1	2.6	0.0	0.1	0.0	0.1	72.0	R 655.7	4.1	0.0	0.0	R 828.9
1995	63.8	0.0	63.8	6.7	0.0	0.1	0.0	0.1	74.0	R 828.5	2.7	0.0	0.0	R 949.7
1996	87.4	0.0	87.4	6.9	0.0	0.1	0.0	0.1	59.4	1,040.9	3.7	0.0	0.0	1,185.9

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> Through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of net imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 305. Energy Consumption Estimates by Source, Selected Years 1960-1996, West Virginia**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	14,060	150	918	119	2,473	169	276	558	570	11,609	1,481	4,704	22,876	0	938	0	0	-12,238	-	
1965	19,049	164	907	201	2,837	130	253	961	636	12,762	2,153	11,875	32,714	0	828	0	0	-16,716	-	
1970	25,376	181	863	78	3,917	290	320	1,230	684	15,831	2,065	14,523	39,801	0	996	(s)	0	-52,336	-	
1975	34,469	158	944	58	5,922	249	325	1,498	686	19,314	2,504	16,544	48,043	0	1,063	0	0	-120,635	-	
1980	34,939	143	717	65	10,541	357	496	3,435	671	19,390	1,463	20,395	57,530	0	1,114	0	0	-133,702	-	
1981	35,893	149	740	32	9,432	339	362	3,249	643	18,802	991	19,840	54,429	0	1,090	0	0	-142,536	-	
1982	32,798	130	663	23	7,701	297	443	2,683	586	18,956	1,391	15,069	47,812	0	1,118	0	0	-130,822	-	
1983	33,269	116	408	44	10,113	277	414	2,698	614	18,686	1,097	12,288	46,639	0	1,109	0	0	-141,569	-	
1984	36,253	124	478	39	10,558	242	183	392	655	18,537	1,497	14,106	46,686	0	1,138	0	0	-156,371	-	
1985	34,999	117	430	39	9,718	235	696	1,157	610	R 18,513	970	13,876	R 46,243	0	1,058	0	0	-160,204	-	
1986	35,097	113	565	50	7,673	219	587	1,148	597	R 18,652	1,182	16,193	R 46,865	0	1,051	0	0	-158,356	-	
1987	34,890	115	537	35	8,999	211	520	1,202	674	R 19,338	541	16,357	R 48,413	0	1,005	0	0	-155,566	-	
1988	36,527	122	879	38	9,067	248	582	1,231	650	R 19,744	631	16,819	R 49,891	0	988	0	0	-160,315	-	
1989	37,289	129	812	38	10,084	380	509	1,535	667	R 19,484	1,056	17,079	R 51,646	0	1,166	0	0	R -163,353	-	
1990	34,896	120	728	36	9,760	273	295	1,612	687	R 19,643	1,285	19,421	R 53,740	0	i NA	i NA	i NA	R -146,300	-	
1991	31,843	111	528	33	9,626	237	300	1,821	614	R 19,342	1,070	13,299	R 46,871	0	NA	NA	NA	R -128,667	-	
1992	32,019	129	550	0	9,455	271	337	1,692	626	R 19,860	581	14,304	R 47,676	0	NA	NA	NA	R -133,050	-	
1993	32,046	135	427	26	10,758	277	424	1,821	638	R 19,638	516	13,864	R 48,367	0	NA	NA	NA	R -129,050	-	
1994	34,767	145	692	26	11,075	255	412	1,972	666	R 19,960	501	14,508	R 50,037	0	NA	NA	NA	R -146,994	-	
1995	34,489	148	639	27	11,346	174	394	1,944	655	20,891	200	14,036	50,308	0	NA	NA	NA	R -144,954	-	
1996	36,139	155	944	32	9,385	170	490	2,160	636	18,899	358	14,614	47,687	0	NA	NA	NA	-159,467	-	
Trillion Btu																				
1960	354.5	155.6	6.1	0.6	14.4	0.9	1.6	2.2	3.5	61.0	9.3	27.3	126.9	0.0	10.1	0.0	0.0	-41.8	605.3	
1965	477.4	176.1	6.0	1.0	16.5	0.7	1.4	3.9	3.9	67.0	13.5	67.0	181.0	0.0	8.7	0.0	0.0	-57.0	786.1	
1970	612.4	186.5	5.7	0.4	22.8	1.6	1.8	4.6	4.2	83.2	13.0	80.4	217.7	0.0	10.4	(s)	0.0	-178.6	848.5	
1975	817.4	164.3	6.3	0.3	34.5	1.4	1.8	5.6	4.2	101.5	15.7	92.8	264.0	0.0	11.1	0.0	0.0	-411.6	845.1	
1980	857.8	147.6	4.8	0.3	61.4	2.0	2.8	12.6	4.1	101.9	9.2	112.5	311.5	0.0	11.6	0.0	0.0	-456.2	872.3	
1981	877.5	154.5	4.9	0.2	54.9	1.9	2.1	11.8	3.9	98.8	6.2	109.3	294.0	0.0	11.4	0.0	0.0	-486.3	851.0	
1982	808.0	136.1	4.4	0.1	44.9	1.7	2.5	9.7	3.6	99.6	8.7	82.8	258.0	0.0	11.7	0.0	0.0	-446.4	767.4	
1983	826.1	120.2	2.7	0.2	58.9	1.5	2.4	9.8	3.7	98.2	6.9	68.8	253.1	0.0	11.7	0.0	0.0	-483.0	728.1	
1984	898.4	131.0	3.2	0.2	61.5	1.3	1.0	1.4	4.0	97.4	9.4	76.6	256.1	0.0	11.9	0.0	0.0	-533.5	763.8	
1985	871.7	125.0	2.9	0.2	56.6	1.3	3.9	4.2	3.7	97.2	6.1	75.8	251.9	0.0	11.1	0.0	0.0	-546.6	713.1	
1986	877.2	121.1	3.8	0.3	44.7	1.2	3.3	4.2	3.6	98.0	7.4	88.8	255.2	0.0	11.0	0.0	0.0	-540.3	724.3	
1987	871.7	123.7	3.6	0.2	52.4	1.2	3.0	4.4	4.1	R 101.6	3.4	89.1	R 262.8	0.0	10.5	0.0	0.0	-530.8	R 738.0	
1988	915.4	131.5	5.8	0.2	52.8	1.4	3.3	4.5	3.9	R 103.7	4.0	92.1	R 271.7	0.0	10.2	0.0	0.0	-547.0	R 781.9	
1989	929.0	139.4	5.4	0.2	58.7	2.1	2.9	5.7	4.0	R 102.4	6.6	93.5	281.5	0.0	R 12.1	0.0	0.0	R -557.4	R 804.7	
1990	872.7	129.0	4.8	0.2	56.9	1.5	1.7	5.8	4.2	R 103.2	8.1	106.7	R 293.0	0.0	i 13.2	i 9.5	i (s)	R -499.2	R i 818.1	
1991	799.7	118.8	3.5	0.2	56.1	1.3	1.7	6.6	3.7	101.6	6.7	73.3	254.7	0.0	R 10.9	R 9.5	(s)	R -439.0	R 754.5	
1992	804.6	137.2	3.6	0.0	55.1	1.5	1.9	6.1	3.8	104.3	3.7	78.6	258.7	0.0	13.2	9.9	(s)	R -454.0	769.5	
1993	803.5	144.0	2.8	0.1	62.7	1.4	2.4	6.6	3.9	R 103.2	3.2	76.0	262.3	0.0	11.5	R 10.5	(s)	R -440.3	R 791.3	
1994	R 870.3	154.7	4.6	0.1	64.5	1.3	2.3	7.2	4.0	R 104.8	3.1	79.5	R 271.5	0.0	11.9	R 11.7	(s)	R -501.5	R 818.5	
1995	R 860.4	157.4	4.2	0.1	66.1	1.0	2.2	7.0	4.0	109.7	1.3	76.9	272.6	0.0	12.4	R 12.0	(s)	-494.6	R 820.0	
1996	898.3	164.5	6.3	0.2	54.7	1.0	2.8	7.8	3.9	99.3	2.2	79.6	257.6	0.0	14.8	12.3	(s)	-544.1	803.4	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 306. Residential Energy Consumption Estimates, Selected Years 1960-1996, West Virginia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours			Total	
1960	85	0	85	50	204	148	226	578	0	0	1,714	—	4,263	—
1965	84	0	84	50	304	184	280	768	0	0	2,365	—	5,647	—
1970	67	0	67	58	250	267	266	783	0	0	3,459	—	8,383	—
1975	83	0	83	51	581	172	331	1,084	0	0	4,979	—	12,010	—
1980	55	0	55	48	1,169	408	395	1,973	0	0	6,606	—	16,064	—
1981	73	0	73	47	892	275	394	1,561	0	0	6,705	—	15,980	—
1982	66	1	67	43	863	312	255	1,431	0	0	6,625	—	15,911	—
1983	82	1	82	40	494	257	304	1,054	0	0	6,754	—	16,180	—
1984	75	0	75	40	506	123	202	831	0	0	6,769	—	15,755	—
1985	27	2	29	37	462	390	225	1,078	0	0	6,712	—	15,770	—
1986	39	0	39	36	558	455	228	1,241	0	0	6,983	—	16,062	—
1987	49	0	49	36	634	343	270	1,246	0	0	7,250	—	16,567	—
1988	39	(s)	39	38	573	398	335	1,306	0	0	7,549	—	17,066	—
1989	51	1	52	37	644	345	396	1,386	0	0	7,634	—	R 17,148	—
1990	62	(s)	63	33	574	210	416	1,200	e 214	e 8	7,578	—	R 16,574	—
1991	33	1	34	33	537	197	394	1,128	225	8	8,106	—	R 17,644	—
1992	27	5	33	35	462	245	454	1,162	237	8	8,138	—	R 17,383	—
1993	32	6	38	35	568	323	483	1,374	246	8	8,682	—	R 18,344	—
1994	30	(s)	30	35	584	304	487	1,375	241	8	8,663	—	R 18,075	—
1995	21	3	24	35	480	287	416	1,183	268	10	9,166	—	R 19,093	—
1996	38	0	38	37	608	377	457	1,442	268	12	9,277	—	19,307	—

  

Trillion Btu														
1960	2.1	0.0	2.1	51.4	1.2	0.8	0.9	2.9	0.0	0.0	5.8	62.4	14.5	76.9
1965	2.1	0.0	2.1	53.2	1.8	1.0	1.1	3.9	0.0	0.0	8.1	67.3	19.3	86.5
1970	1.6	0.0	1.6	59.7	1.5	1.5	1.0	4.0	0.0	0.0	11.8	77.0	28.6	105.6
1975	2.0	0.0	2.0	53.2	3.4	1.0	1.2	5.6	0.0	0.0	17.0	77.8	41.0	118.8
1980	1.3	0.0	1.3	49.8	6.8	2.3	1.5	10.6	0.0	0.0	22.5	84.3	54.8	139.1
1981	1.8	0.0	1.8	49.0	5.2	1.6	1.4	8.2	0.0	0.0	22.9	81.8	54.5	136.4
1982	1.6	(s)	1.6	45.0	5.0	1.8	0.9	7.7	0.0	0.0	22.6	77.0	54.3	131.3
1983	2.0	(s)	2.0	41.5	2.9	1.5	1.1	5.4	0.0	0.0	23.0	72.0	55.2	127.2
1984	1.9	0.0	1.9	41.8	2.9	0.7	0.7	4.4	0.0	0.0	23.1	71.1	53.8	124.9
1985	0.7	(s)	0.7	39.2	2.7	2.2	0.8	5.7	0.0	0.0	22.9	68.6	53.8	122.4
1986	1.0	0.0	1.0	39.0	3.3	2.6	0.8	6.7	0.0	0.0	23.8	70.5	54.8	125.3
1987	1.2	0.0	1.2	38.3	3.7	1.9	1.0	6.6	0.0	0.0	24.7	70.9	56.5	127.4
1988	1.0	(s)	1.0	40.6	3.3	2.3	1.2	6.8	0.0	0.0	25.8	74.2	58.2	132.4
1989	1.3	(s)	1.3	40.0	3.8	2.0	1.5	7.2	0.0	0.0	26.0	74.5	R 58.5	R 133.0
1990	1.6	(s)	1.6	34.9	3.3	1.2	1.5	6.0	e 4.3	e (s)	25.9	e 72.7	56.5	e 129.2
1991	0.8	(s)	0.8	35.0	3.1	1.1	1.4	5.7	4.5	(s)	27.7	73.7	R 60.2	R 133.9
1992	0.7	0.1	0.8	37.6	2.7	1.4	1.6	5.7	4.7	(s)	27.8	76.7	59.3	136.0
1993	0.8	0.1	0.9	37.5	3.3	1.8	1.7	6.9	4.9	(s)	29.6	79.9	62.6	142.5
1994	0.8	(s)	0.8	37.5	3.4	1.7	1.8	6.9	4.8	(s)	29.6	79.5	R 61.7	141.2
1995	0.5	0.1	0.6	37.5	2.8	1.6	1.5	5.9	5.4	(s)	31.3	80.7	65.1	145.9
1996	0.9	0.0	0.9	39.7	3.5	2.1	1.7	7.3	5.4	(s)	31.7	85.0	65.9	150.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 307. Commercial Energy Consumption Estimates, Selected Years 1960-1996, West Virginia**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	158	0	158	15	75	8	40	65	8	195	0	1,134	-	2,821	-
1965	157	0	157	15	111	9	49	66	12	248	0	1,620	-	3,869	-
1970	124	0	124	22	92	14	47	56	9	218	0	2,238	-	5,423	-
1975	155	0	155	25	213	9	58	59	9	349	0	2,858	-	6,893	-
1980	101	0	101	22	262	37	70	110	5	484	0	3,658	-	8,895	-
1981	135	0	135	22	710	16	70	126	2	924	0	4,081	-	9,727	-
1982	123	(s)	123	21	302	16	45	126	3	493	0	4,219	-	10,133	-
1983	151	(s)	152	19	532	61	54	263	1	910	0	4,289	-	10,277	-
1984	140	0	140	19	546	22	36	257	1	861	0	4,316	-	10,046	-
1985	51	1	52	17	603	129	40	307	5	1,084	0	4,462	-	10,483	-
1986	73	0	73	16	750	55	40	325	9	1,180	0	4,617	-	10,620	-
1987	91	0	91	17	451	60	48	R 324	4	R 885	0	4,757	-	10,870	-
1988	72	(s)	72	22	357	79	59	R 308	173	977	0	4,914	-	11,109	-
1989	96	(s)	96	23	495	76	70	R 309	88	1,038	0	5,019	-	R 11,273	-
1990	116	(s)	116	21	443	46	73	R 330	66	R 958	e NA	5,085	-	R 11,122	-
1991	62	(s)	62	21	517	64	70	262	51	964	NA	5,313	-	R 11,563	-
1992	51	4	54	24	322	32	80	219	56	708	NA	5,323	-	R 11,370	-
1993	60	4	64	24	437	36	85	20	20	597	12	5,572	-	R 11,773	-
1994	56	(s)	56	25	408	38	86	20	5	557	12	5,631	-	R 11,750	-
1995	39	2	41	26	345	37	73	20	0	475	10	5,944	-	12,381	-
1996	71	0	71	28	267	37	81	20	0	404	8	6,030	-	12,550	-

**Trillion Btu**

1960	4.0	0.0	4.0	16.0	0.4	(s)	0.2	0.3	(s)	1.0	0.0	3.9	24.9	9.6	34.5
1965	3.9	0.0	3.9	15.6	0.6	0.1	0.2	0.3	0.1	1.3	0.0	5.5	26.3	13.2	39.5
1970	3.0	0.0	3.0	22.3	0.5	0.1	0.2	0.3	0.1	1.1	0.0	7.6	34.1	18.5	52.6
1975	3.7	0.0	3.7	25.7	1.2	0.1	0.2	0.3	0.1	1.9	0.0	9.8	41.0	23.5	64.5
1980	2.4	0.0	2.4	22.7	1.5	0.2	0.3	0.6	(s)	2.6	0.0	12.5	40.2	30.3	70.6
1981	3.3	0.0	3.3	23.1	4.1	0.1	0.3	0.7	(s)	5.2	0.0	13.9	45.4	33.2	78.6
1982	3.0	(s)	3.0	21.5	1.8	0.1	0.2	0.7	(s)	2.7	0.0	14.4	41.7	34.6	76.2
1983	3.8	(s)	3.8	19.5	3.1	0.3	0.2	1.4	(s)	5.0	0.0	14.6	42.9	35.1	78.0
1984	3.5	0.0	3.5	19.8	3.2	0.1	0.1	1.3	(s)	4.8	0.0	14.7	42.8	34.3	77.0
1985	1.3	(s)	1.3	18.4	3.5	0.7	0.1	1.6	(s)	6.0	0.0	15.2	40.9	35.8	76.7
1986	1.8	0.0	1.8	17.2	4.4	0.3	0.1	1.7	0.1	6.6	0.0	15.8	41.4	36.2	77.6
1987	2.3	0.0	2.3	18.0	2.6	0.3	0.2	1.7	(s)	4.9	0.0	16.2	41.4	37.1	78.5
1988	1.8	(s)	1.8	24.1	2.1	0.4	0.2	1.6	1.1	5.5	0.0	16.8	48.2	37.9	86.1
1989	2.4	(s)	2.4	25.1	2.9	0.4	0.3	1.6	0.6	5.7	0.0	17.1	50.3	R 38.5	R 88.8
1990	2.9	(s)	2.9	22.9	2.6	0.3	0.3	1.7	0.4	R 5.3	e NA	17.4	48.4	37.9	R 86.4
1991	1.5	(s)	1.6	22.6	3.0	0.4	0.3	1.4	0.3	5.3	NA	18.1	47.6	R 39.5	87.0
1992	1.3	0.1	1.4	26.0	1.9	0.2	0.3	1.2	0.3	3.8	NA	18.2	49.4	38.8	R 88.2
1993	1.5	0.1	1.6	26.0	2.5	0.2	0.3	0.1	0.1	3.3	0.2	19.0	R 50.1	40.2	R 90.3
1994	1.4	(s)	1.4	26.6	2.4	0.2	0.3	0.1	(s)	3.0	0.2	19.2	R 50.5	40.1	R 90.6
1995	1.0	(s)	1.0	27.5	2.0	0.2	0.3	0.1	0.0	2.6	0.2	20.3	R 51.5	42.2	R 93.8
1996	1.7	0.0	1.7	29.7	1.6	0.2	0.3	0.1	0.0	2.2	0.2	20.6	54.4	42.8	97.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 308. Industrial Energy Consumption Estimates, Selected Years 1960-1996, West Virginia**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	7,802	76	918	452	120	290	372	204	1,437	4,704	8,497	540	0	0	5,915	-	14,713	-
1965	10,747	81	907	890	60	627	438	155	2,080	11,875	17,033	493	0	0	7,984	-	19,063	-
1970	10,279	93	863	1,087	39	907	500	114	1,621	14,523	19,655	558	0	0	9,426	-	22,842	-
1975	8,424	68	944	1,533	144	1,095	447	78	1,787	16,544	22,571	595	0	0	9,102	-	21,955	-
1980	6,284	59	717	3,585	51	2,955	420	81	1,458	20,395	29,663	690	0	0	10,567	-	25,695	-
1981	5,546	64	740	2,517	71	2,753	403	73	989	19,840	27,385	690	0	0	11,083	-	26,413	-
1982	4,812	53	663	2,283	115	2,363	368	65	1,388	15,069	22,313	690	0	0	9,913	-	23,809	-
1983	4,065	48	408	2,147	97	2,318	385	56	1,096	12,288	18,795	690	0	0	9,669	-	23,164	-
1984	4,980	50	478	2,202	39	134	411	118	1,497	14,106	18,983	690	0	0	10,017	-	23,316	-
1985	3,551	45	430	1,897	177	871	383	229	964	13,876	18,827	690	0	0	9,673	-	22,726	-
1986	4,195	44	565	1,879	77	860	374	229	1,173	16,193	21,349	690	0	0	9,003	-	20,710	-
1987	4,145	50	537	2,531	118	870	423	R 237	537	16,357	21,609	690	0	0	9,067	-	20,718	-
1988	4,713	49	879	2,586	105	814	408	R 235	459	16,819	R 22,305	690	0	0	9,925	-	22,439	-
1989	4,750	58	812	2,590	88	1,049	418	248	968	17,079	R 23,254	690	0	0	10,195	-	R 22,899	-
1990	4,845	58	728	2,670	39	1,103	430	R 249	1,219	19,421	R 25,860	f NA	f NA	f NA	10,469	-	R 22,898	-
1991	4,189	49	528	2,580	39	1,340	385	259	1,019	13,299	19,449	NA	NA	NA	10,206	-	R 22,214	-
1992	3,882	52	550	2,192	60	1,136	393	250	526	14,304	19,409	NA	NA	NA	10,370	-	R 22,149	-
1993	4,162	54	427	2,729	65	1,232	400	161	496	13,864	19,373	NA	NA	NA	10,187	-	R 21,523	-
1994	4,363	55	692	2,962	70	1,373	418	181	496	14,508	20,701	NA	NA	NA	10,482	-	R 21,870	-
1995	R 3,768	60	639	3,209	71	1,443	411	194	200	14,036	20,203	NA	NA	NA	10,867	-	R 22,637	-
1996	3,256	57	944	3,187	77	1,612	399	189	354	14,614	21,374	NA	NA	NA	10,820	-	22,521	-

  

Trillion Btu																		
1960	204.4	78.4	6.1	2.6	0.7	1.2	2.3	1.1	9.0	27.3	50.3	5.8	0.0	0.0	20.2	359.0	50.2	409.2
1965	280.0	87.1	6.0	5.2	0.3	2.5	2.7	0.8	13.1	67.0	97.6	5.1	0.0	0.0	27.2	497.1	65.0	562.1
1970	260.2	95.7	5.7	6.3	0.2	3.4	3.0	0.6	10.2	80.4	109.9	5.9	0.0	0.0	32.2	503.9	77.9	581.8
1975	212.5	70.5	6.3	8.9	0.8	4.1	2.7	0.4	11.2	92.8	127.2	6.2	0.0	0.0	31.1	447.5	74.9	522.4
1980	162.4	61.4	4.8	20.9	0.3	10.9	2.5	0.4	9.2	112.5	161.4	7.2	0.0	0.0	36.1	428.4	87.7	516.1
1981	142.9	66.3	4.9	14.7	0.4	10.0	2.4	0.4	6.2	109.3	148.4	7.2	0.0	0.0	37.8	402.6	90.1	492.7
1982	123.6	55.5	4.4	13.3	0.7	8.5	2.2	0.3	8.7	82.8	121.0	7.2	0.0	0.0	33.8	341.1	81.2	422.4
1983	104.3	49.5	2.7	12.5	0.5	8.4	2.3	0.3	6.9	68.8	102.5	7.3	0.0	0.0	33.0	296.5	79.0	375.5
1984	127.0	52.3	3.2	12.8	0.2	0.5	2.5	0.6	9.4	76.6	105.8	7.2	0.0	0.0	34.2	326.5	79.6	406.1
1985	91.0	48.4	2.9	11.1	1.0	3.1	2.3	1.2	6.1	75.8	103.4	7.2	0.0	0.0	33.0	283.0	77.5	360.5
1986	108.4	47.0	3.8	10.9	0.4	3.1	2.3	1.2	7.4	88.8	117.9	7.2	0.0	0.0	30.7	311.2	70.7	381.9
1987	106.9	54.0	3.6	14.7	0.7	3.2	2.6	1.2	3.4	89.1	118.4	7.2	0.0	0.0	30.9	317.4	70.7	388.1
1988	121.8	52.5	5.8	15.1	0.6	3.0	2.5	1.2	2.9	92.1	123.1	7.1	0.0	0.0	33.9	338.4	76.6	415.0
1989	122.2	62.1	5.4	15.1	0.5	3.9	2.5	1.3	6.1	93.5	128.3	7.1	0.0	0.0	34.8	354.6	R 78.1	R 432.7
1990	124.3	61.7	4.8	15.6	0.2	4.0	2.6	1.3	7.7	106.7	142.9	f 8.7	f 5.1	f 0.0	35.7	f 378.4	78.1	R 456.5
1991	108.1	52.2	3.5	15.0	0.2	4.8	2.3	1.4	6.4	73.3	107.0	7.1	4.9	0.0	34.8	314.1	R 75.8	R 389.9
1992	99.8	55.7	3.6	12.8	0.3	4.1	2.4	1.3	3.3	78.6	106.5	8.8	5.0	0.0	35.4	311.2	R 75.6	386.8
1993	107.0	57.8	2.8	15.9	0.4	4.4	2.4	0.8	3.1	76.0	105.9	7.8	5.1	0.0	34.8	318.4	73.4	391.8
1994	112.1	58.4	4.6	17.3	0.4	5.0	2.5	1.0	3.1	79.5	113.3	8.1	R 6.5	0.0	35.8	R 334.3	74.6	R 408.9
1995	R 97.4	64.0	4.2	18.7	0.4	5.2	2.5	1.0	1.3	76.9	110.2	8.3	R 6.3	0.0	37.1	R 323.2	77.2	R 400.5
1996	84.2	60.4	6.3	18.6	0.4	5.8	2.4	1.0	2.2	79.6	116.3	9.6	6.7	0.0	36.9	314.3	76.8	391.1

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 309. Transportation Energy Consumption Estimates, Selected Years 1960-1996, West Virginia**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum							Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>	
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>						Total
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels							Thousand Gallons	Million Kilowatthours				
1960	137	8	119	1,742	169	2	199	11,340	3	13,573	0	0	-	0	-
1965	36	18	201	1,530	130	4	198	12,541	0	14,603	0	0	-	0	-
1970	17	8	78	2,485	290	10	185	15,660	5	18,713	0	0	-	0	-
1975	1	14	58	3,589	242	14	239	19,176	0	23,318	0	0	-	0	-
1980	0	13	65	4,846	353	14	250	19,199	0	24,728	0	0	-	0	-
1981	0	15	32	4,500	325	32	240	18,603	0	23,732	0	0	-	0	-
1982	0	13	23	3,734	293	20	219	18,764	0	23,054	0	0	-	0	-
1983	0	9	44	6,522	277	24	229	18,367	0	25,462	0	0	-	0	-
1984	0	16	39	6,922	242	21	244	18,163	0	25,630	0	0	-	0	-
1985	0	18	39	6,386	235	22	228	17,977	(s)	24,886	0	0	-	0	-
1986	0	16	50	4,105	219	20	223	18,098	0	22,714	0	0	-	0	-
1987	0	12	35	5,000	211	14	252	18,778	0	24,290	0	0	-	0	-
1988	0	13	38	5,194	248	22	243	19,200	0	24,946	0	0	-	0	-
1989	0	11	38	5,952	380	20	249	18,927	0	25,566	0	0	-	0	-
1990	0	9	36	5,706	273	19	256	19,063	0	25,354	R e 2,534	0	-	0	-
1991	0	8	33	5,653	237	17	229	18,821	0	24,990	R 2,009	0	-	0	-
1992	0	17	0	6,172	271	21	234	19,392	0	26,090	R 2,441	0	-	0	-
1993	0	21	26	6,667	257	21	238	19,457	0	26,666	R 2,724	0	-	0	-
1994	0	30	26	6,697	225	26	249	19,759	0	26,982	R 2,002	0	-	0	-
1995	0	26	27	6,973	174	12	244	20,678	0	28,108	R 1,341	0	-	0	-
1996	0	32	32	4,970	170	10	237	18,691	4	24,114	212	0	-	0	-

  

Trillion Btu															
1960	3.5	8.7	0.6	10.1	0.9	(s)	1.2	59.6	(s)	72.5	0.0	0.0	84.7	0.0	84.7
1965	0.9	19.3	1.0	8.9	0.7	(s)	1.2	65.9	0.0	77.7	0.0	0.0	97.9	0.0	97.9
1970	0.4	8.1	0.4	14.5	1.6	(s)	1.1	82.3	(s)	99.9	0.0	0.0	108.5	0.0	108.5
1975	(s)	14.6	0.3	20.9	1.3	0.1	1.5	100.7	0.0	124.8	0.0	0.0	139.4	0.0	139.4
1980	0.0	13.6	0.3	28.2	2.0	0.1	1.5	100.9	0.0	133.0	0.0	0.0	146.6	0.0	146.6
1981	0.0	15.9	0.2	26.2	1.8	0.1	1.5	97.7	0.0	127.5	0.0	0.0	143.4	0.0	143.4
1982	0.0	14.0	0.1	21.8	1.6	0.1	1.3	98.6	0.0	123.5	0.0	0.0	137.5	0.0	137.5
1983	0.0	9.6	0.2	38.0	1.5	0.1	1.4	96.5	0.0	137.7	0.0	0.0	147.3	0.0	147.3
1984	0.0	17.0	0.2	40.3	1.3	0.1	1.5	95.4	0.0	138.8	0.0	0.0	155.8	0.0	155.8
1985	0.0	19.0	0.2	37.2	1.3	0.1	1.4	94.4	(s)	134.6	0.0	0.0	153.5	0.0	153.5
1986	0.0	17.6	0.3	23.9	1.2	0.1	1.3	95.1	0.0	121.9	0.0	0.0	139.5	0.0	139.5
1987	0.0	13.2	0.2	29.1	1.2	0.1	1.5	R 98.6	0.0	R 130.7	0.0	0.0	R 143.9	0.0	R 143.9
1988	0.0	14.2	0.2	30.3	1.4	0.1	1.5	R 100.9	0.0	R 134.3	0.0	0.0	R 148.5	0.0	R 148.5
1989	0.0	12.1	0.2	34.7	2.1	0.1	1.5	99.4	0.0	138.0	0.0	0.0	150.1	0.0	150.1
1990	0.0	9.3	0.2	33.2	1.5	0.1	1.6	R 100.1	0.0	R 136.7	R e 0.2	0.0	R e 146.0	0.0	R e 146.0
1991	0.0	8.9	0.2	32.9	1.3	0.1	1.4	R 98.9	0.0	134.7	R 0.2	0.0	143.6	0.0	143.6
1992	0.0	17.8	0.0	36.0	1.5	0.1	1.4	101.9	0.0	140.8	R 0.2	0.0	158.6	0.0	158.6
1993	0.0	22.6	0.1	38.8	1.4	0.1	1.4	102.2	0.0	144.1	R 0.2	0.0	166.7	0.0	166.7
1994	0.0	32.1	0.1	39.0	1.3	0.1	1.5	103.8	0.0	145.8	R 0.2	0.0	177.9	0.0	177.9
1995	0.0	28.0	0.1	40.6	1.0	(s)	1.5	108.6	0.0	151.9	0.1	0.0	179.9	0.0	179.9
1996	0.0	34.5	0.2	28.9	1.0	(s)	1.4	98.2	(s)	129.8	(s)	0.0	164.2	0.0	164.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 310. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, West Virginia**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	5,879	0	5,879	1	33	(s)	0	33	0	398	0	0	0	--
1965	8,025	0	8,025	1	61	(s)	0	62	0	336	0	0	0	--
1970	14,889	0	14,889	1	430	3	0	433	0	437	(s)	0	0	--
1975	25,805	0	25,805	(s)	708	14	0	722	0	467	0	0	0	--
1980	28,499	0	28,499	(s)	0	683	0	683	0	424	0	0	0	--
1981	30,139	0	30,139	(s)	0	826	0	826	0	400	0	0	0	--
1982	27,796	0	27,796	(s)	0	522	0	522	0	428	0	0	0	--
1983	28,970	0	28,970	(s)	0	418	0	418	0	419	0	0	0	--
1984	31,058	0	31,058	(s)	0	383	0	383	0	448	0	0	0	--
1985	31,367	0	31,367	(s)	0	369	0	369	0	368	0	0	0	--
1986	30,790	0	30,790	(s)	0	381	0	381	0	361	0	0	0	--
1987	30,605	0	30,605	(s)	0	383	0	383	0	315	0	0	0	--
1988	31,704	0	31,704	(s)	0	356	0	356	0	297	0	0	0	--
1989	32,391	0	32,391	(s)	0	402	0	402	0	476	0	0	0	--
1990	29,873	0	29,873	(s)	0	368	0	368	0	435	0	0	0	--
1991	27,557	0	27,557	(s)	0	340	0	340	0	356	0	0	0	--
1992	28,050	0	28,050	(s)	0	307	0	307	0	423	0	0	0	--
1993	27,782	0	27,782	(s)	0	357	0	357	0	362	0	0	0	--
1994	30,318	0	30,318	(s)	0	423	0	423	0	363	0	0	0	--
1995	30,657	0	30,657	(s)	0	338	0	338	0	394	0	0	0	--
1996	32,774	0	32,774	(s)	0	353	0	353	0	497	0	0	0	--

**Trillion Btu**

1960	140.6	0.0	140.6	1.0	0.2	(s)	0.0	0.2	0.0	4.3	0.0	0.0	0.0	146.0
1965	190.5	0.0	190.5	1.0	0.4	(s)	0.0	0.4	0.0	3.5	0.0	0.0	0.0	195.4
1970	347.2	0.0	347.2	0.7	2.7	(s)	0.0	2.7	0.0	4.6	(s)	0.0	0.0	355.2
1975	599.2	0.0	599.2	0.2	4.4	0.1	0.0	4.5	0.0	4.9	0.0	0.0	0.0	608.8
1980	691.7	0.0	691.7	0.1	0.0	4.0	0.0	4.0	0.0	4.4	0.0	0.0	0.0	700.1
1981	729.6	0.0	729.6	0.2	0.0	4.8	0.0	4.8	0.0	4.2	0.0	0.0	0.0	738.8
1982	679.6	0.0	679.6	0.1	0.0	3.0	0.0	3.0	0.0	4.5	0.0	0.0	0.0	687.3
1983	716.0	0.0	716.0	0.1	0.0	2.4	0.0	2.4	0.0	4.4	0.0	0.0	0.0	723.0
1984	766.1	0.0	766.1	0.1	0.0	2.2	0.0	2.2	0.0	4.7	0.0	0.0	0.0	773.1
1985	778.7	0.0	778.7	0.1	0.0	2.1	0.0	2.1	0.0	3.8	0.0	0.0	0.0	784.9
1986	766.0	0.0	766.0	0.3	0.0	2.2	0.0	2.2	0.0	3.8	0.0	0.0	0.0	772.3
1987	761.2	0.0	761.2	0.2	0.0	2.2	0.0	2.2	0.0	3.3	0.0	0.0	0.0	767.0
1988	790.9	0.0	790.9	0.1	0.0	2.1	0.0	2.1	0.0	3.1	0.0	0.0	0.0	796.1
1989	803.0	0.0	803.0	0.1	0.0	2.3	0.0	2.3	0.0	R 5.0	0.0	0.0	0.0	810.4
1990	743.9	0.0	743.9	0.1	0.0	2.1	0.0	2.1	0.0	4.5	0.0	0.0	0.0	750.7
1991	689.2	0.0	689.2	0.1	0.0	2.0	0.0	2.0	0.0	3.7	0.0	0.0	0.0	R 695.1
1992	702.6	0.0	702.6	0.2	0.0	1.8	0.0	1.8	0.0	4.4	0.0	0.0	0.0	R 709.0
1993	694.0	0.0	694.0	0.1	0.0	2.1	0.0	2.1	0.0	3.7	0.0	0.0	0.0	699.9
1994	756.0	0.0	756.0	0.2	0.0	2.5	0.0	2.5	0.0	3.7	0.0	0.0	0.0	R 762.5
1995	761.4	0.0	761.4	0.4	0.0	2.0	0.0	2.0	0.0	4.1	0.0	0.0	0.0	767.8
1996	811.4	0.0	811.4	0.2	0.0	2.1	0.0	2.1	0.0	5.1	0.0	0.0	0.0	818.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

--=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 311. Energy Consumption Estimates by Source, Selected Years 1960-1996, Wisconsin**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>	
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total							
			Thousand Barrels																	Million Kilowatthours
1960	12,737	91	2,847	427	21,750	245	2,964	4,258	872	33,125	4,394	530	71,413	0	2,399	0	0	-185	-	
1965	14,528	200	2,806	636	23,508	629	1,249	5,246	898	36,295	3,209	1,254	75,730	0	2,131	2	0	1,343	-	
1970	16,899	338	4,671	332	25,841	1,603	3,002	7,679	992	45,483	2,936	1,545	94,084	157	1,904	8	0	-1,922	-	
1975	12,733	365	3,019	173	26,561	2,206	974	8,448	923	51,548	2,106	1,968	97,926	10,293	2,037	0	0	-1,338	-	
1980	15,644	352	3,016	124	22,495	2,397	222	6,036	1,019	49,606	1,772	2,078	88,764	9,911	2,115	62	0	4,498	-	
1981	16,186	325	1,948	108	20,968	2,282	125	4,932	977	48,233	866	2,842	83,280	9,719	2,142	57	0	8,241	-	
1982	15,794	312	2,111	31	20,511	2,097	242	5,914	891	46,233	2,132	2,356	82,518	10,268	2,422	73	0	6,699	-	
1983	17,407	299	2,041	113	20,465	1,843	118	5,950	933	46,837	793	2,318	81,412	9,299	2,556	59	0	6,133	-	
1984	17,949	305	1,516	96	21,956	1,605	165	5,540	995	46,648	664	2,692	81,877	10,745	2,338	79	(s)	14,919	-	
1985	18,034	308	1,690	102	22,605	1,663	234	5,377	927	46,557	402	2,387	81,945	10,979	2,546	88	(s)	18,817	-	
1986	18,743	279	2,055	108	21,953	1,562	95	5,361	907	47,421	1,044	1,878	82,385	11,199	2,419	112	(s)	16,688	-	
1987	19,652	279	2,396	83	21,150	1,448	116	5,632	1,025	47,490	1,180	2,012	82,531	11,311	1,576	154	(s)	7,366	-	
1988	20,038	317	3,416	93	24,182	1,344	69	6,029	989	49,522	1,095	2,034	88,773	11,464	1,488	164	(s)	13,089	-	
1989	19,922	331	3,805	129	24,281	1,343	63	6,929	1,014	49,130	1,032	2,012	89,737	10,848	1,577	181	(s)	15,908	-	
1990	20,097	309	3,685	122	23,051	1,424	48	6,664	1,044	48,989	1,125	2,105	88,255	11,226	1,226	181	(s)	12,299	-	
1991	20,659	332	3,332	105	23,013	1,352	49	8,471	934	49,898	851	2,837	90,841	10,991	NA	NA	NA	9,911	-	
1992	20,071	332	3,105	121	22,753	1,721	51	7,780	952	50,285	854	3,148	90,769	11,207	NA	NA	NA	11,251	-	
1993	20,897	348	3,253	119	24,475	1,912	76	8,626	969	51,634	1,264	3,183	95,512	11,465	NA	NA	NA	15,013	-	
1994	21,731	356	3,521	285	26,029	1,975	58	8,957	1,013	53,048	1,287	3,196	99,369	11,516	NA	NA	NA	12,628	-	
1995	23,066	380	4,154	374	24,949	2,044	59	8,753	996	55,053	842	3,028	100,251	10,970	NA	NA	NA	4,807	-	
1996	24,020	403	4,126	367	25,534	1,530	73	10,133	966	56,313	1,037	3,286	103,365	10,121	NA	NA	NA	17,803	-	
Trillion Btu																				
1960	304.7	93.8	18.9	2.2	126.7	1.3	16.8	17.1	5.3	174.0	27.6	3.1	393.0	0.0	25.8	0.0	0.0	-0.6	816.6	
1965	347.9	204.1	18.6	3.2	136.9	3.5	7.1	21.0	5.4	190.7	20.2	6.9	413.6	0.0	22.3	(s)	0.0	4.6	992.5	
1970	381.6	344.2	31.0	1.7	150.5	9.0	17.0	29.0	6.0	238.9	18.5	8.8	510.5	1.7	20.0	0.1	0.0	-6.6	1,251.5	
1975	272.0	372.1	20.0	0.9	154.7	12.5	5.5	31.4	5.6	270.8	13.2	11.1	525.8	113.4	21.2	0.0	0.0	-4.6	1,299.9	
1980	327.3	354.7	20.0	0.6	131.0	13.5	1.3	22.2	6.2	260.6	11.1	11.6	478.1	108.1	22.0	0.6	0.0	15.3	1,306.2	
1981	327.3	327.5	12.9	0.5	122.1	12.9	0.7	18.0	5.9	253.4	5.4	15.8	447.7	107.2	22.4	0.6	0.0	28.1	1,260.8	
1982	324.1	315.8	14.0	0.2	119.5	11.8	1.4	21.4	5.4	242.9	13.4	13.1	443.0	113.7	25.3	0.8	0.0	22.9	1,245.5	
1983	352.8	301.8	13.5	0.6	119.2	10.4	0.7	21.5	5.7	246.0	5.0	13.0	435.6	101.4	26.9	0.6	0.0	20.9	1,240.0	
1984	363.4	307.5	10.1	0.5	127.9	9.0	0.9	19.9	6.0	245.0	4.2	14.8	438.4	116.5	24.4	0.8	(s)	50.9	1,302.0	
1985	360.7	311.4	11.2	0.5	131.7	9.3	1.3	19.4	5.6	244.6	2.5	13.2	439.3	118.7	26.6	0.9	(s)	64.2	1,321.9	
1986	371.4	281.6	13.6	0.5	127.9	8.8	0.5	19.5	5.5	249.1	2.6	10.5	442.5	120.9	25.3	1.2	(s)	56.9	1,299.8	
1987	386.6	281.6	15.9	0.4	123.2	8.1	0.7	20.6	6.2	249.5	7.4	11.1	443.1	121.9	16.4	1.6	(s)	25.1	1,276.3	
1988	394.1	319.7	22.7	0.5	140.9	7.5	0.4	22.0	6.0	260.1	6.9	11.3	478.3	123.2	15.4	1.7	(s)	44.7	1,376.9	
1989	393.3	332.5	25.2	0.6	141.4	7.5	0.4	25.5	6.2	258.1	6.5	11.2	482.7	116.3	16.4	1.9	(s)	54.3	1,397.4	
1990	397.1	310.9	24.5	0.6	134.3	8.0	0.3	24.2	6.3	257.3	7.1	11.7	474.2	119.9	20.7	1.9	(s)	42.0	1,554.4	
1991	407.9	333.8	22.1	0.5	134.1	7.6	0.3	30.6	5.7	262.1	5.3	15.7	484.0	118.0	30.5	1.9	(s)	38.4	1,597.2	
1992	399.2	334.6	20.6	0.6	132.5	9.7	0.3	28.2	5.8	264.1	5.4	17.3	484.6	119.7	32.3	1.9	(s)	33.8	1,596.6	
1993	405.9	351.8	21.6	0.6	142.6	10.8	0.4	31.1	5.9	271.2	7.9	17.6	509.7	122.5	25.5	1.7	(s)	51.2	1,652.7	
1994	426.0	359.9	23.4	1.4	151.6	11.1	0.3	32.6	6.1	278.7	8.1	17.7	531.0	122.9	30.3	1.7	(s)	43.1	1,694.1	
1995	443.0	384.7	27.6	1.9	145.3	11.6	0.3	31.7	6.0	289.2	5.3	16.8	535.7	116.9	55.6	1.7	(s)	16.4	1,740.2	
1996	452.8	408.0	27.4	1.9	148.7	8.7	0.4	36.6	5.9	295.8	6.5	18.2	550.0	107.5	29.3	1.8	(s)	60.7	1,791.4	

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available. (s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 312. Residential Energy Consumption Estimates, Selected Years 1960-1996, Wisconsin**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	960	4	964	47	11,206	1,227	2,675	15,107	0	0	5,298	-	13,178	-
1965	706	3	709	79	11,790	660	3,692	16,142	0	0	6,963	-	16,624	-
1970	452	2	453	105	11,721	1,608	5,606	18,935	0	0	9,825	-	23,810	-
1975	202	1	202	120	11,019	530	5,405	16,953	0	0	11,782	-	28,420	-
1980	18	1	18	123	8,155	124	2,983	11,261	0	0	13,597	-	33,063	-
1981	14	0	14	111	7,490	72	2,705	10,267	0	0	13,735	-	32,734	-
1982	13	1	14	118	7,565	79	2,810	10,454	0	0	13,978	-	33,574	-
1983	16	1	17	112	4,958	81	3,343	8,382	0	0	14,440	-	34,596	-
1984	43	1	44	113	5,354	137	3,266	8,758	0	0	16,025	-	37,299	-
1985	9	1	9	116	6,423	195	3,045	9,663	0	0	16,307	-	38,312	-
1986	11	1	12	111	6,426	71	3,058	9,554	0	0	16,557	-	38,085	-
1987	32	1	33	103	5,782	101	3,392	9,275	0	0	15,429	-	35,254	-
1988	27	1	28	121	6,517	54	3,488	10,058	0	0	16,383	-	37,038	-
1989	6	1	7	127	5,395	40	4,445	9,880	0	0	16,259	-	R 36,521	-
1990	1	1	2	114	4,634	29	4,187	8,851	e 734	e 52	16,385	-	R 35,837	-
1991	3	(s)	4	124	5,128	30	5,241	10,399	773	54	17,349	-	R 37,762	-
1992	1	(s)	2	123	4,753	29	4,950	9,732	813	55	16,615	-	R 35,488	-
1993	13	(s)	13	130	5,132	47	5,575	10,754	422	56	17,373	-	R 36,707	-
1994	18	(s)	18	128	4,799	34	5,479	10,311	414	57	17,660	-	R 36,848	-
1995	45	R 0	45	136	3,955	34	5,560	9,549	459	63	18,635	-	R 38,818	-
1996	37	0	37	148	3,922	41	6,616	10,579	458	65	18,685	-	38,889	-

  

Trillion Btu														
1960	21.0	0.1	21.1	49.1	65.3	7.0	10.7	83.0	0.0	0.0	18.1	171.2	45.0	216.2
1965	15.4	0.1	15.5	80.9	68.7	3.7	14.8	87.2	0.0	0.0	23.8	207.3	56.7	264.0
1970	9.5	(s)	9.5	107.2	68.3	9.1	21.2	98.6	0.0	0.0	33.5	248.9	81.2	330.1
1975	3.8	(s)	3.8	122.4	64.2	3.0	20.1	87.3	0.0	0.0	40.2	253.7	97.0	350.7
1980	0.4	(s)	0.4	124.2	47.5	0.7	11.0	59.2	0.0	0.0	46.4	230.2	112.8	343.0
1981	0.3	0.0	0.3	112.4	43.6	0.4	9.9	53.9	0.0	0.0	46.9	213.5	111.7	325.2
1982	0.3	(s)	0.3	119.6	44.1	0.4	10.2	54.7	0.0	0.0	47.7	222.3	114.6	336.8
1983	0.4	(s)	0.4	113.4	28.9	0.5	12.1	41.4	0.0	0.0	49.3	204.4	118.0	322.5
1984	1.0	(s)	1.1	113.9	31.2	0.8	11.8	43.7	0.0	0.0	54.7	213.3	127.3	340.6
1985	0.2	(s)	0.2	117.4	37.4	1.1	11.0	49.5	0.0	0.0	55.6	222.7	130.7	353.4
1986	0.3	(s)	0.3	111.9	37.4	0.4	11.1	49.0	0.0	0.0	56.5	217.6	129.9	347.6
1987	0.8	(s)	0.8	104.0	33.7	0.6	12.4	46.7	0.0	0.0	52.6	204.1	120.3	324.4
1988	0.7	(s)	0.7	122.3	38.0	0.3	12.7	51.0	0.0	0.0	55.9	229.9	126.4	356.3
1989	0.1	(s)	0.2	127.6	31.4	0.2	16.4	48.0	0.0	0.0	55.5	231.3	R 124.6	R 355.9
1990	(s)	(s)	0.1	114.7	27.0	0.2	15.2	42.3	e 14.7	e 0.2	55.9	e 227.9	R 122.3	R e 350.2
1991	0.1	(s)	0.1	124.9	29.9	0.2	18.9	49.0	15.5	0.2	59.2	248.9	R 128.8	R 377.7
1992	(s)	(s)	(s)	124.5	27.7	0.2	17.9	45.8	16.3	0.2	56.7	243.5	R 121.1	R 364.6
1993	0.3	(s)	0.3	131.6	29.9	0.3	20.1	50.3	8.4	0.2	59.3	250.1	125.2	R 375.3
1994	0.4	(s)	0.5	129.7	28.0	0.2	19.9	48.1	8.3	0.2	60.3	246.9	125.7	R 372.7
1995	1.1	R 0.0	1.1	137.5	23.0	0.2	20.1	43.4	9.2	0.2	63.6	255.0	132.4	R 387.4
1996	0.9	0.0	0.9	149.8	22.8	0.2	23.9	47.0	9.2	0.2	63.8	270.9	132.7	403.6

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 313. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Wisconsin**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels						Thousand Cords	Million Kilowatthours			
1960	1,782	3	1,785	11	1,817	101	472	295	556	3,239	0	3,059	-	7,608	-
1965	1,312	2	1,314	24	1,911	54	652	309	407	3,332	0	4,160	-	9,933	-
1970	839	1	840	55	1,900	132	989	56	244	3,321	0	6,180	-	14,975	-
1975	375	1	375	67	1,786	43	954	52	168	3,004	0	8,342	-	20,121	-
1980	33	(s)	33	77	1,682	57	526	76	30	2,371	0	10,019	-	24,363	-
1981	27	0	27	68	1,152	5	477	81	12	1,727	0	10,228	-	24,377	-
1982	25	(s)	25	70	1,278	130	496	86	38	2,028	0	10,216	-	24,537	-
1983	31	(s)	31	68	3,759	8	590	269	8	4,634	0	10,345	-	24,785	-
1984	81	(s)	81	70	4,060	6	576	255	6	4,903	0	12,955	-	30,153	-
1985	16	(s)	17	73	3,172	18	537	283	106	4,117	0	12,087	-	28,398	-
1986	21	(s)	21	55	1,727	4	540	280	252	2,804	0	12,329	-	28,361	-
1987	60	(s)	60	58	1,796	5	599	R 284	116	2,799	0	12,174	-	27,816	-
1988	50	(s)	50	67	1,804	7	615	286	248	2,960	0	12,931	-	29,233	-
1989	11	(s)	11	70	2,016	6	784	R 279	299	3,384	0	13,122	-	R 29,475	-
1990	2	(s)	3	66	1,832	9	739	R 320	220	R 3,118	e NA	13,408	-	R 29,325	-
1991	6	(s)	6	72	1,960	9	925	247	179	3,319	NA	13,997	-	R 30,465	-
1992	3	(s)	3	71	1,551	10	873	212	231	2,878	NA	13,929	-	R 29,751	-
1993	24	(s)	24	77	1,547	11	984	50	197	2,789	43	14,373	-	R 30,366	-
1994	33	(s)	33	79	1,306	8	967	89	167	2,536	37	15,037	-	R 31,376	-
1995	84	R 0	84	85	1,062	10	981	51	110	2,214	30	15,642	-	R 32,583	-
1996	68	0	68	94	991	12	1,168	80	133	2,384	30	16,188	-	33,692	-

**Trillion Btu**

1960	39.1	0.1	39.1	11.3	10.6	0.6	1.9	1.5	3.5	18.1	0.0	10.4	78.9	26.0	104.9
1965	28.6	(s)	28.6	24.0	11.1	0.3	2.6	1.6	2.6	18.2	0.0	14.2	85.0	33.9	118.9
1970	17.7	(s)	17.7	55.6	11.1	0.7	3.7	0.3	1.5	17.4	0.0	21.1	111.7	51.1	162.8
1975	7.1	(s)	7.1	68.9	10.4	0.2	3.5	0.3	1.1	15.5	0.0	28.5	120.0	68.7	188.6
1980	0.8	(s)	0.8	77.7	9.8	0.3	1.9	0.4	0.2	12.6	0.0	34.2	125.4	83.1	208.5
1981	0.6	0.0	0.6	68.7	6.7	(s)	1.7	0.4	0.1	9.0	0.0	34.9	113.2	83.2	196.4
1982	0.6	(s)	0.6	70.5	7.4	0.7	1.8	0.5	0.2	10.7	0.0	34.9	116.6	83.7	200.4
1983	0.7	(s)	0.7	68.6	21.9	(s)	2.1	1.4	0.1	25.5	0.0	35.3	130.2	84.6	214.8
1984	1.9	(s)	2.0	70.8	23.6	(s)	2.1	1.3	(s)	27.1	0.0	44.2	144.1	102.9	247.0
1985	0.4	(s)	0.4	73.5	18.5	0.1	1.9	1.5	0.7	22.7	0.0	41.2	137.9	96.9	234.8
1986	0.5	(s)	0.5	55.8	10.1	(s)	2.0	1.5	1.6	15.1	0.0	42.1	113.5	96.8	210.3
1987	1.4	(s)	1.4	58.2	10.5	(s)	2.2	1.5	0.7	14.9	0.0	41.5	116.1	94.9	211.0
1988	1.2	(s)	1.2	67.5	10.5	(s)	2.2	1.5	1.6	15.9	0.0	44.1	128.7	99.7	228.4
1989	0.3	(s)	0.3	70.4	11.7	(s)	2.9	1.5	1.9	18.0	0.0	44.8	133.5	R 100.6	R 234.1
1990	0.1	(s)	0.1	66.7	10.7	(s)	2.7	1.7	1.4	R 16.5	e NA	45.7	129.0	R 100.1	R 229.1
1991	0.2	(s)	0.2	72.0	11.4	(s)	3.3	1.3	1.1	17.2	NA	47.8	137.2	R 103.9	R 241.1
1992	0.1	(s)	0.1	72.0	9.0	0.1	3.2	1.1	1.5	14.8	NA	47.5	134.4	101.5	R 235.9
1993	0.6	(s)	0.6	77.9	9.0	0.1	3.5	0.3	1.2	14.1	0.9	49.0	R 142.5	103.6	R 246.1
1994	0.8	(s)	0.8	79.6	7.6	(s)	3.5	0.5	1.0	12.7	0.7	51.3	R 145.1	R 107.1	R 252.2
1995	2.1	R 0.0	2.1	85.8	6.2	0.1	3.6	0.3	0.7	10.8	0.6	53.4	R 152.7	111.2	R 263.8
1996	1.7	0.0	1.7	95.0	5.8	0.1	4.2	0.4	0.8	11.3	0.6	55.2	163.9	115.0	278.9

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 314. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Wisconsin**

Year	Coal Thousand Short Tons	Natural Gas <sup>a</sup> Billion Cubic Feet	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
			Thousand Barrels															
1960	4,710	30	2,847	6,950	1,636	1,088	345	2,774	3,416	530	19,586	338	0	0	4,230	-	10,520	-
1965	5,789	82	2,806	7,654	535	866	405	2,541	2,371	1,254	18,433	306	0	0	6,153	-	14,691	-
1970	5,147	141	4,671	7,917	1,262	1,009	440	2,471	1,554	1,305	20,629	306	0	0	8,570	-	20,767	-
1975	2,439	152	3,019	7,150	401	1,996	426	2,027	1,105	1,932	18,055	318	0	0	10,823	-	26,106	-
1980	2,364	130	3,016	3,589	41	2,444	497	1,633	1,439	2,069	14,727	258	0	0	13,290	-	32,317	-
1981	2,304	130	1,948	3,555	48	1,558	476	1,354	763	2,802	12,505	258	0	0	14,064	-	33,517	-
1982	2,285	116	2,111	3,292	33	2,444	434	1,140	2,065	2,338	13,858	258	0	0	13,410	-	32,209	-
1983	2,265	112	2,041	3,196	29	1,806	455	1,145	666	2,318	11,656	258	0	0	14,232	-	34,098	-
1984	2,020	117	1,516	3,452	22	R 1,426	485	1,204	445	2,669	R 11,218	258	0	0	15,738	-	36,632	-
1985	2,132	115	1,690	3,074	21	1,611	452	1,137	158	2,364	10,508	258	0	0	17,195	-	40,398	-
1986	2,109	107	2,055	3,446	20	1,625	442	1,067	697	1,878	11,231	258	0	0	17,799	-	40,942	-
1987	1,980	113	2,396	3,098	10	R 1,516	500	R 1,001	1,064	2,012	R 11,597	258	0	0	17,374	-	39,697	-
1988	2,099	122	3,416	3,478	9	1,791	482	R 869	843	2,034	R 12,922	258	0	0	18,552	-	41,942	-
1989	2,053	127	3,805	3,362	17	R 1,577	494	868	729	2,012	12,865	258	0	0	18,995	-	R 42,666	-
1990	1,960	122	3,685	3,596	11	R 1,619	508	R 780	903	2,105	R 13,207	f NA	f NA	f NA	19,405	-	R 42,442	-
1991	1,878	129	3,332	4,103	10	2,166	455	R 997	672	2,837	R 14,571	NA	NA	NA	19,686	-	R 42,846	-
1992	1,835	130	3,105	4,181	12	1,836	464	816	614	3,105	R 14,134	NA	NA	NA	20,382	-	R 43,534	-
1993	1,811	134	3,253	4,779	19	R 1,916	472	R 825	1,056	3,073	R 15,393	NA	NA	NA	21,410	-	R 45,236	-
1994	1,984	135	3,521	5,040	16	R 2,217	494	R 914	1,109	3,036	R 16,346	NA	NA	NA	22,714	-	R 47,394	-
1995	1,949	146	4,154	4,443	15	2,089	485	934	710	2,884	15,713	NA	NA	NA	23,690	-	R 49,348	-
1996	1,678	150	4,126	4,787	20	2,249	471	921	872	3,154	16,599	NA	NA	NA	23,871	-	49,683	-
Trillion Btu																		
1960	116.6	30.8	18.9	40.5	9.3	4.4	2.1	14.6	21.5	3.1	114.2	3.6	0.0	0.0	14.4	279.7	35.9	315.6
1965	142.4	83.0	18.6	44.6	3.0	3.5	2.5	13.3	14.9	6.9	107.4	3.2	0.0	0.0	21.0	357.0	50.1	407.1
1970	119.6	143.6	31.0	46.1	7.2	3.8	2.7	13.0	9.8	7.4	120.9	3.2	0.0	0.0	29.2	416.5	70.9	487.3
1975	54.7	155.5	20.0	41.6	2.3	7.4	2.6	10.6	6.9	10.9	102.5	3.3	0.0	0.0	36.9	353.0	89.1	442.1
1980	54.6	130.6	20.0	20.9	0.2	9.0	3.0	8.6	9.0	11.6	82.3	2.7	0.0	0.0	45.3	315.5	110.3	425.8
1981	52.9	130.8	12.9	20.7	0.3	5.7	2.9	7.1	4.8	15.5	69.9	2.7	0.0	0.0	48.0	304.2	114.4	418.6
1982	52.7	117.3	14.0	19.2	0.2	8.8	2.6	6.0	13.0	13.0	76.8	2.7	0.0	0.0	45.8	295.2	109.9	405.1
1983	51.7	113.5	13.5	18.6	0.2	6.5	2.8	6.0	4.2	13.0	64.8	2.7	0.0	0.0	48.6	281.3	116.3	397.7
1984	45.8	117.9	10.1	20.1	0.1	5.1	2.9	6.3	2.8	14.7	62.1	2.7	0.0	0.0	53.7	282.2	125.0	407.2
1985	49.7	116.4	11.2	17.9	0.1	5.8	2.7	6.0	1.0	13.0	57.8	2.7	0.0	0.0	58.7	285.3	137.8	423.2
1986	49.8	108.4	13.6	20.1	0.1	5.9	2.7	5.6	4.4	10.5	62.9	2.7	0.0	0.0	60.7	284.4	139.7	424.1
1987	45.8	113.8	15.9	18.0	0.1	5.5	3.0	R 5.3	6.7	11.1	R 65.7	2.7	0.0	0.0	59.3	287.2	135.4	422.6
1988	45.9	122.8	22.7	20.3	0.1	6.5	2.9	4.6	5.3	11.3	73.7	2.7	0.0	0.0	63.3	308.3	143.1	451.4
1989	46.4	128.1	25.2	19.6	0.1	5.8	3.0	4.6	4.6	11.2	74.1	2.7	0.0	0.0	64.8	316.0	R 145.6	R 461.6
1990	47.3	122.6	24.5	20.9	0.1	5.9	3.1	4.1	5.7	11.7	75.9	f 2.1	f 172.9	f 0.0	66.2	f 487.1	R 144.8	R f 631.9
1991	45.6	129.7	22.1	23.9	0.1	7.8	2.8	5.2	4.2	15.7	81.8	2.4	166.0	0.0	67.2	492.6	R 146.2	R 638.8
1992	44.5	131.4	20.6	24.4	0.1	6.7	2.8	4.3	3.9	17.1	79.7	2.7	172.1	0.0	69.5	500.1	R 148.5	R 648.6
1993	43.4	135.5	21.6	27.8	0.1	6.9	2.9	4.3	6.6	16.9	87.2	2.9	174.4	0.0	73.1	516.5	R 154.3	R 670.8
1994	47.9	136.7	23.4	29.4	0.1	8.1	3.0	4.8	7.0	16.7	92.4	3.2	R 164.1	0.0	77.5	R 521.8	R 161.7	R 683.5
1995	47.2	147.7	27.6	25.9	0.1	7.6	2.9	4.9	4.5	15.9	89.3	2.8	R 158.2	0.0	80.8	R 526.0	R 168.4	R 694.4
1996	40.1	151.5	27.4	27.9	0.1	8.1	2.9	4.8	5.5	17.4	94.0	3.0	169.2	0.0	81.4	539.2	169.5	708.8

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and

unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 315. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Wisconsin**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	83	1	427	1,773	245	23	527	30,056	378	33,430	0	0	-	0	-
1965	19	2	636	2,148	629	36	493	33,446	378	37,765	0	0	-	0	-
1970	8	7	332	4,179	1,603	74	552	42,956	6	49,703	0	0	-	0	-
1975	(s)	5	173	6,064	2,169	93	497	49,469	285	58,751	0	0	-	0	-
1980	0	8	124	8,570	2,397	84	523	47,897	235	59,829	0	0	-	0	-
1981	0	8	108	8,420	2,282	191	501	46,797	77	58,377	0	0	-	0	-
1982	0	4	31	8,119	2,097	164	457	45,007	29	55,903	0	0	-	0	-
1983	0	3	113	8,301	1,843	211	479	45,424	119	56,489	0	0	-	0	-
1984	0	3	96	8,909	1,605	R 271	510	45,188	214	R 56,793	0	0	-	0	-
1985	0	3	102	9,685	1,663	184	476	R 45,136	138	R 57,383	0	0	-	0	-
1986	0	4	108	10,094	1,562	138	465	46,074	95	R 58,536	0	0	-	0	-
1987	0	3	83	10,301	1,448	125	526	R 46,205	0	R 58,688	0	0	-	0	-
1988	0	4	93	12,154	1,344	135	507	R 48,367	5	R 62,604	0	0	-	0	-
1989	0	4	129	13,339	1,343	122	520	R 47,983	4	R 63,440	0	0	-	0	-
1990	0	4	122	12,875	1,424	R 118	535	R 47,890	2	R 62,965	R e 13,939	0	-	0	-
1991	0	4	105	11,676	1,352	139	479	R 48,655	(s)	R 62,406	R 11,049	0	-	0	-
1992	0	4	121	12,186	1,721	R 120	488	R 49,257	8	R 63,901	R 13,429	0	-	0	-
1993	0	4	119	12,895	1,912	R 151	497	R 50,759	11	R 66,344	R 14,987	0	-	0	-
1994	0	10	285	14,666	1,975	294	519	R 52,045	11	R 69,795	R 16,357	(s)	-	(s)	-
1995	0	4	374	15,296	2,044	123	511	54,068	22	72,438	R 35,432	(s)	-	(s)	-
1996	0	4	367	15,673	1,530	100	495	55,313	32	73,510	56,170	(s)	-	(s)	-

**Trillion Btu**

1960	2.0	0.6	2.2	10.3	1.3	0.1	3.2	157.9	2.4	177.4	0.0	0.0	180.0	0.0	180.0
1965	0.5	1.6	3.2	12.5	3.5	0.1	3.0	175.7	2.4	200.4	0.0	0.0	202.5	0.0	202.5
1970	0.2	6.7	1.7	24.3	9.0	0.3	3.3	225.7	(s)	264.4	0.0	0.0	271.3	0.0	271.3
1975	(s)	5.1	0.9	35.3	12.3	0.3	3.0	259.9	1.8	313.5	0.0	0.0	318.5	0.0	318.5
1980	0.0	8.3	0.6	49.9	13.5	0.3	3.2	251.6	1.5	320.6	0.0	0.0	328.9	0.0	328.9
1981	0.0	8.2	0.5	49.0	12.9	0.7	3.0	245.8	0.5	312.5	0.0	0.0	320.7	0.0	320.7
1982	0.0	4.0	0.2	47.3	11.8	0.6	2.8	236.4	0.2	299.2	0.0	0.0	303.3	0.0	303.3
1983	0.0	2.8	0.6	48.4	10.4	0.8	2.9	238.6	0.7	302.3	0.0	0.0	305.1	0.0	305.1
1984	0.0	3.0	0.5	51.9	9.0	1.0	3.1	237.4	1.3	R 304.2	0.0	0.0	R 307.2	0.0	R 307.2
1985	0.0	2.8	0.5	56.4	9.3	0.7	2.9	R 237.1	0.9	R 307.8	0.0	0.0	R 310.6	0.0	R 310.6
1986	0.0	3.8	0.5	58.8	8.8	0.5	2.8	242.0	0.6	314.1	0.0	0.0	317.8	0.0	317.8
1987	0.0	3.4	0.4	60.0	8.1	0.5	3.2	R 242.7	0.0	R 314.9	0.0	0.0	R 318.3	0.0	R 318.3
1988	0.0	4.3	0.5	70.8	7.5	0.5	3.1	R 254.1	(s)	R 336.5	0.0	0.0	R 340.8	0.0	R 340.8
1989	0.0	4.2	0.6	77.7	7.5	0.4	3.2	R 252.1	(s)	R 341.6	0.0	0.0	R 345.8	0.0	R 345.8
1990	0.0	4.4	0.6	75.0	8.0	0.4	3.2	R 251.6	(s)	R 338.9	R e 1.1	0.0	R e 343.3	0.0	R e 343.3
1991	0.0	4.5	0.5	68.0	7.6	0.5	2.9	R 255.6	(s)	R 335.1	R 0.8	0.0	R 339.6	0.0	R 339.6
1992	0.0	4.0	0.6	71.0	9.7	0.4	3.0	R 258.7	0.1	343.5	R 1.0	0.0	R 347.5	0.0	R 347.5
1993	0.0	3.7	0.6	75.1	10.8	0.5	3.0	266.6	0.1	356.7	R 1.1	0.0	360.4	0.0	360.4
1994	0.0	10.0	1.4	85.4	11.1	1.1	3.2	R 273.4	0.1	R 375.7	R 1.2	(s)	R 385.7	(s)	R 385.7
1995	0.0	4.3	1.9	89.1	11.6	0.4	3.1	284.0	0.1	390.3	R 2.7	(s)	394.6	(s)	394.6
1996	0.0	4.3	1.9	91.3	8.7	0.4	3.0	290.6	0.2	395.9	4.3	(s)	400.3	(s)	400.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 316. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Wisconsin**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Thousand Barrels									
1960	5,195	0	5,195	2	45	5	0	50	0	2,061	0	0	0	-
1965	6,697	0	6,697	14	53	6	0	59	0	1,825	2	0	0	-
1970	10,450	0	10,450	31	1,132	124	240	1,497	157	1,597	8	0	0	-
1975	9,716	0	9,716	20	548	578	37	1,163	10,293	1,719	0	0	0	-
1980	13,229	0	13,229	14	68	499	9	576	9,911	1,857	62	0	0	-
1981	13,841	0	13,841	7	13	351	40	404	9,719	1,884	57	0	0	-
1982	13,470	0	13,470	4	0	257	18	275	10,268	2,164	73	0	0	-
1983	15,094	0	15,094	4	0	251	0	251	9,299	2,298	59	0	0	-
1984	15,804	0	15,804	2	0	181	23	205	10,745	2,080	79	0	(s)	-
1985	15,876	0	15,876	1	0	251	24	274	10,979	2,288	88	0	(s)	-
1986	16,601	0	16,601	2	0	260	0	260	11,199	2,161	112	0	(s)	-
1987	17,579	0	17,579	2	0	173	0	173	11,311	1,319	154	0	(s)	-
1988	17,861	0	17,861	3	0	229	0	229	11,464	1,230	164	0	(s)	-
1989	17,851	0	17,851	2	0	168	0	168	10,848	1,319	181	0	(s)	-
1990	18,133	0	18,133	2	0	113	0	113	11,226	1,791	173	0	(s)	-
1991	18,771	0	18,771	3	0	147	0	147	10,991	2,701	157	0	(s)	-
1992	18,231	0	18,231	3	0	82	43	125	11,207	2,861	150	0	0	-
1993	19,049	0	19,049	3	0	123	110	233	11,465	2,191	220	0	0	-
1994	19,696	0	19,696	4	0	220	161	380	11,516	2,630	265	0	0	-
1995	20,987	0	20,987	9	0	194	144	337	10,970	5,116	285	0	0	-
1996	22,236	0	22,236	7	0	161	133	293	10,121	2,542	319	0	0	-

  

Trillion Btu														
1960	125.8	0.0	125.8	2.1	0.3	(s)	0.0	0.3	0.0	22.2	0.0	0.0	0.0	150.4
1965	161.0	0.0	161.0	14.7	0.3	(s)	0.0	0.4	0.0	19.1	(s)	0.0	0.0	195.1
1970	234.6	0.0	234.6	31.2	7.1	0.7	1.4	9.3	1.7	16.8	0.1	0.0	0.0	293.6
1975	206.3	0.0	206.3	20.3	3.4	3.4	0.2	7.0	113.4	17.9	0.0	0.0	0.0	364.8
1980	271.5	0.0	271.5	13.8	0.4	2.9	0.1	3.4	108.1	19.3	0.6	0.0	0.0	416.8
1981	273.5	0.0	273.5	7.5	0.1	2.0	0.2	2.4	107.2	19.7	0.6	0.0	0.0	410.9
1982	270.6	0.0	270.6	4.4	0.0	1.5	0.1	1.6	113.7	22.6	0.8	0.0	0.0	413.6
1983	300.0	0.0	300.0	3.5	0.0	1.5	0.0	1.5	101.4	24.2	0.6	0.0	0.0	431.2
1984	314.6	0.0	314.6	1.9	0.0	1.1	0.1	1.2	116.5	21.7	0.8	0.0	(s)	456.8
1985	310.3	0.0	310.3	1.3	0.0	1.5	0.1	1.6	118.7	23.9	0.9	0.0	(s)	456.8
1986	320.8	0.0	320.8	1.8	0.0	1.5	0.0	1.5	120.9	22.6	1.2	0.0	(s)	468.8
1987	338.6	0.0	338.6	2.2	0.0	1.0	0.0	1.0	121.9	13.7	1.6	0.0	(s)	479.0
1988	346.2	0.0	346.2	2.7	0.0	1.3	0.0	1.3	123.2	12.7	1.7	0.0	(s)	487.9
1989	346.5	0.0	346.5	2.1	0.0	1.0	0.0	1.0	116.3	R 13.8	1.9	0.0	(s)	R 481.5
1990	349.7	0.0	349.7	2.4	0.0	0.7	0.0	0.7	119.9	R 18.6	1.8	0.0	(s)	R 493.0
1991	362.0	0.0	362.0	2.7	0.0	0.9	0.0	0.9	118.0	R 28.2	1.6	0.0	(s)	R 514.7
1992	354.6	0.0	354.6	2.6	0.0	0.5	0.3	0.7	119.7	R 29.6	1.5	0.0	0.0	R 511.1
1993	361.5	0.0	361.5	3.1	0.0	0.7	0.7	1.4	122.5	R 22.6	2.3	0.0	0.0	513.3
1994	376.8	0.0	376.8	3.9	0.0	1.3	1.0	2.2	122.9	R 27.1	2.7	0.0	0.0	R 540.5
1995	392.5	0.0	392.5	9.4	0.0	1.1	0.9	2.0	116.9	52.7	2.9	0.0	0.0	593.4
1996	410.1	0.0	410.1	7.4	0.0	0.9	0.8	1.7	107.5	26.3	3.3	0.0	0.0	556.9

<sup>a</sup> Includes supplemental gaseous fuels.  
<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.  
<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.  
<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.  
<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.  
<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.  
<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.  
R=Revised data.  
- =Not applicable.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.  
Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.



**Table 317. Energy Consumption Estimates by Source, Selected Years 1960-1996, Wyoming**

Year	Coal <sup>a</sup> Thousand Short Tons	Natural Gas <sup>b</sup> Billion Cubic Feet	Petroleum											Nuclear Electric Power	Hydro-electric Power <sup>d</sup>	Biomass <sup>e</sup>	Other <sup>a,f</sup>	Net Inter-state Flow of Electricity/Losses <sup>g</sup>	Total <sup>h</sup>
			Asphalt and Road Oil <sup>a</sup>	Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	Kero-sene <sup>a</sup>	LPG <sup>a</sup>	Lubri-cants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Other <sup>a,c</sup>	Total						
1960	993	51	734	132	3,278	56	91	1,114	93	4,431	1,749	1,943	13,622	0	609	0	0	-3,186	-
1965	2,109	59	743	217	3,696	74	206	1,171	84	4,739	2,171	2,416	15,516	0	884	0	0	-4,049	-
1970	3,802	110	1,099	256	5,059	128	341	1,848	114	5,900	1,487	2,554	18,786	0	1,006	0	0	-10,347	-
1975	7,628	87	606	218	7,656	124	172	1,815	154	7,354	2,076	3,157	23,332	0	1,120	0	0	-21,926	-
1980	15,208	69	1,160	108	13,247	162	62	2,030	208	8,501	2,171	3,724	31,374	0	1,108	0	0	-48,625	-
1981	18,354	69	976	85	12,433	249	69	2,028	199	8,498	1,989	2,240	28,766	0	841	0	0	-61,603	-
1982	19,197	91	908	60	11,090	214	139	2,551	182	8,266	1,575	1,981	26,965	0	850	0	0	-64,437	-
1983	17,970	81	396	55	7,231	155	61	2,641	190	7,856	320	2,462	21,366	0	1,150	0	1	-58,288	-
1984	20,756	85	1,223	57	7,403	159	37	2,194	203	8,196	195	2,542	22,209	0	1,286	0	3	-67,074	-
1985	23,155	82	1,676	51	7,669	154	21	1,942	189	R 7,671	211	2,234	R 21,819	0	1,068	0	3	-77,560	-
1986	19,338	75	1,604	50	6,900	144	8	2,169	185	R 7,203	190	2,278	R 20,732	0	1,140	0	1	-59,893	-
1987	24,399	82	1,469	51	8,772	202	11	2,756	209	R 7,277	119	2,592	R 23,457	0	768	0	(s)	-83,335	-
1988	25,424	82	1,046	53	9,409	193	10	2,083	202	R 7,427	257	3,150	R 23,829	0	789	0	(s)	-87,829	-
1989	23,952	82	924	39	9,782	160	6	2,462	207	R 7,561	31	3,195	R 24,365	0	680	0	(s)	-78,699	-
1990	25,514	92	955	35	9,603	143	4	1,263	213	R 7,105	40	3,203	R 22,563	0	NA	NA	(s)	-86,146	-
1991	25,150	97	1,016	28	8,813	119	9	1,228	191	R 7,212	40	2,142	R 20,799	0	NA	NA	NA	-83,769	-
1992	27,339	124	772	25	9,286	153	7	1,184	194	R 7,429	10	2,586	R 21,647	0	NA	NA	NA	-95,566	-
1993	26,171	105	756	20	10,072	140	21	1,752	198	R 7,572	72	2,420	R 23,022	0	NA	NA	NA	-89,656	-
1994	27,459	106	902	33	10,007	152	23	1,580	207	R 7,683	41	2,464	R 23,090	0	NA	NA	NA	-97,050	-
1995	25,933	98	665	179	11,312	160	24	1,979	203	7,936	21	2,375	24,853	0	NA	NA	NA	-90,298	-
1996	26,647	101	835	213	12,467	151	27	1,694	197	7,905	6	2,730	26,226	0	NA	NA	NA	-93,410	-

  

Trillion Btu																			
1960	15.8	52.8	4.9	0.7	19.1	0.3	0.5	4.5	0.6	23.3	11.0	11.7	76.4	0.0	6.6	0.0	0.0	-10.9	140.7
1965	34.5	54.8	4.9	1.1	21.5	0.4	1.2	4.7	0.5	24.9	13.6	14.5	87.4	0.0	9.2	0.0	0.0	-13.8	172.1
1970	63.5	112.5	7.3	1.3	29.5	0.7	1.9	7.0	0.7	31.0	9.3	15.3	104.1	0.0	10.6	0.0	0.0	-35.3	255.3
1975	128.0	81.4	4.0	1.1	44.6	0.7	1.0	6.7	0.9	38.6	13.1	19.0	129.7	0.0	11.7	0.0	0.0	-74.8	276.0
1980	268.1	73.1	7.7	0.5	77.2	0.9	0.4	7.5	1.3	44.7	13.6	22.4	176.1	0.0	11.5	0.0	0.0	-165.9	362.9
1981	318.9	73.1	6.5	0.4	72.4	1.4	0.4	7.4	1.2	44.6	12.5	14.0	160.9	0.0	8.8	0.0	0.0	-210.2	351.5
1982	333.6	91.1	6.0	0.3	64.6	1.2	0.8	9.2	1.1	43.4	9.9	12.3	148.9	0.0	8.9	0.0	0.0	-219.9	362.6
1983	313.6	85.6	2.6	0.3	42.1	0.9	0.3	9.5	1.2	41.3	2.0	15.1	115.3	0.0	12.1	0.0	(s)	-198.9	327.8
1984	359.4	90.0	8.1	0.3	43.1	0.9	0.2	7.9	1.2	43.1	1.2	15.5	121.5	0.0	13.4	0.0	(s)	-228.9	355.5
1985	405.5	86.4	11.1	0.3	44.7	0.9	0.1	7.0	1.1	40.3	1.3	13.8	120.6	0.0	11.2	0.0	(s)	-264.6	359.1
1986	336.6	78.8	10.6	0.3	40.2	0.8	(s)	7.9	1.1	R 37.8	1.2	14.2	R 114.2	0.0	11.9	0.0	(s)	-204.4	R 337.2
1987	428.1	86.4	9.7	0.3	51.1	1.1	0.1	10.1	1.3	R 38.2	0.7	15.9	R 128.5	0.0	8.0	0.0	(s)	-284.3	R 366.7
1988	445.7	86.7	6.9	0.3	54.8	1.1	0.1	7.6	1.2	R 39.0	1.6	19.1	R 131.7	0.0	8.1	0.0	(s)	-299.7	R 372.6
1989	421.3	86.9	6.1	0.2	57.0	0.9	(s)	9.1	1.3	39.7	0.2	19.2	133.7	0.0	R 7.1	0.0	(s)	-268.5	R 380.5
1990	458.3	101.3	6.3	0.2	55.9	0.8	(s)	4.6	1.3	R 37.3	0.3	19.3	R 126.0	0.0	i 6.7	R i 3.3	(s)	R -293.9	R i 401.2
1991	449.8	103.1	6.7	0.1	51.3	0.7	0.1	4.4	1.2	37.9	0.3	13.0	115.7	0.0	R 7.7	R 3.2	(s)	R -285.8	R 393.3
1992	490.8	130.7	5.1	0.1	54.1	0.9	(s)	4.3	1.2	39.0	0.1	15.5	120.3	0.0	R 6.6	R 2.9	(s)	-326.1	R 424.7
1993	466.7	110.5	5.0	0.1	58.7	0.8	0.1	6.3	1.2	39.8	0.5	14.6	127.1	0.0	8.1	R 2.9	(s)	-305.9	R 408.9
1994	489.5	112.3	6.0	0.2	58.3	0.8	0.1	5.7	1.3	40.4	0.3	14.9	127.9	0.0	9.2	R 3.5	(s)	-331.1	R 410.7
1995	461.9	103.9	4.4	0.9	65.9	0.9	0.1	7.2	1.2	41.7	0.1	14.3	136.8	0.0	8.2	R 3.3	(s)	-308.1	R 405.6
1996	473.0	107.6	5.5	1.1	72.6	0.9	0.2	6.1	1.2	41.5	(s)	16.4	145.5	0.0	12.7	3.2	(s)	-318.7	423.2

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>e</sup> Includes wood, waste, and ethanol. Ethanol blended into motor gasoline is included in motor gasoline and total petroleum. It is also included in the biomass series to give complete biomass data, but it is counted only once in the energy total.

<sup>f</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>g</sup> Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State.

A positive number indicates that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

<sup>h</sup> From 1990, "Total" does not equal the sum of the columns. Ethanol (which is shown in the transportation sector table) is included in both motor gasoline and biomass data in this table but only once in the total. Net imports of electricity generated from nonrenewable energy sources (shown in appendix Table A8) is included in the total in this table but not in any other columns.

<sup>i</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data. --=Not applicable. NA=Not available.  
(s)=Btu value less than 0.05 and physical unit value less than 0.5.  
Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 318. Residential Energy Consumption Estimates, Selected Years 1960-1996, Wyoming**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum				Wood	Solar <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Total						
	Thousand Short Tons			Billion Cubic Feet	Thousand Barrels				Thousand Cords	Million Kilowatthours				
1960	20	0	20	9	4	8	561	573	0	0	275	—	684	—
1965	15	0	15	11	7	32	532	570	0	0	442	—	1,055	—
1970	7	0	7	18	12	39	1,001	1,053	0	0	604	—	1,463	—
1975	17	0	17	12	26	11	960	997	0	0	891	—	2,149	—
1980	37	0	37	10	23	0	644	667	0	0	1,410	—	3,429	—
1981	40	0	40	9	26	8	719	753	0	0	1,633	—	3,892	—
1982	51	0	51	15	30	0	822	852	0	0	1,820	—	4,371	—
1983	51	0	51	14	317	3	1,006	1,326	0	0	1,816	—	4,350	—
1984	57	0	57	14	324	2	515	841	0	0	1,800	—	4,190	—
1985	37	0	37	14	50	8	496	555	0	0	1,815	—	4,263	—
1986	35	0	35	13	27	1	780	808	0	0	1,678	—	3,859	—
1987	36	0	36	11	33	2	1,324	1,359	0	0	1,635	—	3,735	—
1988	49	0	49	12	31	2	883	915	0	0	1,764	—	3,988	—
1989	48	0	48	12	33	1	591	625	0	0	1,721	—	R 3,866	—
1990	46	0	46	11	24	1	487	512	e 50	e 1	1,720	—	R 3,762	—
1991	48	(s)	48	12	87	3	595	685	53	1	1,819	—	R 3,960	—
1992	35	0	35	11	58	1	506	566	56	1	1,763	—	R 3,765	—
1993	65	0	65	13	51	2	452	505	51	1	1,906	—	R 4,027	—
1994	85	0	85	12	68	1	420	489	50	1	1,865	—	R 3,891	—
1995	51	0	51	12	55	1	592	648	56	1	1,939	—	R 4,040	—
1996	134	0	134	14	37	1	458	496	55	1	2,022	—	4,208	—

  

Trillion Btu														
1960	0.4	0.0	0.4	9.1	(s)	(s)	2.3	2.3	0.0	0.0	0.9	12.8	2.3	15.1
1965	0.3	0.0	0.3	9.9	(s)	0.2	2.1	2.4	0.0	0.0	1.5	14.1	3.6	17.7
1970	0.1	0.0	0.1	18.4	0.1	0.2	3.8	4.1	0.0	0.0	2.1	24.7	5.0	29.7
1975	0.3	0.0	0.3	11.3	0.2	0.1	3.6	3.8	0.0	0.0	3.0	18.5	7.3	25.8
1980	0.7	0.0	0.7	10.3	0.1	0.0	2.4	2.5	0.0	0.0	4.8	18.3	11.7	30.0
1981	0.7	0.0	0.7	9.4	0.2	(s)	2.6	2.8	0.0	0.0	5.6	18.5	13.3	31.8
1982	0.9	0.0	0.9	15.2	0.2	0.0	3.0	3.1	0.0	0.0	6.2	25.5	14.9	40.4
1983	0.9	0.0	0.9	14.8	1.8	(s)	3.6	5.5	0.0	0.0	6.2	27.3	14.8	42.2
1984	1.0	0.0	1.0	14.5	1.9	(s)	1.9	3.8	0.0	0.0	6.1	25.5	14.3	39.7
1985	0.6	0.0	0.6	15.1	0.3	(s)	1.8	2.1	0.0	0.0	6.2	24.1	14.5	38.6
1986	0.6	0.0	0.6	13.4	0.2	(s)	2.8	3.0	0.0	0.0	5.7	22.7	13.2	35.9
1987	0.6	0.0	0.6	11.2	0.2	(s)	4.8	5.1	0.0	0.0	5.6	22.5	12.7	35.2
1988	0.9	0.0	0.9	12.3	0.2	(s)	3.2	3.4	0.0	0.0	6.0	22.6	13.6	36.2
1989	0.8	0.0	0.8	12.4	0.2	(s)	2.2	2.4	0.0	0.0	5.9	21.5	13.2	34.7
1990	0.9	0.0	0.9	12.6	0.1	(s)	1.8	1.9	e 1.0	e (s)	5.9	e 22.3	12.8	R e 35.2
1991	1.1	(s)	1.1	12.7	0.5	(s)	2.2	2.7	1.1	(s)	6.2	23.8	13.5	37.3
1992	0.7	0.0	0.7	11.5	0.3	(s)	1.8	2.2	1.1	(s)	6.0	21.5	12.8	34.3
1993	1.2	0.0	1.2	13.4	0.3	(s)	1.6	1.9	1.0	(s)	6.5	24.0	13.7	37.8
1994	1.6	0.0	1.6	12.2	0.4	(s)	1.5	1.9	1.0	(s)	6.4	23.1	13.3	36.3
1995	0.9	0.0	0.9	12.9	0.3	(s)	2.1	2.5	1.1	(s)	6.6	24.0	13.8	37.8
1996	2.4	0.0	2.4	14.4	0.2	(s)	1.7	1.9	1.1	(s)	6.9	26.7	14.4	41.0

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Includes small amounts of solar energy consumed by the commercial sector that cannot be separately identified. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

— =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 319. Commercial Energy Consumption Estimates, Selected Years 1960-1996, Wyoming**

Year	Coal			Natural Gas <sup>b</sup>	Petroleum						Wood	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>c</sup>	Total <sup>d</sup>
	Bituminous Coal and Lignite <sup>a</sup>	Anthracite <sup>a</sup>	Total		Distillate Fuel <sup>a</sup>	Kerosene <sup>a</sup>	LPG <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons				Thousand Barrels										
1960	37	0	37	5	9	29	99	73	37	246	0	174	-	432	-
1965	28	0	28	8	16	119	94	73	40	341	0	594	-	1,419	-
1970	14	0	14	14	30	147	177	85	48	487	0	657	-	1,591	-
1975	32	0	32	10	63	43	169	72	83	431	0	775	-	1,870	-
1980	68	0	68	5	428	23	114	103	27	694	0	1,138	-	2,767	-
1981	73	0	73	5	125	0	127	113	5	370	0	1,434	-	3,416	-
1982	96	0	96	10	351	15	145	114	175	801	0	1,523	-	3,659	-
1983	96	0	96	9	222	13	178	65	33	511	0	1,583	-	3,794	-
1984	106	0	106	9	227	6	91	60	20	404	0	2,056	-	4,786	-
1985	70	0	70	9	440	6	88	67	69	670	0	2,321	-	5,454	-
1986	64	0	64	8	391	1	138	121	109	759	0	2,248	-	5,172	-
1987	67	0	67	8	273	2	234	R 73	R 30	R 612	0	2,177	-	4,974	-
1988	90	0	90	9	269	4	156	68	119	616	0	2,220	-	5,018	-
1989	88	0	88	9	250	2	104	64	1	420	0	2,219	-	R 4,985	-
1990	85	0	85	8	216	1	86	74	1	R 378	e NA	2,319	-	R 5,073	-
1991	90	(s)	90	9	240	3	105	87	1	436	NA	2,439	-	R 5,309	-
1992	65	0	65	8	222	(s)	89	78	0	390	NA	2,496	-	R 5,330	-
1993	122	0	122	10	214	(s)	80	7	0	301	6	2,616	-	R 5,526	-
1994	157	0	157	9	233	(s)	74	7	1	315	7	2,572	-	R 5,366	-
1995	95	0	95	10	307	2	104	8	(s)	421	9	2,443	-	5,088	-
1996	248	0	248	10	356	1	81	36	(s)	474	11	2,562	-	5,333	-

  

Trillion Btu															
1960	0.8	0.0	0.8	5.1	0.1	0.2	0.4	0.4	0.2	1.2	0.0	0.6	7.7	1.5	9.2
1965	0.6	0.0	0.6	7.4	0.1	0.7	0.4	0.4	0.2	1.8	0.0	2.0	11.8	4.8	16.7
1970	0.3	0.0	0.3	14.3	0.2	0.8	0.7	0.4	0.3	2.4	0.0	2.2	19.3	5.4	24.7
1975	0.6	0.0	0.6	9.6	0.4	0.2	0.6	0.4	0.5	2.1	0.0	2.6	15.0	6.4	21.3
1980	1.2	0.0	1.2	5.3	2.5	0.1	0.4	0.5	0.2	3.7	0.0	3.9	14.1	9.4	23.6
1981	1.3	0.0	1.3	4.8	0.7	0.0	0.5	0.6	(s)	1.8	0.0	4.9	12.8	11.7	24.5
1982	1.7	0.0	1.7	10.1	2.0	0.1	0.5	0.6	1.1	4.4	0.0	5.2	21.4	12.5	33.8
1983	1.7	0.0	1.7	9.7	1.3	0.1	0.6	0.3	0.2	2.6	0.0	5.4	19.4	12.9	32.3
1984	1.9	0.0	1.9	9.9	1.3	(s)	0.3	0.3	0.1	2.1	0.0	7.0	21.0	16.3	37.3
1985	1.2	0.0	1.2	9.6	2.6	(s)	0.3	0.4	0.4	3.7	0.0	7.9	22.4	18.6	41.0
1986	1.1	0.0	1.1	8.4	2.3	(s)	0.5	0.6	0.7	4.1	0.0	7.7	21.4	17.6	39.0
1987	1.2	0.0	1.2	8.9	1.6	(s)	0.9	0.4	0.2	3.0	0.0	7.4	20.5	17.0	37.5
1988	1.6	0.0	1.6	9.2	1.6	(s)	0.6	0.4	0.7	3.3	0.0	7.6	21.6	17.1	38.7
1989	1.6	0.0	1.6	9.0	1.5	(s)	0.4	0.3	(s)	2.2	0.0	7.6	20.3	17.0	37.3
1990	1.7	0.0	1.7	9.3	1.3	(s)	0.3	0.4	(s)	2.0	e NA	7.9	20.8	R 17.3	R 38.2
1991	2.1	(s)	2.1	9.6	1.4	(s)	0.4	0.5	(s)	2.3	NA	8.3	22.3	18.1	40.4
1992	1.2	0.0	1.2	8.5	1.3	(s)	0.3	0.4	0.0	2.0	NA	8.5	20.2	18.2	38.4
1993	2.3	0.0	2.3	10.8	1.2	(s)	0.3	(s)	0.0	1.6	0.1	8.9	R 23.7	R 18.9	R 42.6
1994	2.9	0.0	2.9	9.7	1.4	(s)	0.3	(s)	(s)	1.7	0.1	8.8	R 23.2	18.3	R 41.5
1995	1.7	0.0	1.7	10.5	1.8	(s)	0.4	(s)	(s)	2.2	0.2	8.3	R 22.9	17.4	R 40.3
1996	4.5	0.0	4.5	10.3	2.1	(s)	0.3	0.2	(s)	2.6	0.2	8.7	26.3	18.2	44.5

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels.

<sup>c</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>d</sup> Small amounts of solar energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of

non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 320. Industrial Energy Consumption Estimates, Selected Years 1960-1996, Wyoming**

Year	Coal	Natural Gas <sup>a</sup>	Petroleum									Hydro-electric Power <sup>b</sup>	Wood and Waste	Other <sup>b,d</sup>	Electricity <sup>b</sup>	Net Energy	Electrical System Energy Losses <sup>e</sup>	Total
			Asphalt and Road Oil <sup>b</sup>	Distillate Fuel <sup>b</sup>	Kerosene <sup>b</sup>	LPG <sup>b</sup>	Lubricants <sup>b</sup>	Motor Gasoline	Residual Fuel <sup>b</sup>	Other <sup>b,c</sup>	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million Kilowatthours						
1960	119	35	734	1,458	55	384	2	320	756	1,943	5,653	0	0	0	270	--	671	--
1965	124	38	743	1,790	55	496	3	510	942	2,416	6,956	0	0	0	1,285	--	3,067	--
1970	210	70	1,099	1,931	155	578	30	552	960	2,554	7,858	0	0	0	1,896	--	4,595	--
1975	640	59	606	3,596	117	569	45	591	1,881	3,157	10,562	0	0	0	2,918	--	7,038	--
1980	1,605	48	1,160	6,255	39	1,199	57	365	2,144	3,724	14,943	0	0	0	4,621	--	11,237	--
1981	1,682	49	976	5,913	61	1,063	55	269	1,981	2,240	12,558	0	0	0	4,402	--	10,490	--
1982	1,521	59	908	5,545	124	1,454	50	440	1,391	1,981	11,893	0	0	0	4,730	--	11,361	--
1983	1,688	52	396	3,133	45	1,299	53	439	287	2,462	8,112	0	0	0	4,801	--	11,501	--
1984	1,788	57	1,223	3,199	28	1,524	56	173	175	2,542	R 8,922	0	0	0	5,882	--	13,691	--
1985	1,875	54	1,676	2,750	7	1,312	52	530	142	2,234	8,703	0	0	0	6,212	--	14,596	--
1986	1,786	49	1,604	2,454	6	1,199	51	503	81	2,278	R 8,176	0	0	0	6,047	--	13,911	--
1987	1,887	57	1,469	2,653	7	1,148	58	R 451	89	2,592	R 8,465	0	0	0	6,699	--	15,306	--
1988	1,722	56	1,046	2,221	5	992	56	R 461	138	3,150	8,070	0	0	0	6,980	--	15,781	--
1989	1,908	57	924	2,293	3	1,731	57	R 482	30	3,195	8,714	0	0	0	7,293	--	R 16,382	--
1990	1,857	67	955	2,271	2	663	59	R 417	39	3,203	R 7,609	f NA	f NA	f NA	7,729	--	R 16,905	--
1991	1,896	68	1,016	2,659	4	479	53	502	39	2,142	6,893	NA	NA	NA	7,498	--	R 16,320	--
1992	2,126	97	772	2,717	6	561	54	R 490	10	2,586	7,196	NA	NA	NA	7,442	--	R 15,895	--
1993	1,873	75	756	2,739	19	1,192	55	R 387	72	2,420	7,637	NA	NA	NA	7,363	--	R 15,557	--
1994	1,867	79	902	2,764	22	1,047	57	416	40	2,464	R 7,712	NA	NA	NA	7,260	--	R 15,147	--
1995	1,937	68	665	2,198	22	1,265	56	443	20	2,375	7,044	NA	NA	NA	6,817	--	14,199	--
1996	1,835	70	835	3,072	25	1,137	54	451	6	2,730	8,312	NA	NA	NA	6,891	--	14,342	--

**Trillion Btu**

1960	2.4	36.1	4.9	8.5	0.3	1.5	(s)	1.7	4.8	11.7	33.3	0.0	0.0	0.0	0.9	72.8	2.3	75.1
1965	2.5	35.2	4.9	10.4	0.3	2.0	(s)	2.7	5.9	14.5	40.8	0.0	0.0	0.0	4.4	82.9	10.5	93.4
1970	4.0	71.3	7.3	11.2	0.9	2.2	0.2	2.9	6.0	15.3	46.1	0.0	0.0	0.0	6.5	127.9	15.7	143.5
1975	11.8	55.2	4.0	20.9	0.7	2.1	0.3	3.1	11.8	19.0	61.9	0.0	0.0	0.0	10.0	138.8	24.0	162.8
1980	28.8	51.1	7.7	36.4	0.2	4.4	0.3	1.9	13.5	22.4	86.9	0.0	0.0	0.0	15.8	182.6	38.3	220.9
1981	30.2	52.2	6.5	34.4	0.3	3.9	0.3	1.4	12.5	14.0	73.4	0.0	0.0	0.0	15.0	170.8	35.8	206.6
1982	27.1	58.9	6.0	32.3	0.7	5.3	0.3	2.3	8.7	12.3	68.0	0.0	0.0	0.0	16.1	170.1	38.8	208.9
1983	29.9	55.4	2.6	18.2	0.3	4.7	0.3	2.3	1.8	15.1	45.3	0.0	0.0	0.0	16.4	147.1	39.2	186.3
1984	31.3	59.9	8.1	18.6	0.2	5.5	0.3	0.9	1.1	15.5	50.3	0.0	0.0	0.0	20.1	161.6	46.7	208.3
1985	32.9	56.3	11.1	16.0	(s)	4.7	0.3	2.8	0.9	13.8	49.7	0.0	0.0	0.0	21.2	160.2	49.8	210.0
1986	31.0	51.5	10.6	14.3	(s)	4.4	0.3	2.6	0.5	14.2	47.0	0.0	0.0	0.0	20.6	150.1	47.5	197.6
1987	33.0	59.7	9.7	15.5	(s)	4.2	0.4	2.4	0.6	15.9	48.6	0.0	0.0	0.0	22.9	164.2	52.2	216.4
1988	30.6	59.2	6.9	12.9	(s)	3.6	0.3	2.4	0.9	19.1	46.3	0.0	0.0	0.0	23.8	159.8	53.8	213.7
1989	33.8	59.7	6.1	13.4	(s)	6.4	0.3	2.5	0.2	19.2	48.2	0.0	0.0	0.0	24.9	166.6	R 55.9	R 222.5
1990	41.2	73.8	6.3	13.2	(s)	2.4	0.4	2.2	0.2	19.3	R 44.1	f 0.0	f 1.8	f 0.0	26.4	f 187.2	R 57.7	R f 244.9
1991	41.8	72.4	6.7	15.5	(s)	1.7	0.3	2.6	0.2	13.0	40.2	0.0	1.8	0.0	25.6	181.8	R 55.7	R 237.5
1992	44.9	102.3	5.1	15.8	(s)	2.0	0.3	2.6	0.1	15.5	41.5	0.0	1.3	0.0	25.4	215.3	54.2	269.6
1993	39.9	79.0	5.0	16.0	0.1	4.3	0.3	2.0	0.5	14.6	42.8	0.0	1.3	0.0	25.1	188.1	53.1	241.2
1994	40.6	83.6	6.0	16.1	0.1	3.8	0.3	2.2	0.3	14.9	43.7	0.0	R 1.8	0.0	24.8	R 194.5	51.7	R 246.2
1995	42.5	72.6	4.4	12.8	0.1	4.6	0.3	2.3	0.1	14.3	39.1	0.0	R 1.6	0.0	23.3	R 179.0	48.4	R 227.5
1996	40.2	74.2	5.5	17.9	0.1	4.1	0.3	2.4	(s)	16.4	46.8	0.0	1.7	0.0	23.5	186.4	48.9	235.3

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> "Other" is the subtotal of 16 petroleum products. See a full description in Appendix A, Section 4, "Other Petroleum Products."

<sup>d</sup> Includes geothermal, wind, photovoltaic, and solar thermal energy. See Appendix A, Section 5, for explanation of estimation methodology.

<sup>e</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>f</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

--=Not applicable. NA=Not available.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 321. Transportation Energy Consumption Estimates, Selected Years 1960-1996, Wyoming**

Year	Coal <sup>a</sup>	Natural Gas <sup>b</sup>	Petroleum								Ethanol <sup>c</sup>	Electricity <sup>a</sup>	Net Energy	Electrical System Energy Losses <sup>d</sup>	Total <sup>c</sup>
			Aviation Gasoline <sup>a</sup>	Distillate Fuel <sup>a</sup>	Jet Fuel <sup>a</sup>	LPG <sup>a</sup>	Lubricants <sup>a</sup>	Motor Gasoline	Residual Fuel <sup>a</sup>	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Gallons	Million Kilowatthours			
1960	2	2	132	1,801	56	70	91	4,038	951	7,138	0	0	-	0	-
1965	(s)	2	217	1,864	74	49	81	4,157	1,173	7,615	0	0	-	0	-
1970	(s)	6	256	3,072	128	91	85	5,262	469	9,363	0	0	-	0	-
1975	(s)	5	218	3,965	124	116	108	6,691	0	11,223	0	0	-	0	-
1980	0	6	108	6,419	162	73	151	8,034	0	14,946	0	0	-	0	-
1981	0	6	85	6,223	249	118	144	8,116	3	14,938	0	0	-	0	-
1982	0	7	60	5,049	214	129	132	7,712	9	13,305	0	0	-	0	-
1983	0	5	55	3,478	155	138	138	7,352	0	11,336	0	0	-	0	-
1984	0	5	57	3,532	159	64	147	7,962	0	11,922	0	0	-	0	-
1985	0	5	51	4,287	154	45	137	R 7,073	(s)	R 11,747	0	0	-	0	-
1986	0	5	50	3,906	144	53	134	R 6,579	0	R 10,866	0	0	-	0	-
1987	0	6	51	5,697	202	50	151	R 6,754	0	R 12,905	0	0	-	0	-
1988	0	6	53	6,767	193	51	146	R 6,897	0	R 14,108	0	0	-	0	-
1989	0	5	39	7,087	160	35	150	R 7,015	(s)	R 14,487	0	0	-	0	-
1990	0	5	35	6,993	143	27	154	R 6,613	0	R 13,965	R e 6,110	0	-	0	-
1991	0	8	28	5,705	119	49	138	R 6,623	0	R 12,662	R 4,843	0	-	0	-
1992	0	8	25	6,189	153	27	141	R 6,861	0	R 13,396	R 5,886	0	-	0	-
1993	0	7	20	6,965	140	29	143	R 7,178	0	R 14,475	R 6,569	0	-	0	-
1994	0	6	33	6,856	152	38	150	R 7,259	0	R 14,488	R 7,386	0	-	0	-
1995	0	7	179	8,624	160	17	147	7,486	0	16,612	R 5,537	0	-	0	-
1996	0	8	213	8,892	151	17	143	7,418	0	16,833	2,004	0	-	0	-

**Trillion Btu**

1960	(s)	1.8	0.7	10.5	0.3	0.3	0.5	21.2	6.0	39.5	0.0	0.0	41.3	0.0	41.3
1965	(s)	2.0	1.1	10.9	0.4	0.2	0.5	21.8	7.4	42.3	0.0	0.0	44.3	0.0	44.3
1970	(s)	6.0	1.3	17.9	0.7	0.3	0.5	27.6	2.9	51.3	0.0	0.0	57.4	0.0	57.4
1975	(s)	4.9	1.1	23.1	0.7	0.4	0.7	35.2	0.0	61.1	0.0	0.0	66.1	0.0	66.1
1980	0.0	6.2	0.5	37.4	0.9	0.3	0.9	42.2	0.0	82.2	0.0	0.0	88.4	0.0	88.4
1981	0.0	6.7	0.4	36.2	1.4	0.4	0.9	42.6	(s)	82.0	0.0	0.0	88.7	0.0	88.7
1982	0.0	6.8	0.3	29.4	1.2	0.5	0.8	40.5	0.1	72.7	0.0	0.0	79.5	0.0	79.5
1983	0.0	5.6	0.3	20.3	0.9	0.6	0.8	38.6	0.0	61.4	0.0	0.0	67.0	0.0	67.0
1984	0.0	5.5	0.3	20.6	0.9	0.2	0.9	41.8	0.0	64.7	0.0	0.0	70.2	0.0	70.2
1985	0.0	5.2	0.3	25.0	0.9	0.2	0.8	R 37.2	(s)	64.2	0.0	0.0	69.5	0.0	69.5
1986	0.0	5.3	0.3	22.8	0.8	0.2	0.8	R 34.6	0.0	R 59.4	0.0	0.0	R 64.7	0.0	R 64.7
1987	0.0	6.4	0.3	33.2	1.1	0.2	0.9	R 35.5	0.0	R 71.2	0.0	0.0	77.5	0.0	77.5
1988	0.0	6.0	0.3	39.4	1.1	0.2	0.9	R 36.2	0.0	78.1	0.0	0.0	R 84.0	0.0	R 84.0
1989	0.0	5.7	0.2	41.3	0.9	0.1	0.9	R 36.9	(s)	80.3	0.0	0.0	85.9	0.0	85.9
1990	0.0	5.6	0.2	40.7	0.8	0.1	0.9	R 34.7	0.0	R 77.5	R e 0.5	0.0	R e 83.0	0.0	R e 83.0
1991	0.0	8.3	0.1	33.2	0.7	0.2	0.8	34.8	0.0	69.8	R 0.4	0.0	78.1	0.0	78.1
1992	0.0	8.4	0.1	36.1	0.9	0.1	0.9	R 36.0	0.0	74.0	R 0.4	0.0	82.4	0.0	82.4
1993	0.0	7.2	0.1	40.6	0.8	0.1	0.9	37.7	0.0	80.1	R 0.5	0.0	87.3	0.0	87.3
1994	0.0	6.6	0.2	39.9	0.8	0.1	0.9	38.1	0.0	80.1	R 0.6	0.0	86.7	0.0	86.7
1995	0.0	7.7	0.9	50.2	0.9	0.1	0.9	39.3	0.0	92.3	0.4	0.0	100.0	0.0	100.0
1996	0.0	8.7	1.1	51.8	0.9	0.1	0.9	39.0	0.0	93.6	0.2	0.0	102.3	0.0	102.3

<sup>a</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>b</sup> Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

<sup>c</sup> Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

<sup>d</sup> Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

<sup>e</sup> There is a discontinuity in this time series between 1989 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1990.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

**Table 322. Estimates of Energy Input at Electric Utilities, Selected Years 1960-1996, Wyoming**

Year	Coal			Natural Gas <sup>a</sup>	Petroleum				Nuclear Electric Power	Hydroelectric Power <sup>e</sup>	Wood and Waste	Geothermal Energy	Other <sup>b,f</sup>	Total <sup>g</sup>
	Bituminous Coal and Lignite	Anthracite	Total		Heavy Oil <sup>b,c</sup>	Light Oil <sup>b,d</sup>	Petroleum Coke <sup>b</sup>	Total						
	Thousand Short Tons				Billion Cubic Feet	Thousand Barrels								
1960	815	0	815	1	5	6	0	12	0	609	0	0	0	-
1965	1,941	0	1,941	(s)	15	19	0	34	0	884	0	0	0	-
1970	3,571	0	3,571	2	11	13	0	25	0	1,006	0	0	0	-
1975	6,938	0	6,938	1	112	6	0	118	0	1,120	0	0	0	-
1980	13,498	0	13,498	(s)	0	123	0	123	0	1,108	0	0	0	-
1981	16,559	0	16,559	(s)	0	147	0	147	0	841	0	0	0	-
1982	17,529	0	17,529	(s)	0	115	0	115	0	850	0	0	0	-
1983	16,135	0	16,135	(s)	0	81	0	81	0	1,150	0	0	1	-
1984	18,805	0	18,805	(s)	0	121	0	121	0	1,286	0	0	3	-
1985	21,173	0	21,173	(s)	0	143	0	143	0	1,068	0	0	3	-
1986	17,452	0	17,452	(s)	0	123	0	123	0	1,140	0	0	1	-
1987	22,408	0	22,408	(s)	0	115	0	115	0	768	0	0	(s)	-
1988	23,563	0	23,563	(s)	0	121	0	121	0	789	0	0	(s)	-
1989	21,908	0	21,908	(s)	0	118	0	118	0	680	0	0	(s)	-
1990	23,526	0	23,526	(s)	0	99	0	99	0	645	0	0	0	-
1991	23,115	0	23,115	(s)	0	122	0	122	0	736	0	0	0	-
1992	25,114	0	25,114	(s)	0	100	0	100	0	636	0	0	0	-
1993	24,111	0	24,111	(s)	0	104	0	104	0	787	0	0	0	-
1994	25,350	0	25,350	(s)	0	86	0	86	0	897	0	0	0	-
1995	23,850	0	23,850	(s)	0	128	0	128	0	799	0	0	0	-
1996	24,430	0	24,430	(s)	0	110	0	110	0	1,232	0	0	0	-

**Trillion Btu**

1960	12.1	0.0	12.1	0.7	(s)	(s)	0.0	0.1	0.0	6.6	0.0	0.0	0.0	19.4
1965	31.0	0.0	31.0	0.2	0.1	0.1	0.0	0.2	0.0	9.2	0.0	0.0	0.0	40.6
1970	59.0	0.0	59.0	2.4	0.1	0.1	0.0	0.1	0.0	10.6	0.0	0.0	0.0	72.2
1975	115.4	0.0	115.4	0.4	0.7	(s)	0.0	0.7	0.0	11.7	0.0	0.0	0.0	128.2
1980	237.4	0.0	237.4	0.2	0.0	0.7	0.0	0.7	0.0	11.5	0.0	0.0	0.0	249.8
1981	286.7	0.0	286.7	0.1	0.0	0.9	0.0	0.9	0.0	8.8	0.0	0.0	0.0	296.4
1982	303.9	0.0	303.9	0.1	0.0	0.7	0.0	0.7	0.0	8.9	0.0	0.0	0.0	313.6
1983	281.2	0.0	281.2	0.1	0.0	0.5	0.0	0.5	0.0	12.1	0.0	0.0	(s)	293.9
1984	325.2	0.0	325.2	0.1	0.0	0.7	0.0	0.7	0.0	13.4	0.0	0.0	(s)	339.4
1985	370.7	0.0	370.7	0.1	0.0	0.8	0.0	0.8	0.0	11.2	0.0	0.0	(s)	382.9
1986	303.9	0.0	303.9	0.1	0.0	0.7	0.0	0.7	0.0	11.9	0.0	0.0	(s)	316.7
1987	393.4	0.0	393.4	0.1	0.0	0.7	0.0	0.7	0.0	8.0	0.0	0.0	(s)	402.1
1988	412.6	0.0	412.6	0.2	0.0	0.7	0.0	0.7	0.0	8.1	0.0	0.0	(s)	421.7
1989	385.1	0.0	385.1	0.1	0.0	0.7	0.0	0.7	0.0	R 7.1	0.0	0.0	(s)	392.9
1990	414.6	0.0	414.6	0.1	0.0	0.6	0.0	0.6	0.0	R 6.7	0.0	0.0	0.0	421.9
1991	404.8	0.0	404.8	0.1	0.0	0.7	0.0	0.7	0.0	R 7.7	0.0	0.0	0.0	413.2
1992	444.0	0.0	444.0	0.1	0.0	0.6	0.0	0.6	0.0	R 6.6	0.0	0.0	0.0	R 451.3
1993	423.3	0.0	423.3	0.1	0.0	0.6	0.0	0.6	0.0	8.1	0.0	0.0	0.0	432.1
1994	444.4	0.0	444.4	0.1	0.0	0.5	0.0	0.5	0.0	9.2	0.0	0.0	0.0	454.3
1995	416.8	0.0	416.8	0.1	0.0	0.7	0.0	0.7	0.0	8.2	0.0	0.0	0.0	425.9
1996	425.9	0.0	425.9	0.1	0.0	0.6	0.0	0.6	0.0	12.7	0.0	0.0	0.0	439.4

<sup>a</sup> Includes supplemental gaseous fuels.

<sup>b</sup> The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the "Additional Notes" under each type of energy in Appendix A.

<sup>c</sup> Prior to 1980, based on oil used in steam plants. Since 1980, heavy oil includes fuel oil nos. 4, 5, and 6 and residual fuel oils.

<sup>d</sup> Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

<sup>e</sup> If applicable, through 1989, includes all net imports of electricity, and, from 1990, includes only the portion of imports of electricity that is derived from hydroelectric power.

<sup>f</sup> "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.

<sup>g</sup> If applicable, from 1990, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in appendix Table A8.

R=Revised data.

- =Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the appendices to this report.

## Appendix A

# Documentation

## Section 1. Documentation Guide

Appendix A of the *State Energy Data Report* describes how the estimates in the report were derived by the Combined State Energy Data System (CSEDS). The following five sections, one for each energy source, provide: descriptions of all the data series that are entered into CSEDS; the formulas applied in CSEDS for creating additional data series; and notes on special circumstances for any series.

Appendix B is an alphabetical listing of the variable names and formulas used in the system; Appendix C lists the sources of all data series entered into CSEDS; Appendix D lists the conversion factors used in CSEDS to convert physical units into British thermal units and gives the sources for those factors; Appendix E provides the U.S. Department of Commerce, Bureau of the Census, resident population data used in per capita calculations; Appendix F presents metric and other physical conversion factors for information, although they are not currently used in CSEDS; Appendix G lists carbon dioxide emission factors for coal consumed by State for information, although they are not used in CSEDS; Appendix H is a summary of the changes made in CSEDS since the last report, which was released in December 1997; and Appendix I is a list of other Energy Information Administration reports containing State-level data.

There are 475 variables used in CSEDS to create the estimates in this report. All of the variables are identified by seven-letter names, such as MGTCPAL. In the following example, MGTCPAL is the identifying code for data on motor gasoline total consumption in physical units in Alabama

<b>Characters:</b>	<b>MG</b>	<b>TC</b>	<b>P</b>	<b>AL</b>
<b>Positions:</b>	1 and 2	3 and 4	5	6 and 7
<b>Identity:</b>	Type of Energy	Energy activity or consumption end-use sector	Type of data	Geographic

The type of energy categories in CSEDS, which are represented by the first two letters of the variable name, are:

- AB = aviation gasoline blending components
- AC = anthracite
- AI = aluminum ingot
- AR = asphalt and road oil
- AS = asphalt
- AV = aviation gasoline
- BC = bituminous coal and lignite
- BM = biomass
- CC = coal coke
- CG = corrugated and solid fiber boxes
- CL = coal
- CO = crude oil, including lease condensate
- CT = catalytic cracking
- DF = distillate fuel
- DK = distillate fuel, including kerosene-type jet fuel

EL	=	electricity
EN	=	ethanol
ER	=	electricity generated from renewable energy
ES	=	electricity sales
EX	=	electricity generated from non-renewable energy
FF	=	fossil fuels
FN	=	petrochemical feedstocks, naphtha less than 401° F
FO	=	petrochemical feedstocks, other oils equal to or greater than 401° F
FS	=	petrochemical feedstocks, still gas
GE	=	geothermal energy
GO	=	geothermal, wind, photovoltaic, and solar thermal energy
HP	=	hydroelectric power from pumped storage
HV	=	conventional hydroelectric power
HY	=	hydroelectric power, all types
JF	=	jet fuel
JK	=	jet fuel, kerosene-type
JN	=	jet fuel, naphtha-type
KS	=	kerosene
LG	=	liquefied petroleum gases
LO	=	electrical system energy losses
LU	=	lubricants
MB	=	motor gasoline blending components
MG	=	motor gasoline
MS	=	miscellaneous petroleum products
NA	=	natural gasoline (including isopentane)
NG	=	natural gas
NU	=	nuclear electric power
OC	=	organic chemicals
PA	=	all petroleum products
PC	=	petroleum coke
PI	=	paints and allied products
PL	=	plant condensate
PO	=	other petroleum products
PP	=	pentanes plus
RD	=	road oil
RE	=	renewable energy
RF	=	residual fuel
SG	=	still gas
SN	=	special naphtha
SO	=	photovoltaic and solar thermal energy

TE	=	total energy
TN	=	total net energy
TP	=	resident population
UO	=	unfinished oils
US	=	unfractionated stream
WD	=	wood
WN	=	wind, photovoltaic, and solar thermal energy
WS	=	waste
WW	=	wood and waste
WX	=	waxes
WY	=	wind

The consumption end-use sectors, identified by characters three and four of each variable name, are:

AC	=	transportation sector consumption
CC	=	commercial sector consumption
EU	=	electric utility sector consumption
IC	=	industrial sector consumption
RC	=	residential sector consumption
TC	=	total consumption of all sectors

Many other characters occur in the third and fourth positions of the variable names for the sales, deliveries, and distribution data series used in the intermediate calculations in CSEDS to derive the end-use consumption estimates. Examples of these codes are:

AG	=	sales for use in agriculture
BK	=	sales for use in vessel bunkering
IN	=	deliveries to the industrial sector
OD	=	distribution to other industrial users

Combining the first two components (the first four letters) produces variable names, such as:

MGAG	=	motor gasoline sold for use in agriculture
MGAC	=	motor gasoline consumed by the transportation sector
NGIN	=	natural gas delivered to the industrial sector
NGIC	=	natural gas consumed by the industrial sector

The fifth character of the variable names in CSEDS identifies the type of data by using one of the following letters:



- B = data in British thermal units (Btu)  
 K = factor for converting data from physical units to Btu  
 M = data in alternative physical units  
 P = data in standardized physical units  
 S = share or ratio expressed as a fraction  
 V = value added in manufacture

Data entered into CSEDS are in physical units, represented by a “P” in the fifth character; for example, coal data are in thousand short tons, petroleum data are in thousand barrels, and natural gas data are in million cubic feet. In a few cases, data are obtained from the source documents in different units, such as thousand gallons instead of thousand barrels, and are represented by an “M” until converted in CSEDS to the unit that is consistent with other variables. Conversion factors, represented by a “K” in the fifth character, are applied to the physical unit data to convert the data to British thermal units, a common unit for all forms of energy. The derived data series in thousand British thermal units are represented by “B” in the fifth character. In a few cases, consumption estimates are derived by calculating shares of aggregated consumption data. The fractions used to calculate the consumption shares are identified by an “S” in the fifth character. The consumption estimates for some petroleum products are based on the value added in the manufacturing process by related industries in each State. The data series for those industry activities are in dollars, and the variable names contain “V” in the fifth character.

The last two characters of each variable name are for geographic identification. Geographic areas used in CSEDS are the 50 States and the District of Columbia (represented by the U.S. Postal Service State abbreviations) and the United States as a whole. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia, and the variables used in those calculations are identified by “48” in the last two characters of the names. The geographic area codes used in CSEDS are shown in Table A1.

Throughout this report, the term “State” includes the District of Columbia. Throughout this documentation, “ZZ” is used as a geographic identifier to

**Table A1. Geographic Area Codes Used in the State Energy Data System**

Code	State	Code	State
AK	Alaska	NC	North Carolina
AL	Alabama	ND	North Dakota
AR	Arkansas	NE	Nebraska
AZ	Arizona	NH	New Hampshire
CA	California	NJ	New Jersey
CO	Colorado	NM	New Mexico
CT	Connecticut	NV	Nevada
DC	District of Columbia	NY	New York
DE	Delaware	OH	Ohio
FL	Florida	OK	Oklahoma
GA	Georgia	OR	Oregon
HI	Hawaii	PA	Pennsylvania
IA	Iowa	RI	Rhode Island
ID	Idaho	SC	South Carolina
IL	Illinois	SD	South Dakota
IN	Indiana	TN	Tennessee
KS	Kansas	TX	Texas
KY	Kentucky	UT	Utah
LA	Louisiana	VA	Virginia
MA	Massachusetts	VT	Vermont
MD	Maryland	WA	Washington
ME	Maine	WI	Wisconsin
MI	Michigan	WV	West Virginia
MN	Minnesota	WY	Wyoming
MO	Missouri	US	United States
MS	Mississippi	48	The contiguous 48 States and the District of Columbia
MT	Montana		

represent the different State abbreviations that would be interchanged in that position of the variable name.

## Section 2. Coal

Two forms of coal—anthracite (AC) and bituminous coal and lignite (BC)—are added to provide coal totals (CL).

### Anthracite

#### Physical Units

There are seven input data series used to estimate the State end-use consumption of anthracite, and all are in units of thousand short tons. “ZZ” in the variable names is used to represent the two-letter State code that differs for each State:

- ACEUPZZ = anthracite consumed by the electric utilities in each State;
- ACHCPUS = anthracite consumed by the residential and commercial sectors in the United States;
- ACHDPZZ = anthracite distributed to the residential and commercial sectors in each State;
- ACKCPUS = anthracite consumed by coke plants in the United States;
- ACKDPZZ = anthracite distributed to coke plants in each State;
- ACOCPUS = anthracite consumed by other industrial users in the United States; and
- ACODPZZ = anthracite distributed to other industrial users in each State.

The U.S. totals for the four State-level series, ACEUPZZ, ACHDPZZ, ACKDPZZ, and ACOCPZZ, are calculated by summing the State data.

Estimates of anthracite consumed by the residential and commercial sectors combined are made by assuming that anthracite is consumed in proportion to the amount of anthracite distributed to the residential and commercial sectors in each State:

$$\text{ACHCPZZ} = (\text{ACHDPZZ}/\text{ACHDPUS}) * \text{ACHCPUS}$$

Little information is available regarding disaggregating the combined residential and commercial estimates. An estimate of 60 percent to the residential sector and 40 percent to the commercial sector is made for all States and years. Therefore, the residential sector consumption of anthracite, ACRCPPZZ, is estimated:

$$\text{ACRCPPZZ} = \text{ACHCPZZ} * 0.60$$

and the commercial sector consumption, ACCCPZZ, is estimated:

$$\text{ACCCPZZ} = \text{ACHCPZZ} * 0.40$$

To gain a perspective on these estimates: all anthracite consumed in the United States in 1996 accounted for less than 0.3 percent of total coal consumption, and the residential and commercial use of anthracite was less than half of all anthracite consumed.

The industrial sector consumption is estimated by State. An assumption is made that anthracite is consumed by coke plants in proportion to the amount of anthracite distributed to coke plants in each State. It is also assumed that the consumption of anthracite by industrial users other than coke plants is in proportion to the amount of anthracite delivered to the other industrial users in each State. The industrial sector consumption is the sum of anthracite consumed by coke plants and by other industrial users for each State:

$$\text{ACKCPZZ} = (\text{ACKDPZZ}/\text{ACKDPUS}) * \text{ACKCPUS}$$

$$\text{ACOCPZZ} = (\text{ACODPZZ}/\text{ACODPUS}) * \text{ACOCPUS}$$

$$\text{ACICPZZ} = \text{ACKCPZZ} + \text{ACOCPZZ}$$

Total anthracite consumption in each State is the sum of the sectors' consumption:

$$\text{ACTCPZZ} = \text{ACRCPZZ} + \text{ACCCPZZ} + \text{ACICPZZ} + \text{ACEUPZZ}$$

The U.S. anthracite consumption estimates for each of the sectors and the total are calculated as the sum of the States' values.

### **British Thermal Units (Btu)**

Two factors are used for converting anthracite consumption from physical units to Btu. The factors, in million Btu per short ton, are:

ACEUKUS = the factor for converting anthracite consumed in the electric utility sector from short tons to Btu; and

ACNUKUS = the factor for converting anthracite consumed by all sectors other than electric utilities from short tons to Btu.

The industrial sector Btu consumption is estimated in three steps in order to maintain separate series for anthracite used as coking coal (ACKCB) and anthracite consumed by other industrial users (ACOCB):

$$\text{ACKCBZZ} = \text{ACKCPZZ} * \text{ACNUKUS}$$

$$\text{ACOCBZZ} = \text{ACOCPPZZ} * \text{ACNUKUS}$$

$$\text{ACICBZZ} = \text{ACKCBZZ} + \text{ACOCBZZ}$$

The remaining end-use sectors are calculated for all States:

$$\text{ACEUBZZ} = \text{ACEUPZZ} * \text{ACEUKUS}$$

$$\text{ACRCBZZ} = \text{ACRCPZZ} * \text{ACNUKUS}$$

$$\text{ACCCBZZ} = \text{ACCCPZZ} * \text{ACNUKUS}$$

$$\text{ACTCBZZ} = \text{ACRCBZZ} + \text{ACCCBZZ} + \text{ACICBZZ} + \text{ACEUBZZ}$$

Total U.S. end-use consumption estimates are calculated as the sum of the States' data.

### **Additional Notes on Anthracite**

Anthracite consumption at the national level for the residential and commercial sectors (ACHCPUS), coke plants (ACKCPUS), and industries other than coke plants (ACOCBUS) are continuous data series. However, the total coal distribution and anthracite distribution data series used to develop State-level estimates are not continuous.

For 1960 through 1979, State-level anthracite data are not available and the 1980 State data are used to apportion the U.S. totals to the States. From 1980 forward, the data in the distribution series variables—ACKDPZZ, ACODPZZ, and ACHDPZZ—are estimates of actual anthracite consumption rather than the distribution.

For 1980 forward, State-level total coal consumption data are available, but consumption by sector within many States is withheld. Estimates of the withheld sector consumption of total coal are derived by using the distribution series for the residential and commercial sectors to fill in withheld residential and commercial consumption. In most States, this leaves only one sector withheld and it can be derived by subtracting known sectors from the State total. This gives total coal consumption estimates for the end-use sectors that are compatible with State coal consumption data published in other EIA reports. Anthracite consumption is then derived by using anthracite distribution data to estimate consumption within each sector and State. These estimates equal U.S. totals for anthracite consumption by sector contained in other EIA databases.

## Bituminous Coal and Lignite

### **Physical Units**

Eight data series are used to estimate bituminous coal and lignite consumption. They are consumption and distribution data, and they are all in units of thousand short tons:

BCACPUS = bituminous coal and lignite consumed by the transportation sector in the United States;

BCEUPZZ = bituminous coal and lignite consumed by the electric utilities in each State;

BCHCPUS = bituminous coal and lignite consumed by the residential and commercial sectors in the United States;

BCHDPZZ = bituminous coal and lignite distributed to the residential and commercial sectors in each State.

BCKCPUS = bituminous coal and lignite consumed by coke plants in the United States;

BCKDPZZ = bituminous coal and lignite distributed to coke plants in each State;

BCOCPUS = bituminous coal and lignite consumed by other industrial users in the United States; and  
 BCODPZZ = bituminous coal and lignite distributed to other industrial users in each State.

The U.S. totals for the four State-level series, BCEUPZZ, BCHDPZZ, BCKDPZZ, and BCODPZZ, are calculated by summing the State data.

An assumption is made that bituminous coal and lignite are consumed by the residential and commercial sectors combined in proportion to the amount of bituminous coal and lignite distributed to the residential and commercial sectors in each State:

$$BCHCPZZ = (BCHDPZZ / BCHDPUS) * BCHCPUS$$

Little information exists for disaggregating the combined residential and commercial estimates. An estimate of 35 percent to the residential sector and 65 percent to the commercial sector is made for all States and years. That is, the residential sector consumption, BCRCPZZ, is estimated:

$$BCRCPZZ = BCHCPZZ * 0.35$$

and the commercial sector consumption, BCCCPZZ, is estimated:

$$BCCCPZZ = BCHCPZZ * 0.65$$

To gain a perspective on these estimates: bituminous coal and lignite consumed by residential and commercial users in 1996 accounted for only 0.5 percent of all bituminous coal and lignite consumed—that is, 5 million short tons out of the 981 million short tons consumed in 1996.

Consumption in the industrial sector is estimated by State. An assumption is made that bituminous coal and lignite is consumed by coke plants in proportion to the amount of bituminous coal and lignite distributed to coke plants in each State. It is also assumed that the consumption of bituminous coal and lignite by industrial users other than coke plants is in proportion to the amount delivered to other industrial users in each State. The industrial sector consumption is the sum of bituminous coal and lignite consumed by coke plants and by other industrial users for each State:

$$BCKCPZZ = (BCKDPZZ / BCKDPUS) * BCKCPUS$$

$$BCOCPZZ = (BCODPZZ / BCODPUS) * BCOCPUS$$

$$BCICPZZ = BCKCPZZ + BCOCPZZ$$

There are no data available for estimating the transportation sector's consumption of bituminous coal and lignite by State. The quantity would be very small. The transportation sector accounted for only 1 percent of the national total consumption in 1960 and none since 1978. An assumption is made that when transportation sector consumption exists, the consumption by State, BCACPZZ, is in proportion to the share of the U.S. industrial sector attributed to each State:

$$BCACPZZ = (BCICPZZ / BCICPUS) * BCACPUS$$

Total consumption in each State, BCTCPZZ, is the sum of the sectors' consumption:

$$BCTCPZZ = BCRCPZZ + BCCCPZZ + BCICPZZ + BCACPZZ + BCEUPZZ$$

The U.S. bituminous coal and lignite consumption estimates for each of the sectors and the total are calculated as the sum of the States' values.

**British Thermal Units (Btu)**

Three factors are used for converting bituminous coal and lignite from physical units to Btu. The three factors, State-specific for each year, in units of million Btu per short ton, are:

- BCEUKZZ = the factor for converting bituminous coal and lignite consumed by the electric utility sector in each State from short tons to Btu;
- BCHCKZZ = the factor for converting bituminous coal and lignite consumed by the residential and commercial sectors in each State from short tons to Btu; and
- BCOCKZZ = the factor for converting bituminous coal and lignite consumed by other industrial users in each State from short tons to Btu.

The electric utility factor for each State is applied to estimate bituminous coal and lignite consumed by electric utilities in Btu:

$$\text{BCEUBZZ} = \text{BCEUPZZ} * \text{BCEUKZZ}$$

The residential and commercial sectors' State factor is applied to estimate bituminous coal and lignite consumed by the two sectors in Btu:

$$\text{BCRCBZZ} = \text{BCRCPZZ} * \text{BCHCKZZ}$$

$$\text{BCCCBZZ} = \text{BCCCPZZ} * \text{BCHCKZZ}$$

The industrial sector Btu consumption is estimated in three steps. A constant conversion factor of 26.80 million Btu per short ton is used for coking coal consumption for all years. The conversion factor for industrial users other than coke plants in each State is applied to other industrial users sector consumption. The industrial sector Btu consumption is then estimated by adding coking coal Btu consumption and other industrial users Btu consumption:

$$\text{BCKCBZZ} = \text{BCKCPZZ} * 26.80$$

$$\text{BCOCBZZ} = \text{BCOCPZZ} * \text{BCOCKZZ}$$

$$\text{BCICBZZ} = \text{BCKCBZZ} + \text{BCOCBZZ}$$

The transportation sector Btu consumption is estimated by applying the other industrial users' State factor to the transportation consumption:

$$\text{BCACBZZ} = \text{BCACPZZ} * \text{BCOCKZZ}$$

Total consumption for each State is the sum of the sectors' consumption:

$$\text{BCTCBZZ} = \text{BCRCBZZ} + \text{BCCCBZZ} + \text{BCICBZZ} + \text{BCACBZZ} + \text{BCEUBZZ}$$

The U.S. consumption estimates in Btu are calculated by summing the State values for each of the data series.

***Additional Notes for Bituminous Coal and Lignite***

1. Bituminous coal and lignite consumption at the national level for the residential and commercial sectors (BCHCPUS), coke plants (BCKCPUS), and industries other than coke plants (BCOCPUS) are continuous data series. However, the distribution data series used to develop State-level estimates by end-use sector are not continuous.

For 1960 through 1979, State-level bituminous coal and lignite distribution data are used to apportion the U.S. consumption data to the States. From 1980 forward, the data in the distribution series variables—BCKDPZZ, BCODPZZ, and BCHDPZZ—are estimates of actual bituminous coal and lignite consumption rather than the distribution data used for the previous years.

For 1980 forward, State-level total coal consumption data are available, but data for consumption by sector within many States are withheld. Estimates of the withheld sector consumption of total coal are derived by using the distribution series for the residential and commercial sectors to fill in withheld residential and commercial consumption. In most States, this leaves only one sector withheld and it can be derived by subtracting known sectors from the State total. This gives total coal consumption estimates for the end-use sectors that are compatible with State coal consumption data published in other EIA reports. Anthracite consumption is derived by using anthracite distribution data to estimate consumption within each sector and State that sum to the U.S. totals for anthracite consumption by sector contained in other EIA databases. Bituminous coal and lignite consumption for each sector and State is, then, the difference between the total coal consumption estimates and anthracite consumption estimates.

2. Prior to 1974, data for distribution of bituminous coal and lignite by State included several groupings of States for which separate State data were unavailable. These groupings were: (1) Maine, New Hampshire, Vermont, and Rhode Island; (2) North Dakota and South Dakota; (3) Delaware and Maryland; (4) Georgia and Florida; (5) Alabama and Mississippi; (6) Arkansas, Louisiana, Oklahoma, and Texas; (7) Montana and Idaho; (8) Arizona and Nevada; and (9) Washington and Oregon. Beginning with 1974, individual State distribution data became available. To estimate the 1960 through 1973 State distribution data, the combined States were disaggregated in proportion to the individual States' shares of each similar State grouping in 1974.

3. Total coal consumption by State for 1980 through 1989 published in the EIA *Quarterly Coal Report* do not sum to the U.S. totals due to a quantity called "Unknown" in the source tables. This unknown coal consumption is assumed to be bituminous coal and lignite and is added to the residential, commercial, and "other industrial" sectors of

Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia.

## Coal

### Physical Units

All coal totals are the sum of the anthracite and bituminous coal and lignite estimates. It is assumed that no anthracite is consumed by the transportation sector. The calculations for each State and the U.S. total are:

$$\begin{aligned} \text{CLRCP} &= \text{ACRCP} + \text{BCRCP} \\ \text{CLCCP} &= \text{ACCCP} + \text{BCCCP} \\ \text{CLICP} &= \text{ACICP} + \text{BCICP} \\ \text{CLACP} &= \text{BCACP} \\ \text{CLEUP} &= \text{ACEUP} + \text{BCEUP} \\ \text{CLTCP} &= \text{ACTCP} + \text{BCTCP} \end{aligned}$$

### British Thermal Units (Btu)

Estimates of total coal consumption in Btu for each State and the U.S. are calculated:

$$\begin{aligned} \text{CLRCB} &= \text{ACRCB} + \text{BCRCB} \\ \text{CLCCB} &= \text{ACCCB} + \text{BCCCB} \\ \text{CLICB} &= \text{ACICB} + \text{BCICB} \\ \text{CLACB} &= \text{BCACB} \\ \text{CLEUB} &= \text{ACEUB} + \text{BCEUB} \\ \text{CLTCB} &= \text{ACTCB} + \text{BCTCB} \end{aligned}$$

Additional calculations are performed in the Combined State Energy Data System (CSEDS) to provide coal consumption estimates for the price and expenditure calculations published in the *State Energy Price and Expenditure Report*. Total coal used at coke plants (CLKCB) and total coal

consumed by all other industrial users (CLOCP and CLOCB) are calculated at the State and U.S. levels:

$$\begin{aligned} \text{CLKCB} &= \text{ACKCB} + \text{BCKCB} \\ \text{CLOCP} &= \text{ACOCP} + \text{BCOCP} \\ \text{CLOCB} &= \text{ACOCB} + \text{BCOCB} \end{aligned}$$

## Net Imports of Coal Coke

### Physical Units

Net imports of coal coke is a component of total U.S. energy consumption. There is no attempt to estimate State allocations of this energy source. All of it is considered to be used by the industrial sector. In the *State Energy Data Report*, net imports of coal coke is included in the U.S. data but not in the State-level data in all tables of total energy consumption and industrial sector energy consumption. Variables for net imports of coal coke into the United States are:

$$\begin{aligned} \text{CCIMPUS} &= \text{coal coke imported into the United States, in thousand short tons; and} \\ \text{CCEXPUS} &= \text{coal coke exported from the United States, in thousand short tons.} \end{aligned}$$

Net imports is calculated:

$$\text{CCNIPUS} = \text{CCIMPUS} - \text{CCEXPUS}$$

### British Thermal Units (Btu)

The factor for converting coal coke from short tons to Btu is 24.80 million Btu per short ton:

$$\begin{aligned} \text{CCIMBUS} &= \text{CCIMPUS} * 24.80 \\ \text{CCEXBUS} &= \text{CCEXPUS} * 24.80 \\ \text{CCNIBUS} &= \text{CCIMBUS} - \text{CCEXBUS} \end{aligned}$$

## Section 3. Natural Gas

### Physical Units

Six natural gas data series are used to derive the natural gas consumption estimates in the Combined State Energy Data System (CSEDS). Three of these data series are deliveries of natural gas to the end user by State and are used as consumption because actual consumption data at these levels are not available. The sources for the natural gas data are the reports in the *Natural Gas Annual* series published by the Energy Information Administration (EIA) and its predecessors. These series, in million cubic feet, for each State are as follows (the two-letter State code is represented by "ZZ" in the following variable names):

- NGCCPZZ = natural gas delivered to the commercial sector (includes gas used by nonmanufacturing organizations, such as hotels, restaurants, retail stores, laundries, and other service enterprises, and gas used in agriculture, forestry, and fisheries) plus natural gas delivered to other consumers (includes deliveries to municipalities and public authorities for institutional heating and street lighting);
- NGEUPZZ = natural gas consumed by electric utilities;
- NGINPZZ = a portion of the natural gas delivered to the industrial sector (includes gas used as fuel and feedstock in chemical plants and to produce carbon black);
- NGLEPZZ = natural gas consumed as lease fuel;
- NGPLPZZ = natural gas consumed as plant fuel;
- NGPZPZZ = natural gas consumed as pipeline fuel;
- NGRCPZZ = natural gas delivered to the residential sector; and
- NGVHPZZ = natural gas delivered for use as vehicle fuel.

The U.S. totals of these independent variables are calculated as the sum of the States' values.

The data are combined into the four major end-use sectors used in CSEDS as closely as possible. However, natural gas data are collected by using

different aggregations of users. The industrial sector in CSEDS is intended to contain energy used in agriculture, forestry, and fisheries. For natural gas, these categories are reported with commercial use of natural gas (the series called NGCCPZZ in CSEDS) and cannot be separately identified. No adjustment for this end-use inconsistency could be made in CSEDS.

The residential sector's consumption of natural gas is represented by the variable for deliveries to the residential sector, NGRCPZZ.

The commercial sector's consumption of natural gas is represented by the variable for deliveries to the commercial sector, NGCCPZZ.

The industrial sector's consumption of natural gas in CSEDS, NGICPZZ, is estimated to be the sum of natural gas delivered to the industrial sector, NGINPZZ, natural gas consumed as lease fuel, NGLPZZ, and natural gas consumed as plant fuel, NGPLPZZ. The source document reports lease and plant fuel combined for 1960 through 1992; the combined data series is stored as NGLPZZ in CSEDS.

$$\text{NGICPZZ} = \text{NGINPZZ} + \text{NGLPZZ} + \text{NGPLPZZ}$$

The transportation sector's consumption of natural gas, NGACPZZ, is the sum of natural gas consumed in pipeline operations, primarily in compressors, NGPZPZZ, and natural gas delivered for use as vehicle fuel, NGVHPZZ. Prior to 1990, the small amounts of natural gas consumed as vehicle fuel are included in the commercial sector consumption and cannot be identified separately; therefore, NGVHPZZ is zero prior to 1990.

$$\text{NGACPZZ} = \text{NGPZPZZ} + \text{NGVHPZZ}$$

Electric utilities' consumption of natural gas is represented by the data series NGEUPZZ.

The total consumption of natural gas, estimated for each State, is the sum of the consumption by the end-use sectors and electric utilities:

$$\text{NGTCPZZ} = \text{NGRCPZZ} + \text{NGCCPZZ} + \text{NGICPZZ} + \text{NGACPZZ} + \text{NGEUPZZ}$$

The U.S. consumption estimates for each of the sectors and the U.S. total are calculated as the sum of the States' values.

### **British Thermal Units (Btu)**

Three factors for each State are used for converting the consumption of natural gas from its physical units of million cubic feet into thousand Btu per cubic foot. Two of these State-level factors are from sources listed in Appendix C:

NGEUKZZ = The factor for converting natural gas consumed by electric utilities from physical units to Btu; and

NGTCKZZ = The factor for converting natural gas consumed by all sectors from physical units to Btu.

These two factors are used to derive a third factor, NGNUKZZ, for converting natural gas used by all sectors other than electric utilities from physical units to Btu:

$$\text{NGTCBZZ} = \text{NGTCPZZ} * \text{NGTCKZZ}$$

$$\text{NGEUBZZ} = \text{NGEUPZZ} * \text{NGEUKZZ}$$

$$\text{NGNUKZZ} = (\text{NGTCBZZ} - \text{NGEUBZZ}) / (\text{NGTCPZZ} - \text{NGEUPZZ})$$

Natural gas consumption in Btu for the residential, commercial, industrial, and transportation sectors in each State is calculated by multiplying the physical unit data by the factor NGNUKZZ, such as:

$$\text{NGACBZZ} = \text{NGACPZZ} * \text{NGNUKZZ}$$

$$\text{NGCCBZZ} = \text{NGCCPZZ} * \text{NGNUKZZ}$$

The U.S. consumption estimates in Btu for each of the sectors and the U.S. total are calculated as the sum of the States' Btu values:

$$\text{NGTCBUS} = \Sigma \text{NGTCBZZ}$$

$$\text{NGEUBUS} = \Sigma \text{NGEUBZZ}$$

$$\text{NGACBUS} = \Sigma \text{NGACBZZ}$$

$$\text{NGCCBUS} = \Sigma \text{NGCCBZZ}$$

Prior to 1972, conversion factors for natural gas consumed by electric utilities were not collected; therefore, the factor for all natural gas consumed (NGTCKZZ) is used for electric utilities (NGEUKZZ) and for the other sectors (NGNUKZZ) for 1963 through 1971. Prior to 1963, State-level conversion factors for natural gas consumption were not collected and a standard factor of 1.035 thousand Btu per cubic foot is used for all sectors in all States for 1960 through 1962.

### **Additional Calculations**

Although CSEDS does not use U.S.-level conversion factors for calculating natural gas consumption, these factors are calculated by CSEDS for reference and are shown in the natural gas tables in Appendix D:

$$\text{NGEUKUS} = \text{NGEUBUS} / \text{NGEUPUS}$$

$$\text{NGTCKUS} = \text{NGTCBUS} / \text{NGTCPUS}$$

$$\text{NGNUKUS} = (\text{NGTCBUS} - \text{NGEUBUS}) / (\text{NGTCPUS} - \text{NGEUPUS})$$

To produce price and expenditure data for the *State Energy Price and Expenditure Report (SEPER)*, CSEDS differentiates between natural gas used in the transportation sector as pipeline fuel, which is not sold and has no price, and natural gas purchased and consumed as vehicle fuel. CSEDS also differentiates between natural gas used as lease and plant fuel by the natural gas industry, which is not costed, and natural gas purchased by industrial consumers. Btu values are calculated in CSEDS for use in *SEPER*:

$$\text{NGPZBZZ} = \text{NGPZPZZ} * \text{NGNUKZZ}$$

$$\text{NGVHBZZ} = \text{NGVHPZZ} * \text{NGNUKZZ}$$

$$\text{NGLPPZZ} = \text{NGLEPZZ} + \text{NGPLPZZ}$$

$$\text{NGLPBZZ} = \text{NGLPPZZ} * \text{NGNUKZZ}$$

The U.S. totals for each series are calculated as the sum of the States' values.



## Section 4. Petroleum

### Petroleum Overview

The 27 petroleum products included in the Combined State Energy Data System (CSEDS) are explained in this section. For 12 of these products, the means of estimating their individual consumption by State is described in individual sections. The 12 petroleum products are:

- asphalt (AS)
- aviation gasoline (AV)
- distillate fuel (DF)
- jet fuel, kerosene-type (JK)
- jet fuel, naphtha-type (JN)
- kerosene (KS)
- liquefied petroleum gases (LG)
- lubricants (LU)
- motor gasoline (MG)
- petroleum coke (PC)
- residual fuel (RF)
- road oil (RD)

The remaining 15 products are described in the section “Other Petroleum Products” and include the following:

- crude oil, including lease condensate (CO)
- miscellaneous petroleum products (MS)
- natural gasoline (NA) (including isopentane)
- petroleum feedstocks, naphtha less than 401° F (FN)
- petroleum feedstocks, other oils equal to or greater than 401° F (FO)
- petroleum feedstocks, still gas (FS)
- plant condensate (PL)
- pentanes plus (PP)
- special naphthas (SN)

- still gas (SG)
- unfractionated stream (US)
- waxes (WX)
- unfinished oils (UO)
- motor gasoline blending components (MB)
- aviation gasoline blending components (AB)

The last petroleum documentation section, “Petroleum Summaries,” describes how the 27 petroleum products are combined for each major end-use sector’s estimated consumption.

Table A2 summarizes the petroleum products’ end-use assignments in CSEDS. Shown in this table are the first four letters of the seven-letter variable names used to identify all energy sources. The first two letters identify the petroleum product and the next two letters identify the end-use sector. For example, the table shows that the aviation gasoline estimated to be consumed by the transportation sector is all aviation gasoline consumed, and that there is some estimated consumption of lubricants in the industrial and transportation sectors, while distillate fuel is consumed in every sector.

### Asphalt and Road Oil

#### *Physical Units*

There are no State-level consumption data for asphalt and road oil available. Therefore, the State-level sales data are used to apportion the national consumption numbers to the States.

The asphalt and road oil sales data are in short tons, while the consumption data are in thousand barrels. Because the sales data are used only for

Table A2. Summary of Petroleum Products in the State Energy Data System

Petroleum Products	Residential Sector Estimated Consumption (RC)		Commercial Sector Estimated Consumption (CC)		Industrial Sector Estimated Consumption (IC)		Transportation Sector Estimated Consumption (AC)		Electric Utility Sector Estimated Consumption (EU)		Total Estimated Consumption (TC)
Asphalt and Road Oil (AR)					ARIC				=		ARTC
Aviation Gasoline (AV)					+		AVAC		=		AVTC
Distillate Fuel (DF)	DFRC	+	DFCC	+	DFIC	+	DFAC	+	DFEU	=	DFTC
Jet Fuel, Kerosene (JK)	+		+		+		JKAC		JKEU	=	JKTC
Jet Fuel, Naphtha (JN)							JNAC			=	JNTC
Kerosene (KS)	KSRC	+	KSCC	+	KSIC					=	KSTC
Liquefied Petroleum Gases (LG)	LGRC	+	LGCC	+	LGIC	+	LGAC			=	LGTC
Lubricants (LU)			+		LUIC		LUAC			=	LUTC
Motor Gasoline (MG)			MGCC		MGIC		MGAC			=	MGTC
Residual Fuel (RF)			+		+		+			=	+
Other Petroleum Products (PO)			RFCC		RFIC	+	RFAC	+	RFEU	=	RFTC
					+				+		+
					POIC <sup>1</sup>				PCEU <sup>2</sup>	=	POTC
Total Petroleum (PA)	PARC	+	PACC	+	PAIC	+	PAAC	+	PAEU	=	PATC

<sup>1</sup> The category "Other petroleum products" consumed by the industrial sector comprises crude oil, including lease condensate; unfinished oils; plant condensate; aviation gasoline and motor gasoline blending components; natural gasoline; petroleum feedstocks (naphtha less than 401° F, other oils equal to or

greater than 401° F, and still gas); pentanes plus; special naphthas; still gas; unfractionated stream; waxes; miscellaneous petroleum products; and petroleum coke for industrial use.

<sup>2</sup> Petroleum coke consumed at electric utilities.

apportioning the U.S. consumption data to the States, they do not need to be converted into thousand barrels.

The four data series that are used to estimate consumption of asphalt and road oil are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

- ASINPZZ = asphalt sold for use in the industrial sector of each State, in short tons;
- ASTCPUS = asphalt total consumed in the United States, in thousand barrels;
- RDINPZZ = road oil sold for use in the industrial sector of each State, in short tons; and
- RDTCPUS = road oil total consumed in the United States, in thousand barrels.

All asphalt consumption is assigned to the industrial sector because it is used in construction activity. ASINPZZ represents all asphalt sold as paving products, as roofing products, and for all other uses.

ASTCPUS represents total U.S. consumption of asphalt, and RDTCPUS represents total U.S. consumption of road oil. Both are the "product supplied" data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA). Beginning in 1983, asphalt product supplied includes road oil, and RDTCPUS is entered as zero in CSEDS.

The source of the third variable, RDINPZZ, is the report series "Sales of Asphalt" for 1960 through 1980, published by EIA. This sales series was discontinued after the 1980 report. Values for 1981 and 1982 are estimated as described under "Additional Notes" in this section. Beginning with 1983 data, when road oil is included in asphalt product supplied data in the source publication, RDINPZZ is entered as zero in CSEDS.

To calculate State consumption estimates of asphalt, total sales of asphalt in the United States to the industrial sector is first calculated as the sum of the State data:

$$ASINPUS = \Sigma ASINPZZ$$

Each State's consumption of asphalt in the industrial sector (ASICPZZ) is calculated to be in proportion to each State's sales:

$$\begin{aligned}
 ASICPZZ &= (ASINPZZ / ASINPUS) * ASTCPUS \\
 ASICPUS &= \Sigma ASICPZZ
 \end{aligned}$$

Since all consumption of asphalt is assumed to be in the industrial sector, the total consumption of asphalt in each State equals the industrial sector consumption:

$$ASTCPZZ = ASICPZZ$$

The State sales of road oil are used to create an estimate of State consumption of road oil.

The U.S. total of all road oil sales to the industrial sector is calculated by adding all of the States' sales:

$$RDINPUS = \Sigma RDINPZZ$$

Each State's consumption of road oil in the industrial sector (RDICPZZ) is calculated to be in proportion to each State's sales:

$$\begin{aligned}
 RDICPZZ &= (RDINPZZ / RDINPUS) * RDTCPUS \\
 RDICPUS &= \Sigma RDICPZZ
 \end{aligned}$$

Since all road oil consumption is assumed to be in the industrial sector, the total consumption of road oil in each State equals the industrial sector consumption:

$$RDTCPZZ = RDICPZZ$$

Asphalt and road oil consumption are added together:

$$\begin{aligned}
 ARICPZZ &= ASICPZZ + RDICPZZ \\
 ARICPUS &= \Sigma ARICPZZ \\
 ARTCPZZ &= ASTCPZZ + RDTCPZZ \\
 ARTCPUS &= \Sigma ARTCPZZ
 \end{aligned}$$

**British Thermal Units (Btu)**

Asphalt and road oil have a heat content value of approximately 6.636 million Btu per barrel. This factor is applied to convert asphalt and road oil estimated consumption from physical units to Btu:

$$\begin{aligned} \text{ARICBZZ} &= \text{ARICPZZ} * 6.636 \\ \text{ARICBUS} &= \Sigma \text{ARICBZZ} \end{aligned}$$

Because all asphalt and road oil are assumed to be used by the industrial sector, total asphalt and road oil consumption in each State and in the United States is assumed to equal the industrial sector consumption:

$$\begin{aligned} \text{ARTCBZZ} &= \text{ARICBZZ} \\ \text{ARTCBUS} &= \text{ARICBUS} \end{aligned}$$

**Additional Notes on Asphalt and Road Oil**

Because the Federal Government stopped collecting asphalt and road oil sales data in 1980, the source for these numbers in recent years has been reports published by the Asphalt Institute. There is an inherent problem in the methodology of using sales to estimate consumption because asphalt and road oil sold by a producer in one State may be easily transported across State lines and consumed in a neighboring State. The Asphalt Institute acknowledges this problem and estimates that, in any one year, about 15 States may have consumption estimates as much as 20 percent too high or too low.

Total U.S. consumption of asphalt and road oil are the product supplied data series from the EIA publication *Petroleum Supply Annual*. Beginning with 1983 data, the road oil data series is no longer published separately but is included in the asphalt product supplied. The sum of the two series for all years in CSEDS is a continuous series.

The EIA report series “Sales of Asphalt,” which is the source for road oil sales by State (RDINPZZ) in CSEDS for 1960 through 1980, was discontinued after the 1980 report. For 1981 and 1982, State estimates of road oil sales were created by first converting the annual total U.S. road oil product supplied data into short tons (one short ton contains 5.5 barrels of road oil). Then, the U.S. total road oil product supplied, in short tons, was

disaggregated to each State in proportion to the State’s share of total U.S. asphalt sales as reported in the Asphalt Institute’s *Report on Sales of Asphalt in the U.S.*

**Aviation Gasoline**

**Physical Units**

The three data series used to estimate consumption of aviation gasoline are:

- AVMIPZZ = aviation gasoline issued to the military in each State, in thousand barrels;
- AVNMMZZ = aviation gasoline sold to nonmilitary users in each State, in thousand gallons; and
- AVTCPUS = aviation gasoline total consumed in the United States, in thousand barrels.

The U.S. Department of Transportation, Federal Highway Administration publishes the nonmilitary aviation gasoline sales data by State (AVNMMZZ) in *Highway Statistics*.

AVMIPZZ is the issues of aviation gasoline to the military in each State and is obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

Total U.S. consumption of aviation gasoline (AVTCPUS) is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA).

The State-level data series are summed to provide totals for the United States:

$$\begin{aligned} \text{AVMIPUS} &= \Sigma \text{AVMIPZZ} \\ \text{AVNMMUS} &= \Sigma \text{AVNMMZZ} \end{aligned}$$

The State sales of nonmilitary aviation gasoline data are converted from thousand gallons to thousand barrels (42 gallons = 1 barrel):

$$\text{AVNMPZZ} = \text{AVNMMZZ} / 42$$

The U.S. nonmilitary sales is the sum of the States' sales:

$$AVNMPUS = \Sigma AVNMPZZ$$

The total sales of aviation gasoline is estimated as the sum of nonmilitary sales and military issues:

$$AVTTPZZ = AVNMPZZ + AVMIPZZ$$

$$AVTTPUS = \Sigma AVTTPZZ$$

All aviation gasoline is assumed to be used by the transportation sector. An estimate of aviation gasoline consumption by the transportation sector by State (AVACPZZ) is calculated by assuming that each State consumes aviation gasoline in proportion to the amount sold to that State:

$$AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS$$

$$AVACPUS = \Sigma AVACPZZ$$

Total aviation gasoline consumption in each State, AVTCPZZ, equals the transportation sector consumption in each State:

$$AVTCPZZ = AVACPZZ$$

### **British Thermal Units (Btu)**

Aviation gasoline has a heat content value of approximately 5.048 million Btu per barrel. This factor is applied to convert aviation gasoline estimated consumption from physical units to Btu:

$$AVACBZZ = AVACPZZ * 5.048$$

$$AVACBUS = \Sigma AVACBZZ$$

Because all aviation gasoline is assumed to be used for transportation, aviation gasoline total consumption in each State and in the United States equals the transportation sector consumption:

$$AVTCBZZ = AVACBZZ$$

$$AVTCBUS = AVACBUS$$

### **Additional Notes on Aviation Gasoline**

Aviation gasoline issues to the military for each State (AVMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for 1960 through 1976 in CSEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 forward, data from the same two databases, reported by calendar year, are used.

## Distillate Fuel

### **Physical Units**

Since State-level and end-use consumption data for distillate fuel (except for that consumed by electric utilities) are not available, sales of distillate fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA) are used to estimate distillate fuel consumption. The sales data are adjusted to sum to the Petroleum Administration for Defense District subtotals of the EIA distillate fuel product supplied data series. Both the sales data and the adjusted sales series are published in the EIA *Fuel Oil and Kerosene Sales Report*. The following variable names have been assigned to the adjusted sales series ("ZZ" in the variable names represents the two-letter State code that differs for each State):

DFBKPZZ = distillate fuel adjusted sales for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding that sold to the Armed Forces;

DFCMPZZ = distillate fuel adjusted sales to commercial establishments for space heating, water heating, and cooking;

DFIBPZZ = distillate fuel adjusted sales to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufac-

ured products, in processing goods, and in assembling), including farm use;

- DFMIPZZ = distillate fuel adjusted sales to the Armed Forces, regardless of use;
- DFOCPZZ = distillate fuel adjusted sales for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations;
- DFOFPZZ = distillate fuel adjusted sales as diesel fuel for off-highway use in construction (i.e., earthmoving equipment, cranes, stationary generators, air compressors, etc.) and for off-highway uses other than construction (i.e., logging);
- DFONPZZ = distillate fuel adjusted sales as diesel fuel for on-highway use (i.e., as engine fuel for trucks, buses, and automobiles);
- DFOTPZZ = distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories;
- DFRRPZZ = distillate fuel adjusted sales to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations; and
- DFRSPZZ = distillate fuel adjusted sales to the residential sector for space heating, water heating, and cooking, excluding farm houses.

Three series are used in CSEDS for consumption data:

- DKEUPZZ = distillate fuel consumed by electric utilities, in thousand barrels;
- JKEUPZZ = kerosene-type jet fuel consumed by electric utilities, in thousand barrels; and
- DFTCPUS = distillate fuel total consumed in the United States, in thousand barrels.

Distillate fuel consumed by electric utilities (DKEUPZZ) is collected by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor forms. (See Note 4 at the end of this distillate fuel section for further information on changes in this series' data definitions.) The series DKEUPZZ includes kerosene-type jet fuel consumed at electric utilities that is identified as JKEUPZZ. The kerosene-type jet fuel is subtracted from the distillate fuel data and accounted for in the jet fuel data described in a following section of this documentation.

Total consumption of distillate fuel in the United States, DFTCPUS, is the product supplied series in the EIA publication *Petroleum Supply Annual*.

To begin calculating distillate fuel State and end-use consumption, all of the State-level data series are summed to provide totals for the United States.

Next, the variables are combined as closely as possible into the major end-use sectors used in CSEDS. The residential sector adjusted sales and the commercial sector adjusted sales contain only DFRSPZZ and DFCMPZZ, respectively.

The adjusted sales of distillate fuel to the industrial sector for each State, DFINPZZ, is the sum of the distillate fuel adjusted sales for industrial use, including industrial space heating and farm use (DFIBPZZ), for oil company use (DFOCPZZ), for off-highway use (DFOFPZZ), and for all other uses (DFOTPZZ):

$$\begin{aligned} \text{DFINPZZ} &= \text{DFIBPZZ} + \text{DFOCPZZ} + \text{DFOFPZZ} + \text{DFOTPZZ} \\ \text{DFINPUS} &= \Sigma \text{DFINPZZ} \end{aligned}$$

The adjusted sales of distillate fuel to the transportation sector for each State, DFTRPZZ, is the sum of the distillate fuel adjusted sales for vessel bunkering, military use, railroad use, and the diesel fuel used on-highway:

$$\begin{aligned} \text{DFTRPZZ} &= \text{DFBKPZZ} + \text{DFMIPZZ} + \text{DFRRPZZ} + \text{DFONPZZ} \\ \text{DFTRPUS} &= \Sigma \text{DFTRPZZ} \end{aligned}$$

Adjusted sales of distillate fuel oil to the residential, commercial, industrial, and transportation sectors are added to create a subtotal of adjusted sales to all sectors other than the electric utility sector, DFNDPZZ:

$$\begin{aligned} \text{DFNDPZZ} &= \text{DFRSPZZ} + \text{DFCMPZZ} + \text{DFINPZZ} + \text{DFTRPZZ} \\ \text{DFNDPUS} &= \Sigma \text{DFNDPZZ} \end{aligned}$$

Consumption of distillate fuel by electric utilities (DFEUPZZ) is calculated by subtracting the kerosene-type jet fuel consumed by electric utilities from the input series DKEUPZZ:

$$\begin{aligned} \text{DFEUPZZ} &= \text{DKEUPZZ} - \text{JKEUPZZ} \\ \text{DFEUPUS} &= \Sigma \text{DFEUPZZ} \end{aligned}$$

The estimated U.S. distillate fuel consumption by all sectors other than the electric utility sector, DFNCPUS, is calculated by subtracting the distillate fuel consumption at electric utilities from the total U.S. distillate fuel consumption:

$$DFNCPUS = DFTCPUS - DFEUPUS$$

This U.S. subtotal of distillate fuel consumption by the four end-use sectors, DFNCPUS, is apportioned to the States by use of the end-use sectors' State-level adjusted sales data. The assumption is made that each State consumes distillate fuel in proportion to the amount of adjusted sales to that State:

$$DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS$$

The end-use sectors' subtotal for each State, DFNCPZZ, is further divided into estimates for the four end-use sectors in proportion to each sector's adjusted sales. The estimated residential sector consumption in each State, DFRCPZZ, is calculated:

$$\begin{aligned} DFRCPZZ &= (DFRSPZZ / DFNDPZZ) * DFNCPZZ \\ DFRCPUS &= \Sigma DFRCPZZ \end{aligned}$$

The commercial sector's estimated consumption in each State, DFCCPZZ, is calculated:

$$\begin{aligned} DFCCPZZ &= (DFCMPZZ / DFNDPZZ) * DFNCPZZ \\ DFCCPUS &= \Sigma DFCCPZZ \end{aligned}$$

The industrial sector's estimated consumption in each State, DFICPZZ, is calculated:

$$\begin{aligned} DFICPZZ &= (DFINPZZ / DFNDPZZ) * DFNCPZZ \\ DFICPUS &= \Sigma DFICPZZ \end{aligned}$$

The transportation sector's estimated consumption in each State, DFACPZZ, is calculated:

$$\begin{aligned} DFACPZZ &= (DFTRPZZ / DFNDPZZ) * DFNCPZZ \\ DFACPUS &= \Sigma DFACPZZ \end{aligned}$$

Total State distillate fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric utilities consumption:

$$DFTCPZZ = DFNCPZZ + DFEUPZZ$$

### **British Thermal Units (Btu)**

Distillate fuel has a heat content value of approximately 5.825 million Btu per barrel. This factor is applied to convert distillate fuel estimated consumption for the five consuming sectors from physical units to Btu as shown in the following examples:

$$\begin{aligned} DFRCBZZ &= DFRCPZZ * 5.825 \\ DFCCBZZ &= DFCCPZZ * 5.825 \\ DFTCBZZ &= DFRCBZZ + DFCCBZZ + DFICBZZ + DFACBZZ + \\ &\quad DFEUBZZ \end{aligned}$$

The U.S. Btu consumption estimates are calculated as the sum of all the States' data.

In the *State Energy Data Report* tables, "Estimates of Energy Input at Electric Utilities," the data used in the column headed "Light Oil" is the variable DKEUP (distillate fuel plus jet kerosene) in physical units. The Btu variable, DKEUB, is calculated:

$$\begin{aligned} DKEUBZZ &= DFEUBZZ + JKEUBZZ \\ DKEUBUS &= \Sigma DKEUBZZ \end{aligned}$$

### **Additional Notes on Distillate Fuel**

1. "Deliveries" data are actually called "shipments" in the source document for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1987; and "adjusted sales" for 1988 forward.
2. State data for the variables DFONPZZ (on-highway use), DFOFPZZ (off-highway use), and DFOTPZZ (other) for 1967 are unavailable from published sources. These three variables compose the miscellaneous use category for distillate fuel, which is known for all years by State. State estimates of DFONPZZ and DFOFPZZ for 1967 were

developed by dividing the 1966 values for DFONPZZ and DFOFPZZ by the 1966 total miscellaneous use for each State and applying these percentages to the 1967 total miscellaneous use for each State. The 1967 State estimates for DFOTPZZ are the remainder of the 1967 miscellaneous category after DFONPZZ and DFOFPZZ have been subtracted.

3. In 1979, EIA implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in the Combined State Energy Data System (CSEDS) to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report, but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For distillate fuel deliveries in 1979, the end-use categories called "residential," "commercial," "industrial," and "farm" are available. The pre-1979 deliveries categories are called "heating" and "industrial" (which included farm use). While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of residential, commercial, industrial, and farm deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979 years. Therefore, the following method was applied to present a comparable series for distillate fuel delivered to the residential, commercial, and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State's heating and industrial deliveries categories. A comparable 1979 subtotal was created by adding each State's residential, commercial, industrial, and farm deliveries categories.

- Residential, commercial, and industrial (including farm) shares of the subtotal in 1979 were calculated for each State.
- These 1979 end-use shares were then applied to each pre-1979 subtotal of distillate fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 distillate fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene deliveries survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the deliveries data for 1983 forward are reported in thousand gallons. These data are first converted to thousand barrels before being entered into CSEDS.)

Some of the No. 2 diesel fuel reported as sold to the commercial and industrial sectors, DFCMPZZ and DFINPZZ, on the EIA forms may also be included in the on-highway data, DFONPZZ, obtained from the Federal Highway Administration. Included in the commercial sector is some diesel fuel consumed by government vehicles and school buses, and included in the industrial sector is some diesel fuel consumed by fleets of trucks. Because the specific quantities involved are unknown, CSEDS reflects the diesel fuel consumption as reported in the EIA *Petroleum Marketing Monthly* and no attempt has been made to adjust the end-use reporting.

4. The data on fuel oil consumed at electric utilities for all years and States are actual fuel oil consumption numbers collected from electric utilities on the EIA Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Due to changes in fuel oil reporting classifications on the Form EIA-759 over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only



data on total fuel oil consumed at electric utilities by State are available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, data on consumption of light oil at all plant types combined and consumption of heavy oil at all plant types combined are available by State. In CSEDS, the following assumptions have been made:

- 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State in 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
- 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.
- 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for CSEDS for residual fuel and distillate fuel plus jet kerosene consumption at electric utilities is considered to be actual consumption at electric utilities for each State and each year.

## Jet Fuel

There are two types of jet fuel with different heat contents, kerosene-type jet fuel (JK) and naphtha-type jet fuel (JN), which are added in the Combined State Energy Data System (CSEDS) to give total jet fuel (JF). Jet fuel is used primarily for transportation, although, for 1972 through 1982, small amounts of the kerosene-type jet fuel were reported as used in the electric utility sector.

## Kerosene-Type Jet Fuel

### Physical Units

Data series used to calculate kerosene-type jet fuel consumption estimates are ("ZZ" in the variable name represents the two-letter State code that differs for each State):

- JKTCPUS = kerosene-type jet fuel total consumed, in thousand barrels;
- JKEUPZZ = the electric utility sector consumption of kerosene-type jet fuel in each State, in thousand barrels; and
- JKTTPZZ = kerosene-type jet fuel total sold, in thousand gallons.

Total U.S. consumption of kerosene-type jet fuel, JKTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA).

Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published by EIA in the *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero.

Kerosene-type jet fuel total sold, JKTTPZZ, was collected by the Ethyl Corporation, Petroleum Chemicals Division, for 1960 through 1983 and by EIA for 1984 forward. The Ethyl Corporation data are sales to commercial users and are used to represent total sales based on the assumption that there is little military use of kerosene-type jet fuel during 1960 through 1983. (See Note 1 in the "Additional Notes" section for the source reference for this assumption.) The EIA data for 1984 forward include commercial and military sales.

U.S. totals for the two State series are calculated as the sum of the State data.

Most kerosene-type jet fuel is used by the transportation sector. The transportation sector consumption for the United States (JKACPUS) is estimated as the difference between the total kerosene-type jet fuel consumed and the electric utility consumption:

$$JKACPUS = JKTCPUS - JKEUPUS$$

It is assumed that kerosene-type jet fuel consumption in each State is in proportion to the amount sold in each State:

$$JKACPZZ = (JKTTPZZ / JKTTPUS) * JKACPUS$$

Total kerosene-type jet fuel by State is estimated as:

$$JKTCPZZ = JKACPZZ + JKEUPZZ$$

### British Thermal Units (Btu)

Kerosene-type jet fuel has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene-type jet fuel from physical units to Btu:

$$JKACBZZ = JKACPZZ * 5.670$$

$$JKACBUS = \sum JKACBZZ$$

$$JKEUBZZ = JKEUPZZ * 5.670$$

$$JKEUBUS = \sum JKEUBZZ$$

$$JKTCBZZ = JKTCPZZ * 5.670$$

$$JKTCBUS = \sum JKTCBZZ$$

### Additional Notes on Kerosene-Type Jet Fuel

1. An assumption is made that kerosene-type jet fuel use by the military in 1960 through 1983 is negligible. This assumption is based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that kerosene-type jet fuel is used primarily by commercial aircraft engines.
2. Ethyl Corporation jet fuel sales to commercial users by State include some sales data that were improperly allocated between the States of Illinois and Indiana for 1960 through 1973. To adjust for this error, the average relative proportions of Illinois and Indiana sales from 1974 through 1978 were applied to the sum of the Illinois and Indiana sales in 1960 through 1973. From 1974 through 1983, sales data were correctly allocated.

3. Jet fuel sales in Illinois decreased sharply from 1984 forward, while sales in Indiana increased by about the same amount. It is possible that jet fuel for use at Chicago, Illinois, airports may have been purchased in Indiana. The same anomaly may have happened between New York and New Jersey beginning in 1981, when jet fuel for consumption at New York City airports may have been purchased in New Jersey. This is an inherent problem when using sales data as an indication of consumption, and no attempt has been made to adjust the numbers.
4. Prior to 1964, kerosene-type jet fuel was included in the total kerosene product supplied data in the source, the U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 2, "Salient Statistics of the Major Refined Petroleum Products in the United States." Table A3 summarizes the derivation of kerosene and jet fuel consumption estimates (columns 4 and 5) from data published in the source (columns 1, 2, and 3) for 1960 through 1963. For 1964 and years following, kerosene and kerosene-type jet fuel are reported separately in the source documents.
5. Kerosene-type jet fuel consumed by electric utilities, JKEUPZZ, is published in the EIA *Cost and Quality of Fuels for Electric Utility Plants*. These data are available for 1972 through 1982 only. Consumption in all other years is assumed to be zero. State-level data for 1972 through 1974 are not available. The percentage of each State's consumption of the total U.S. consumption in 1975 was used to apportion the 1972 through 1974 national data to the States.

## Naphtha-Type Jet Fuel

### Physical Units

Two data series are used to estimate naphtha-type jet fuel consumption:

- JNTCPUS = naphtha-type jet fuel total consumed, in thousand barrels; and
- JNMIPZZ = naphtha-type jet fuel issued to the military in each State, in thousand barrels.

**Table A3. Estimate of U.S. Consumption of Kerosene and Jet Fuel for 1960 through 1963**  
(Thousand barrels)

Year	(1) Kerosene Demand, Including Commercial Jet Fuel	(2) Jet Fuel Demand, Military Use Only	(3) Sales of Kerosene for Commercial Jet Fuel Use	(4) Estimated Kerosene Consumption (1) – (3)	(5) Estimated Total Jet Fuel Consumption (2) + (3)
1960	132,499	102,803	33,159	99,340	135,962
1961	144,435	104,436	47,187	97,248	151,623
1962	164,167	112,401	66,134	98,033	178,535
1963	172,212	115,237	75,236	96,976	190,473

Total U.S. consumption of naphtha-type jet fuel, JNTCPUS, is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA).

Data on naphtha-type jet fuel issued to the military in each State, JNMIPZZ, are from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center.

The total U.S. military issues is the sum of the State data:

$$JNMIPUS = \sum JNMIPZZ$$

It is assumed that all naphtha-type jet fuel is used by military aircraft engines. (See the Additional Notes at the end of this section for the source reference for this assumption.) Therefore, an estimate of naphtha-type jet fuel consumption by State, JNTCPZZ, is calculated by assuming that each State consumes naphtha-type jet fuel in proportion to the amount issued to that State:

$$JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS$$

All naphtha-type jet fuel is assumed to be used for transportation purposes so the transportation consumption equals the estimated total consumption for each State and for the United States:

$$\begin{aligned} JNACPZZ &= JNTCPZZ \\ JNACPUS &= JNTCPUS \end{aligned}$$

#### **British Thermal Units (Btu)**

Naphtha-type jet fuel has a heat content value of approximately 5.355 million Btu per barrel. This factor is applied to convert naphtha-type jet fuel from physical units to Btu:

$$\begin{aligned} JNTCBZZ &= JNTCPZZ * 5.355 \\ JNTCBUS &= \sum JNTCBZZ \\ JNACBZZ &= JNTCBZZ \\ JNACBUS &= JNTCBUS \end{aligned}$$

#### **Additional Notes on Naphtha-Type Jet Fuel**

1. An assumption was made that the naphtha-type jet fuel is for military use only. This assumption was based on product definitions from the American Petroleum Institute's *Standard Definitions for Petroleum*

*Statistics*, Technical Report No. 1, Third Edition (1981), page 13, which states that naphtha-type jet fuel is used primarily by military aircraft engines.

- Data on naphtha-type jet fuel issued to the military for each State (JNMIPZZ) are obtained from the U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. There are no data available for 1960 through 1974, and the data available for 1975 and 1976 are not consistent; therefore, the 1977 values are used for 1960 through 1976 in CSEDS. The data are reported by fiscal year for 1977 through 1988 and are taken from the Defense Energy Information System. For 1989 and 1990, fiscal-year data from two databases, Defense Fuel Automated Management System and the Into-Plane Database, are summed. For 1991 and 1992, data from the same two databases, reported by calendar year, are used.

## Jet Fuel Totals

### Physical Unit

The following calculations are used to provide total jet fuel consumption estimates by end use in physical units:

$$\begin{aligned} \text{JFACPZZ} &= \text{JKACPZZ} + \text{JNACPZZ} \\ \text{JFACPUS} &= \Sigma \text{JFACPZZ} \\ \text{JFEUPZZ} &= \text{JKEUPZZ} \\ \text{JFEUPUS} &= \text{JKEUPUS} \\ \text{JFTCPZZ} &= \text{JFACPZZ} + \text{JFEUPZZ} \\ \text{JFTCPUS} &= \Sigma \text{JFTCPZZ} \end{aligned}$$

### British Thermal Units (Btu)

The following calculations are used to provide total jet fuel consumption estimates by end use in Btu:

$$\begin{aligned} \text{JFACBZZ} &= \text{JKACBZZ} + \text{JNACBZZ} \\ \text{JFACBUS} &= \Sigma \text{JFACBZZ} \\ \text{JFEUBZZ} &= \text{JKEUBZZ} \\ \text{JFEUBUS} &= \text{JKEUBUS} \end{aligned}$$

$$\begin{aligned} \text{JFTCBZZ} &= \text{JFACBZZ} + \text{JFEUBZZ} \\ \text{JFTCBUS} &= \Sigma \text{JFTCBZZ} \end{aligned}$$

## Kerosene

### Physical Units

Because State-level and end-use consumption data for kerosene are not available, four data series published by EIA representing sales of kerosene into or within each State are used to estimate kerosene consumption. The fifth data series, the U.S. total consumption, is the product supplied series from the EIA *Petroleum Supply Annual*. The sales series are used to apportion the known U.S. total consumption into State-level estimates of end-use consumption. The following variable names have been assigned to the five data series ("ZZ" in the variable names represents the two-letter State code that differs for each State):

$$\begin{aligned} \text{KSCMPZZ} &= \text{kerosene sold to the commercial sector for heating, in thousand barrels;} \\ \text{KSIHPZZ} &= \text{kerosene sold to the industrial sector for heating, in thousand barrels;} \\ \text{KSOTPZZ} &= \text{kerosene sold for all other uses, including farm use, in thousand barrels;} \\ \text{KSRSPZZ} &= \text{kerosene sold to the residential sector for heating, in thousand barrels; and} \\ \text{KSTCPUS} &= \text{kerosene total consumed in the United States, in thousand barrels.} \end{aligned}$$

U.S. sales totals for each of the four State-level series are created by summing the State values.

The variables are combined as closely as possible into the major end-use sectors used in CSEDS. The residential and commercial sectors contain only KSRSPZZ and KSCMPZZ, respectively.

The sales of kerosene to the industrial sector, KSINPZZ, for each State is the sum of kerosene sold for industrial space heating (KSIHPZZ) and kerosene sold for all other uses (KSOTPZZ), including farm use. Sales of kerosene to the industrial sector are calculated:

$$\begin{aligned} \text{KSINPZZ} &= \text{KSOTPZZ} + \text{KSIHPZZ} \\ \text{KSINPUS} &= \Sigma \text{KSINPZZ} \end{aligned}$$

Total sales of kerosene in each State is the sum of these three sectors' sales:

$$\begin{aligned} \text{KSTTPZZ} &= \text{KSRSPZZ} + \text{KSCMPZZ} + \text{KSINPZZ} \\ \text{KSTTPUS} &= \Sigma \text{KSTTPZZ} \end{aligned}$$

An estimate of each State's total consumption of kerosene is made by disaggregating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

$$\text{KSTCPZZ} = (\text{KSTTPZZ} / \text{KSTTPUS}) * \text{KSTCPUS}$$

Each State's residential sector sales percentage of total sales is applied to the State's estimated total consumption to create estimated residential sector consumption for the State,  $\text{KSRCPZZ}$ :

$$\text{KSRCPZZ} = (\text{KSRSPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

The commercial sector's estimated consumption in each State,  $\text{KSCCPZZ}$ , is calculated:

$$\text{KSCCPZZ} = (\text{KSCMPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

The industrial sector's estimated consumption in each State,  $\text{KSICPZZ}$ , is calculated:

$$\text{KSICPZZ} = (\text{KSINPZZ} / \text{KSTTPZZ}) * \text{KSTCPZZ}$$

U.S. totals for the three sectors' consumption estimates are the sums of the States' estimated consumption.

### **British Thermal Units (Btu)**

Kerosene has a heat content value of approximately 5.670 million Btu per barrel. This factor is applied to convert kerosene estimated consumption from physical units to Btu:

$$\text{KSRCBZZ} = \text{KSRCPZZ} * 5.670$$

$$\begin{aligned} \text{KSCCBZZ} &= \text{KSCCPZZ} * 5.670 \\ \text{KSICBZZ} &= \text{KSICPZZ} * 5.670 \\ \text{KSTCBZZ} &= \text{KSRCBZZ} + \text{KSCCBZZ} + \text{KSICBZZ} \end{aligned}$$

The U.S. Btu consumption estimates for the three consuming sectors and the U.S. total are calculated as the sum of the State-level data.

### **Additional Notes on Kerosene**

1. See Note 4 at the end of the "Kerosene-Type Jet Fuel" section on page 356 for comments concerning the inclusion of kerosene-type jet fuel with the kerosene total product supplied prior to 1964 in the source documents.
2. "Sales" data are actually called "shipments" in the source documents for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1983; and "sales" for 1984 forward.
3. In 1979, the Energy Information Administration (EIA) implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report* "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in CSEDS to conform with the 1979 kerosene deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For kerosene deliveries in 1979, the end-use categories called "residential," "commercial," and "industrial" are available. The pre-1979 deliveries category called "heating" is related to the sum of "residential," "commercial," and "industrial" in 1979. Therefore, the following method was applied to present a comparable series for kerosene delivered to the residential, commercial, and industrial sectors:

- A 1979 subtotal for heating was created by summing each State's residential, commercial, and industrial deliveries categories, thereby creating a comparable deliveries subtotal for all years.
- Residential, commercial, and industrial shares of the heating subtotal in 1979 were calculated for each State.
- These 1979 end-use shares were then applied to each pre-1979 heating subtotal in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 kerosene deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into CSEDS.)

4. In 1975 through 1977, the industrial sector consumption of kerosene includes small quantities of kerosene-type jet fuel that were produced as jet fuel and sold as kerosene.

## Liquefied Petroleum Gases

Liquefied petroleum gases (LPG) in CSEDS include: ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane.

### Physical Units

The following data series used in CSEDS to estimate LPG consumption represent sales or estimated sales by State in thousand gallons. Sources for these variables are given in Appendix C.

LGCBMZZ = LPG sold for internal combustion engine fuel use. Included are sales for use in all kinds of highway vehicles, forklifts, industrial tractors, and for use in oil field drilling and production;

LGHCMZZ = LPG sold for residential and commercial use. Included are sales for nonfarm private households for space heating, cooking, water heating, and other household uses, such as clothes drying and incineration. Also included are sales to nonmanufacturing organizations, such as motels, restaurants, retail stores, laundries, and other service enterprises, primarily for use in space heating, water heating, and cooking; and

LGTPZZ = LPG total sales for all uses.

Total U.S. consumption of LPG is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA):

LGTCBUS = LPG total consumed in the United States, in thousand barrels.

Another variable is used in CSEDS to estimate LPG consumption by the transportation sector. It is described in detail in Note 2 at the end of this LPG section:

LGTRSUS = the transportation sector share of LPG internal combustion engine sales.

Since the LPG sales data are in gallons, they must be converted to barrels (42 U.S. gallons per U.S. barrel) to be comparable to total consumption estimates. The formulas for calculating State sales data are:

LGCBPZZ = LGCBMZZ / 42

LGHCPCZZ = LGHCMZZ / 42

The U.S. totals for each of the State-level LPG sales data series are calculated as the sum of the State values.

An assumption is made that 85 percent of the LPG sold for residential and commercial use (LGHCPZZ) is sold to the residential sector (LGRCPZZ), and 15 percent is sold to the commercial sector (LGCCPZZ) for all States and years. (See Note 3 at the end of this LPG section for the source reference for this assumption.) It is also assumed that LPG sales to the residential and commercial sectors are equal to the consumption in those sectors. The formulas used are:

$$\begin{aligned} \text{LGRCPZZ} &= \text{LGHCPZZ} * 0.85 \\ \text{LGCCPZZ} &= \text{LGHCPZZ} * 0.15 \end{aligned}$$

The LPG consumption by the transportation sector is estimated to be the transportation share of the sales for internal combustion engine fuel:

$$\text{LGACPZZ} = \text{LGCBPZZ} * \text{LGTRSUS}$$

An estimate of each State's total LPG consumption (LGTCPZZ) is made by allocating the U.S. total consumption to the States in proportion to each State's sales share of the U.S. total sales:

$$\text{LGTCPZZ} = (\text{LGTTPZZ} / \text{LGTTPUS}) * \text{LGTCPUS}$$

The industrial (LGICPZZ) sector consumption of each State is the difference between the State's total LPG consumption and the sum of its residential, commercial, and transportation sectors' consumption:

$$\text{LGICPZZ} = \text{LGTCPZZ} - (\text{LGRCPZZ} + \text{LGCCPZZ} + \text{LGACPZZ})$$

U.S. totals for the four end-use sector consumption estimates are calculated as the sums of the State estimates.

### **British Thermal Units (Btu)**

The factor for converting LPG from physical unit values to British thermal units, LGTCKUS, is calculated annually for 1967 forward by EIA as a weighted average by multiplying the quantity consumed of each of the component products (ethane, propane, butane, butane-propane, ethane-propane, and isobutane) by each product's conversion factor (listed in Appendix D,

Thermal Conversion Factor Source Documentation) and dividing the sum of those heat contents by the sum of the quantities consumed. The consumption of each product is taken from the product supplied data series in the *Energy Data Report*, "Petroleum Statement, Annual" (1967 through 1980), and the *Petroleum Supply Annual* (1981 forward), published by EIA. For 1960 through 1966, EIA adopted the Bureau of Mines thermal conversion factor of 4.011 million Btu per barrel as published in the *Mineral Industry Surveys*, "Crude Petroleum and Petroleum Products, 1956," Table 4 footnote.

This factor is used to estimate consumption in Btu for all States and end uses:

$$\begin{aligned} \text{LGRCBZZ} &= \text{LGRCPZZ} * \text{LGTCKUS} \\ \text{LGCCBZZ} &= \text{LGCCPZZ} * \text{LGTCKUS} \\ \text{LGICBZZ} &= \text{LGICPZZ} * \text{LGTCKUS} \\ \text{LGACBZZ} &= \text{LGACPZZ} * \text{LGTCKUS} \end{aligned}$$

Total estimated consumption of LPG in Btu is the sum of the end-use consumption estimates:

$$\text{LGTCBZZ} = \text{LGRCBZZ} + \text{LGCCBZZ} + \text{LGICBZZ} + \text{LGACBZZ}$$

The U.S. Btu consumption estimates for the four sectors and total LPG are calculated as the sum of the State data.

### **Additional Notes on Liquefied Petroleum Gases**

1. Sales data for Maryland and the District of Columbia are combined in the source documents. Sales data are published in six categories. The percentages shown in Table A5 are applied to disaggregate the combined State data in each of the sectors for all years.
2. The sales of LPG for internal combustion engine fuel use are divided between the transportation sector and the industrial sector by using LGTRSUS, the transportation sector's share of internal combustion engine use. LGTRSUS is estimated from data on "special fuels used on highways," a category that includes only LPG and diesel fuel. The special fuels data are published by the U.S. Department of Transportation, Federal Highway Administration (see MGSFPZZ in Appendix C). The quantity of LPG included in special fuels is estimated each

**Table A5. Percentages Used to Disaggregate Maryland and D.C. Combined LPG Sales Data**

Sales Category	Maryland	D.C.
Residential and Commercial	99.9%	0.1%
Internal combustion engine fuel	98.9	1.1
Industrial	99.4	0.6
Chemical	100.0	0.0
Utility gas	100.0	0.0
Miscellaneous	100.0	0.0

year (the LPG portion ranges from 8.4 percent in 1960 to 1.2 percent in 1990). LGTRSUS is then derived by dividing the quantity of LPG included in special fuels used on highways by the quantity of LPG sold for internal combustion engine use. This U.S. factor is applied to each of the States. LGTRSUS values are shown in Table A4.

- Little information exists for allocating the residential and commercial use of LPG to the individual sectors. CSEDS applies an 85 percent residential and 15 percent commercial split for all States and years based on figures published in the Federal Energy Administration Project Independence Blueprint Task Force Report, "Residential and Commercial Energy Use Patterns, 1970-1990," November 1974, Table 1.A.1.
- LPG sales data by State and end-use categories for 1960 through 1982 are from EIA's "Sales of Liquefied Petroleum Gases and Ethane." In 1979, EIA modified the LPG sales survey, Form EIA-174, and changed the list of respondents. Because of the updated sampling frame, the 1979 through 1982 sales data may not be directly comparable to the pre-1979 sales when a different estimation procedure was used. Explanation of the discontinuities caused by the change in the 1979 sampling frame are provided in EIA's *Energy Data Report*, "Sales of Liquefied Petroleum Gases and Ethane in 1979."

Because of the change in survey techniques used for measuring LPG sales, many States' data were withheld from publication in the 1979 through 1982 LPG sales reports to avoid disclosure of company-level

**Table A4. Transportation Sector Share of LPG Internal Combustion Engine Use, 1960 Forward**

Year	LGTRSUS	Year	LGTRSUS	Year	LGTRSUS
1960	0.229	1973	0.384	1986	0.456
1961	0.258	1974	0.381	1987	0.375
1962	0.266	1975	0.406	1988	0.437
1963	0.273	1976	0.440	1989	0.428
1964	0.259	1977	0.478	1990	0.471
1965	0.290	1978	0.594	1991	0.426
1966	0.325	1979	0.536	1992	0.425
1967	0.368	1980	0.380	1993	0.443
1968	0.389	1981	0.671	1994	0.734
1969	0.341	1982	0.579	1995	0.416
1970	0.363	1983	0.578	1996	0.357
1971	0.423	1984	0.631		
1972	0.392	1985	0.440		

data. The consumption estimates in CSEDS use all data published in the 1979 through 1982 LPG sales reports and estimates prepared by EIA's Office of Oil and Gas for data that were withheld from publication. (See Note 5 below for estimation procedures.)

Some end-use categories changed in 1979 due to redefinition of the classifications. One of these changes, for example, occurred with LPG sold to farms for household heating and cooking. Prior to 1979 these sales were reported as part of the residential and commercial category, while in 1979 they were counted in the farm use category that goes into the industrial sector in CSEDS. No attempt has been made to adjust for this type of inconsistency.

The Form EIA-174 was cancelled after collection of 1982 data. The 1983 LPG consumption estimates are based on the assumption that LPG end-use sector demand in 1983 occurred in the same proportion as 1982 sector demand within each State; i.e., the 1983 LPG product supplied figure was allocated to the States by using the distribution of volumes consumed for 1982.



5. The following procedures were used to estimate the State end-use sales that were withheld from publication in the 1979-1982 LPG sales reports:

- For each year, missing State total sales were estimated by allocating the sum of the missing State sales within each Petroleum Administration for Defense (PAD) District to the individual States, in proportion to the sum of the known end-use sales for those States.
- Missing PAD District end-use totals for 1979 and 1980 were obtained by using the 1980 and 1981 sales reports. Missing PAD District chemical sales were estimated by allocating the total missing volume of chemical sales to the PAD District in proportion to the number of chemical plants in each PAD District. The remaining PAD District end-use totals were obtained by subtraction. For 1981 and 1982, no PAD District estimations were necessary because all PAD District end-use totals are known.
- The published data and the estimated State and PAD District end-use totals were used to estimate missing State end-use sales volumes within a PAD District: missing State end-use sector values were estimated by allocating the missing volume for the State approximately proportional to the PAD District end-use sector totals.

6. Prior to 1979, State data for chemical use of LPG were withheld from publication, although they were included in the U.S. total in the tables in EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports. Beginning in 1979, State-level chemical use data were published in the LPG sales reports, but data for several States were withheld. Estimates for the withheld data for chemical use sales for 1979 and 1980 were created by using the estimation procedure described in Note 5 above. Then the published and the estimated State data for 1979 were used to create State shares of the total U.S. chemical use sales. These percentage shares (shown in Table A6) were applied to the total U.S. LPG chemical use sales in 1960 through 1978 to create State chemical use estimates. The chemical use estimates were added to the States' total LPG sales series, LGTTPZZ.

**Table A6. State Shares of the Total U.S. LPG Sold for Chemical Use, 1960 Through 1978**

State	Percent	State	Percent
Alabama	0.000	Montana	0.000
Alaska	0.589	Nebraska	0.000
Arizona	0.000	Nevada	0.000
Arkansas	0.000	New Hampshire	0.000
California	2.667	New Jersey	2.040
Colorado	0.232	New Mexico	0.603
Connecticut	0.053	New York	0.000
Delaware	0.811	North Carolina	0.327
District of Columbia	0.000	North Dakota	0.000
Florida	0.000	Ohio	1.103
Georgia	0.699	Oklahoma	0.309
Hawaii	0.000	Oregon	0.000
Idaho	0.000	Pennsylvania	0.354
Illinois	7.066	Rhode Island	0.000
Indiana	0.243	South Carolina	0.021
Iowa	0.900	South Dakota	0.000
Kansas	0.451	Tennessee	0.000
Kentucky	2.548	Texas	57.425
Louisiana	20.566	Utah	0.000
Maine	0.012	Vermont	0.000
Maryland	0.050	Virginia	0.025
Massachusetts	0.009	Washington	0.000
Michigan	0.151	West Virginia	0.286
Minnesota	0.000	Wisconsin	0.000
Mississippi	0.315	Wyoming	0.091
Missouri	0.054	United States	100.000

7. Beginning in 1984, the American Petroleum Institute (API), the Gas Processors Association, and the National LP-Gas Association jointly sponsored an LPG sales survey. The results are published in the API's report *Sales of Natural Gas Liquids and Liquefied Refinery Gases*. These data include sales of pentanes plus; the pentanes plus data were removed prior to use in CSEDS.

The API report publishes total LPG sales for Alaska and Hawaii, but disaggregated data for those States are withheld. EIA estimates the withheld data for the “Residential and Commercial” and the “Internal Combustion Fuel” columns as follows:

- Alaska and Hawaii are the only States of the seven States in PAD District V for which data are withheld. Therefore, subtracting the available data for the other five States from the PAD District V total gives the withheld data for Alaska and Hawaii combined.
- The withheld data are assigned to Alaska and Hawaii in proportion to each State’s share of their combined published total sales.

## Lubricants

### Physical Units

Three data series are used to estimate State consumption of lubricants. The two State-level sales data series are used to apportion the U.S. total consumption data to the States and the end-use sectors within the States. “ZZ” in the variable names represents the two-letter State code that differs for each State:

LUINPZZ	= lubricants sold to the industrial sector, in thousand barrels;
LUTRPZZ	= lubricants sold to the transportation sector, in thousand barrels; and
LUTCPUS	= lubricants total consumed in the United States, in thousand barrels.

Data for the first two variables are developed from the Bureau of the Census reports “Sales of Lubricating and Industrial Oils and Greases” in the *Current Industrial Reports* series. These series were discontinued in 1977 and the method of estimation for 1978 forward is explained in Note 1 at the end of this “Lubricants” section. The third variable for lubricants is the product supplied data series in the publication *Petroleum Supply Annual*, published by the Energy Information Administration (EIA). The first two variables

are used for apportioning the third into State total consumption and State end-use consumption estimates by using the following calculations.

Total sales of lubricants for each State, LUTTPZZ, is created by adding the industrial and transportation sales:

$$\text{LUTTPZZ} = \text{LUINPZZ} + \text{LUTRPZZ}$$

U.S. sales totals are calculated by summing the State sales data.

Each State’s proportion of total U.S. sales is used to calculate each State’s estimated consumption of lubricants:

$$\text{LUTCPZZ} = (\text{LUTTPZZ} / \text{LUTTPUS}) * \text{LUTCPUS}$$

Each State’s estimated total consumption of lubricants is further divided into end-use estimates in proportion to that State’s sales by sector as a portion of total sales in the State. Lubricants consumed by State for industrial use, LUICPZZ, and for transportation use, LUACPZZ, are calculated:

$$\begin{aligned} \text{LUICPZZ} &= (\text{LUINPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ} \\ \text{LUACPZZ} &= (\text{LUTRPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ} \end{aligned}$$

The consumption of lubricants in the United States by these two end-use sectors is created by summing the State estimates.

### British Thermal Units (Btu)

Lubricants have a heat content value of approximately 6.065 million Btu per barrel. This factor is applied to convert lubricants estimated consumption from physical units to Btu:

$$\begin{aligned} \text{LUICBZZ} &= \text{LUICPZZ} * 6.065 \\ \text{LUACBZZ} &= \text{LUACPZZ} * 6.065 \end{aligned}$$

The State total consumption in Btu is the sum of the two sectors’ consumption in Btu:

$$\text{LUTCBZZ} = \text{LUICBZZ} + \text{LUACBZZ}$$

The U.S. sector and total consumption estimates in Btu are calculated as the sum of the State data.

### Additional Notes on Lubricants

1. The lubricants sales data (LUINPZZ and LUTRPZZ) were published approximately every other year by the Bureau of the Census until the discontinuation of the series after 1977. Each year's sales data have been used to calculate that year's and at least one other year's consumption estimates. Table A7 specifies which years of consumption estimates depend on which years of the sales data.
2. The sales data from the source document for LUINPZZ and LUTRPZZ are available in incompatible units. The industrial series, LUINPZZ, is oils and greases sold for industrial lubricating and other uses measured in thousand gallons. The transportation series, LUTRPZZ, is oils and greases sold for automotive and aviation uses measured in thousand pounds. Prior to use in CSEDS, these were converted to thousand barrels by dividing the oil data by 42 gallons per barrel and dividing the greases data by 300 pounds per barrel. In the source document, some State data are not published to avoid disclosing figures for individual companies. The undisclosed data were entered as zero in CSEDS.

**Table A7. Lubricants Sales Data Used in Consumption Estimates**

Year of Sales Data	Year of Consumption Estimates
1960	1960 and 1961
1962	1962, 1963, and 1964
1965	1965 and 1966
1967	1967 and 1968
1969	1969 and 1970
1971	1971 and 1972
1973	1973 and 1974
1975	1975 and 1976
1977	1977 forward

## Motor Gasoline

### Physical Units

Nine data series are used to estimate the State end-use consumption of motor gasoline. Eight of the series are from the U.S. Department of Transportation, Federal Highway Administration publication, *Highway Statistics*, and represent sales of motor gasoline. The sales data are categorized as sales for highway and nonhighway use:

- **Highway Use** sales data (MGMFP) are from the *Highway Statistics* Table MF-21; however, they are reduced by the amount of highway "special fuels" (MGSFP) used in each State each year as reported on Table MF-25 (prior to 1994) and Table MF-21 (1994 forward). Special fuels are primarily diesel fuels, not motor gasoline, and are included in the transportation sector of distillate fuel.
- **Nonhighway Use** sales are further subdivided into sales for: (1) public use by States, counties, and municipalities (MGPNP) from Table MF-21, and (2) private and commercial use as reported on MF-24. The private and commercial nonhighway use of motor gasoline has the following components: agricultural use (MGAGP), industrial and commercial use (MGIYP), construction use (MGCUP), marine use (MGMRP), and miscellaneous and unclassified uses (MGMSF). Another component of the private and commercial nonhighway series is aviation gasoline (AVNMM), which is discussed under the "Aviation Gasoline" section of this documentation.

The ninth motor gasoline data series (MGTCBUS) is the total U.S. consumption of motor gasoline published in the product supplied series in the EIA publication *Petroleum Supply Annual*.

The nine motor gasoline data series are ("ZZ" in the variable names represent the two-letter State code that differs for each State):

- MGAGPZZ = motor gasoline sold for agricultural use in each State, in thousand gallons;
- MGCUPZZ = motor gasoline sold for construction use in each State, in thousand gallons;

- MGIYPZZ = motor gasoline sold for industrial and commercial use in each State, in thousand gallons;
- MGMFPZZ = motor fuel sold for highway use in each State, in thousand gallons;
- MGMRPZZ = motor gasoline sold for marine use in each State, in thousand gallons;
- MGMSPZZ = motor gasoline sold for miscellaneous and unclassified uses in each State, in thousand gallons;
- MGPNPZZ = motor fuel sold for public nonhighway use in each State, in thousand gallons;
- MGSFPZZ = special fuels (primarily diesel fuel with small amounts of liquefied petroleum gases) sold in each State, in thousand gallons; and
- MGTCPUS = motor gasoline total consumed in the United States, in thousand barrels.

U.S. totals for the eight State series named above are calculated as the sum of the State data.

The transportation sector accounts for most of the motor gasoline sales. Sales to the transportation sector is estimated to be the sum of motor fuel sales for marine use and for highway use (minus the sales of special fuels, which are primarily diesel fuels and are accounted for in the transportation sector of distillate fuel). Sales of motor gasoline to the transportation sector in each State (MGTRPZZ) is calculated:

$$MGTRPZZ = MGMFPZZ + MGMRPZZ - MGSFPZZ$$

Two sales data series are added to estimate motor gasoline sales to the commercial sector: miscellaneous (including unclassified) and public nonhighway sales. Sales of motor gasoline to the commercial sector in each State (MGCMPZZ) is calculated:

$$MGCMPZZ = MGMSPZZ + MGPNPZZ$$

Sales of motor gasoline for use in the industrial sector in each State (MGINPZZ) is calculated as the sum of the sales for agricultural use, for construction use, and for industrial and commercial use:

$$MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ$$

Total sales of motor gasoline in each State (MGTPZZ) is calculated as the sum of the sales to the major sectors:

$$MGTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ$$

U.S. totals for the three end-use sectors' sales and for total sales are calculated as the sum of the States' sales.

The motor gasoline sales data for the three end-use sectors in each State are used to apportion the U.S. total consumption of motor gasoline to the States and to the major end-use sectors within each State.

The estimated consumption of motor gasoline in each State is calculated according to each State's share of the total sales. Estimated consumption of motor gasoline in each State (MGTCPZZ) is calculated:

$$MGTCPZZ = (MGTPZZ / MGTPUS) * MGTCPUS$$

The commercial sector estimated consumption of motor gasoline (MGCCPZZ) is calculated:

$$MGCCPZZ = (MGCMPZZ / MGTPZZ) * MGTCPZZ$$

The industrial sector estimated consumption (MGICPZZ) is calculated:

$$MGICPZZ = (MGINPZZ / MGTPZZ) * MGTCPZZ$$

The transportation sector estimated consumption (MGACPZZ) is calculated:

$$MGACPZZ = (MGTRPZZ / MGTPZZ) * MGTCPZZ$$

The consumption of motor gasoline by major end-use sector in the United States is estimated by summing the States' estimated consumption.

### **British Thermal Units (Btu)**

Motor gasoline has a heat content value of approximately 5.253 million Btu per barrel. This factor is applied to convert motor gasoline estimated consumption from physical units to Btu:

MGCCBZZ = MGCCPZZ \* 5.253  
 MGICBZZ = MGICPZZ \* 5.253  
 MGACBZZ = MGACPZZ \* 5.253  
 MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ

The U.S. level Btu consumption estimates are calculated by summing the State data.

## Petroleum Coke

### Physical Units

Five data series are used to estimate the consumption of petroleum coke. Three are measures of petroleum coke consumption and two are indicators of industrial activity used to apportion U.S. consumption to the States. "ZZ" in the variable name represents the two-letter State code that differs for each State:

PCTCPUS = petroleum coke total consumed in the United States (electric utility and industrial sectors), in thousand barrels;  
 PCEUMZZ = petroleum coke consumed by electric utilities in each State, in thousand short tons;  
 PCRFPUS = petroleum coke used at refineries as both catalytic and marketable coke in the United States, in thousand barrels;  
 CTCAPZZ = catalytic cracking charge capacity of petroleum refineries in each State, in barrels per calendar day (1960 through 1979) and barrels per stream day (1980 forward); and  
 AICAPZZ = aluminum ingot production capacity in each State, in short tons.

The total consumption of petroleum coke in the United States (PCTCPUS) is the product supplied series from the EIA publication *Petroleum Supply Annual*.

Petroleum coke consumed at electric utilities, PCEUMZZ, is available from 1970 forward from the Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Prior to 1970, no data are available for this series and zero is used. These data are

in thousand short tons and are converted into thousand barrels in CSEDS by applying a conversion factor of 5 barrels per short ton:

PCEUPZZ = PCEUMZZ \* 5

The source for petroleum coke used at refineries, PCRFPUS, is the EIA series of reports entitled "Petroleum Statement, Annual" and predecessor reports. For 1960 through 1980, the data are provided in thousand short tons. For consistency with later years' data, the 1960 through 1980 data were first converted into thousand barrels before being used in CSEDS.

The data for petroleum coke consumed by electric utilities are available by State. Other petroleum coke consumption data are available only on a U.S. level and are accredited to the industrial sector in CSEDS, either as petroleum coke used as catalyst coke at refineries in a process for increasing the yield of gasoline from crude oil (catalytic cracking) or as petroleum coke used for all other industrial uses (mainly for conversion into electrodes that are consumed in the production of aluminum). The industrial petroleum coke consumption series are apportioned to the States by using the data series that indicate the size of the refining industry and aluminum production industry in each State. The capacity of refineries' catalytic cracking equipment (CTCAPZZ) and the aluminum ingot production capacity (AICAPZZ) are not measured in thousand barrels, but since these data series are used only to apportion U.S. industrial consumption of petroleum coke to the States, they do not need to be converted into thousand barrels.

The U.S. totals for the State-level data series are calculated by summing the State data.

To estimate industrial consumption of petroleum coke, electric utility consumption is subtracted from the total U.S. petroleum coke product supplied:

PCICPUS = PCTCPUS - PCEUPUS

The petroleum coke used at refineries in the United States as catalytic coke is subtracted from the U.S. industrial sector consumption to derive consumption of petroleum coke by all other industrial users:

PCOCPUS = PCICPUS - PCRFPUS

State-level estimates of the catalytic coke portion of the industrial sector are calculated by assuming that each State consumes catalytic coke in proportion to the catalytic cracking charge capacity of the refineries in the State:

$$\text{PCRFPZZ} = (\text{CTCAPZZ} / \text{CTCAPUS}) * \text{PCRFPUS}$$

State-level estimates of the petroleum coke consumed by the other industrial users are assumed to be in proportion to each State's aluminum ingot production capacity:

$$\text{PCOCPZZ} = (\text{AICAPZZ} / \text{AICAPUS}) * \text{PCOCPUS}$$

The State totals for the industrial sector use of petroleum coke are added:

$$\text{PCICPZZ} = \text{PCRFPZZ} + \text{PCOCPZZ}$$

Total petroleum coke consumption by State is industrial use plus electric utility use:

$$\text{PCTCPZZ} = \text{PCICPZZ} + \text{PCEUPZZ}$$

### **British Thermal Units (Btu)**

Petroleum coke has a heat content value of approximately 6.024 million Btu per barrel. This factor is applied to convert petroleum coke estimated consumption from physical units to Btu by State and at the U.S. level:

$$\text{PCICBZZ} = \text{PCICPZZ} * 6.024$$

$$\text{PCICBUS} = \Sigma \text{PCICBZZ}$$

$$\text{PCEUBZZ} = \text{PCEUPZZ} * 6.024$$

$$\text{PCEUBUS} = \Sigma \text{PCEUBZZ}$$

$$\text{PCTCBZZ} = \text{PCICBZZ} + \text{PCEUBZZ}$$

$$\text{PCTCBUS} = \Sigma \text{PCTCBZZ}$$

## Residual Fuel

### **Physical Units**

Since State-level end-use consumption data for residual fuel (with the exception of electric utilities data) are not available, sales of residual fuel into or within each State, in thousand barrels, published by the Energy Information Administration (EIA), are used to estimate residual fuel consumption. "ZZ" in the following variable names represents the two-letter State code that differs for each State:

RFBKPZZ = residual fuel sold for vessel bunkering use (i.e., the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies, and fueling for other marine purposes), excluding sales to the Armed Forces;

RFCMPZZ = residual fuel sold to the commercial sector for heating;

RFIBPZZ = residual fuel sold to industrial establishments for space heating and for other industrial use (i.e., for all uses to mines, smelters, plants engaged in producing manufactured products, in processing goods, and in assembling);

RFMIPZZ = residual fuel sold to the Armed Forces, regardless of use;

RFMSPZZ = residual fuel sold for all other uses not identified in other sales categories;

RFOCPZZ = residual fuel sold for oil company use, including all fuel oil, crude oil, or acid sludge used as fuel at refineries, by pipelines, or in field operations; and

RFRRPZZ = residual fuel sold to the railroads for use in fueling trains, operating railroad equipment, space heating of buildings, and other operations.

Two other data series that represent consumption of residual fuel are:

RFEUPZZ = residual fuel consumed by electric utilities in each State, in thousand barrels.

RFTCPUS = residual fuel total supplied in the United States, in thousand barrels.

Residual fuel oil consumed by electric utilities, RFEUPZZ, is collected by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor

forms. (See Note 3 at the end of this residual fuel section for further information on changes in this series' data definitions.)

Total U.S. consumption of residual fuel, RFTCPUS, is the product supplied series in EIA's publication *Petroleum Supply Annual*.

To begin calculating residual fuel State and end-use consumption estimates, all State-level data series are summed to provide totals for the United States.

Then the data series are combined as closely as possible into the major end-use sectors used in CSEDS. No residual fuel is sold to the residential sector. Residual fuel sales to the commercial sector is the RFCMPZZ series.

The sales of residual fuel to the industrial sector in each State, RFINPZZ, is the sum of the residual fuel sold for industrial use, including industrial space heating (RFIBPZZ), for oil company use (RFOCPZZ), and for all other uses (RFMSPZZ):

$$\begin{aligned} \text{RFINPZZ} &= \text{RFIBPZZ} + \text{RFOCPZZ} + \text{RFMSPZZ} \\ \text{RFINPUS} &= \sum \text{RFINPZZ} \end{aligned}$$

The sales of residual fuel to the transportation sector in each State, RFTRPZZ, is the sum of the residual fuel sales for vessel bunkering (RFBKPZZ), military use (RFMIPZZ), and railroad use (RFRRPZZ):

$$\begin{aligned} \text{RFTRPZZ} &= \text{RFBKPZZ} + \text{RFMIPZZ} + \text{RFRRPZZ} \\ \text{RFTRPUS} &= \sum \text{RFTRPZZ} \end{aligned}$$

Sales of residual fuel oil to the commercial, industrial, and transportation sectors are added to create a subtotal of sales to all sectors other than the electric utility sector (RFNDPZZ):

$$\begin{aligned} \text{RFNDPZZ} &= \text{RFCMPZZ} + \text{RFINPZZ} + \text{RFTRPZZ} \\ \text{RFNDPUS} &= \sum \text{RFNDPZZ} \end{aligned}$$

The estimated residual fuel consumption for the United States by all sectors other than the electric utility sector (RFNCPUS) is calculated by subtracting the total residual fuel consumption at electric utilities from the total U.S. residual fuel consumption:

$$\text{RFNCPUS} = \text{RFTCPUS} - \text{RFEUPUS}$$

This U.S. subtotal of residual fuel consumption by the end-use sectors combined (RFNCPUS) is apportioned to the States by using the States' end-use sector sales data. The assumption is made that each State consumes residual fuel in proportion to the amount sold in that State:

$$\text{RFNCPZZ} = (\text{RFNDPZZ} / \text{RFNDPUS}) * \text{RFNCPUS}$$

The end-use sectors' subtotal for each State is further divided into estimates for each sector in proportion to each sector's sales. The estimated commercial sector consumption in each State, RFCCPZZ, is calculated:

$$\text{RFCCPZZ} = (\text{RFCMPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The industrial sector's estimated consumption in each State, RFICPZZ, is calculated:

$$\text{RFICPZZ} = (\text{RFINPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The transportation sector's estimated consumption in each State, RFACPZZ, is calculated:

$$\text{RFACPZZ} = (\text{RFTRPZZ} / \text{RFNDPZZ}) * \text{RFNCPZZ}$$

The consumption of residual fuel in the United States by the major end-use sectors is estimated by adding the States' estimated consumption.

Total State residual fuel consumption is the sum of the end-use sectors' consumption subtotal and the electric utilities consumption:

$$\text{RFTCPZZ} = \text{RFNCPZZ} + \text{RFEUPZZ}$$

### **British Thermal Units (Btu)**

Residual fuel has a heat content value of approximately 6.287 million Btu per barrel. This factor is applied to convert residual fuel estimated consumption from physical units to Btu as shown in the following examples:

$$\begin{aligned} \text{RFCCBZZ} &= \text{RFCCPZZ} * 6.287 \\ \text{RFICBZZ} &= \text{RFICPZZ} * 6.287 \end{aligned}$$

$$\text{RFTCBZZ} = \text{RFCCBZZ} + \text{RFICBZZ} + \text{RFACBZZ} + \text{RFEUBZZ}$$

The U.S. level Btu consumption estimates are calculated as the sum of the States' Btu consumption.

### **Additional Notes on Residual Fuel**

1. "Sales" data are actually called "shipments" in the source documents for 1960 and 1961; "consumption" for 1962 through 1966; "shipments" for 1967; "sales" from 1968 through 1978; "deliveries" for 1979 through 1983; and "sales" for 1984 forward.
2. In 1979, the Energy Information Administration implemented a new survey form, EIA-172, to obtain deliveries of fuel oil and kerosene data and updated the list of respondents. (A detailed explanation is published in the *Energy Data Report*, "Deliveries of Fuel Oil and Kerosene in 1979.") In the new survey form, certain end-use categories were redefined—in many cases, to collect more disaggregated data. The reclassifications resulted in some end-use categories that were no longer comparable with those in previous surveys. Where discontinuities occurred, estimates for the pre-1979 years have been made in CSEDS to conform with the 1979 fuel oil deliveries classifications. The pre-1979 deliveries estimates are not published in this report but are used in CSEDS to disaggregate the known U.S. total product supplied (consumption) into State and major end-use sector consumption estimates.

For residual fuel deliveries in 1979, the end-use categories "commercial" and "industrial" are available. The pre-1979 deliveries categories are called "heating" and "industrial." While the pre-1979 categories individually are not continuous with the 1979 categories, their subtotals are related. That is, a general comparison can be made between the sum of commercial and industrial deliveries in 1979 and the sum of heating and industrial deliveries in the pre-1979 years. Therefore, the following method was applied to present a comparable series for residual fuel delivered to the commercial and industrial sectors:

- For each of the pre-1979 years, a subtotal was created for each State by adding each State's heating and industrial deliveries

categories. A comparable 1979 subtotal was created by adding each State's commercial and industrial deliveries categories.

- Commercial and industrial shares of the subtotal in 1979 were calculated for each State.
- These 1979 end-use shares were then applied to each pre-1979 subtotal of residual fuel deliveries in each State to create State estimates of end-use deliveries for 1960 through 1978.

The 1980 through 1982 residual fuel deliveries data are based on the same survey as that used for 1979; therefore, the 1980 through 1982 data are directly comparable to 1979 data.

In 1984, EIA again updated the list of respondents for this survey, and the Form EIA-172 became the Form EIA-821, "Annual Fuel Oil and Kerosene Sales Report." EIA did not conduct a fuel oil and kerosene sales survey for 1983. The 1983 estimates in CSEDS are based on 1984 data obtained from the Form EIA-821. Statistical procedures and methodologies used for the Form EIA-821 differ from those used in previous years. Therefore, the 1983 and forward sales data may not be directly comparable to the pre-1983 data. (In the source document, the sales data for 1983 forward are reported in thousand gallons. These data were first converted to thousand barrels before being entered into CSEDS.)

3. The fuel oil at electric utilities data for all years and States are actual fuel oil consumption numbers collected from electric utilities by EIA on Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Due to changes in fuel oil reporting classifications on the Form EIA-759 over the years, it is not possible to develop a thoroughly consistent series for all years. However, over time, data more accurately disaggregating fuel oil into distillate fuel and residual fuel have become available. For 1960 through 1969, only total fuel oil consumed at electric utilities by State is available. For 1970 through 1979, fuel oil consumed by plant type (internal combustion and gas turbine plants combined and steam plants) by State are available. For 1980 forward, consumption of light oil at all plant types combined and consumption of heavy oil at all plant types combined are available by State. In CSEDS, the following assumptions have been made:



- 1960 through 1969 — State estimates of fuel oil consumption by plant type have been created for each year by applying the shares of steam plants (primarily residual fuel) and internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State in 1970 to each year's total fuel oil consumption at electric utilities for 1960 through 1969.
- 1970 through 1979 — fuel oil consumed by steam plants is assumed to equal residual fuel consumption, and fuel oil consumed by internal combustion and gas turbine plants is assumed to equal distillate fuel plus jet kerosene consumption.
- 1980 and forward — total heavy oil consumption at all plant types is assumed to equal residual fuel consumption, and total light oil consumption at all plant types is assumed to equal distillate fuel plus jet kerosene consumption.

The data series thus derived for CSEDS for residual fuel and distillate fuel plus jet kerosene consumption at electric utilities is considered to be actual consumption at electric utilities for each State and each year.

## Other Petroleum Products

There are 16 petroleum products that are summed and called "other petroleum products" in CSEDS. These products, in thousand barrels, are:

ABTCPUS	= aviation gasoline blending components total consumed in the United States;
COTCPZZ	= crude oil (including lease condensate) total consumed in each State;
FNTCPUS	= petroleum feedstocks, naphtha less than 401° F, total consumed in the United States;
FOTCPUS	= petroleum feedstocks, other oils equal to or greater than 401° F, total consumed in the United States;
FSTCPUS	= petroleum feedstocks, still gas, total consumed in the United States;
MBTCPUS	= motor gasoline blending components total consumed in the United States;

MSTCPUS	= miscellaneous petroleum products total consumed in the United States;
NATCPUS	= natural gasoline (including isopentane) total consumed in the United States;
PCTCPUS	= petroleum coke total consumed in the United States;
PLTCPUS	= plant condensate total consumed in the United States;
PPTCPUS	= pentanes plus total consumed in the United States;
SGTCPUS	= still gas total consumed in the United States;
SNTCPUS	= special naphthas total consumed in the United States;
UOTCPUS	= unfinished oils total consumed in the United States;
USTCPUS	= unfractionated stream total consumed in the United States; and
WXTCPUS	= waxes total consumed in the United States.

The methods used to create State estimates for each of these products (except petroleum coke, which was described earlier in the petroleum coke documentation) are explained in the following sections. It is assumed that all of these products are used by the industrial sector, except for the small portion of petroleum coke consumed at electric utilities. State estimates are created for other petroleum products by using the following four variables to allocate the products to the States:

COCAPZZ	= crude oil operating capacity at refineries in each State, in barrels per calendar day;
OCVAVZZ	= value added in the manufacture of industrial organic chemicals in each State, in million dollars;
PIVAVZZ	= value added in the manufacture of paints and allied products in each State, in million dollars; and
CGVAVZZ	= value added in the manufacture of corrugated and solid fiber boxes, in million dollars.

Value added by manufacture is a measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-process between the beginning and end-of-year inventories. Value added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas. The value added data are from the Department of Commerce *Census of Manufactures* reports.

**Crude Oil**

**Physical Units**

State estimates for crude oil consumed in petroleum industry operations are the data series COTCPZZ. The U.S. total for this data series is summed:

$$\text{COTCPUS} = \Sigma\text{COTCPZZ}$$

Industrial consumption equals total consumption of crude oil:

$$\begin{aligned} \text{COICPZZ} &= \text{COTCPZZ} \\ \text{COICPUS} &= \text{COTCPUS} \end{aligned}$$

**British Thermal Units (Btu)**

Crude oil has a heat content value of approximately 5.800 million Btu per barrel. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

$$\begin{aligned} \text{COTCBZZ} &= \text{COTCPZZ} * 5.800 \\ \text{COTCBUS} &= \Sigma\text{COTCBZZ} \\ \text{COICBZZ} &= \text{COTCBZZ} \\ \text{COICBUS} &= \text{COTCBUS} \end{aligned}$$

**Aviation Gasoline Blending Components; Petroleum Feedstocks, Still Gas; Motor Gasoline Blending Components; Still Gas; and Unfinished Oils**

**Physical Units**

The five petroleum products in this category are consumed as refinery fuels. Beginning in 1986, still gas for petrochemical feedstocks and still gas for other uses are reported together in the source document. State consumption estimates of these products are created in proportion to each State's crude oil operating capacity at refineries (COCAPZZ). The U.S. total for this variable is summed:

$$\text{COCAPUS} = \Sigma\text{COCAPZZ}$$

Aviation gasoline blending components State and U.S. consumption are estimated:

$$\begin{aligned} \text{ABTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{ABTCPUS} \\ \text{ABICPZZ} &= \text{ABTCPZZ} \\ \text{ABICPUS} &= \text{ABTCPUS} \end{aligned}$$

Petroleum feedstocks, still gas, State and U.S. consumption are estimated:

$$\begin{aligned} \text{FSTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{FSTCPUS} \\ \text{FSICPZZ} &= \text{FSTCPZZ} \\ \text{FSICPUS} &= \text{FSTCPUS} \end{aligned}$$

Motor gasoline blending components State and U.S. consumption are estimated:

$$\begin{aligned} \text{MBTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{MBTCPUS} \\ \text{MBICPZZ} &= \text{MBTCPZZ} \\ \text{MBICPUS} &= \text{MBTCPUS} \end{aligned}$$

Still gas State and U.S. consumption are estimated:

$$\begin{aligned} \text{SGTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{SGTCPUS} \\ \text{SGICPZZ} &= \text{SGTCPZZ} \\ \text{SGICPUS} &= \text{SGTCPUS} \end{aligned}$$

Unfinished oils State and U.S. consumption are estimated:

$$\begin{aligned} \text{UOTCPZZ} &= (\text{COCAPZZ} / \text{COCAPUS}) * \text{UOTCPUS} \\ \text{UOICPZZ} &= \text{UOTCPZZ} \\ \text{UOICPUS} &= \text{UOTCPUS} \end{aligned}$$

**British Thermal Units (Btu)**

Btu estimates for the five products in this group are developed by multiplying the estimated consumption of each individual product in physical units by its respective heat content conversion factor. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

ABTCBZZ = ABTCPZZ \* 5.048  
 ABTCBUS =  $\Sigma$ ABTCBZZ  
 ABICBZZ = ABTCBZZ  
 ABICBUS = ABTCBUS

FSTCBZZ = FSTCPZZ \* 6.000  
 FSTCBUS =  $\Sigma$ FSTCBZZ  
 FSICBZZ = FSTCBZZ  
 FSICBUS = FSTCBUS

MBTCBZZ = MBTCPZZ \* 5.253  
 MBTCBUS =  $\Sigma$ MBTCBZZ  
 MBICBZZ = MBTCBZZ  
 MBICBUS = MBTCBUS

SGTCBZZ = SGTCPZZ \* 6.000  
 SGTCBUS =  $\Sigma$ SGTCBZZ  
 SGICBZZ = SGTCBZZ  
 SGICBUS = SGTCBUS

UOTCBZZ = UOTCPZZ \* 5.825  
 UOTCBUS =  $\Sigma$ UOTCBZZ

UOICBZZ = UOTCBZZ  
 UOICBUS = UOTCBUS

**Petroleum Feedstocks, Naphtha Less Than 401° F; Petroleum Feedstocks, Other Oils Equal to or Greater Than 401° F; Miscellaneous Petroleum Products; Natural Gasoline (Including Isopentane); Plant Condensate; Pentanes Plus; and Unfractionated Stream.**

#### **Physical Units**

The seven petroleum products in this category are allocated to the States in proportion to the value added in the manufacture of industrial organic chemicals in each State (OCVAVZZ).

The two petroleum feedstocks are consumed by the chemical industry in producing petrochemical "building blocks" that, in turn, are converted to such products as synthetic fibers, synthetic rubber, and plastics.

Miscellaneous products include such products as petrolatum, synthetic natural gas feedstocks, and specialty oils (e.g., hydraulic oils, insulating oils, medicinal oils, rust preventatives, and spray oils). Finished petrochemicals usually constitute the largest volume of miscellaneous product, and it is assumed that the chief consuming industry for this product line is the chemical industry.

Natural gasoline (including isopentane), plant condensate, pentanes plus, and unfractionated stream are included in this group because the chemical industry is the only one that could readily utilize these lighter liquid hydrocarbons (as petrochemical feedstocks). Beginning in 1984, in the source document, natural gasoline (including isopentane) and plant condensate are reported together as a new product, pentanes plus. At the same time, unfractionated stream was dropped because its components were reported separately as liquefied petroleum gases.

The U.S. total for the data series used to apportion these products to the States is summed:

OCVAVUS =  $\Sigma$ OCVAVZZ

Total petroleum feedstocks, naphtha less than 401° F, State and U.S. consumption are estimated:

FNTCPZZ = (OCVAVZZ / OCVAVUS) \* FNTCPUS  
 FNICPZZ = FNTCPZZ  
 FNICPUS = FNTCPUS

Petroleum feedstocks, other oils equal to or greater than 401° F, State and U.S. consumption are estimated:

FOTCPZZ = (OCVAVZZ / OCVAVUS) \* FOTCPUS  
 FOICPZZ = FOTCPZZ  
 FOICPUS = FOTCPUS

Miscellaneous petroleum products State and U.S. consumption are estimated:

**OTHER  
PETROLEUM  
PRODUCTS**

MSTCPZZ = (OCVAVZZ / OCVAVUS) \* MSTCPUS  
 MSICPZZ = MSTCPZZ  
 MSICPUS = MSTCPUS

Natural gasoline (including isopentane) State and U.S. consumption are estimated:

NATCPZZ = (OCVAVZZ / OCVAVUS) \* NATCPUS  
 NAICPZZ = NATCPZZ  
 NAICPUS = NATCPUS

Plant condensate State and U.S. consumption are estimated:

PLTCPZZ = (OCVAVZZ / OCVAVUS) \* PLTCPUS  
 PLICPZZ = PLTCPZZ  
 PLICPUS = PLTCPUS

Pentane plus State and U.S. consumption are estimated:

PPTCPZZ = (OCVAVZZ / OCVAVUS) \* PPTCPUS  
 PPICPZZ = PPTCPZZ  
 PPICPUS = PPTCPUS

Unfractionated stream State and U.S. consumption are estimated:

USTCPZZ = (OCVAVZZ / OCVAVUS) \* USTCPUS  
 USICPZZ = USTCPZZ  
 USICPUS = USTCPUS

**British Thermal Units (Btu)**

Btu estimates for the seven petroleum products in this group are developed by multiplying each individual product's estimated consumption in physical units by its respective approximate heat content conversion factor. The calculations performed to estimate total Btu consumption and industrial use Btu consumption by State and for the United States are:

FNTCBZZ = FNTCPZZ \* 5.248  
 FNTCBUS = ΣFNTCBZZ  
 FNICBZZ = FNTCBZZ  
 FNICBUS = FNTCBUS

FOTCBZZ = FOTCPZZ \* 5.825  
 FOTCBUS = ΣFOTCBZZ  
 FOICBZZ = FOTCBZZ  
 FOICBUS = FOTCBUS

MSTCBZZ = MSTCPZZ \* 5.796  
 MSTCBUS = ΣMSTCBZZ  
 MSICBZZ = MSTCBZZ  
 MSICBUS = MSTCBUS

NATCBZZ = NATCPZZ \* 4.620  
 NATCBUS = ΣNATCBZZ  
 NAICBZZ = NATCBZZ  
 NAICBUS = NATCBUS

PLTCBZZ = PLTCPZZ \* 5.418  
 PLTCBUS = ΣPLTCBZZ  
 PLICBZZ = PLTCBZZ  
 PLICBUS = PLTCBUS

PPTCBZZ = PPTCPZZ \* 4.620  
 PPTCBUS = ΣPPTCBZZ  
 PPICBZZ = PPTCBZZ  
 PPICBUS = PPTCBUS

USTCBZZ = USTCPZZ \* 5.418  
 USTCBUS = ΣUSTCBZZ  
 USICBZZ = USTCBZZ  
 USICBUS = USTCBUS

**Special Naphthas**

**Physical Units**

Special naphthas are used as paint and varnish thinners and dry cleaning liquids or solvents. This petroleum product is allocated to the States in proportion to the value added in the manufacture of paints and allied products in each State (PIVAVZZ).

The U.S. total for the apportioning data series is calculated:

$$\text{PIVAVUS} = \Sigma \text{PIVAVZZ}$$

Special naphthas State and U.S. consumption are estimated:

$$\begin{aligned}\text{SNTCPZZ} &= (\text{PIVAVZZ} / \text{PIVAVUS}) * \text{SNTCPUS} \\ \text{SNICPZZ} &= \text{SNTCPZZ} \\ \text{SNICPUS} &= \text{SNTCPUS}\end{aligned}$$

### **British Thermal Units (Btu)**

Special naphthas have a heat content value of approximately 5.248 million Btu per barrel. This factor is applied to convert special naphthas estimated consumption from physical units to Btu by State and for the United States:

$$\begin{aligned}\text{SNTCBZZ} &= \text{SNTCPZZ} * 5.248 \\ \text{SNTCBUS} &= \Sigma \text{SNTCBZZ} \\ \text{SNICBZZ} &= \text{SNTCBZZ} \\ \text{SNICBUS} &= \text{SNTCBUS}\end{aligned}$$

### **Waxes**

#### **Physical Units**

Because petroleum waxes are very cost-effective moisture and gas barriers, food packaging is the largest market for petroleum waxes in the United States, accounting for more than 50 percent of petroleum wax consumption. Therefore, waxes are allocated to the States in proportion to the value added in the manufacture of corrugated and solid fiber boxes (CGVAVZZ).

The U.S. total for this variable is summed:

$$\text{CGVAVUS} = \Sigma \text{CGVAVZZ}$$

State and U.S. consumption are estimated:

$$\begin{aligned}\text{WXTCPZZ} &= (\text{CGVAVZZ} / \text{CGVAVUS}) * \text{WXTCPUS} \\ \text{WXICPZZ} &= \text{WXTCPZZ} \\ \text{WXICPUS} &= \text{WXTCPUS}\end{aligned}$$

### **British Thermal Units (Btu)**

Waxes have a heat content value of approximately 5.537 million Btu per barrel. This factor is applied to convert the estimated consumption of waxes from physical units to Btu by State and at the U.S. level:

$$\begin{aligned}\text{WXTCBZZ} &= \text{WXTCPZZ} * 5.537 \\ \text{WXTCBUS} &= \Sigma \text{WXTCBZZ} \\ \text{WXICBZZ} &= \text{WXTCBZZ} \\ \text{WXICBUS} &= \text{WXTCBUS}\end{aligned}$$

### **Total Other Petroleum Products**

#### **Physical Units**

Total other petroleum products is the sum of the 16 "other petroleum products." All of these products are consumed by the industrial sector except for some petroleum coke consumed by electric utilities (PCEUP), which is calculated in CSEDS with electric utility fuel consumption. State and U.S. industrial use of these other petroleum products are calculated:

$$\begin{aligned}\text{POICPZZ} &= \text{ABICPZZ} + \text{COICPZZ} + \text{FNICPZZ} + \text{FOICPZZ} + \\ &\text{FSICPZZ} + \text{MBICPZZ} + \text{MSICPZZ} + \text{NAICPZZ} + \\ &\text{PCICPZZ} + \text{PLICPZZ} + \text{PPICPZZ} + \text{SGICPZZ} + \\ &\text{SNICPZZ} + \text{UOICPZZ} + \text{USICPZZ} + \text{WXICPZZ} \\ \text{POICPUS} &= \Sigma \text{POICPZZ}\end{aligned}$$

Total consumption of these products (including petroleum coke consumption by electric utilities) is calculated:

$$\begin{aligned}\text{POTCPZZ} &= \text{ABTCPZZ} + \text{COTCPZZ} + \text{FNTCPZZ} + \text{FOTCPZZ} + \\ &\text{FSTCPZZ} + \text{MBTCPZZ} + \text{MSTCPZZ} + \text{NATCPZZ} + \\ &\text{PCTCPZZ} + \text{PLTCPZZ} + \text{PPTCPZZ} + \text{SGTCPZZ} + \\ &\text{SNTCPZZ} + \text{UOTCPZZ} + \text{USTCPZZ} + \text{WXTCPZZ} \\ \text{POTCPUS} &= \Sigma \text{POTCPZZ}\end{aligned}$$

**British Thermal Units (Btu)**

Estimated consumption of all 16 “other petroleum products” in Btu is the sum of the Btu consumption of each product by the industrial sector. The State and U.S. totals are calculated:

$$\begin{aligned} \text{POICBZZ} &= \text{ABICBZZ} + \text{COICBZZ} + \text{FNICBZZ} + \text{FOICBZZ} + \\ &\quad \text{FSICBZZ} + \text{MBICBZZ} + \text{MSICBZZ} + \text{NAICBZZ} + \\ &\quad \text{PCICBZZ} + \text{PLICBZZ} + \text{PPICBZZ} + \text{SGICBZZ} + \\ &\quad \text{SNICBZZ} + \text{UOICBZZ} + \text{USICBZZ} + \text{WXICBZZ} \\ \text{POICBUS} &= \Sigma \text{POICBZZ} \end{aligned}$$

State and U.S. total consumption of these products, which includes electric utility consumption of petroleum coke, is calculated:

$$\begin{aligned} \text{POTCBZZ} &= \text{ABTCBZZ} + \text{COTCBZZ} + \text{FNTCBZZ} + \text{FOTCBZZ} + \\ &\quad \text{FSTCBZZ} + \text{MBTCBZZ} + \text{MSTCBZZ} + \text{NATCBZZ} + \\ &\quad \text{PCTCBZZ} + \text{PLTCBZZ} + \text{PPTCBZZ} + \text{SGTCBZZ} + \\ &\quad \text{SNTCBZZ} + \text{UOTCBZZ} + \text{USTCBZZ} + \text{WXTCBZZ} \\ \text{POTCBUS} &= \Sigma \text{POTCBZZ} \end{aligned}$$

**Additional Notes on Other Petroleum Products**

1. In the “Energy Consumption Estimates by Source” tables in this report, a petroleum column called “Other” comprises the other products, including petroleum coke consumed by electric utilities (POTCB and POTCP). In the “Industrial Energy Consumption Estimates” tables, the petroleum “Other” column is the other petroleum products consumption total for industrial use (POICB and POICP).
2. The data for “value added by manufacture” that are used to allocate many of the other petroleum products are from the Department of Commerce, *Census of Manufactures* reports. For all years, several States’ data were withheld from publication to avoid disclosing operations of individual companies. The total withheld data was apportioned to the withheld States on the basis of those States’ proportional values in the previous year.

In 1982, all respondents to the Census of Manufactures survey were requested to report their inventories at cost or market prior to

accounting adjustments for “last in, first out” cost. This is a change from prior years in which respondents were permitted to value their inventories by using any generally accepted accounting valuation method. Consequently, data for value added by manufacture for 1982 are not comparable to the prior years’ data.

**Petroleum Summaries**

This section describes the method of estimating consumption by the major end-use sectors within the States for all petroleum data series. Table A2 on page 348 of this section indicates which petroleum products are consumed in each of the five major end-use sectors. In the preceding portions of this section, end-use consumption estimates have been derived for each petroleum product. These petroleum product subtotals are now summed, in physical units of thousand barrels and in Btu, to create estimated end-use consumption for all petroleum products.

**Residential Sector**

Petroleum products consumed by the residential sector are: distillate fuel (DF), kerosene (KS), and liquefied petroleum gas (LG). For the residential sector, the State and U.S. totals in physical units are:

$$\begin{aligned} \text{PARCPZZ} &= \text{DFRCPZZ} + \text{KSRCPPZZ} + \text{LGRCPZZ} \\ \text{PARCPUS} &= \Sigma \text{PARCPZZ} \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned} \text{PARCBZZ} &= \text{DFRCBZZ} + \text{KSRCBZZ} + \text{LGRCBZZ} \\ \text{PARCBUS} &= \Sigma \text{PARCBZZ} \end{aligned}$$

**Commercial Sector**

The commercial sector’s use of petroleum products includes: distillate fuel (DF), kerosene (KS), liquefied petroleum gases (LG), motor gasoline (MG), and residual fuel (RF). In physical units, the State and the U.S. totals for the commercial sector are calculated:

$$\begin{aligned}
 \text{PACCPZZ} &= \text{DFCCPZZ} + \text{KSCCPZZ} + \text{LGCCPZZ} + \text{MGCCPZZ} + \\
 &\quad \text{RFCCPZZ} \\
 \text{PACCPUS} &= \Sigma \text{PACCPZZ}
 \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}
 \text{PACCBZZ} &= \text{DFCCBZZ} + \text{KSCCBZZ} + \text{LGCCBZZ} + \text{MGCCBZZ} + \\
 &\quad \text{RFCCBZZ} \\
 \text{PACCBUS} &= \Sigma \text{PACCBZZ}
 \end{aligned}$$

### Industrial Sector

Petroleum used in the industrial sector includes: asphalt and road oil (AR); distillate fuel (DF); kerosene (KS); liquefied petroleum gases (LG); lubricants (LU); motor gasoline (MG); residual fuel (RF); and the 16 products that are already summed in the "other petroleum products" (PO) subtotal. The State and U.S. total estimates in physical units are:

$$\begin{aligned}
 \text{PAICPZZ} &= \text{ARICPZZ} + \text{DFICPZZ} + \text{KSICPZZ} + \text{LGICPZZ} + \\
 &\quad \text{LUICPZZ} + \text{MGICPZZ} + \text{RFICPZZ} + \text{POICPZZ} \\
 \text{PAICPUS} &= \Sigma \text{PAICPZZ}
 \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}
 \text{PAICBZZ} &= \text{ARICBZZ} + \text{DFICBZZ} + \text{KSICBZZ} + \text{LGICBZZ} + \\
 &\quad \text{LUICBZZ} + \text{MGICBZZ} + \text{RFICBZZ} + \text{POICBZZ} \\
 \text{PAICBUS} &= \Sigma \text{PAICBZZ}
 \end{aligned}$$

### Transportation Sector

Petroleum products used in the transportation sector are: aviation gasoline (AV), distillate fuel (DF), kerosene-type jet fuel (JK), naphtha-type jet fuel (JN), liquefied petroleum gases (LG), lubricants (LU), motor gasoline (MG), and residual fuel (RF). The State and U.S. totals in physical units are:

$$\begin{aligned}
 \text{PAACPZZ} &= \text{AVACPZZ} + \text{DFACPZZ} + \text{JKACPZZ} + \text{JNACPZZ} + \\
 &\quad \text{LGACPZZ} + \text{LUACPZZ} + \text{MGACPZZ} + \text{RFACPZZ}
 \end{aligned}$$

$$\text{PAACPUS} = \Sigma \text{PAACPZZ}$$

State and U.S. totals in Btu are:

$$\begin{aligned}
 \text{PAACBZZ} &= \text{AVACBZZ} + \text{DFACBZZ} + \text{JKACBZZ} + \text{JNACBZZ} + \\
 &\quad \text{LGACBZZ} + \text{LUACBZZ} + \text{MGACBZZ} + \text{RFACBZZ} \\
 \text{PAACBUS} &= \Sigma \text{PAACBZZ}
 \end{aligned}$$

### Electric Utility Sector

Petroleum products consumed by the electric utility sector are: distillate fuel (DF), kerosene-type jet fuel (JK), petroleum coke (PC), and residual fuel (RF). In physical units, the State and U.S. totals are:

$$\begin{aligned}
 \text{PAEUPZZ} &= \text{DFEUPZZ} + \text{JKEUPZZ} + \text{PCEUPZZ} + \text{RFEUPZZ} \\
 \text{PAEUPUS} &= \Sigma \text{PAEUPZZ}
 \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}
 \text{PAEUBZZ} &= \text{DFEUBZZ} + \text{JKEUBZZ} + \text{PCEUBZZ} + \text{RFEUBZZ} \\
 \text{PAEUBUS} &= \Sigma \text{PAEUBZZ}
 \end{aligned}$$

### Total Consumption of Petroleum Products

Total consumption of all petroleum products is the sum of all of the individual product totals. The State and U.S. physical unit totals are:

$$\begin{aligned}
 \text{PATCPZZ} &= \text{ARTCPZZ} + \text{AVTCPZZ} + \text{DFTCPZZ} + \text{JKTCPZZ} + \\
 &\quad \text{JNTCPZZ} + \text{KSTCPZZ} + \text{LGTCPZZ} + \text{LUTCPZZ} + \\
 &\quad \text{MGTCPZZ} + \text{RFTCPZZ} + \text{POTCPZZ} \\
 \text{PATCPUS} &= \Sigma \text{PATCPZZ}
 \end{aligned}$$

State and U.S. totals in Btu are:

$$\begin{aligned}
 \text{PATCBZZ} &= \text{ARTCBZZ} + \text{AVTCBZZ} + \text{DFTCBZZ} + \text{JKTCBZZ} + \\
 &\quad \text{JNTCBZZ} + \text{KSTCBZZ} + \text{LGTCBZZ} + \text{LUTCBZZ} + \\
 &\quad \text{MGTCBZZ} + \text{RFTCBZZ} + \text{POTCBZZ} \\
 \text{PATCBUS} &= \Sigma \text{PATCBZZ}
 \end{aligned}$$

## Additional Calculations

Additional calculations are performed by CSEDS to provide data that are used in EIA's *Annual Energy Review* and published in the conversion factor section of EIA's *Monthly Energy Review*. Conversion factors for all petroleum products consumed by each sector, as well as data for the residential and commercial sectors combined, are calculated by CSEDS.

The conversion factor for all petroleum products consumed by the residential sector is calculated:

$$\text{PARCKUS} = \text{PARCBUS} / \text{PARCPUS}$$

The conversion factor for all petroleum products consumed by the commercial sector is calculated:

$$\text{PACCKUS} = \text{PACCBUS} / \text{PACCPUS}$$

Consumption of all petroleum products by the residential and commercial sectors combined, in physical units, in Btu, and the average conversion factor are calculated:

$$\begin{aligned} \text{PAHCPUS} &= \text{PARCPUS} + \text{PACCPUS} \\ \text{PAHCBUS} &= \text{PARCBUS} + \text{PACCBUS} \\ \text{PAHCKUS} &= \text{PAHCBUS} / \text{PAHCPUS} \end{aligned}$$

The conversion factor for all petroleum products consumed by the industrial sector is calculated:

$$\text{PAICKUS} = \text{PAICBUS} / \text{PAICPUS}$$

The conversion factor for all petroleum products consumed by the transportation sector is calculated:

$$\text{PAACKUS} = \text{PAACBUS} / \text{PAACPUS}$$

The conversion factor for all petroleum products consumed by electric utilities is calculated:

$$\text{PAEUKUS} = \text{PAEUBUS} / \text{PAEUPUS}$$

The conversion factor for all petroleum products consumed by all sectors is calculated:

$$\text{PATCKUS} = \text{PATCBUS} / \text{PATCPUS}$$



## Section 5. Renewable Energy

Renewable energy sources included in the Combined State Energy Data System (CSEDS) comprise biomass (primarily wood, waste, and ethanol), geothermal, hydroelectric, wind, photovoltaic, and solar thermal energy sources. Extensive data collection for fuels used at electric utilities enables CSEDS to include renewable energy used to produce electricity for all years covered in the system, 1960 forward. Renewable energy consumption estimates for the residential, commercial, industrial, and transportation sectors are available for 1990 forward.

### Biomass

Different forms of biomass are used by each consuming sector. The residential and commercial sectors burn wood for space heating. The industrial sector's primary biomass source is combustible industrial by-products used for electricity generation and process steam, followed in importance by wood chips. The transportation sector uses ethanol as an additive to motor gasoline. Electric utilities use wood, industrial wood waste and waste gas, and municipal waste as cofiring or primary fuels to produce electricity. Consumption of biomass in the residential, commercial, industrial, and transportation sectors is included in CSEDS for 1990 forward. Biomass consumption by electric utilities to produce electricity is included from 1960 forward.

#### Residential Sector

Estimates of wood consumption in the residential sector by State are developed from data collected on the EIA triennial surveys, Residential Energy Consumption Survey (RECS) 1990 and 1993. The surveys provide data for the national total and for Census Divisions. The survey sample size of the 1993 RECS was large enough to provide data for California, Florida, New

York, and Texas. On the basis of RECS data, the assumption is made that no wood is consumed in the residential sector in Hawaii. Estimates for the other States are developed by allocating Division-level data to the States by using U.S. Department of Commerce, Bureau of the Census, number of housing units per State. Consumption for years between and following 1990 and 1993 is interpolated.

The following data series and formulas are used to estimate wood consumption in the residential sector. "ZZ" in the variable name represents the two-letter State code that differs for each State.

WDRCPZZ = wood consumed in the residential sector of each State, in thousand cords.

The State-level data are summed to a U.S. total:

$$\text{WDRCPUS} = \sum \text{WDRCPZZ}$$

The residential sector data in cords are converted to Btu and the commercial sector data in Btu are converted to cords by using the conversion factor of 20 million Btu per cord:

$$\begin{aligned} \text{WDRCBZZ} &= \text{WDRCPZZ} * 20 \\ \text{WDRCBUS} &= \sum \text{WDRCBZZ} \end{aligned}$$

#### Commercial Sector

Commercial sector wood consumption is estimated by EIA to be 2 percent of total wood consumption as published in the EIA, *Annual Energy Review*. Data are available only at the national level for 1993 forward. The national data are allocated to the States in proportion to commercial sector distillate fuel use with the exception that wood consumption in Hawaii is assumed to be zero.

The following data series and formulas are used to estimate wood consumption in the commercial sector. "ZZ" in the variable name represents the two-letter State code that differs for each State.

- WDCCBUS = wood consumed by the commercial sector in the United States, in billion Btu; and
- DFCCPZZ = distillate fuel consumed by the commercial sector in each State, in thousand barrels.

The CSEDS commercial distillate fuel consumption (DFCCP) is used as an allocating series (DFCJP) with the exception that Hawaii wood use is assumed to be zero.

- DFCJPZZ = DFCCPZZ
- DFCJPHI = 0
- DFCJPUS =  $\Sigma$ DFCJPZZ

The national wood value is allocated to the States in proportion to adjusted distillate fuel series:

$$WDCCBZZ = (DFCJPZZ / DFCJPUS) * WDCCBUS$$

The commercial wood consumption estimates are converted from Btu to cords by using the conversion factor of 20 million Btu per cord:

- WDCCPZZ =  $WDCCBZZ / 20$
- WDCCPUS =  $\Sigma$ WDCCPZZ

### Industrial Sector

Industrial sector biomass (wood and waste) consumption estimates are based on national-level data published in the EIA, *Renewable Energy Annual*; State-level data collected on the Form EIA-867, "Annual Nonutility Power Producer Report"; national data collected by Standard Industrial Code (SIC) on the Form EIA-846, "1991 Manufacturing Energy Consumption Survey"; and State data for the value added in manufacturing processes from the U.S. Department of Commerce, Bureau of the Census, *Census of Manufactures, Industry Series*.

The State data for wood consumption and for waste consumption in British thermal units (Btu) from the nonutility power producers' report are summed, and the total is subtracted from the national value for industrial sector biomass published in Btu in the *Renewable Energy Annual*. The difference is assumed to be used by the manufacturing sector. Based on information obtained from the EIA, "1991 Manufacturing Energy Consumption Survey," the assumption is made that wood and waste use in the manufacturing sector occurs primarily in the industries included in SIC codes 2421 (sawmills and planing mills), 2541 (wood partitions and fixtures), and 2621 (paper mills). The State-level "Value Added in Manufacture" data series for these industries is used to allocate the derived U.S. subtotal of manufacturing wood and waste consumption to the States. The State estimated manufacturing wood and waste consumption is added to the nonutility State-level data to create State industrial sector biomass estimates that equal the U.S. total published in the *Renewable Energy Annual*.

The State-level estimates in Btu are entered into CSEDS. "ZZ" in the variable name represents the two-letter State code that differs for each State.

- WWICBZZ = wood and waste consumed by the industrial sector of each State, in billion Btu.

The U.S. total is calculated as the sum of the States' data:

$$WWICBUS = \Sigma WWICBZZ$$

There are no comparable physical units because industrial biomass is measured in a variety of units (e.g., tons, cubic feet, and kilowatthours).

### Transportation Sector

Biomass is consumed in the transportation sector in the form of ethanol blended into motor gasoline. The U.S. total in CSEDS is fuel ethanol production reported on the "Monthly Oxygenate Telephone Report," Form EIA-819M. A State data series, estimated by the U.S. Department of Transportation, Federal Highway Administration, and published in *Highway Statistics*, represents ethanol consumed in gasohol. Ethanol estimates are kept separately in CSEDS and shown in the *SEDR* tables to illustrate renewable energy use, but ethanol consumption is already accounted for within the motor gasoline data series.

ENTRPZZ = ethanol blended into motor gasoline by State, in thousand gallons; and  
 ENACPUS = ethanol consumed in the transportation sector in the United States, in thousand gallons.

The U.S. value, ENACPUS, is allocated to the States in proportion the *Highway Statistics* State estimates, ENTRPZZ:

ENTRPUS =  $\Sigma$ ENTRPZZ  
 ENACPZZ =  $(ENTRPZZ / ENTRPUS) * ENACPUS$

Ethanol is converted to equivalent British thermal units (Btu) by using a conversion factor of 76,400 Btu per gallon.

ENACBZZ = ENACPZZ \* 0.0764  
 ENACBUS =  $\Sigma$ ENACBZZ

### Electric Utilities

Electric utilities' generation of electricity from wood and waste energy, by State, are available combined from 1960 through 1981 and separately from 1982 forward from the Form EIA-759, "Monthly Power Plant Report." The data identifiers in CSEDS are:

WDEOPZZ = electricity produced from wood energy sources at electric utilities in each State (included in waste energy for 1960 through 1981), in million kilowatthours; and  
 WSEOPZZ = electricity produced from waste energy sources at electric utilities in each State (includes wood energy for 1960 through 1981), in million kilowatthours.

The U.S. totals are calculated as the sum of the States' data, and wood and waste are summed to provide a biomass (BM) value:

WDEOPUS =  $\Sigma$ WDEOPZZ  
 WSEOPUS =  $\Sigma$ WSEOPZZ  
 WWEOPIZZ = WDEOPZZ + WSEOPZZ  
 WWEOPIUS =  $\Sigma$ WWEOPIZZ

Electricity produced from wood and waste sources is converted into Btu by use of a conversion factor that is the U.S. average heat content of fossil fuels burned at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix D, Table D1.

WDEOBZZ = WDEOPZZ \* FFEOKUS  
 WDEOBUS =  $\Sigma$ WDEOBZZ

WSEOBZZ = WSEOPZZ \* FFEOKUS  
 WSEOBUS =  $\Sigma$ WSEOBZZ

WWEOBZZ = WDEOBZZ + WSEOBZZ  
 WWEOBUS =  $\Sigma$ WWEOBZZ

### Totals

State total consumption of biomass is calculated as the sum of the residential, commercial, industrial, and transportation sectors' values plus consumption at electric utilities. The U.S. total is the sum of the State data:

BMTCBZZ = WDRCBZZ + WDCCBZZ + WWICBZZ + ENACBZZ + WWEOBZZ  
 BMTCBUS =  $\Sigma$ BMTCBZZ

## Geothermal

Electricity generation by electric utilities from geothermal energy is included in the Combined State Energy Data System (CSEDS) for all years, 1960 forward, as collected on the Form EIA-759, "Monthly Power Plant Report." Data for electricity produced from geothermal energy sources and imported into the United States from Mexico are available from 1990 forward and are based on data from EIA's Office of Coal, Nuclear, Electric and Alternate Fuels. Geothermal energy used by nonutility power producers to produce electricity, which is included in CSEDS industrial sector for 1990 forward, is not available in kilowatthours but is expressed in British thermal units (Btu) and developed from data collected on the Form EIA-867, "Annual Nonutility Power Producers Report." These data series are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

- GEICBZZ = electricity produced from geothermal energy in the industrial sector by State, in billion Btu;
- GEEOPZZ = electricity produced from geothermal energy at electric utilities by State, in million kilowatt-hours; and
- GEIMPZZ = electricity produced from geothermal energy and imported into the United States, by State, in million kilowatt-hours.

The U.S. totals for the State-level series are calculated by summing the State data:

- GEICBUS =  $\Sigma$ GEICBZZ
- GEEOPUS =  $\Sigma$ GEEOPZZ
- GEIMPUS =  $\Sigma$ GEIMPZZ

Electricity imports produced from geothermal energy are added to the electricity produced from geothermal energy at electric utilities to be shown in the "Geothermal Energy" column of the *State Energy Data Report (SEDR)* tables titled "Energy Input at Electric Utilities."

- GEENPZZ = GEEOPZZ + GEIMPZZ
- GEENPUS =  $\Sigma$ GEENPZZ

To convert electricity produced from geothermal energy from kilowatt-hours into comparable Btu, a U.S. average factor that varies by year is used. The values for the factor, GEEOKUS, are shown in Appendix D, Table D1.

- GEEOKUS = factor for converting electricity produced from geothermal energy from kilowatt-hours to Btu.

The values for each sector within each State are converted to Btu:

- GEEOBZZ = GEEOPZZ \* GEEOKUS
- GEEOBUS =  $\Sigma$ GEEOBZZ
- GEIMBZZ = GEIMPZZ \* GEEOKUS
- GEIMBUS =  $\Sigma$ GEIMBZZ
- GEENBZZ = GEEOBZZ + GEIMBZZ
- GEENBUS =  $\Sigma$ GEENBZZ

The State totals for geothermal energy are the sum of the industrial sector geothermal-based generation, available only in Btu, and the electric

utilities' generation (including imports). The U.S. total is the sum of the State data.

- GETCBZZ = GEICBZZ + GEENBZZ
- GETCBUS =  $\Sigma$ GETCBZZ

## Hydroelectric Power

Electricity produced from hydropower in the industrial sector and by electric utilities is included in CSEDS for all years. The industrial sector includes estimates of hydroelectricity generation by industries for their own use for all years, as well as generation by nonutility power producers for sale in 1990 forward as collected on the Form EIA-867, "Annual Nonutility Power Producers Report." Industrial data for 1990 forward are not available in kilowatt-hours but are included in CSEDS in equivalent British thermal units (Btu). Data on electric utilities' use of hydropower are collected on the Form EIA-759, "Monthly Power Plant Report," and includes two types of hydropower—conventional and pumped storage. Conventional hydroelectric power uses falling water to drive turbines to produce electricity. With pumped storage hydroelectricity, energy is used to pump water into higher storage areas during non-peak hours so that it can be released to drive turbines during times of peak electricity demand. Because pumped storage hydroelectricity uses energy, it is not considered a renewable energy source; however, it is discussed in this chapter with other hydropower.

The hydroelectric data series included in CSEDS are identified by the following data series names ("ZZ" in the name represents the two-letter State code that differs for each State):

- HVEOPZZ = electricity produced by conventional hydroelectric power at electric utilities, in million kilowatt-hours;
- HPEOPZZ = electricity produced by pumped storage hydroelectric power at electric utilities, in million kilowatt-hours;
- HYICPZZ = electricity produced by hydroelectric power at industrial facilities, by State, in million kilowatt-hours (available for 1960-1989 only);
- HYICBZZ = electricity produced by hydroelectric power at industrial facilities, by State, in billion Btu;

HYIMPZZ = electricity produced from hydroelectric power and imported into the United States, by State, in million kilowatt-hours; and

HYEXPZZ = electricity produced from hydroelectric power and exported from the United States, by State, in million kilowatt-hours.

The U.S. value for each of the series is the sum of the State data.

Total electricity produced from hydropower at electric utilities is calculated as the sum of conventional and pumped storage hydroelectric power.

HYEOPZZ = HVEOPZZ + HPEOPZZ

HYEOPUS =  $\Sigma$ HYEOPZZ

Hydroelectric-based electricity that is imported and exported across U.S. borders is added to the electric utility hydroelectric generation and shown in the "Hydroelectric Power" column of the *State Energy Data Report (SEDR)* tables titled "Energy Input at Electric Utilities."

HYENPZZ = HYEOPZZ + HYIMPZZ - HYEXPZZ

HYENPUS =  $\Sigma$ HYENPZZ

Additional calculations are made to estimate the renewable portion of hydroelectric power at electric utilities, i.e., excluding hydroelectricity produced from pumped storage:

HVENPZZ = HVEOPZZ + HYIMPZZ - HYEXPZZ

HVENPUS =  $\Sigma$ HVENPZZ

Electricity produced from hydroelectric power is converted from kilowatt-hours into Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix D, Table D1.

HPEOBZZ = HPEOPZZ \* FFEOKUS

HVEOBZZ = HVEOPZZ \* FFEOKUS

HYEOBZZ = HPEOBZZ + HVEOBZZ

HYIMBZZ = HYIMPZZ \* FFEOKUS

HYEXBZZ = HYEXPZZ \* FFEOKUS

HYENBZZ = HYEOPZZ + HYIMBZZ - HYEXBZZ

HVENBZZ = HVEOPZZ + HYIMBZZ - HYEXBZZ

The U.S. value for each of the series is the sum of the State data.

Total hydroelectricity consumption for each State is the sum of the electric utilities generation (plus imports and minus exports) and the industrial sector generation:

HYTCBZZ = HYENBZZ + HYICBZZ

HYTCBUS =  $\Sigma$ HYTCBZZ

## Solar

Estimates of solar energy use for the residential and commercial sectors combined and the industrial sector are included in the Combined State Energy Data System (CSEDS) for 1990 forward. Generation of electricity by electric utilities from solar energy sources is included in CSEDS for 1984 forward.

### Residential/Commercial Sector

Solar thermal energy use in the residential and commercial sectors combined is estimated by using data on shipments of solar thermal collectors to State destinations, measured in thousand square feet, as collected on the Energy Information Administration Form CE-63A, "Annual Solar Thermal Collector Manufacturers Survey," and predecessor surveys. The data are published for recent years in the EIA, *Renewable Energy Annual*. The assumptions are that: (1) the retirement/replacement period for solar thermal collectors is 20 years and, therefore, the cumulative square footage of solar thermal collectors produced since 1974 are still in use; (2) the daily average energy output of all three categories of solar thermal collectors is 1,500 Btu per square foot; and (3) the average efficiency of the collectors is 50 percent. See Appendix C for detailed source references. The data are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

SOHCBZZ = energy produced by solar thermal energy collectors in the residential and commercial sectors combined, in billion Btu.

The U.S. total is calculated as the sum of the State data:

$$\text{SOHCBUS} = \Sigma \text{SOHCBZZ}$$

Solar thermal energy is converted to equivalent kilowatthours by using the standard thermal conversion factor for electricity of 3.412 thousand Btu per kilowatthour:

$$\text{SOHCPZZ} = \text{SOHCBZZ} / 3.412$$

$$\text{SOHCPUS} = \Sigma \text{SOHCPZZ}$$

### **Industrial Sector and Electric Utilities**

Estimates of electricity produced from photovoltaic and solar thermal energy sources by nonutility power producers are included in the CSEDS industrial sector for 1990 forward, in Btu, from data collected on the Form EIA-867, "Annual Nonutility Power Producers Report." Electric utilities' generation from solar sources are included for 1984 forward as collected on the Form EIA-759, "Monthly Power Plant Report." The data identifiers are:

SOEOPZZ = electricity produced from photovoltaic and solar thermal energy sources at electric utilities, by State, in million kilowatthours; and

SOICBZZ = electricity produced from photovoltaic and solar thermal energy sources by nonutility power producers, by State, in billion Btu.

U.S. totals for these series are calculated as the sum of the State data:

$$\text{SOEOPUS} = \Sigma \text{SOEOPZZ}$$

$$\text{SOICBUS} = \Sigma \text{SOICBZZ}$$

Electricity produced from photovoltaic and solar thermal energy at electric utilities is converted from kilowatthours to Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix D, Table D1.

$$\text{SOEOBZZ} = \text{SOEOPZZ} * \text{FFEOKUS}$$

$$\text{SOEOBUS} = \Sigma \text{SOEOBZZ}$$

### **Totals**

Each State's total use of photovoltaic and solar thermal energy sources is the sum of the sectors' values, and the U.S. total is the sum of the States' totals:

$$\text{SOTCBZZ} = \text{SOHCBZZ} + \text{SOICBZZ} + \text{SOEOBZZ}$$

$$\text{SOTCBUS} = \Sigma \text{SOTCBZZ}$$

## Wind

Wind energy used to produce electricity by nonutility power producers is included in the CSEDS industrial sector for 1990 forward in Btu from data collected on the Form EIA-867, "Annual Nonutility Power Producers Report." Electricity generation from wind energy by electric utilities is included for 1983 forward as collected on the Form EIA-759, "Monthly Power Plant Report." The data are identified in CSEDS by the following names ("ZZ" in the variable name represents the two-letter State code that differs for each State):

WYEOPZZ = electricity produced from wind energy at electric utilities, by State, in million kilowatthours; and

WYICBZZ = electricity produced from wind energy in the industrial sector, by State, in billion Btu.

The U.S. totals are calculated as the sum of the State data:

$$\text{WYEOPUS} = \Sigma \text{WYEOPZZ}$$

$$\text{WYICBUS} = \Sigma \text{WYICBZZ}$$

Electricity produced from wind energy at electric utilities is converted from kilowatthours to Btu by using a conversion factor that is the U.S. average heat content of fossil fuels consumed at steam-electric power plants, FFEOKUS. The annual values for this factor are shown in Appendix D, Table D1.

$$\text{WYEOBZZ} = \text{WYEOPZZ} * \text{FFEOKUS}$$

$$\text{WYEOBUS} = \Sigma \text{WYEOBZZ}$$

The State and U.S. totals for wind energy are calculated:

$$\text{WYTCBZZ} = \text{WYEOBZZ} + \text{WYICBZZ}$$

$$\text{WYTCBUS} = \Sigma \text{WYTCBZZ}$$

### Additional Calculations

Additional calculations are made in CSEDS to aggregate some data series to be shown in the tables of this report. Geothermal, wind, photovoltaic, and solar thermal energy sources are combined to be shown in the “Other” column in tables titled “Energy Consumption Estimates by Source” and “Industrial Energy Consumption Estimates.” The variables are calculated for each State and the United States in billion Btu as follows:

$$\text{GOICBZZ} = \text{GEICBZZ} + \text{SOICBZZ} + \text{WYICBZZ}$$

$$\text{GOICBUS} = \Sigma \text{GOICBZZ}$$

$$\text{GOTCBZZ} = \text{GETCBZZ} + \text{SOTCBZZ} + \text{WYTCBZZ}$$

$$\text{GOTCBUS} = \Sigma \text{GOTCBZZ}$$

Wind, photovoltaic, and solar thermal energy sources are combined to be shown in the “Other” column in tables titled “Estimates of Energy Input at Electric Utilities.” The variables are calculated for each State and the United States in billion Btu as follows:

$$\text{WNEOPZZ} = \text{WYEOPZZ} + \text{SOEOPZZ}$$

$$\text{WNEOPUS} = \Sigma \text{WNEOPZZ}$$

$$\text{WNEOBZZ} = \text{WYEOBZZ} + \text{SOEOBZZ}$$

$$\text{WNEOBUS} = \Sigma \text{WNEOBZZ}$$

Renewable energy sources included in CSEDS for 1960 through 1989 are only those used by the electric utilities to produce electricity and hydroelectricity used in the industrial sector. These data are available in kilowatthours and are shown in both the physical unit portion of *SEDR* tables, as well as in the Btu portion. The calculations to provide the data in million kilowatthours for 1960 through 1989 only are:

$$\text{HYTCPZZ} = \text{HYENPZZ} + \text{HYICPZZ}$$

$$\text{HYTCPUS} = \Sigma \text{HYTCPZZ}$$

$$\text{BMTCPZZ} = \text{WWEOPZZ}$$

$$\text{BMTCPUS} = \text{WWEOPUS}$$

$$\text{SOTCPZZ} = \text{SOEOPZZ}$$

$$\text{SOTCPUS} = \Sigma \text{SOTCPZZ}$$

$$\text{WYTCPZZ} = \text{WYEOPZZ}$$

$$\text{WYTCPUS} = \Sigma \text{WYTCPZZ}$$

$$\text{GETCPZZ} = \text{GEEOPZZ}$$

$$\text{GETCPUS} = \Sigma \text{GETCPZZ}$$

$$\text{GOTCPZZ} = \text{GETCPZZ} + \text{SOTCPZZ} + \text{WYTCPZZ}$$

$$\text{GOTCPUS} = \Sigma \text{GOTCPZZ}$$

### Renewable Energy Total

Renewable energy subtotals for each consuming sector in thousand Btu are calculated by using the same formulas for each State and the U.S. totals. Renewable energy subtotals can also be calculated in physical units for the commercial sector (thousand cords), the transportation sector (thousand gallons), and electric utilities (million kilowatthours).

$$\text{RERCB} = \text{WDRCB} + \text{SOHCB}$$

$$\text{RECCP} = \text{WDCCP}$$

$$\text{RECCB} = \text{WDCCB}$$

$$\text{REICB} = \text{HYICB} + \text{WWICB} + \text{GOICB}$$

$$\text{REACP} = \text{ENACP}$$

$$\text{REACB} = \text{ENACB}$$

$$\text{REEOP} = \text{HVENP} + \text{GEENP} + \text{WWEOP} + \text{WNEOP}$$

$$\text{REEOB} = \text{HVENB} + \text{GEENB} + \text{WWEOB} + \text{WNEOB}$$

$$\text{RETCB} = \text{RERCB} + \text{RECCB} + \text{REICB} + \text{REACB} + \text{REEOB}$$

## Section 6. Electricity

This section describes electrical energy sources; electricity consumed by end users (i.e., electricity sold to end users); estimates of the electrical system energy losses incurred in the generation, transmission, and distribution of electricity; and estimates of net interstate sales of electricity.

### Electrical Energy Sources

#### Physical Units

Electricity is produced from a number of energy sources. In the Combined State Energy Data System (CSEDS), coal, natural gas, and petroleum are measured in physical units of thousand short tons, million cubic feet, and thousand barrels, respectively, as they are consumed by the electric utilities. Because comparable measures in physical units for nuclear power, hydroelectric, biomass fuels, geothermal, wind, photovoltaic, and solar thermal energy sources are not available, energy output in the form of electricity produced from these energy sources, in million kilowatthours, is used instead. The variable names for these data are as follows ("ZZ" in the variable name represents the two-letter State code that differs for each State):

CLEUPZZ	= coal consumed by electric utilities (described in Section 2 of this report), in thousand short tons;	GEIMPZZ	= electricity produced from geothermal energy and imported into the United States (described in Section 5), in million kilowatthours;
ELEXPZZ	= electricity exported from the United States (assumed to be produced from hydroelectric power through 1989), in million kilowatthours;	HPEOPZZ	= electricity produced from pumped storage hydroelectric power at electric utilities (described in Section 5), in million kilowatthours;
ELIMPZZ	= electricity imported into the United States (assumed to be produced from hydroelectric power through 1989), in million kilowatthours;	HVEOPZZ	= electricity produced from conventional hydroelectric power at electric utilities (described in Section 5), in million kilowatthours;
GEEOPZZ	= electricity produced from geothermal energy at electric utilities (described in Section 5), in million kilowatthours;	HYEXPZZ	= electricity produced from hydroelectric power and exported from the United States (described in Section 5), in million kilowatthours;
		HYIMPZZ	= electricity produced from hydroelectric power and imported into the United States (described in Section 5), in million kilowatthours;
		NGEUPZZ	= natural gas consumed by electric utilities (described in Section 3), in million cubic feet;
		NUEOPZZ	= electricity produced from nuclear power at electric utilities, in million kilowatthours;
		PAEUPZZ	= petroleum consumed by electric utilities (described in Section 4), in thousand barrels;
		SOEOPZZ	= electricity produced from photovoltaic and solar thermal energy sources at electric utilities (described in Section 5), in million kilowatthours;
		WDEOPZZ	= electricity produced from wood energy sources at electric utilities (described in Section 5), in million kilowatthours;
		WSEOPZZ	= electricity produced from waste energy sources at electric utilities (described in Section 5), in million kilowatthours; and
		WYEOPZZ	= electricity produced from wind energy at electric utilities (described in Section 5), in million kilowatthours.



The U.S. totals for these series are calculated as the sum of the State data, with the exception of coal, which is the sum of the U.S. totals for each rank of coal as described in Section 2.

**British Thermal Units (Btu)**

In order to total all the energy that is used to produce electricity, the energy sources are converted to the common unit of Btu. The methods for calculating the Btu content of coal, natural gas, petroleum, and renewable energy sources consumed by utilities are explained in their respective sections of this documentation. The following factors are used to convert the remaining components:

- FFEOKUS = average factor for fossil fuels burned at steam-electric power plants; used to convert selected electricity series from kilowatthours to Btu, and
- NUEOKUS = factor for converting nuclear electricity from kilowatthours to Btu.

These U.S. average factors, which vary from year to year, can be found in Appendix D, Table D1. The U.S. average conversion factor for fossil fuels burned at steam-electric power plants (FFEOKUS) is used to convert wood, waste, hydroelectric power, wind, photovoltaic, and solar thermal energy sources (as described in Section 5), as well as electricity imports and exports derived from nonrenewable energy sources described in this section. The factor for converting electricity produced from nuclear energy (NUEOKUS) is developed from data collected from nuclear steam-electric power plants. The formulas for applying the nuclear factor are:

- NUEOBZZ = NUEOPZZ \* NUEOKUS
- NUEOBUS = ΣNUEOBZZ

**Electricity Imports and Exports**

Imports and exports of electricity across U.S. borders prior to 1990 are assumed to be based on hydroelectric power. Beginning with 1990, traded electricity is identified in CSEDS as derived from hydroelectric power, geothermal energy, or nonrenewable energy sources. Electricity imports and exports based on renewable energy sources are summed in million

kilowatthours and billion Btu and identified with “ER” as the source code in the variable name:

- EREXPZZ = HYEXPZZ
- EREXPUS = ΣEREXPZZ
- ERIMPZZ = HYIMPZZ + GEIMPZZ
- ERIMPUS = ΣERIMPZZ
  
- EREXBZZ = HYEXBZZ
- EREXBUS = ΣEREXBZZ
- ERIMBZZ = HYIMBZZ + GEIMBZZ
- ERIMBUS = ΣERIMBZZ

Imports and exports of electricity produced from nonrenewable energy sources (“EX”), in million kilowatthours, are calculated by subtracting renewable-based imports and exports from total electricity imports and exports :

- EXIMPZZ = ELIMPZZ - ERIMPZZ
- EXIMPUS = ΣEXIMPZZ
- EXEXPZZ = ELEXPZZ - EREXPZZ
- EXEXPUS = ΣEXEXPZZ

Nonrenewable-based electricity imports and exports are converted from million kilowatthours to billion Btu by using the average conversion factor for fossil fuels burned at steam-electric power plants (FFEOKUS):

- EXIMBZZ = EXIMPZZ \* FFEOKUS
- EXIMBUS = ΣEXIMBZZ
- EXEXBZZ = EXEXPZZ \* FFEOKUS
- EXEXBUS = ΣEXEXBZZ

Net imports of electricity produced from nonrenewable energy sources is calculated by subtracting exports from imports:

- EXNIPZZ = EXIMPZZ - EXEXPZZ
- EXNIPUS = ΣEXNIPZZ
- EXNIBZZ = EXIMBZZ - EXEXBZZ
- EXNIBUS = ΣEXNIBZZ

Net imports of renewable-based electricity are included in the “Total” column of SEDR tables titled “Energy Consumption Estimates by Source” and “Estimates of Energy Input at Electric Utilities” but are not shown separately in the tables’ columns. Table A8 provides the data by State and year.

Total imports and exports of electricity are calculated in billion Btu by summing the renewable and nonrenewable components:

$$\begin{aligned} \text{ELIMBZZ} &= \text{HYIMBZZ} + \text{GEIMBZZ} + \text{EXIMBZZ} \\ \text{ELIMBUS} &= \Sigma \text{ELIMBZZ} \\ \text{ELEXBZZ} &= \text{HYEXBZZ} + \text{EXEXBZZ} \\ \text{ELEXBUS} &= \Sigma \text{ELEXBZZ} \end{aligned}$$

**Total Energy Input**

A total of all energy input at electric utilities, including imports and exports of electricity across U.S. borders, is calculated by the following formulas for each State and for the United States:

$$\begin{aligned} \text{TEEUBZZ} &= \text{PAEUBZZ} + \text{NGEUBZZ} + \text{CLEUBZZ} + \text{HYENBZZ} + \\ &\quad \text{NUEOBZZ} + \text{GEENBZZ} + \text{WWEOBZZ} + \text{WNEOBZZ} + \\ &\quad \text{EXNIBZZ} \\ \text{TEEUBUS} &= \Sigma \text{TEEUBZZ} \end{aligned}$$

**Electricity Consumed by the End User**

**Physical Units**

The amount of electricity sold to end users is considered to be the amount of electricity consumed by the end-use sectors. Five electricity sales data series, in physical units of million kilowatthours, and one data series that represents the proportional share of an end-use sector are used to estimate consumption of electricity by end-use sector:

$$\begin{aligned} \text{ESRCPZZ} &= \text{electricity sold to the residential sector of each State;} \\ \text{ESCMPZZ} &= \text{a portion of the electricity sold to the commercial sector of} \\ &\quad \text{each State;} \\ \text{ESICPZZ} &= \text{electricity sold to the industrial sector of each State;} \end{aligned}$$

**Table A8. Net Imports of Electricity Produced from Nonrenewable Energy Sources, 1990–1996**  
(Trillion Btu)

State	1990	1991	1992	1993	1994	1995	1996
Alabama	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Alaska	0.000	0.000	0.000	0.000	0.000	0.000	0.003
Arizona	-0.022	1.109	-0.022	-0.023	-0.026	3.462	-0.027
Arkansas	0.000	0.000	0.000	0.000	0.000	0.000	0.000
California	16.207	21.955	17.502	14.704	14.944	12.926	4.049
Colorado	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Connecticut	0.386	0.422	2.312	2.551	4.111	5.638	3.302
Delaware	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dist. of Col.	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Florida	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Georgia	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Hawaii	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Idaho	0.196	0.310	0.629	0.312	0.762	0.169	0.591
Illinois	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Indiana	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Iowa	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Kansas	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Kentucky	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Louisiana	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maine	1.964	1.439	2.089	0.642	10.033	16.948	8.238
Maryland	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Massachusetts	4.441	4.375	4.144	4.362	16.527	5.638	4.026
Michigan	-113.861	-5.480	-2.933	1.986	28.208	20.640	3.582
Minnesota	-17.943	-3.134	-0.752	-5.186	24.510	14.725	22.701
Mississippi	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Missouri	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Montana	0.073	0.039	0.072	0.048	0.467	0.128	0.097
Nebraska	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nevada	0.000	0.007	0.095	0.078	0.047	0.159	0.000
New Hampshire	0.386	2.057	2.312	2.551	4.412	5.638	3.302
New Jersey	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Mexico	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New York	-17.143	-3.444	-1.126	8.156	45.412	28.001	9.923
North Carolina	0.000	0.000	0.000	0.000	0.000	0.000	0.000
North Dakota	0.332	-2.204	1.273	0.217	2.360	0.978	2.330
Ohio	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oklahoma	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oregon	4.666	8.338	14.954	7.807	16.095	6.076	9.620
Pennsylvania	0.000	0.000	0.000	0.000	0.000	0.000	0.564
Rhode Island	0.386	0.422	2.312	2.551	2.236	5.638	3.302
South Carolina	0.000	0.000	0.000	0.000	0.000	0.000	0.000
South Dakota	0.000	0.320	0.699	0.000	1.433	0.000	0.000
Tennessee	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Texas	-0.660	-4.658	-9.951	-8.258	-9.945	-9.535	-10.587
Utah	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Vermont	1.346	3.465	-3.831	3.160	2.978	4.897	7.495
Virginia	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Washington	5.644	-2.072	6.789	-5.441	-6.525	-26.068	-12.552
West Virginia	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wisconsin	0.000	1.285	2.331	0.000	4.776	16.923	0.518
Wyoming	0.000	0.000	0.000	0.000	0.000	0.000	0.000
United States	-113.600	24.553	38.898	30.215	162.815	112.981	60.477

Source: Combined State Energy Data System 1996.

- ESOTPZZ = electricity sold to “Other” users (i.e., public street and highway lighting, other public authorities, railroads and railways, and interdepartmental sales) in each State;
- ESTRPZZ = electricity consumed by transit systems, in each State; and
- ESTRSUS = The share of electricity sold to the “Other” users that is used for transportation.

U.S. totals for the five State-level series are calculated as the sum of the State data.

The sales of electricity to the residential and industrial sectors are used directly as consumption of electricity by these sectors.

The consumption estimates for the commercial and transportation sectors are made, first, by estimating the portion of sales to the “Other” sector that is used for transportation at the U.S. level, ESACPUS:

$$ESACPUS = ESOTPUS * ESTRSUS$$

The transportation share (ESTRSUS) of “Other” is calculated at the U.S. level because State information is not available. (See Note 2 on page 392 for further information on this share.) Next, State transportation use of electricity is estimated by assuming that each State consumes electricity for transportation in proportion to the amount of electricity consumed by transit systems in each State (see Appendix C for the sources of the transit system estimates):

$$ESACPZZ = (ESTRPZZ / ESTRPUS) * ESACPUS$$

Finally, the remaining portion of “Other” is then assigned to the commercial sector. The commercial sector consumption of electricity is represented by ESCCPZZ and is calculated:

$$ESCCPZZ = ESCMPZZ + ESOTPZZ - ESACPZZ$$

$$ESCCPUS = \Sigma ESCCPZZ$$

Total electricity consumed by the major end-use sectors is represented by ESTCPZZ and is calculated by adding the four major sector estimates:

$$ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ$$

$$ESTCPUS = \Sigma ESTCPZZ$$

**British Thermal Units (Btu)**

Electricity consumption estimates are converted into Btu by applying a constant factor of 3.412 thousand Btu per kilowatthour as illustrated in the formulas:

$$ESRCBZZ = ESRCPZZ * 3.412$$

$$ESTCBZZ = ESTCPZZ * 3.412$$

And U.S. totals in Btu are calculated by summing the States’ Btu values.

**Estimates of Electrical System Energy Losses**

**British Thermal Units (Btu)**

Electrical system energy losses, identified by “LO,” include all losses incurred in the generation, transmission, and distribution of electricity, including plant use and unaccounted for quantities. Total losses for the United States, LOTCBUS, is assumed to be the difference between the total of all energy input at electric utilities (TEEUBUS) and the total electricity sold to end users (ESTCBUS). Total losses for the United States is calculated in billion Btu as follows:

$$LOTCBUS = TEEUBUS - ESTCBUS$$

Because Alaska and Hawaii have no exchanges of electricity with other States, their electrical system energy losses are estimated as the difference between the sum of all energy input at the State’s electric utilities and the electricity sold within the State:

$$LOTCBAK = TEEUBAK - ESTCBAK$$

$$LOTCBHI = TEEUBHI - ESTCBHI$$

Individual State electrical system energy losses for the remaining States are estimated by a different method. The difference between each of the contiguous 48 States’ (including the District of Columbia) TEEUB series and ESTCB is not only the losses but also any net interstate flow of electricity that may occur between States. In some cases these net interstate flows are

substantial. Therefore, an effort is made to estimate separately each State's losses and net interstate flow. The methodology is to calculate the contiguous-48-State subtotal of losses and subtotal of sales; to create annual losses-to-sales ratios for the aggregate of the 48 States; and to apply the annual losses-to-sales ratios from the total 48 States to the individual 48 States' sales to estimate their losses.

The following steps are performed to complete the losses estimates. A subtotal of losses in the contiguous 48 States, LOTCB48, is created by subtracting the Alaska and Hawaii losses from the total United States' losses:

$$\text{LOTCB48} = \text{LOTCBUS} - (\text{LOTGBAK} + \text{LOTGBHI})$$

A similar subtotal of electricity sales in the 48 States only, ESTCB48, is calculated:

$$\text{ESTCB48} = \text{ESTCBUS} - (\text{ESTGBAK} + \text{ESTGBHI})$$

The losses-to-sales ratio for the contiguous 48 States only, ELLSS48, is calculated:

$$\text{ELLSS48} = \text{LOTCB48} / \text{ESTCB48}$$

Over the 36-year period now covered in CSEDS, the ratio is fairly constant, with a slight downward trend. For 1960, the ratio is 2.5; for 1961 through 1983 the ratio is 2.4; for 1984 through 1988 the ratio is 2.3; for 1989 through 1991 it is 2.2; and for 1992 forward the losses-to-sales ratio is 2.1. The decline in the ratio in recent years is attributed partially to the fact that electricity produced by nonutility power producers is included in the electricity sales data, while the resources consumed to produce the nonutility electricity are not. When the electricity purchased by utilities from nonutilities is subtracted from the electricity sales, the ratio is 2.3 for 1989 through 1993, and 2.2 for 1994 forward.

The U.S. ratios are applied to each State's sales to the major end-use sectors and total sales (temporarily including Alaska, Hawaii, and the 48-State subtotal for processing convenience):

$$\begin{aligned} \text{LORCBZZ} &= \text{ESRCBZZ} * \text{ELLSS48} \\ \text{LOCCBZZ} &= \text{ESCCBZZ} * \text{ELLSS48} \end{aligned}$$

$$\begin{aligned} \text{LOICBZZ} &= \text{ESICBZZ} * \text{ELLSS48} \\ \text{LOACBZZ} &= \text{ESACBZZ} * \text{ELLSS48} \\ \text{LOTGBZZ} &= \text{ESTGBZZ} * \text{ELLSS48} \end{aligned}$$

Alaska, Hawaii, and the contiguous 48-State subtotal are recalculated to their original estimates. The end-use losses for Alaska and Hawaii are created in proportion to each sector's share of the State's total electricity sales:

$$\begin{aligned} \text{LOTGBAK} &= \text{TEEUBAK} - \text{ESTGBAK} \\ \text{LOTGBHI} &= \text{TEEUBHI} - \text{ESTGBHI} \\ \text{LOTGB48} &= \text{LOTGBUS} - (\text{LOTGBAK} + \text{LOTGBHI}) \end{aligned}$$

$$\begin{aligned} \text{LORGBAK(HI)} &= (\text{ESRCBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)} \\ \text{LOCCBAK(HI)} &= (\text{ESCCBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)} \\ \text{LOICBAK(HI)} &= (\text{ESICBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)} \\ \text{LOACBAK(HI)} &= (\text{ESACBAK(HI)} / \text{ESTGBAK(HI)}) * \text{LOTGBAK(HI)} \end{aligned}$$

Losses for the United States, including Alaska and Hawaii, are the sums of all the States' losses.

### Physical Units

Estimates of losses in physical units of million kilowatt-hours are made by dividing the Btu estimate by the constant 3.412 thousand Btu per kilowatt-hour as illustrated in the following formulas:

$$\begin{aligned} \text{LORCPZZ} &= \text{LORCBZZ} / 3.412 & \text{LORCPUS} &= \text{LORCBUS} / 3.412 \\ \text{LOTCPZZ} &= \text{LOTGBZZ} / 3.412 & \text{LOTCPUS} &= \text{LOTGBUS} / 3.412 \end{aligned}$$

## Net Interstate Flow of Electricity

### British Thermal Units (Btu)

An estimate of the net interstate flow of electricity is calculated as the difference between the total electricity sales and attributed losses and the total energy input to the electric utilities within each State. The estimated net interstate flow of electricity (ELISB) for each State and the United States is calculated:

$$\begin{aligned} \text{ELISBZZ} &= (\text{ESTCBZZ} + \text{LOTBZZ}) - \text{TEEUBZZ} \\ \text{ELISBUS} &= \Sigma \text{ELISBZZ} \end{aligned}$$

**Physical Units**

Estimates of net interstate flow of electricity in physical units of million kilowatthours are calculated by dividing the Btu value by the constant 3.412 thousand Btu per kilowatthour:

$$\begin{aligned} \text{ELISPZZ} &= \text{ELISBZZ} / 3.412 \\ \text{ELISPUS} &= \Sigma \text{ELISPZZ} \end{aligned}$$

Positive net interstate flow for a State means that the amount consumed within the State (including attributed losses) is greater than the amount of energy input at electric utilities in the State. That is, the State is using more electricity than it generates and, therefore, is a net buyer from other States.

A negative number indicates that the State's input into its electric utilities is greater than the requirements for electricity within its own borders, and, therefore, it is a net seller of electricity to other States.

- Annual estimates of the electricity sales to the transportation sector, which are a portion of "Other" sales in the source document, are made by using data published in *Financial Statistics of Major U.S. Investor-Owned Electric Utilities*, DOE/EIA-0437/1. Sales to the "Other" category include: (1) public street and highway lighting; (2) sales to other public authorities; (3) railroads and railways; and (4) interdepartmental sales.

ESTRSUS is the "Railroads and Railways" share of all four items in the "Other" category. The shares used in CSEDS are shown in Table A9.

- The source for the electricity sales data for 1960 through 1983 is the EIA Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Electricity sales data for the District of Columbia and Maryland are combined on those forms. Estimates of separate sales for the District of Columbia and Maryland were created by using electricity sales data by end-use sector by communities from the FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others," filed by the Potomac Electric Power Company (PEPCO). PEPCO sales to the District of Columbia were assumed to be total electricity sales in the District of Columbia. Electricity sales

**Additional Notes on Electricity**

- The source for the electricity sales data for 1960 through 1983 is the Energy Information Administration (EIA) Form EIA-826, "Electric Utility Company Monthly Statement," and predecessor forms. Electricity sales data for 1984 forward are from Form EIA-861, "Annual Electric Utility Report." At the national level, data from both forms correspond closely (within 3 percent) for all end-use sectors. However, differences in the number of survey respondents and the reporting of commercial and industrial sales caused inconsistencies between 1983 and 1984 data in those end-use sectors for some States. See the EIA's, *Electric Power Annual, 1991*, DOE/EIA-0348(91), p. 130, and *An Assessment of the Quality of Selected EIA Data Series, Electric Power Data*, DOE/EIA-0292(87), pp. 17-28, for detailed discussions of the reporting differences.

**Table A9. Railroads and Railways Share of Other Electricity Sales**

Year	ESTRSUS	Year	ESTRSUS	Year	ESTRSUS
1960	0.09967	1973	0.04156	1986	0.04380
1961	0.10461	1974	0.04524	1987	0.04258
1962	0.10506	1975	0.04409	1988	0.04453
1963	0.09294	1976	0.04384	1989	0.04449
1964	0.08859	1977	0.04300	1990	0.04486
1965	0.08345	1978	0.03583	1991	0.04324
1966	0.07785	1979	0.04195	1992	0.04286
1967	0.06762	1980	0.04226	1993	0.04064
1968	0.06008	1981	0.03821	1994	0.04051
1969	0.05352	1982	0.03736	1995	0.04037
1970	0.05177	1983	0.03980	1996	0.04037
1971	0.04823	1984	0.04134		
1972	0.04437	1985	0.04360		

to the District of Columbia reported by PEPCO on the FERC Form 1 were subtracted from the EIA-826 District of Columbia and Maryland aggregate figures to obtain estimates of Maryland electricity sales by sector. Beginning with 1981 data, electric utilities were no longer required to report sales to specific communities. Therefore, sales data for the District of Columbia for 1981 through 1983 were obtained directly from PEPCO's accounting department.

### Alternative Method for Calculating Interstate Flow of Electricity and Electrical System Energy Losses

EIA is examining a method to disaggregate the estimates of net interstate sales of electricity and electrical system energy losses as shown in Tables A10 through A20.

The fuel consumed at electric utilities and the net generation of other energy sources by electric utilities collected by EIA on Form EIA-759, "Monthly Power Plant Report," represent the total energy input at electric utilities, TIEUB, shown in column 1 of Tables A10 through A20. This series is equal to the CSEDS series TEEUB, except TEEUB also contains net imports of electricity. The formulas for TIEUB for each State and the United States are:

$$\begin{aligned} \text{TIEUBZZ} &= \text{PAEUBZZ} + \text{NGEUBZZ} + \text{CLEUBZZ} + \text{HYEUBZZ} + \\ &\quad \text{NUEUBZZ} + \text{GEEUBZZ} + \text{WWEUBZZ} + \text{WNEUBZZ} \\ \text{TIEUBUS} &= \Sigma \text{TIEUBZZ} \end{aligned}$$

Another series collected on Form EIA-759 is the net generation of electricity by electric utilities (total generation minus plant use). This data series, in thousand kilowatthours, given the variable name ELEOP, represents the energy output of electric utilities. ELEOPZZ is converted to Btu by using the standard conversion factor of 3.412 thousand Btu per kilowatthour:

$$\begin{aligned} \text{ELEOBZZ} &= \text{ELEOPZZ} * 3.412 \\ \text{ELEOBUS} &= \Sigma \text{ELEOBZZ} \end{aligned}$$

Subtracting energy output by electric utilities, ELEOBZZ (shown in column 3 of Tables A10 through A20), from energy input at electric utilities, TIEUBZZ (shown in column 1 of those tables), gives an indication of energy losses that occur at electric utility plants, ELPLBZZ (shown in column 2). These losses are primarily energy lost in the conversion of the energy sources to electricity. Plant use of electricity is also included in this number.

$$\begin{aligned} \text{ELPLBZZ} &= \text{TIEUBZZ} - \text{ELEOBZZ} \\ \text{ELPLBUS} &= \Sigma \text{ELPLBZZ} \end{aligned}$$

Data for electricity imported or exported across U.S. borders, described earlier in "Electrical Energy Sources," are reported in thousand kilowatthours. These data are converted to Btu by using the standard conversion factor and are shown in column 4 of Tables A10 through A20. Trade data are added to the net generation of each State involved in international exchanges of electricity to derive electricity transmitted for sale within the United States (shown in column 5 of the following tables).

$$\begin{aligned} \text{ELIMBZZ} &= \text{ELIMPZZ} * 3.412 \\ \text{ELEXBZZ} &= \text{ELEXPZZ} * 3.412 \\ \text{ELNIBZZ} &= \text{ELIMBZZ} - \text{ELEXBZZ} \\ \text{ELNIBUS} &= \Sigma \text{ELNIBZZ} \end{aligned}$$

$$\begin{aligned} \text{ELENBZZ} &= \text{ELEOBZZ} + \text{ELNIBZZ} \\ \text{ELENBUS} &= \Sigma \text{ELENBZZ} \end{aligned}$$

Total electrical energy lost in the transmission and distribution of electricity is reported by each electric utility. However, some electric utilities distribute electricity to more than one State. The EIA Electric Power Division has estimated these losses by State. The losses in million kilowatthours are converted to billion Btu by using the standard conversion factor and are shown in column 6 in the following tables.

$$\begin{aligned} \text{ELLOBZZ} &= \text{ELLOPZZ} * 3.412 \\ \text{ELLOBUS} &= \Sigma \text{ELLOBZZ} \end{aligned}$$

Subtracting the State estimates for transmission and distribution losses (column 6) from the electricity transmitted (column 5) yields the electricity available for sale within each State, ELFSBZZ, shown in column 7.

ELFSBZZ = ELENBZZ – ELLOBZZ

ELFSBUS = ΣELFSBZZ

Column 7, electricity available for sale, can be compared to column 8, the actual reported sales to consumers within each State. The sales data are collected on Form EIA-861, “Annual Electric Utility Report,” and are currently used in CSEDS as variable ESTCBZZ. If column 7, the electricity available for sale, is larger than column 8, the electricity sold, the State would be a supplier of electricity to neighboring States. If the electricity available within the State is less than the amount needed to meet sales demand, the State would be a purchaser of electricity from other States. Column 9 of Tables A10 through A20 shows the difference between columns 8 and 7 for each State as calculated:

ESISBZZ = ESTCBZZ – ELFSBZZ

ESISBUS = ΣESISBZZ

Negative values in column 9 show the amount of electricity that flowed out of the State. Positive numbers show the amount of electricity that flowed

into the State to meet the State’s own requirements. For comparison, data in column 10 are the “Net Interstate Flow of Electricity and Associated Losses” (ELISBZZ) series now calculated by CSEDS (as described earlier in “Net Interstate Flow of Electricity”) and shown in the State tables of this report. Values in Column 9 are estimates of the net interstate flow of electricity alone and would be a subset of the data in column 10, which include electrical system energy losses associated with that flow.

There are some unresolved problems with the separate estimate of electricity flow as shown in Column 9: Alaska and Hawaii appear to have small purchases of electricity from other States, and the total United States appears to have excess electricity. The current methodology used in CSEDS avoids these discrepancies as shown in column 10. The U.S. value in column 9 may reflect, at least in part, the electricity that is generated by companies other than electric utilities that would be included in the electricity sales to end users (column 8) but not in the electricity available for sale (column 7). The U.S. value for electricity production by nonutilities is shown in the footnotes on Tables A10 through A20.

Comments on these methodologies would be appreciated.

**Table A10. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1996**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	1,174,501	781,803	392,698	0	392,698	18,308	374,390	249,432	-124,957	-405,920
Alaska .....	54,950	37,950	16,999	4	17,004	1,229	15,774	16,308	533	0
Arizona .....	754,476	512,643	241,823	-9	241,823	12,182	229,641	177,712	-51,929	-206,860
Arkansas .....	458,500	309,472	149,028	0	149,028	3,746	145,282	123,298	-21,984	-78,579
California .....	1,257,329	865,952	391,377	4,191	395,568	71,508	324,060	744,200	420,139	1,016,190
Colorado .....	354,214	238,303	115,911	0	115,911	21,625	94,286	126,493	32,207	35,551
Connecticut .....	167,749	113,929	53,820	4,140	57,960	10,418	47,542	96,959	49,116	118,467
Delaware .....	82,980	55,268	27,712	0	27,712	2,723	24,989	32,894	7,905	18,378
Dist. of Col. ....	1,802	1,428	375	0	375	4,308	-3,934	34,586	38,520	104,769
Florida .....	1,454,191	958,973	495,218	0	495,218	37,592	457,627	586,291	128,664	352,359
Georgia .....	1,053,169	716,305	336,864	0	336,864	25,438	311,426	346,660	34,234	11,920
Hawaii .....	68,154	46,249	21,906	0	21,906	1,872	20,034	32,001	11,967	0
Idaho .....	126,442	84,711	41,732	741	42,473	4,942	37,530	72,059	34,529	93,349
Illinois .....	1,533,638	1,041,914	491,724	0	491,724	33,019	458,705	428,510	-30,195	-213,261
Indiana .....	1,107,762	747,601	360,161	0	360,161	19,815	340,345	303,331	-37,014	-173,100
Iowa .....	364,891	250,975	113,916	0	113,916	12,367	101,549	119,418	17,869	3,074
Kansas .....	444,474	308,422	136,052	0	136,052	8,305	127,747	106,764	-20,983	-115,501
Kentucky .....	895,125	593,374	301,751	0	301,751	10,395	291,356	262,788	-28,568	-85,392
Louisiana .....	637,002	436,912	200,090	0	200,090	23,419	176,671	256,818	80,147	154,337
Maine .....	82,904	56,290	26,614	13,314	39,928	2,546	37,382	40,011	2,628	42
Maryland .....	452,040	300,614	151,426	0	151,426	5,943	145,483	194,476	48,992	147,201
Massachusetts .....	278,313	183,600	94,713	5,047	99,760	10,867	88,893	161,366	72,473	203,616
Michigan .....	987,894	663,224	324,670	6,488	331,158	21,623	309,535	328,581	19,046	4,911
Minnesota .....	465,235	322,643	142,593	34,095	176,688	20,290	156,398	187,461	31,063	9,087
Mississippi .....	318,166	219,770	98,396	0	98,396	5,970	92,426	135,192	42,765	98,403
Missouri .....	713,556	482,130	231,427	0	231,427	24,318	207,109	221,245	14,137	-31,829
Montana .....	276,076	187,230	88,846	154	89,000	2,707	86,293	47,152	-39,141	-131,252
Nebraska .....	293,277	200,052	93,225	0	93,225	6,667	86,558	73,349	-13,208	-67,264
Nevada .....	236,781	163,894	72,887	0	72,887	4,355	68,532	77,023	8,490	550
New Hampshire .....	164,784	112,176	52,608	4,140	56,748	396	56,352	31,143	-25,209	-81,367
New Jersey .....	211,578	144,052	67,526	0	67,526	23,800	43,725	228,227	184,501	491,662
New Mexico .....	310,175	209,984	100,191	0	100,191	3,626	96,566	58,596	-37,970	-129,623
New York .....	1,104,822	748,745	356,077	21,661	377,738	37,165	340,572	448,771	108,198	212,353
North Carolina .....	1,033,818	683,110	350,708	0	350,708	28,312	322,396	369,507	47,111	104,752
North Dakota .....	345,377	240,391	104,986	3,482	108,468	3,826	104,642	28,368	-76,274	-268,516
Ohio .....	1,449,289	961,713	487,576	0	487,576	50,924	436,652	541,100	104,448	218,014
Oklahoma .....	496,134	333,912	162,222	0	162,222	24,503	137,720	147,710	9,990	-40,993
Oregon .....	492,708	329,328	163,380	12,061	175,441	30,481	144,960	160,995	16,035	-33,175
Pennsylvania .....	1,804,773	1,207,598	597,175	707	597,882	30,735	567,147	435,450	-131,697	-465,155
Rhode Island .....	26,208	14,944	11,263	4,140	15,403	15	15,389	22,534	7,145	30,681
South Carolina .....	790,859	530,436	260,423	0	260,423	7,571	252,852	228,898	-23,954	-85,551
South Dakota .....	109,650	75,304	34,346	0	34,346	2,303	32,043	26,396	-5,647	-28,316
Tennessee .....	903,111	600,647	302,464	0	302,464	25,672	276,792	299,093	22,300	18,489
Texas .....	2,860,527	1,931,499	929,028	-3,494	925,534	51,592	873,942	950,070	76,128	77,529
Utah .....	331,862	221,898	109,964	0	109,964	14,926	95,038	67,756	-27,282	-123,085
Vermont .....	52,898	35,823	17,074	11,757	28,831	1,885	26,946	17,877	-9,069	-33,434
Virginia .....	579,514	386,623	192,890	0	192,890	15,660	177,230	298,876	121,646	341,420
Washington .....	1,171,443	787,230	384,213	4,759	388,972	16,067	372,906	298,254	-74,652	-266,847
West Virginia .....	818,785	532,252	286,533	0	286,533	58	286,476	89,145	-197,331	-544,102
Wisconsin .....	554,887	378,652	176,235	649	176,884	15,419	161,465	200,433	38,968	60,745
Wyoming .....	439,358	299,972	139,386	0	139,386	992	138,393	39,153	-99,240	-318,715
United States .....	32,148,150	21,647,917	10,500,233	128,029	10,628,262	814,428	9,813,834	10,569,728	755,893	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1996 was 766,591 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.



**Table A11. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1995**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	1,009,855	670,056	339,799	0	339,799	31,051	308,748	238,863	-69,885	-273,428
Alaska .....	53,690	37,153	16,538	0	16,538	1,158	15,380	15,804	424	0
Arizona .....	724,120	488,806	235,314	1,146	236,460	19,442	217,018	165,786	-51,232	-216,457
Arkansas .....	421,160	286,295	134,866	0	134,866	18,009	116,856	118,299	1,443	-56,439
California .....	1,318,177	902,317	415,859	10,103	425,962	79,060	346,903	725,407	378,504	878,390
Colorado .....	346,699	235,216	111,484	0	111,484	12,322	99,162	120,501	21,339	24,811
Connecticut .....	285,650	193,758	91,892	5,299	97,191	7,205	89,985	95,434	5,448	-7,426
Delaware .....	84,730	56,328	28,402	0	28,402	2,284	26,118	32,685	6,568	16,041
Dist. of Col. ....	2,962	2,318	644	0	644	4,335	-3,690	35,197	38,887	105,551
Florida .....	1,470,346	968,247	502,099	0	502,099	43,749	458,350	571,483	113,134	291,565
Georgia .....	1,063,882	715,804	348,078	0	348,078	22,702	325,375	328,208	2,832	-52,001
Hawaii .....	66,504	45,382	21,122	0	21,122	1,828	19,295	31,348	12,053	0
Idaho .....	103,688	69,354	34,334	159	34,493	6,470	28,023	66,943	38,920	102,221
Illinois .....	1,556,528	1,061,225	495,304	0	495,304	41,566	453,737	430,700	-23,037	-228,658
Indiana .....	1,092,825	733,920	358,904	0	358,904	21,352	337,553	296,864	-40,688	-177,577
Iowa .....	363,361	249,053	114,309	0	114,309	9,367	104,942	117,035	12,093	-2,538
Kansas .....	420,901	290,459	130,442	0	130,442	13,882	116,561	103,578	-12,983	-101,566
Kentucky .....	867,984	574,001	293,983	0	293,983	11,456	282,527	254,358	-28,169	-83,784
Louisiana .....	714,248	490,574	223,674	0	223,674	18,237	205,438	248,486	43,049	51,848
Maine .....	28,554	19,450	9,105	16,058	25,163	2,415	22,748	39,447	16,699	44,568
Maryland .....	452,505	300,128	152,376	0	152,376	8,457	143,919	191,611	47,692	138,242
Massachusetts .....	276,261	184,233	92,027	5,299	97,326	11,535	85,791	158,693	72,902	196,995
Michigan .....	956,191	640,654	315,538	19,649	335,187	32,096	303,091	323,120	20,030	-19,335
Minnesota .....	472,935	327,915	145,020	16,364	161,384	19,780	141,604	184,107	42,504	45,259
Mississippi .....	298,181	208,121	90,060	0	90,060	6,666	81,395	129,207	47,813	100,171
Missouri .....	689,622	466,476	223,146	0	223,146	8,930	216,216	212,428	-3,788	-34,697
Montana .....	270,688	183,985	86,703	139	86,842	16,295	70,547	45,784	-24,763	-129,953
Nebraska .....	270,756	184,503	86,253	0	86,253	6,476	79,777	71,285	-8,491	-50,980
Nevada .....	218,352	150,121	68,231	149	68,380	2,773	65,607	70,490	4,883	-1,479
New Hampshire .....	148,428	100,878	47,550	5,299	52,849	2,616	50,233	30,733	-19,500	-69,679
New Jersey .....	290,573	198,150	92,423	0	92,423	15,980	76,443	227,764	151,321	411,635
New Mexico .....	308,900	208,478	100,422	0	100,422	5,867	94,555	56,010	-38,545	-136,219
New York .....	1,070,708	725,547	345,161	30,275	375,435	45,792	329,643	445,166	115,523	210,335
North Carolina .....	964,220	636,293	327,927	0	327,927	39,945	287,982	357,143	69,162	136,871
North Dakota .....	324,579	226,170	98,409	1,368	99,777	3,361	96,416	26,896	-69,521	-245,791
Ohio .....	1,399,413	929,034	470,379	0	470,379	39,142	431,237	541,230	109,994	269,227
Oklahoma .....	498,396	334,772	163,623	0	163,623	7,077	156,547	141,231	-15,316	-62,973
Oregon .....	453,223	302,988	150,235	5,710	155,945	5,449	150,496	156,015	5,519	10,534
Pennsylvania .....	1,742,991	1,166,562	576,429	0	576,429	28,956	547,473	430,767	-116,706	-414,915
Rhode Island .....	5,656	3,428	2,228	5,299	7,527	981	6,546	22,641	16,095	48,145
South Carolina .....	819,562	551,925	267,637	0	267,637	8,302	259,334	222,034	-37,301	-135,021
South Dakota .....	92,939	62,873	30,066	0	30,066	1,726	28,340	25,295	-3,045	-14,953
Tennessee .....	826,092	545,362	280,731	0	280,731	10,110	270,621	279,887	9,266	36,815
Texas .....	2,774,597	1,881,646	892,951	-3,157	889,794	52,372	837,422	898,307	60,885	4,462
Utah .....	329,801	220,272	109,529	0	109,529	681	108,848	62,986	-45,862	-135,611
Vermont .....	51,393	34,879	16,513	7,441	23,954	1,890	22,064	17,415	-4,649	-20,171
Virginia .....	541,376	361,470	179,906	0	179,906	11,627	168,279	290,574	122,295	354,480
Washington .....	992,452	666,021	326,431	-14,167	312,264	10,043	302,221	301,462	-759	-20,247
West Virginia .....	767,842	504,019	263,823	0	263,823	230	263,594	88,633	-174,961	-494,584
Wisconsin .....	545,341	371,287	174,054	15,905	189,960	5,027	184,933	197,783	12,850	16,402
Wyoming .....	425,897	290,496	135,401	0	135,401	531	134,870	38,209	-96,660	-308,096
United States .....	31,275,735	21,058,404	10,217,332	128,338	10,345,669	778,604	9,567,066	10,281,334	714,268	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1995 was 743,495 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A12. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1994**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	965,753	641,029	324,724	0	324,724	20,712	304,012	230,585	-73,426	-254,045
Alaska .....	52,280	36,031	16,248	0	16,248	1,194	15,055	15,468	413	0
Arizona .....	739,725	496,778	242,947	-8	242,939	11,376	231,563	161,326	-70,236	-241,761
Arkansas .....	424,279	289,342	134,937	0	134,937	8,565	126,372	111,296	-15,076	-80,760
California .....	1,374,346	941,878	432,468	12,696	445,164	72,399	372,765	729,091	356,326	825,225
Colorado .....	351,233	237,530	113,703	0	113,703	8,295	105,408	117,722	12,314	12,119
Connecticut .....	289,379	196,568	92,811	3,462	96,273	6,200	90,073	95,624	5,551	-4,693
Delaware .....	87,055	58,049	29,006	0	29,006	1,785	27,221	31,728	4,507	10,875
Dist. of Col. ....	4,131	3,195	936	0	936	1,946	-1,010	35,125	36,135	104,285
Florida .....	1,413,804	930,014	483,790	0	483,790	33,135	450,656	544,365	93,710	266,395
Georgia .....	1,004,782	667,838	336,944	0	336,944	20,583	316,362	306,783	-9,578	-57,886
Hawaii .....	64,666	44,006	20,660	0	20,660	1,947	18,713	30,532	11,819	0
Idaho .....	75,289	50,370	24,918	642	25,560	6,268	19,292	67,826	48,534	132,119
Illinois .....	1,491,276	1,021,289	469,988	0	469,988	30,906	439,081	414,524	-24,557	-211,835
Indiana .....	1,080,936	727,844	353,092	0	353,092	16,524	336,569	285,951	-50,617	-198,339
Iowa .....	349,750	240,689	109,060	0	109,060	7,139	101,921	112,730	10,809	-1,805
Kansas .....	414,597	287,385	127,213	0	127,213	8,195	119,017	101,042	-17,975	-102,727
Kentucky .....	851,182	564,243	286,939	0	286,939	16,903	270,036	247,320	-22,716	-87,821
Louisiana .....	653,797	448,498	205,300	0	205,300	12,320	192,980	239,290	46,310	84,778
Maine .....	96,265	65,504	30,761	10,655	41,416	2,274	39,142	39,599	457	-6,233
Maryland .....	450,586	301,258	149,328	0	149,328	10,049	139,279	186,813	47,534	126,017
Massachusetts .....	278,046	184,332	93,714	13,916	107,630	9,255	98,375	157,264	58,889	165,308
Michigan .....	854,385	568,730	285,655	23,767	309,421	22,124	287,298	311,038	23,740	33,834
Minnesota .....	456,517	316,907	139,610	24,099	163,709	12,014	151,695	174,541	22,846	9,397
Mississippi .....	289,843	200,373	89,471	0	89,471	11,882	77,589	124,970	47,381	95,880
Missouri .....	651,818	441,915	209,903	0	209,903	16,547	193,356	203,672	10,316	-23,180
Montana .....	263,542	179,247	84,294	410	84,704	5,572	79,131	44,984	-34,147	-125,934
Nebraska .....	236,845	161,967	74,878	0	74,878	6,256	68,622	67,807	-815	-27,556
Nevada .....	229,834	159,823	70,011	39	70,051	4,553	65,498	68,364	2,866	-18,947
New Hampshire ....	126,868	86,305	40,562	3,715	44,277	2,799	41,478	30,559	-10,919	-43,771
New Jersey .....	349,009	240,058	108,951	0	108,951	13,164	95,786	226,071	130,284	348,766
New Mexico .....	312,042	209,621	102,421	0	102,421	3,947	98,475	54,110	-44,365	-145,030
New York .....	1,094,640	740,601	354,039	42,468	396,507	38,811	357,696	447,574	89,879	158,501
North Carolina ....	918,756	606,712	312,044	0	312,044	21,140	290,904	340,481	49,577	132,148
North Dakota .....	326,321	227,361	98,961	2,477	101,438	3,162	98,275	26,207	-72,069	-252,917
Ohio .....	1,315,855	875,636	440,218	0	440,218	33,040	407,178	526,733	119,555	309,924
Oklahoma .....	474,684	319,846	154,839	0	154,839	10,299	144,539	140,381	-4,158	-41,393
Oregon .....	386,898	258,982	127,916	13,552	141,468	11,993	129,475	153,440	23,965	45,754
Pennsylvania .....	1,744,450	1,167,723	576,727	0	576,727	29,472	547,255	419,830	-127,425	-448,633
Rhode Island .....	1,067	833	234	1,883	2,117	1,159	959	22,423	21,465	62,453
South Carolina ....	774,285	521,136	253,149	0	253,149	11,536	241,613	211,059	-30,553	-122,844
South Dakota .....	84,412	57,146	27,266	1,207	28,473	1,995	26,478	24,478	-2,000	-12,506
Tennessee .....	756,640	501,240	255,400	0	255,400	23,881	231,519	281,604	50,084	112,538
Texas .....	2,702,491	1,831,952	870,540	-3,292	867,248	54,095	813,153	880,909	67,757	26,407
Utah .....	349,002	231,442	117,561	0	117,561	5,981	111,580	60,894	-50,686	-161,051
Vermont .....	56,339	38,276	18,063	4,207	22,270	2,486	19,784	17,287	-2,497	-15,694
Virginia .....	540,266	360,344	179,923	0	179,923	18,024	161,899	280,501	118,602	325,509
Washington .....	851,907	570,937	280,970	-7,610	273,360	21,367	251,992	297,299	45,307	88,709
West Virginia .....	762,462	497,340	265,122	0	265,122	6,814	258,307	84,535	-173,773	-501,543
Wisconsin .....	528,315	359,634	168,681	4,022	172,703	12,565	160,138	189,064	28,927	43,087
Wyoming .....	454,313	309,859	144,454	0	144,454	3,721	140,733	39,908	-100,825	-331,136
United States .....	30,406,964	20,475,614	9,931,350	152,304	10,083,654	718,369	9,365,285	10,012,728	647,444	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1994 was 698,395 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A13. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1993**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	954,841	633,692	321,150	0	321,150	23,753	297,397	221,977	-75,420	-263,872
Alaska .....	51,195	35,564	15,631	0	15,631	1,195	14,436	14,926	491	0
Arizona .....	705,866	473,765	232,101	-8	232,094	12,015	220,078	151,520	-68,559	-234,193
Arkansas .....	406,107	276,284	129,823	0	129,823	7,765	122,059	108,034	-14,025	-69,819
California .....	1,388,097	958,928	429,168	11,925	441,093	69,463	371,630	718,226	346,596	802,266
Colorado .....	345,627	234,098	111,529	0	111,529	7,492	104,037	112,452	8,415	4,414
Connecticut .....	304,961	206,986	97,975	3,670	101,646	7,447	94,198	92,938	-1,261	-26,754
Delaware .....	88,170	59,829	28,342	0	28,342	1,821	26,520	31,121	4,601	8,704
Dist. of Col. ....	2,984	2,341	643	0	643	2,075	-1,432	35,398	36,830	107,204
Florida .....	1,414,936	937,028	477,908	0	477,908	35,172	442,736	521,176	78,439	207,379
Georgia .....	961,660	635,003	326,656	0	326,656	16,594	310,062	304,320	-5,742	-14,373
Hawaii .....	66,172	45,414	20,758	0	20,758	1,925	18,833	29,541	10,708	0
Idaho .....	93,015	62,230	30,785	449	31,235	6,009	25,225	63,872	38,647	104,449
Illinois .....	1,524,836	1,046,879	477,956	0	477,956	32,154	445,803	401,887	-43,916	-273,842
Indiana .....	1,042,034	701,000	341,033	0	341,033	15,986	325,047	279,550	-45,497	-171,850
Iowa .....	335,310	229,567	105,744	0	105,744	6,791	109,539	109,539	0	5,661
Kansas .....	404,593	280,285	124,308	0	124,308	7,624	116,684	98,294	-18,389	-98,623
Kentucky .....	858,999	568,986	290,012	0	290,012	14,575	275,437	232,525	-42,912	-135,195
Louisiana .....	641,073	438,562	202,511	0	202,511	14,440	188,071	231,183	43,112	78,553
Maine .....	86,302	58,747	27,555	7,328	34,883	1,162	33,721	40,781	7,061	18,501
Maryland .....	447,806	299,424	148,382	0	148,382	10,866	137,516	183,813	46,297	124,366
Massachusetts .....	285,386	189,292	96,094	6,277	102,371	10,448	91,923	154,498	62,575	176,570
Michigan .....	953,388	638,630	314,757	3,179	317,936	21,614	296,322	298,852	2,530	-32,725
Minnesota .....	449,778	309,019	140,759	21,789	162,548	12,134	150,414	167,907	17,493	7,050
Mississippi .....	252,963	173,688	79,275	0	79,275	12,760	66,515	118,565	52,050	116,105
Missouri .....	567,064	385,537	181,526	0	181,526	16,828	164,698	200,018	35,321	55,554
Montana .....	250,540	170,538	80,002	102	80,105	5,697	74,407	44,115	-30,293	-113,530
Nebraska .....	244,347	166,811	77,535	0	77,535	6,282	71,253	63,972	-7,282	-45,215
Nevada .....	212,414	144,787	67,627	112	67,739	3,655	64,085	63,118	-967	-16,280
New Hampshire ....	157,066	107,299	49,767	3,670	53,438	2,204	51,233	29,892	-21,341	-75,107
New Jersey .....	371,778	254,799	116,979	0	116,979	17,444	99,535	223,898	124,363	325,171
New Mexico .....	300,314	203,535	96,779	0	96,779	4,502	92,277	50,931	-41,347	-141,778
New York .....	1,117,992	755,247	362,745	23,342	386,087	38,930	347,157	444,141	96,984	194,004
North Carolina ....	887,274	584,447	302,827	0	302,827	22,176	280,651	340,441	59,790	172,450
North Dakota .....	321,011	223,770	97,241	4,855	102,096	3,099	98,997	25,358	-73,639	-256,746
Ohio .....	1,355,562	899,257	456,305	0	456,305	33,369	422,936	506,923	83,987	222,388
Oklahoma .....	508,752	342,210	166,542	0	166,542	10,586	155,956	138,293	-17,663	-78,274
Oregon .....	417,703	278,687	139,015	11,234	150,249	12,192	138,057	152,100	14,042	21,812
Pennsylvania .....	1,700,848	1,133,772	567,077	0	567,077	31,406	535,670	409,377	-126,293	-426,540
Rhode Island .....	853	669	183	3,670	3,854	1,156	2,698	22,343	19,645	57,608
South Carolina ....	790,325	532,418	257,908	0	257,908	12,510	245,398	209,950	-35,448	-136,794
South Dakota .....	55,670	37,738	17,932	0	17,932	1,909	16,023	23,559	7,536	17,664
Tennessee .....	709,816	465,468	244,348	0	244,348	27,587	216,761	272,387	55,627	138,072
Texas .....	2,601,978	1,755,208	846,771	-2,733	844,037	60,678	783,360	853,288	69,928	62,395
Utah .....	340,125	225,956	114,169	0	114,169	5,598	108,571	57,551	-51,020	-160,981
Vermont .....	45,696	31,023	14,673	9,213	23,887	1,985	21,902	17,114	-4,788	-20,263
Virginia .....	531,171	353,127	178,045	0	178,045	18,595	159,450	277,641	118,191	333,068
Washington .....	868,070	582,243	285,827	-11,082	274,745	23,948	250,796	308,693	57,896	126,312
West Virginia .....	699,908	457,390	242,518	0	242,518	6,836	235,683	83,394	-152,288	-440,318
Wisconsin .....	513,343	350,376	162,967	0	162,967	12,304	150,663	181,370	30,706	51,225
Wyoming .....	432,136	295,129	137,007	0	137,007	3,772	133,235	40,552	-92,683	-305,905
United States .....	30,067,855	20,232,681	9,835,175	96,994	9,932,168	738,530	9,193,638	9,763,310	569,672	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1993 was 639,634 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A14. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1992**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	920,245	610,461	309,783	0	309,783	21,144	288,639	212,113	-76,527	-255,072
Alaska .....	47,291	33,073	14,218	0	14,218	1,158	13,060	14,804	1,745	0
Arizona .....	733,673	494,461	239,212	-7	239,204	11,727	227,477	148,938	-78,539	-266,589
Arkansas .....	397,715	270,209	127,506	0	127,506	7,724	119,782	97,075	-22,707	-93,293
California .....	1,327,393	920,309	407,085	15,349	422,434	74,749	347,685	728,282	380,597	900,531
Colorado .....	336,573	227,733	108,840	0	108,840	9,296	99,545	108,577	9,032	3,917
Connecticut .....	265,576	179,752	85,824	3,260	89,084	6,493	82,592	92,557	9,965	14,798
Delaware .....	78,379	56,995	21,385	0	21,385	1,709	19,676	29,112	9,437	12,916
Dist. of Col. ....	1,546	1,294	252	0	252	1,838	-1,586	34,267	35,853	105,912
Florida .....	1,376,208	919,079	457,129	0	457,129	35,172	421,957	501,598	79,641	196,773
Georgia .....	926,552	613,401	313,151	0	313,151	16,950	296,201	284,532	-11,670	-34,278
Hawaii .....	74,573	51,162	23,411	0	23,411	1,938	21,472	29,571	8,099	0
Idaho .....	64,730	43,371	21,359	887	22,246	6,125	16,121	64,856	48,735	135,967
Illinois .....	1,350,551	924,651	425,900	0	425,900	30,000	395,900	383,920	-11,980	-146,601
Indiana .....	1,014,678	682,692	331,986	0	331,986	16,347	315,640	262,645	-52,995	-191,039
Iowa .....	321,785	221,381	100,404	0	100,404	9,090	100,070	11,756	11,756	1,436
Kansas .....	355,240	246,862	108,378	0	108,378	6,739	101,639	92,360	-9,279	-65,606
Kentucky .....	777,420	513,498	263,922	0	263,922	12,297	251,625	228,835	-22,790	-59,806
Louisiana .....	594,693	406,391	188,302	0	188,302	13,281	175,021	222,116	47,095	101,848
Maine .....	89,002	60,564	28,439	7,244	35,682	2,500	33,183	39,180	5,998	11,912
Maryland .....	406,130	271,061	135,069	0	135,069	9,830	125,239	173,974	48,735	139,441
Massachusetts .....	331,793	219,749	112,044	5,844	117,888	10,890	106,998	153,533	46,536	131,970
Michigan .....	848,553	566,451	282,102	-627	281,475	21,648	259,827	286,063	26,236	50,423
Minnesota .....	422,997	294,079	128,919	16,849	145,768	10,555	135,213	161,770	26,557	33,244
Mississippi .....	228,091	158,186	69,905	0	69,905	11,565	58,339	113,419	55,079	127,584
Missouri .....	596,487	403,275	193,212	0	193,212	15,192	178,020	185,650	7,630	-14,300
Montana .....	270,990	184,095	86,896	129	87,025	6,168	80,857	44,685	-36,172	-131,253
Nebraska .....	241,370	164,985	76,385	0	76,385	5,909	70,476	60,680	-9,796	-51,081
Nevada .....	224,024	152,498	71,526	133	71,659	4,306	67,353	60,380	-6,973	-35,082
New Hampshire .....	142,349	96,454	45,895	3,260	49,156	1,136	48,019	30,552	-17,467	-56,419
New Jersey .....	339,287	232,947	106,340	0	106,340	16,505	89,836	215,373	125,538	336,111
New Mexico .....	292,259	197,721	94,538	0	94,538	3,821	90,717	49,240	-41,477	-137,845
New York .....	1,179,573	796,648	382,925	13,255	396,180	35,298	360,882	438,339	77,457	154,861
North Carolina .....	831,855	548,634	283,221	0	283,221	20,732	262,489	321,394	58,906	176,019
North Dakota .....	322,079	224,522	97,557	2,332	99,889	3,525	96,364	24,322	-72,042	-252,874
Ohio .....	1,376,581	911,537	465,044	0	465,044	32,190	432,854	494,796	61,942	175,070
Oklahoma .....	478,415	321,657	156,757	0	156,757	9,705	147,052	130,568	-16,484	-68,962
Oregon .....	427,323	286,679	140,644	21,085	161,729	12,590	149,139	146,410	-2,729	-32,090
Pennsylvania .....	1,684,019	1,117,510	566,509	0	566,509	25,219	541,290	396,773	-144,516	-439,762
Rhode Island .....	1,595	1,222	373	3,260	3,633	1,008	2,625	21,811	19,187	56,924
South Carolina .....	749,726	505,841	243,885	0	243,885	11,493	232,392	199,264	-33,129	-124,846
South Dakota .....	66,498	45,185	21,313	986	22,299	1,845	20,454	22,157	1,703	-2
Tennessee .....	761,592	504,340	257,252	0	257,252	24,687	232,564	268,129	35,565	79,244
Texas .....	2,551,483	1,732,726	818,757	-3,284	815,473	56,085	759,388	816,939	57,551	20,339
Utah .....	332,832	220,507	112,326	0	112,326	5,849	106,476	56,527	-49,950	-155,568
Vermont .....	50,000	33,970	16,030	5,005	21,034	2,071	18,964	16,859	-2,105	-12,298
Virginia .....	500,947	333,883	167,064	0	167,064	17,305	149,759	260,842	111,083	317,038
Washington .....	873,708	586,708	287,000	-1,522	285,478	22,326	263,152	304,758	41,606	86,606
West Virginia .....	708,956	462,153	246,803	0	246,803	6,811	239,993	81,312	-158,681	-453,967
Wisconsin .....	501,113	342,579	158,534	3,286	161,821	12,189	149,631	173,756	24,125	33,817
Wyoming .....	451,257	308,457	142,800	0	142,800	3,941	138,859	39,920	-98,939	-326,070
United States .....	29,247,708	19,703,596	9,544,112	96,724	9,640,836	708,672	8,932,165	9,428,603	496,438	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1992 was 560,844 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A15. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1991**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	861,628	571,435	290,193	0	290,193	17,609	272,584	208,908	-63,676	-198,027
Alaska .....	50,006	35,381	14,625	0	14,625	1,262	13,363	14,520	1,158	0
Arizona .....	702,159	474,349	227,810	363	228,173	12,223	215,950	142,787	-73,164	-249,702
Arkansas .....	411,560	280,658	130,902	0	130,902	7,073	123,829	97,038	-26,791	-103,315
California .....	1,191,493	833,343	358,151	21,681	379,831	68,964	310,867	711,915	401,048	995,893
Colorado .....	328,367	222,465	105,902	0	105,902	7,639	98,263	107,330	9,067	12,570
Connecticut .....	249,123	168,763	80,360	622	80,982	5,910	75,072	92,709	17,637	43,469
Delaware .....	91,741	65,797	25,944	0	25,944	1,843	24,101	29,124	5,023	773
Dist. of Col. ....	3,097	2,484	614	0	614	2,279	-1,666	34,786	36,451	107,401
Florida .....	1,345,103	899,005	446,098	0	446,098	34,513	411,586	499,299	87,713	240,936
Georgia .....	923,069	613,228	309,842	0	309,842	16,241	293,601	278,211	-15,389	-39,323
Hawaii .....	79,242	54,221	25,021	0	25,021	1,547	23,474	29,084	5,610	0
Idaho .....	86,337	58,080	28,256	456	28,713	5,087	23,626	61,572	37,946	107,854
Illinois .....	1,399,502	963,274	436,229	0	436,229	31,146	405,083	398,756	-6,328	-132,844
Indiana .....	1,027,102	692,043	335,058	0	335,058	16,532	318,526	262,839	-55,687	-192,186
Iowa .....	340,019	233,469	106,550	0	106,550	8,035	105,026	105,026	6,511	-6,399
Kansas .....	364,005	253,747	110,258	0	110,258	7,509	102,749	96,055	-6,694	-58,882
Kentucky .....	765,863	508,239	257,623	0	257,623	10,750	246,873	219,029	-27,844	-70,110
Louisiana .....	619,365	424,342	195,023	0	195,023	12,872	182,151	220,771	38,620	81,921
Maine .....	102,469	69,992	32,477	7,169	39,647	2,570	37,076	38,838	1,762	-1,004
Maryland .....	397,183	266,793	130,390	0	130,390	11,175	119,215	174,380	55,164	156,739
Massachusetts .....	359,051	236,893	122,158	6,443	128,600	11,143	117,457	152,847	35,389	106,786
Michigan .....	976,768	654,104	322,664	-1,467	321,197	21,628	299,570	288,377	-11,193	-56,248
Minnesota .....	437,752	299,813	137,939	7,304	145,242	9,702	135,541	166,351	30,810	68,350
Mississippi .....	255,938	176,421	79,517	0	79,517	9,059	70,458	112,662	42,204	101,937
Missouri .....	633,123	427,991	205,132	0	205,132	15,746	189,386	192,826	3,440	-20,605
Montana .....	299,720	203,647	96,073	89	96,162	5,640	90,522	45,743	-44,778	-154,688
Nebraska .....	246,593	168,213	78,380	0	78,380	5,633	72,747	63,481	-9,267	-44,944
Nevada .....	225,202	153,815	71,387	11	71,398	3,840	67,559	56,726	-10,833	-45,044
New Hampshire ....	135,176	91,826	43,350	3,030	46,380	2,027	44,353	29,895	-14,458	-49,470
New Jersey .....	404,878	278,535	126,343	0	126,343	16,432	109,911	220,697	110,786	296,172
New Mexico .....	264,345	178,825	85,520	0	85,520	3,753	81,767	48,054	-33,713	-111,699
New York .....	1,323,071	892,897	430,174	12,085	442,259	34,975	407,284	441,550	34,266	42,601
North Carolina .....	845,673	560,702	284,970	0	284,970	20,327	264,643	314,984	50,340	154,883
North Dakota .....	311,684	217,734	93,950	1,562	95,512	3,300	92,212	24,755	-67,457	-237,823
Ohio .....	1,356,068	903,317	452,751	0	452,751	32,209	420,542	496,986	76,444	222,624
Oklahoma .....	468,988	315,959	153,029	0	153,029	9,730	143,298	134,448	-8,850	-41,910
Oregon .....	483,516	325,547	157,969	12,278	170,247	11,517	158,730	148,936	-9,794	-47,929
Pennsylvania .....	1,661,614	1,107,619	553,996	0	553,996	31,465	522,531	396,942	-125,589	-400,717
Rhode Island .....	2,573	1,988	585	622	1,207	1,141	66	21,847	21,782	64,924
South Carolina .....	734,499	496,212	238,287	0	238,287	11,460	226,828	194,721	-32,107	-115,963
South Dakota .....	71,260	48,834	22,426	472	22,898	1,938	20,959	22,810	1,850	-246
Tennessee .....	757,047	504,792	252,255	0	252,255	16,917	235,338	267,467	32,129	92,570
Texas .....	2,546,202	1,732,974	813,228	-1,525	811,703	52,361	759,342	820,080	60,738	63,466
Utah .....	310,503	207,602	102,901	0	102,901	5,385	97,515	54,276	-43,239	-138,093
Vermont .....	56,236	38,293	17,943	7,524	25,467	2,232	23,235	16,052	-7,183	-28,235
Virginia .....	504,361	337,375	166,986	0	166,986	17,478	149,508	256,279	106,771	309,718
Washington .....	1,058,667	712,850	345,817	-4,619	341,198	22,574	318,624	316,338	-2,285	-39,695
West Virginia .....	695,066	451,947	243,119	0	243,119	6,890	236,229	80,608	-155,621	-439,011
Wisconsin .....	508,935	348,063	160,872	1,892	162,764	11,943	150,820	174,122	23,301	38,388
Wyoming .....	413,244	281,312	131,932	0	131,932	3,873	128,059	40,114	-87,945	-285,820
United States .....	29,686,189	20,047,211	9,638,978	75,993	9,714,971	685,094	9,029,877	9,423,954	394,078	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1991 was 440,551 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A16. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1990**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	773,890	513,787	260,103	0	260,103	16,542	243,560	204,466	-39,094	-122,227
Alaska .....	53,202	37,871	15,330	0	15,330	1,310	14,020	14,514	494	0
Arizona .....	656,396	443,866	212,530	-7	212,523	13,688	198,834	141,494	-57,340	-205,413
Arkansas .....	399,411	272,984	126,426	0	126,426	7,066	119,360	93,370	-25,990	-101,826
California .....	1,292,107	901,338	390,770	15,924	406,693	78,954	327,740	720,249	392,509	949,137
Colorado .....	331,330	224,491	106,840	0	106,840	7,630	99,209	105,071	5,862	3,546
Connecticut .....	339,718	230,003	109,715	612	110,327	6,259	104,069	92,763	-11,306	-45,936
Delaware .....	86,611	62,387	24,224	0	24,224	1,332	22,893	28,265	5,372	3,472
Dist. of Col. ....	5,441	4,209	1,232	0	1,232	1,445	-213	33,603	33,816	101,656
Florida .....	1,274,200	852,395	421,805	0	421,805	30,366	391,438	489,741	98,303	286,673
Georgia .....	981,167	648,275	332,892	0	332,892	16,053	316,839	274,462	-42,377	-106,420
Hawaii .....	86,114	58,831	27,283	0	27,283	1,709	25,574	28,356	2,782	0
Idaho .....	89,621	60,217	29,405	310	29,715	5,797	23,918	61,428	37,510	105,212
Illinois .....	1,381,867	948,620	433,247	0	433,247	30,452	402,794	380,700	-22,094	-168,522
Indiana .....	1,026,093	692,610	333,484	0	333,484	16,442	317,042	252,427	-64,615	-221,572
Iowa .....	318,099	218,988	99,112	0	99,112	7,632	91,479	100,440	8,961	2,018
Kansas .....	380,811	265,251	115,560	0	115,560	7,987	107,573	92,632	-14,942	-85,581
Kentucky .....	747,929	496,099	251,830	0	251,830	9,561	242,269	208,463	-33,807	-83,530
Louisiana .....	626,383	427,913	198,471	0	198,471	12,780	185,690	217,774	32,083	67,693
Maine .....	96,206	65,281	30,925	7,976	38,901	2,278	36,623	39,337	2,714	4,857
Maryland .....	326,034	218,565	107,469	0	107,469	8,433	99,037	169,009	69,973	212,621
Massachusetts .....	375,722	251,257	124,465	7,043	131,508	11,096	120,412	155,047	34,635	96,969
Michigan .....	915,225	611,357	303,868	-37,255	266,613	21,731	244,881	281,036	36,154	94,021
Minnesota .....	448,110	306,343	141,767	302	142,070	10,783	131,286	160,934	29,647	63,886
Mississippi .....	252,009	173,793	78,217	0	78,217	8,240	69,977	109,618	39,641	97,357
Missouri .....	616,673	415,328	201,345	0	201,345	15,398	185,947	183,991	-1,956	-30,268
Montana .....	273,635	185,882	87,753	155	87,908	6,557	81,351	44,781	-36,570	-131,383
Nebraska .....	233,259	159,455	73,804	0	73,804	5,837	67,967	60,966	-7,001	-38,950
Nevada .....	208,145	142,340	65,805	0	65,805	4,074	61,731	55,793	-5,938	-30,326
New Hampshire .....	114,699	77,815	36,884	612	37,497	1,810	35,687	30,638	-5,048	-18,916
New Jersey .....	396,450	271,951	124,499	0	124,499	15,553	108,946	214,467	105,521	287,086
New Mexico .....	303,534	206,322	97,212	0	97,212	3,769	93,443	47,156	-46,286	-153,240
New York .....	1,351,561	912,590	438,972	1,564	440,535	30,024	410,512	441,255	30,743	50,014
North Carolina .....	805,431	532,999	272,432	0	272,432	15,209	257,223	306,822	49,600	172,455
North Dakota .....	304,530	213,005	91,525	2,233	93,758	3,216	90,542	23,931	-66,611	-235,064
Ohio .....	1,284,037	852,385	431,652	0	431,652	31,612	400,039	486,092	86,053	265,207
Oklahoma .....	470,133	316,377	153,756	0	153,756	10,249	143,506	145,024	1,518	-7,920
Oregon .....	512,905	345,130	167,775	7,400	175,175	12,825	162,349	146,639	-15,710	-68,098
Pennsylvania .....	1,696,550	1,131,240	565,310	0	565,310	27,191	538,119	391,529	-146,590	-448,691
Rhode Island .....	7,909	5,890	2,019	612	2,631	1,127	1,504	21,902	20,397	60,028
South Carolina .....	725,307	488,992	236,314	0	236,314	8,831	227,483	189,884	-37,599	-120,120
South Dakota .....	69,929	47,999	21,931	0	21,931	1,832	20,099	21,611	1,512	-1,051
Tennessee .....	748,793	496,637	252,156	0	252,156	15,058	237,098	263,218	26,120	90,119
Texas .....	2,511,445	1,711,391	800,054	-217	799,837	50,440	749,397	810,060	60,663	70,991
Utah .....	321,134	211,062	110,072	0	110,072	5,495	104,577	52,551	-52,027	-153,648
Vermont .....	52,959	35,924	17,035	3,971	21,006	1,858	19,148	16,092	-3,056	-13,774
Virginia .....	486,602	325,554	161,048	0	161,048	16,528	144,520	248,040	103,520	303,935
Washington .....	1,049,054	706,220	342,834	-4,479	338,355	24,105	314,249	310,649	-3,600	-45,319
West Virginia .....	750,731	486,766	263,965	0	263,965	6,491	257,474	78,928	-178,546	-499,177
Wisconsin .....	493,042	337,623	155,420	0	155,420	11,484	143,936	167,864	23,927	41,963
Wyoming .....	421,910	287,552	134,358	0	134,358	4,156	130,202	40,155	-90,047	-293,930
United States .....	29,474,054	19,891,159	9,582,895	6,756	9,589,652	666,295	8,923,356	9,255,237	331,880	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1990 was 362,436 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A17. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1989**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	790,079	525,307	264,772	0	264,772	16,563	248,210	198,535	-49,674	-145,596
Alaska .....	51,157	36,187	14,970	0	14,970	1,405	13,565	14,131	567	0
Arizona .....	564,047	382,783	181,264	-7	181,257	13,482	167,775	139,031	-28,744	-112,705
Arkansas .....	355,394	241,435	113,959	0	113,959	7,441	106,518	89,002	-17,516	-66,477
California .....	1,484,819	1,033,533	451,286	14,424	465,710	71,806	393,904	696,521	302,617	732,122
Colorado .....	341,042	230,837	110,205	0	110,205	7,848	102,356	102,834	478	-7,221
Connecticut .....	363,733	246,781	116,952	777	117,729	6,895	110,834	93,368	-17,466	-63,019
Delaware .....	90,350	61,492	28,858	0	28,858	2,014	26,844	27,519	675	-1,018
Dist. of Col. ....	9,268	7,049	2,219	0	2,219	2,301	-83	32,935	33,018	97,646
Florida .....	1,286,046	862,089	423,956	0	423,956	38,618	385,338	472,473	87,135	247,691
Georgia .....	936,117	620,682	315,434	0	315,434	16,940	298,495	262,928	-35,567	-82,603
Hawaii .....	85,821	58,700	27,122	0	27,122	1,733	25,389	27,195	1,806	0
Idaho .....	93,150	62,684	30,465	97	30,562	5,395	25,167	60,806	35,639	103,940
Illinois .....	1,373,765	940,982	432,783	0	432,783	31,982	400,801	372,935	-27,865	-163,146
Indiana .....	920,335	618,159	302,176	0	302,176	17,556	284,620	248,703	-35,916	-112,997
Iowa .....	304,997	209,189	95,808	0	95,808	7,438	88,369	97,967	9,597	13,022
Kansas .....	386,539	269,733	116,807	0	116,807	7,902	108,905	88,105	-20,800	-100,534
Kentucky .....	716,724	475,290	241,434	0	241,434	10,497	230,937	199,558	-31,379	-68,922
Louisiana .....	584,500	399,254	185,245	0	185,245	13,584	171,661	211,003	39,342	100,457
Maine .....	123,819	84,157	39,662	7,101	46,763	2,778	43,985	39,013	-4,972	-18,886
Maryland .....	371,064	249,055	122,009	0	122,009	12,358	109,651	168,071	58,419	174,525
Massachusetts .....	397,752	264,146	133,606	7,027	140,633	12,632	128,001	155,871	27,870	86,749
Michigan .....	933,048	620,789	312,259	-18,514	293,745	22,517	271,228	282,955	11,727	42,084
Minnesota .....	434,702	296,935	137,767	-1,460	136,307	11,385	124,922	156,719	31,797	78,503
Mississippi .....	228,746	156,906	71,839	0	71,839	8,639	63,200	100,908	37,708	98,820
Missouri .....	615,167	412,555	202,612	0	202,612	16,599	186,013	179,480	-6,533	-32,541
Montana .....	274,844	186,737	88,107	52	88,159	5,753	82,407	44,564	-37,843	-130,339
Nebraska .....	228,406	156,451	71,955	0	71,955	5,836	66,119	59,938	-6,182	-33,837
Nevada .....	213,868	146,717	67,151	246	67,396	3,359	64,037	51,071	-12,966	-48,833
New Hampshire .....	74,616	50,305	24,311	630	24,941	2,770	22,171	31,001	8,830	24,091
New Jersey .....	449,699	309,314	140,384	0	140,384	17,379	123,005	216,179	93,174	252,060
New Mexico .....	309,615	212,890	96,726	0	96,726	3,587	93,139	45,618	-47,521	-161,532
New York .....	1,369,691	924,581	445,110	15,505	460,615	35,682	424,933	437,430	12,498	2,884
North Carolina .....	880,327	583,130	297,196	0	297,196	23,363	273,834	300,970	27,136	96,680
North Dakota .....	290,451	202,746	87,705	187	87,892	3,390	84,501	24,095	-60,407	-212,806
Ohio .....	1,342,391	893,945	448,446	0	448,446	31,504	416,941	483,222	66,281	226,240
Oklahoma .....	465,558	313,901	151,657	0	151,657	11,128	140,529	126,269	-14,260	-55,663
Oregon .....	470,657	317,242	153,416	7,272	160,687	12,001	148,686	142,004	-6,682	-31,918
Pennsylvania .....	1,584,485	1,056,340	528,144	0	528,144	31,657	496,487	388,626	-107,861	-322,929
Rhode Island .....	6,682	4,989	1,693	326	2,019	1,278	741	21,698	20,957	62,756
South Carolina .....	701,824	473,273	228,551	0	228,551	12,884	215,667	183,761	-31,906	-105,302
South Dakota .....	76,125	52,294	23,831	0	23,831	1,969	21,862	21,626	-236	-5,923
Tennessee .....	751,815	499,467	252,348	0	252,348	16,963	235,385	256,285	20,900	80,135
Texas .....	2,471,949	1,679,070	792,879	-199	792,680	59,663	733,017	783,601	50,583	72,376
Utah .....	303,915	199,863	104,052	1	104,052	5,088	98,964	51,059	-47,904	-138,168
Vermont .....	50,817	34,573	16,244	6,669	22,913	59	22,854	15,603	-7,251	-20,557
Virginia .....	446,512	298,570	147,943	0	147,943	18,032	129,910	250,650	120,739	367,145
Washington .....	913,048	615,791	297,257	-2,684	294,573	22,548	272,025	295,733	23,708	55,164
West Virginia .....	810,419	527,701	282,718	0	282,718	7,223	275,495	77,955	-197,540	-557,361
Wisconsin .....	481,534	330,173	151,361	0	151,361	11,724	139,637	165,059	25,422	54,277
Wyoming .....	392,945	267,551	125,394	0	125,394	3,697	121,697	38,329	-83,368	-268,522
United States .....	29,204,373	19,704,326	9,500,047	37,450	9,537,496	716,846	8,820,650	9,030,913	210,263	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity sold by nonutilities to utilities for distribution in 1989 was 277,153 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A18. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1988**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	685,072	454,700	230,372	0	230,372	14,771	215,601	193,247	-22,354	-54,938
Alaska .....	49,172	34,860	14,313	0	14,313	1,292	13,020	13,801	781	0
Arizona .....	650,901	440,850	210,051	-6	210,044	13,429	196,615	132,783	-63,833	-217,909
Arkansas .....	361,689	246,487	115,202	0	115,202	7,543	107,659	86,230	-21,429	-80,513
California .....	1,439,577	1,009,730	429,848	24,859	454,707	74,441	380,266	684,574	304,308	717,442
Colorado .....	328,838	223,424	105,414	0	105,414	7,588	97,826	100,091	2,265	-2,464
Connecticut .....	384,817	260,693	124,124	2,313	126,436	7,213	119,223	91,862	-27,361	-92,274
Delaware .....	94,795	64,249	30,546	0	30,546	1,673	28,873	25,738	-3,135	-10,870
Dist. of Col. ....	6,842	5,243	1,600	0	1,600	1,978	-378	32,003	32,382	97,512
Florida .....	1,279,179	855,909	423,270	0	423,270	32,120	391,150	444,382	53,232	169,847
Georgia .....	833,533	552,470	281,063	0	281,063	15,297	265,766	253,669	-12,097	-6,375
Hawaii .....	81,909	55,884	26,025	0	26,025	1,627	24,398	26,337	1,939	0
Idaho .....	69,644	46,627	23,016	342	23,359	5,131	18,227	58,568	40,341	120,298
Illinois .....	1,332,747	911,912	420,835	0	420,835	31,030	389,805	375,459	-14,346	-108,461
Indiana .....	880,198	593,748	286,450	0	286,450	17,452	268,998	244,557	-24,441	-82,755
Iowa .....	304,442	209,829	94,613	0	94,613	7,652	86,961	98,394	11,433	16,398
Kansas .....	356,741	249,654	107,087	0	107,087	7,728	99,359	88,128	-11,231	-69,377
Kentucky .....	760,254	499,454	260,800	0	260,800	10,475	250,325	184,515	-65,810	-158,594
Louisiana .....	614,573	420,861	193,711	0	193,711	12,686	181,026	204,757	23,731	53,091
Maine .....	100,915	68,399	32,516	11,559	44,075	2,582	41,493	38,432	-3,061	-10,570
Maryland .....	418,244	280,453	137,792	0	137,792	11,647	126,145	162,288	36,143	110,940
Massachusetts .....	347,404	229,130	118,274	9,798	128,072	11,881	116,191	152,608	36,417	120,569
Michigan .....	912,784	609,567	303,218	561	303,779	23,016	280,762	281,548	786	3,582
Minnesota .....	430,262	292,922	137,340	-5,695	131,645	11,248	120,397	156,022	35,625	95,721
Mississippi .....	267,440	181,824	85,616	0	85,616	8,436	77,180	95,807	18,628	44,966
Missouri .....	622,007	418,175	203,832	0	203,832	16,298	187,534	178,267	-9,267	-40,720
Montana .....	263,712	179,022	84,690	10	84,699	5,460	79,239	44,156	-35,082	-119,757
Nebraska .....	223,600	153,193	70,407	0	70,407	5,769	64,638	58,886	-5,752	-31,585
Nevada .....	219,106	149,855	69,250	0	69,250	3,532	65,718	46,691	-19,027	-66,858
New Hampshire .....	73,080	49,204	23,875	2,459	26,334	2,596	23,739	30,190	6,451	17,921
New Jersey .....	438,104	301,078	137,025	0	137,025	17,999	119,026	211,925	92,899	252,935
New Mexico .....	288,161	198,189	89,972	0	89,972	3,862	86,109	43,521	-42,588	-146,248
New York .....	1,300,960	875,437	425,523	41,604	467,128	32,992	434,136	428,694	-5,442	-28,973
North Carolina .....	793,545	526,025	267,521	0	267,521	21,020	246,501	291,863	45,363	158,154
North Dakota .....	305,281	211,958	93,323	1,329	94,652	3,454	91,198	24,248	-66,950	-230,234
Ohio .....	1,266,079	842,874	423,205	0	423,205	30,553	392,652	458,286	65,635	228,287
Oklahoma .....	462,868	312,619	150,249	0	150,249	9,803	140,446	127,356	-13,090	-47,589
Oregon .....	426,814	286,758	140,055	5,578	145,633	11,498	134,135	134,133	-2	-6,313
Pennsylvania .....	1,559,243	1,037,438	521,806	0	521,806	31,674	490,132	385,186	-104,946	-303,242
Rhode Island .....	9,841	7,234	2,607	2,313	4,919	1,436	3,483	21,221	17,738	52,360
South Carolina .....	681,298	458,895	222,403	0	222,403	11,830	210,573	180,183	-30,390	-93,763
South Dakota .....	85,086	58,180	26,906	0	26,906	1,920	24,986	21,273	-3,714	-15,720
Tennessee .....	598,203	393,968	204,234	0	204,234	16,346	187,889	248,639	60,750	212,551
Texas .....	2,351,083	1,596,418	754,665	-108	754,556	52,489	702,068	765,468	63,401	145,260
Utah .....	298,882	197,759	101,122	0	101,122	3,958	97,164	49,496	-47,668	-137,485
Vermont .....	54,021	36,794	17,227	9,624	26,851	1,950	24,902	15,067	-9,835	-34,012
Virginia .....	468,952	314,826	154,126	0	154,126	16,979	137,146	239,233	102,086	311,131
Washington .....	867,533	582,313	285,220	1,859	287,079	21,396	265,683	289,448	23,765	70,667
West Virginia .....	796,078	518,634	277,444	0	277,444	7,288	270,157	76,388	-193,769	-546,995
Wisconsin .....	487,882	334,332	153,550	0	153,550	11,421	142,129	163,318	21,189	44,660
Wyoming .....	421,659	288,088	133,571	0	133,571	3,743	129,828	37,410	-92,418	-299,673
United States .....	28,355,050	19,128,149	9,226,901	108,399	9,335,300	687,201	8,648,099	8,796,349	148,251	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity purchased from nonutilities for distribution in 1988 was 232,118 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.



**Table A19. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1987**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	707,843	471,268	236,575	0	236,575	10,820	225,755	186,646	-39,110	-94,726
Alaska .....	48,498	34,432	14,066	0	14,066	1,377	12,689	13,520	831	0
Arizona .....	550,183	374,122	176,061	-5	176,055	12,963	163,093	125,012	-38,081	-139,513
Arkansas .....	384,971	261,161	123,811	0	123,811	7,387	116,423	82,557	-33,866	-113,777
California .....	1,499,867	1,055,133	444,733	26,421	471,154	72,843	398,312	657,833	259,522	580,383
Colorado .....	308,177	209,878	98,299	0	98,299	7,360	90,939	95,778	4,839	6,447
Connecticut .....	351,950	238,765	113,185	1,961	115,146	6,495	108,651	87,761	-20,890	-69,650
Delaware .....	90,645	61,606	29,039	0	29,039	1,664	27,375	23,936	-3,438	-12,016
Dist. of Col. ....	3,837	3,041	796	0	796	1,863	-1,066	30,733	31,799	97,118
Florida .....	1,153,400	775,470	377,930	0	377,930	32,592	345,337	417,862	72,525	219,245
Georgia .....	860,595	567,826	292,769	0	292,769	16,378	276,391	244,571	-31,820	-57,199
Hawaii .....	76,616	52,060	24,555	0	24,555	1,558	22,997	24,901	1,905	0
Idaho .....	84,449	56,794	27,655	140	27,795	5,296	22,499	54,953	32,453	95,637
Illinois .....	1,186,130	811,194	374,936	0	374,936	29,355	345,581	357,540	11,959	-11,641
Indiana .....	815,045	546,947	268,099	0	268,099	16,507	251,592	230,733	-20,859	-57,106
Iowa .....	279,846	192,672	87,174	0	87,174	7,292	79,882	92,212	12,331	23,064
Kansas .....	348,550	243,384	105,165	0	105,165	7,475	97,690	83,356	-14,334	-74,730
Kentucky .....	689,234	459,082	230,152	0	230,152	8,753	221,399	173,285	-48,114	-120,008
Louisiana .....	554,709	379,643	175,066	0	175,066	12,375	162,691	201,840	39,149	108,319
Maine .....	88,648	60,171	28,477	12,777	41,254	2,536	38,718	36,570	-2,147	-7,533
Maryland .....	378,813	255,127	123,687	0	123,687	10,193	113,494	153,226	39,732	124,522
Massachusetts .....	348,248	229,733	118,515	16,532	135,047	10,836	124,211	144,610	20,399	76,304
Michigan .....	886,168	589,206	296,962	2,627	299,590	20,822	279,768	269,479	-9,288	-8,973
Minnesota .....	374,648	257,256	117,392	6,623	124,015	10,025	113,990	142,538	28,548	73,352
Mississippi .....	242,219	165,833	76,386	0	76,386	7,214	69,172	92,758	23,586	62,483
Missouri .....	573,266	385,310	187,956	0	187,956	15,144	172,812	171,011	-1,801	-11,509
Montana .....	223,692	152,435	71,258	87	71,344	5,424	65,921	42,387	-23,534	-84,719
Nebraska .....	221,720	151,812	69,909	0	69,909	5,217	64,691	55,222	-9,469	-40,320
Nevada .....	188,738	129,227	59,511	67	59,578	3,270	56,308	43,515	-12,793	-45,998
New Hampshire .....	63,036	42,411	20,625	3,791	24,416	2,555	21,861	28,570	6,709	19,237
New Jersey .....	435,846	301,672	134,174	0	134,174	16,917	117,257	200,441	83,184	222,588
New Mexico .....	280,661	193,366	87,296	0	87,296	4,146	83,149	42,077	-41,072	-142,440
New York .....	1,242,413	841,059	401,354	52,754	454,109	35,922	418,187	405,924	-12,263	-70,078
North Carolina .....	798,141	529,189	268,952	0	268,952	18,547	250,405	281,864	31,459	127,760
North Dakota .....	251,129	173,950	77,179	4,718	81,897	2,959	78,938	22,509	-56,429	-191,595
Ohio .....	1,222,786	814,503	408,283	0	408,283	30,332	377,951	444,865	66,915	238,562
Oklahoma .....	455,512	309,694	145,819	0	145,819	9,339	136,480	123,161	-13,319	-50,938
Oregon .....	416,018	280,427	135,591	17,938	153,530	11,718	141,811	128,677	-13,135	-48,103
Pennsylvania .....	1,488,052	992,075	495,977	0	495,977	28,729	467,248	365,563	-101,685	-287,206
Rhode Island .....	10,720	7,865	2,855	29	2,884	1,384	1,500	20,274	18,774	55,789
South Carolina .....	675,275	455,506	219,769	0	219,769	11,059	208,709	177,310	-31,399	-92,827
South Dakota .....	66,491	45,113	21,378	0	21,378	1,679	19,699	19,485	-213	-2,483
Tennessee .....	574,794	375,833	198,962	0	198,962	12,548	186,413	237,920	51,507	206,754
Texas .....	2,259,333	1,533,874	725,459	-135	725,324	51,417	673,907	737,219	63,312	162,785
Utah .....	273,457	183,563	89,893	127	90,020	3,528	86,492	45,711	-40,781	-123,688
Vermont .....	49,783	33,971	15,812	7,771	23,582	2,048	21,534	13,979	-7,556	-27,594
Virginia .....	447,146	301,465	145,682	0	145,682	15,735	129,947	228,083	98,136	302,087
Washington .....	878,213	592,439	285,774	3,877	289,652	23,010	266,642	263,005	-3,637	-26,103
West Virginia .....	767,001	499,596	267,406	0	267,406	6,616	260,790	71,907	-188,882	-530,791
Wisconsin .....	478,969	328,737	150,232	0	150,232	10,972	139,260	153,459	14,200	25,133
Wyoming .....	402,138	274,630	127,508	0	127,508	3,311	124,197	35,861	-88,336	-284,338
United States .....	27,057,621	18,281,526	8,776,096	158,101	8,934,197	655,509	8,278,688	8,384,213	105,525	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity purchased from nonutilities for distribution in 1987 was 171,163 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

**Table A20. Disaggregated Data for Net Interstate Flow and Electrical System Energy Losses, 1986**  
(Billion Btu)

State	(1) Total Energy Input at Electric Utilities (TIEUB)	(2) Electric Utilities Conversion Losses and Plant Use (ELPLB)	(3) Electric Utilities Net Generation (Output) (ELEOB)	(4) Net Imports (ELNIB)	(5) Net Generation Plus Net Imports (ELENB)	(6) Transmission & Distribution Losses (ELLOB)	(7) Electricity for Sale to End Users (5) - (6) (ELFSB)	(8) Electricity Sold to End Users <sup>a</sup> (ESTCB)	(9) Net Interstate Flow of Electricity: (8) - (7) (ESISB)	(10) Net Interstate Flow of Electricity and Associated Losses (ELISB)
Alabama .....	702,953	468,976	233,977	0	233,977	14,600	219,377	176,049	-43,328	-121,943
Alaska .....	53,237	38,730	14,507	0	14,507	1,161	13,346	13,812	466	0
Arizona .....	541,616	367,006	174,610	-5	174,605	11,937	162,668	115,957	-46,711	-158,909
Arkansas .....	372,374	252,495	119,879	0	119,879	8,031	111,848	78,244	-33,605	-114,148
California .....	1,431,585	1,015,781	415,804	12,899	428,703	66,728	361,975	632,650	270,675	616,848
Colorado .....	305,926	209,429	96,497	0	96,497	6,891	89,606	92,673	3,068	-78
Connecticut .....	342,118	232,293	109,824	1,468	111,293	6,303	104,990	83,681	-21,308	-70,440
Delaware .....	89,237	60,541	28,697	0	28,697	1,578	27,119	23,284	-3,834	-12,392
Dist. of Col. ....	2,948	2,385	563	0	563	1,625	-1,062	29,303	30,365	93,761
Florida .....	1,127,712	757,631	370,081	0	370,081	26,846	343,235	398,095	54,859	186,112
Georgia .....	756,658	501,067	255,591	0	255,591	15,059	240,531	233,688	-6,843	14,580
Hawaii .....	72,884	49,484	23,401	0	23,401	1,456	21,945	23,994	2,049	0
Idaho .....	126,956	85,489	41,467	0	41,467	4,660	36,807	53,879	17,072	50,860
Illinois .....	1,146,607	781,893	364,714	0	364,714	26,234	338,480	347,197	8,717	-760
Indiana .....	806,552	542,661	263,891	0	263,891	15,715	248,175	219,701	-28,474	-81,477
Iowa .....	266,268	183,914	82,354	0	82,354	6,833	75,521	89,925	14,404	30,510
Kansas .....	336,986	236,226	100,760	0	100,760	7,177	93,582	81,323	-12,259	-68,597
Kentucky .....	688,018	459,703	228,315	0	228,315	9,304	219,011	169,561	-49,449	-128,418
Louisiana .....	564,528	384,226	180,302	0	180,302	12,485	167,817	202,305	34,488	103,136
Maine .....	116,243	79,085	37,158	8,785	45,943	2,509	43,434	34,813	-8,622	-28,246
Maryland .....	393,955	265,212	128,743	0	128,743	5,583	119,160	143,170	24,009	78,545
Massachusetts .....	347,418	229,769	117,649	12,378	130,027	9,986	120,040	136,624	16,584	65,585
Michigan .....	787,091	527,572	259,519	2,347	261,866	19,643	242,223	260,174	17,951	64,372
Minnesota .....	308,685	211,780	96,905	23,407	120,312	9,924	110,388	132,160	21,771	55,816
Mississippi .....	205,375	140,617	64,758	0	64,758	7,704	57,054	90,527	33,473	93,930
Missouri .....	571,762	386,828	184,934	0	184,934	14,455	170,479	164,710	-5,770	-28,174
Montana .....	241,880	165,286	76,594	-9	76,585	6,468	70,116	47,154	-22,963	-86,232
Nebraska .....	206,110	141,831	64,279	0	64,279	5,325	58,955	54,182	-4,773	-27,295
Nevada .....	217,183	149,427	67,756	0	67,756	3,035	64,721	39,764	-24,956	-85,950
New Hampshire .....	64,910	44,035	20,874	2,838	23,713	2,419	21,294	26,859	5,566	15,044
New Jersey .....	321,875	223,670	98,205	0	98,205	15,061	83,144	191,047	107,902	308,632
New Mexico .....	262,720	182,195	80,526	0	80,526	3,964	76,561	40,606	-35,955	-128,710
New York .....	1,180,502	800,763	379,738	52,756	432,494	33,409	399,085	392,067	-7,018	-48,084
North Carolina .....	764,329	502,296	262,032	0	262,032	18,755	243,278	264,210	20,933	107,639
North Dakota .....	252,146	176,461	75,686	3,334	79,020	2,883	76,138	23,368	-52,770	-185,233
Ohio .....	1,147,264	766,804	380,460	0	380,460	29,301	351,160	423,903	72,743	251,734
Oklahoma .....	438,737	298,594	140,143	0	140,143	9,873	130,270	122,010	-8,260	-36,069
Oregon .....	502,097	339,071	163,026	4,520	167,546	9,407	158,139	119,646	-38,492	-121,069
Pennsylvania .....	1,535,207	1,031,644	503,563	0	503,563	26,296	477,266	349,823	-127,443	-380,692
Rhode Island .....	9,333	6,863	2,470	22	2,492	1,257	1,235	19,303	18,068	54,305
South Carolina .....	596,499	403,563	192,936	0	192,936	10,036	182,900	168,667	-14,233	-39,851
South Dakota .....	84,419	57,779	26,640	0	26,640	1,702	24,938	19,358	-5,580	-20,531
Tennessee .....	557,208	364,584	192,624	0	192,624	14,344	178,280	231,360	53,080	206,345
Texas .....	2,264,646	1,538,401	726,246	-36	726,210	50,065	676,145	727,676	51,531	136,997
Utah .....	174,660	117,273	57,387	0	57,387	3,393	53,994	44,320	-9,674	-28,391
Vermont .....	33,873	23,128	10,744	5,701	16,446	2,229	14,217	12,717	-1,499	-9,357
Virginia .....	450,040	304,543	145,497	0	145,497	12,248	133,249	215,861	82,612	262,363
Washington .....	970,774	655,055	315,720	-7,924	307,796	18,070	289,726	257,168	-32,558	-97,788
West Virginia .....	772,310	507,813	264,497	0	264,497	6,398	258,099	70,297	-187,802	-540,310
Wisconsin .....	468,759	322,777	145,982	0	145,982	11,511	134,471	159,289	24,817	56,938
Wyoming .....	316,660	218,485	98,176	0	98,176	3,059	95,117	34,029	-61,088	-204,355
United States .....	26,299,833	17,813,132	8,486,701	122,481	8,609,182	618,934	7,990,248	8,082,185	91,937	0

<sup>a</sup> Includes electricity generated by nonutility power producers. The U.S. total electricity purchased from nonutilities for distribution in 1986 was 136,337 billion Btu.

Source: Energy Information Administration calculations using data from the Combined State Energy Data System, the Form EIA-759 database, and the Form EIA-861 database.

## Section 7. Total Energy

### Total Energy Consumed

The preceding sections of this documentation describe how State end-use consumption estimates are made by individual energy source. This section describes how all energy sources are added in Btu to create end-use sector and total energy consumption estimates.

Energy consumption estimates for the residential sector include solar energy consumed in the commercial sector that cannot be identified separately. The code "RC" in the data identifier indicates residential sector and "HC" indicates residential and commercial sectors combined in the following calculation used for each State and the United States:

$$\text{TERCB} = \text{CLRCB} + \text{NGRCB} + \text{PARCB} + \text{WDRCB} + \text{SOHCB} + \text{ESRCB} + \text{LORCB}$$

The commercial sector calculations for each State and the U.S. total are:

$$\text{TECCB} = \text{CLCCB} + \text{NGCCB} + \text{PACCB} + \text{WDCCB} + \text{ESCCB} + \text{LOCCB}$$

For the industrial sector, the State calculations are slightly different from the U.S. calculation ("ZZ" in the variable name represents the two-letter State code that differs for each State). The industrial sector includes net imports of coal coke (CCNIBUS) in the U.S. total but not in the individual State estimates because no reliable means of allocating the U.S. amount to the States has been developed.

$$\text{TEICBZZ} = \text{CLICBZZ} + \text{NGICBZZ} + \text{PAICBZZ} + \text{HYICBZZ} + \text{WWICBZZ} + \text{GOICBZZ} + \text{ESICBZZ} + \text{LOICBZZ}$$

$$\text{TEICBUS} = \text{CLICBUS} + \text{CCNIBUS} + \text{NGICBUS} + \text{PAICBUS} + \text{HYICBUS} + \text{WWICBUS} + \text{GOICBUS} + \text{ESICBUS} + \text{LOICBUS}$$

For the transportation sector, the calculations are:

$$\text{TEACB} = \text{CLACB} + \text{NGACB} + \text{PAACB} + \text{ESACB} + \text{LOACB}$$

Total energy consumed is calculated as the sum of all energy sources. The US and State calculations differ slightly. The States' calculations include net interstate flow of electricity and associated electricity system losses, and the U.S. calculation includes net imports of coal coke:

$$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{NUEOBZZ} + \text{HYTCBZZ} + \text{BMTCBZZ} - \text{ENACBZZ} + \text{GOTCBZZ} + \text{EXNIBZZ} + \text{ELISBZZ}$$

$$\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{NUEOBUS} + \text{HYTCBUS} + \text{BMTCBUS} - \text{ENACBUS} + \text{GOTCBUS} + \text{EXNIBUS}$$

As a cross-check that is not used in the report tables, total energy consumed is also calculated in SEDS as the sum of the consumption by the four end-use sectors for each State and US total:

$$\text{TESSB} = \text{TERCB} + \text{TECCB} + \text{TEICB} + \text{TEACB}$$

### Total Net Energy Consumed

A set of totals is calculated to estimate consumption in the four major end use sectors excluding each sector's share of all electrical system energy losses that are incurred in the generation, transmission, and distribution of

electricity. This series is total net energy consumed and is represented by "TN."

Total net energy consumed by the residential, commercial, industrial, and transportation sectors are calculated:

$$\begin{array}{ll} \text{TNRCB} = \text{TERCB} - \text{LORCB} & \text{TNICB} = \text{TEICB} - \text{LOICB} \\ \text{TNCCB} = \text{TECCB} - \text{LOCCB} & \text{TNACB} = \text{TEACB} - \text{LOACB} \end{array}$$

### Total Energy Consumed per Capita

The energy consumed per person residing in each State and in the United States is estimated by dividing the total energy series ("TE") by the resident population as published by the U.S. Department of Commerce, Bureau of the Census. The U.S. total population published by the Bureau of the Census is based on unrounded numbers that are not available by State so that the sum of the States' population does not equal the U.S. total. Therefore,

the U.S. total population is input to SEDS instead of being calculated as the sum of the States' values. The Bureau of the Census series are estimated, in thousands of people, as of July 1 of each year, except in 1960, 1970, 1980, and 1990, when the April 1 census data were used. The variable names for the series are:

$$\begin{array}{l} \text{TPOPPZZ} = \text{The resident population of each State; and} \\ \text{TPOPPUS} = \text{The resident population of the United States.} \end{array}$$

Estimated energy consumption per capita for each State and the United States, in million Btu, is represented by "TETP" and is calculated:

$$\text{TETPB} = \text{TETCB} / \text{TPOPP}$$

The residential, commercial, industrial, and transportation sectors' energy consumption per capita are estimated:

$$\begin{array}{l} \text{TERPB} = \text{TERCB} / \text{TPOPP} \\ \text{TECPB} = \text{TECCB} / \text{TPOPP} \\ \text{TEIPB} = \text{TEICB} / \text{TPOPP} \\ \text{TEAPB} = \text{TEACB} / \text{TPOPP} \end{array}$$

## Appendix B

# Combined State Energy Data System Variables

This is an alphabetical listing of all the variable names used in the Combined State Energy Data System (CSEDS). Provided for each variable on the system are: a brief description of the variable; units of the variable as found in CSEDS; and the formulas used in CSEDS to create the variable. If a variable is not one created by CSEDS but is entered into the system, it is described as an independent variable. Formulas are provided for the State calculations ("ZZ" in the variable name would be replaced by the two-letter code for each State) and for the U.S. calculation (wherever appropriate).

Variables in the CSEDS have seven-letter names that consist of the following components:

<b>Character Positions:</b>	<b>1 and 2</b>	<b>3 and 4</b>	<b>5</b>	<b>6 and 7</b>
<b>Identify:</b>	Type of energy	Energy activity or consumption end-use sector	Type of data	Geographic area

Characters 1 through 4 are explained in the description of each variable.

Character 5 is always one of the following:

- B = Data in British thermal units (Btu)
- K = Factor for converting data from physical units to Btu
- M = Data in alternative physical units
- P = Data in standardized physical units
- S = Share or ratio expressed as a fraction
- V = Value added in manufacture.

Characters 6 and 7 are two-letter U.S. Postal Service codes for the 50 States and the District of Columbia (represented by "ZZ" in the following variable names) and the United States ("US"). In this system, the United States means the 50 States and the District of Columbia. Some estimates of electricity sales and losses are derived by using only the contiguous 48 States and the District of Columbia. The variables used in those calculations are identified by "48" as characters 6 and 7 in the variable names.

**A  
P  
P  
E  
N  
D  
I  
X**

**B**

ABICB	Aviation gasoline blending components total consumed by the industrial sector.	Billion Btu	ABICBZZ = ABTCBZZ ABICBUS = ABTCBUS
ABICP	Aviation gasoline blending components total consumed by the industrial sector.	Thousand barrels	ABICPZZ = ABTCPZZ ABICPUS = ABTCPUS
ABTCB	Aviation gasoline blending components total consumed.	Billion Btu	ABTCBZZ = ABTCPZZ * 5.048 ABTCBUS = ΣABTCBZZ
ABTCP	Aviation gasoline blending components total consumed.	Thousand barrels	ABTCPZZ = (COCAPZZ / COCAPUS) * ABTCPUS ABTCPUS is independent.
ACCCB	Anthracite consumed by the commercial sector.	Billion Btu	ACCCBZZ = ACCCPZZ * ACNUKUS ACCCBUS = ΣACCCBZZ
ACCCP	Anthracite consumed by the commercial sector.	Thousand short tons	ACCCPZZ = ACHCPZZ * 0.40 ACCCPUS = ΣACCCPZZ
ACEUB	Anthracite consumed by the electric utilities.	Billion Btu	ACEUBZZ = ACEUPZZ * ACEUKUS ACEUBUS = ΣACEUBZZ
ACEUKUS	Factor for converting anthracite consumed by the electric utilities from physical units to Btu.	Million Btu per short ton	ACEUKUS is independent.
ACEUP	Anthracite consumed by the electric utilities.	Thousand short tons	ACEUPZZ is independent. ACEUPUS = ΣACEUPZZ
ACHCP	Anthracite consumed by the residential and commercial sectors.	Thousand short tons	ACHCPZZ = (ACHDPZZ / ACHDPUS) * ACHCPUS ACHCPUS is independent.
ACHDP	Anthracite distributed to the residential and commercial sectors.	Thousand short tons	ACHDPZZ is independent. ACHDPUS = ΣACHDPZZ
ACICB	Anthracite consumed by the industrial sector.	Billion Btu	ACICBZZ = ACKCBZZ + ACOCBZZ ACICBUS = ΣACICBZZ
ACICP	Anthracite consumed by the industrial sector.	Thousand short tons	ACICPZZ = ACKCPZZ + ACOCPPZZ ACICPUS = ΣACICPZZ
ACKCB	Anthracite consumed at coke plants.	Billion Btu	ACKCBZZ = ACKCPZZ * ACNUKUS ACKCBUS = ΣACKCBZZ
ACKCP	Anthracite consumed at coke plants.	Thousand short tons	ACKCPZZ = (ACKDPZZ / ACKDPUS) * ACKCPUS ACKCPUS is independent.

ACKDP	Anthracite distributed to coke plants.	Thousand short tons	ACKDPZZ is independent. ACKDPUS = $\Sigma$ ACKDPZZ
ACNUKUS	Factor for converting anthracite consumed by all sectors other than the electric utility sector from physical units to Btu.	Million Btu per short ton	ACNUKUS is independent.
ACOCB	Anthracite consumed by other industrial users.	Billion Btu	ACOCBZZ = ACOCPPZZ * ACNUKUS ACOCBUS = $\Sigma$ ACOCBZZ
ACOCP	Anthracite consumed by other industrial users.	Thousand short tons	ACOCPZZ = (ACODPZZ / ACODPUS) * ACOCBUS ACOCPUS is independent.
ACODP	Anthracite distributed to other industrial users.	Thousand short tons	ACODPZZ is independent. ACODPUS = $\Sigma$ ACODPZZ
ACRCB	Anthracite consumed by the residential sector.	Billion Btu	ACRCBZZ = ACRCPPZZ * ACNUKUS ACRCBUS = $\Sigma$ ACRCBZZ
ACRCP	Anthracite consumed by the residential sector.	Thousand short tons	ACRCPZZ = ACHCPZZ * 0.60 ACRCPUS = $\Sigma$ ACRCPZZ
ACTCB	Anthracite total consumed.	Billion Btu	ACTCBZZ = ACRCBZZ + ACCCBZZ + ACICBZZ + ACEUBZZ ACTCBUS = $\Sigma$ ACTCBZZ
ACTCP	Anthracite total consumed.	Thousand short tons	ACTCPZZ = ACRCPZZ + ACCCPZZ + ACICPZZ + ACEUPZZ ACTCPUS = $\Sigma$ ACTCPZZ
AICAP	Aluminum ingot production capacity.	Short tons	AICAPZZ is independent. AICAPUS = $\Sigma$ AICAPZZ
ARICB	Asphalt and road oil consumed by the industrial sector.	Billion Btu	ARICBZZ = ARICPZZ * 6.636 ARICBUS = $\Sigma$ ARICBZZ
ARICP	Asphalt and road oil consumed by the industrial sector.	Thousand barrels	ARICPZZ = ASICPZZ + RDICPZZ ARICPUS = $\Sigma$ ARICPZZ
ARTCB	Asphalt and road oil total consumed.	Billion Btu	ARTCBZZ = ARICBZZ ARTCBUS = ARICBUS
ARTCP	Asphalt and road oil total consumed.	Thousand barrels	ARTCPZZ = ASTCPZZ + RDTCPZZ ARTCPUS = $\Sigma$ ARTCPZZ

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

ASICP	Asphalt consumed by the industrial sector.	Thousand barrels	$ASICPZZ = (ASINPZZ / ASINPUS) * ASTCPUS$ $ASICPUS = \Sigma ASICPZZ$
ASINP	Asphalt sold to the industrial sector.	Short tons	ASINPZZ is independent. $ASINPUS = \Sigma ASINPZZ$
ASTCP	Asphalt total consumed.	Thousand barrels	ASTCPZZ = ASICPZZ ASTCPUS is independent.
AVACB	Aviation gasoline consumed by the transportation sector.	Billion Btu	$AVACBZZ = AVACPZZ * 5.048$ $AVACBUS = \Sigma AVACBZZ$
AVACP	Aviation gasoline consumed by the transportation sector.	Thousand barrels	$AVACPZZ = (AVTTPZZ / AVTTPUS) * AVTCPUS$ $AVACPUS = \Sigma AVACPZZ$
AVMIP	Aviation gasoline issued to the military.	Thousand barrels	AVMIPZZ is independent. $AVMIPUS = \Sigma AVMIPZZ$
AVNMM	Aviation gasoline sold to nonmilitary users.	Thousand gallons	AVNMMZZ is independent. $AVNMMUS = \Sigma AVNMMZZ$
AVNMP	Aviation gasoline sold to nonmilitary users.	Thousand barrels	$AVNMPZZ = AVNMMZZ / 42$ $AVNMPUS = \Sigma AVNMPZZ$
AVTCB	Aviation gasoline total consumed.	Billion Btu	$AVTCBZZ = AVACBZZ$ $AVTCBUS = AVACBUS$
AVTCP	Aviation gasoline total consumed.	Thousand barrels	AVTCPZZ = AVACPZZ AVTCPUS is independent.
AVTTP	Aviation gasoline total sales to the transportation sector.	Thousand barrels	$AVTTPZZ = AVNMPZZ + AVMIPZZ$ $AVTTPUS = \Sigma AVTTPZZ$
BCACB	Bituminous coal and lignite consumed by the transportation sector.	Billion Btu	$BCACBZZ = BCACPZZ * BCOCKZZ$ $BCACBUS = \Sigma BCACBZZ$
BCACP	Bituminous coal and lignite consumed by the transportation sector.	Thousand short tons	$BCACPZZ = (BCICPZZ / BCICPUS) * BCACPUS$ BCACPUS is independent.
BCCCB	Bituminous coal and lignite consumed by the commercial sector.	Billion Btu	$BCCCBZZ = BCCCPZZ * BCHCKZZ$ $BCCCBUS = \Sigma BCCCBZZ$
BCCCP	Bituminous coal and lignite consumed by the commercial sector.	Thousand short tons	$BCCCPZZ = BCHCPZZ * 0.65$ $BCCCPUS = \Sigma BCCCPZZ$



BCEUB	Bituminous coal and lignite consumed by the electric utilities.	Billion Btu	BCEUBZZ = BCEUPZZ * BCEUKZZ BCEUBUS = ΣBCEUBZZ
BCEUKZZ	Factor for converting bituminous coal and lignite consumed by the electric utilities from physical units to Btu.	Million Btu per short ton	BCEUKZZ is independent.
BCEUP	Bituminous coal and lignite consumed by the electric utilities.	Thousand short tons	BCEUPZZ is independent. BCEUPUS = ΣBCEUPZZ
BCHCKZZ	The factor for converting bituminous coal and lignite consumed by the residential and commercial sectors from physical units to Btu.	Million Btu per short ton	BCHCKZZ is independent.
BCHCP	Bituminous coal and lignite consumed by the residential and commercial sectors.	Thousand short tons	BCHCPZZ = (BCHDPZZ / BCHDPUS) * BCHCPUS BCHCPUS is independent.
BCHDP	Bituminous coal and lignite distributed to the residential and commercial sectors.	Thousand short tons	BCHDPZZ is independent. BCHDPUS = ΣBCHDPZZ
BCICB	Bituminous coal and lignite consumed by the industrial sector.	Billion Btu	BCICBZZ = BCKCBZZ + BCOCBZZ BCICBUS = ΣBCICBZZ
BCICP	Bituminous coal and lignite consumed by the industrial sector.	Thousand short tons	BCICPZZ = BCKCPZZ + BCOCPZZ BCICPUS = ΣBCICPZZ
BCKCB	Bituminous coal and lignite consumed by coke plants.	Billion Btu	BCKCBZZ = BCKCPZZ * 26.80 BCKCBUS = ΣBCKCBZZ
BCKCP	Bituminous coal and lignite consumed by coke plants.	Thousand short tons	BCKCPZZ = (BCKDPZZ / BCKDPUS) * BCKCPUS BCKCPUS is independent.
BCKDP	Bituminous coal and lignite distributed to coke plants.	Thousand short tons	BCKDPZZ is independent. BCKDPUS = ΣBCKDPZZ
BCOCB	Bituminous coal and lignite consumed by other industrial users.	Billion Btu	BCOCBZZ = BCOCPZZ * BCOCKZZ BCOCBUS = ΣBCOCBZZ
BCOCKZZ	The factor for converting bituminous coal and lignite consumed by other industrial users from physical units to Btu.	Million Btu per short ton	BCOCKZZ is independent.
BCOCP	Bituminous coal and lignite consumed by other industrial users.	Thousand short tons	BCOCPZZ = (BCODPZZ / BCODPUS) * BCOCPUS BCOCPUS is independent.

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

BCODP	Bituminous coal and lignite distributed to other industrial users.	Thousand short tons	BCODPZZ is independent. BCODPUS = $\Sigma$ BCODPZZ
BCRCB	Bituminous coal and lignite consumed by the residential sector.	Billion Btu	BCRCBZZ = BCRCPZZ * BCHCKZZ BCRCBUS = $\Sigma$ BCRCBZZ
BCRCP	Bituminous coal and lignite consumed by the residential sector.	Thousand short tons	BCRCPZZ = BCHCPZZ * 0.35 BCRCPUS = $\Sigma$ BCRCPZZ
BCTCB	Bituminous coal and lignite total consumed.	Billion Btu	BCTCBZZ = BCRCBZZ + BCCCBZZ + BCICBZZ + BCACBZZ + BCEUBZZ BCTCBUS = $\Sigma$ BCTCBZZ
BCTCP	Bituminous coal and lignite total consumed.	Thousand short tons	BCTCPZZ = BCRCPZZ + BCCCPZZ + BCICPZZ + BCACPZZ + BCEUPZZ BCTCPUS = $\Sigma$ BCTCPZZ
BMTCP	Biomass total consumed (available for 1960–1989 only).	Million kilowatthours	BMTCPZZ = WWEOPZZ BMTCPUS = WWEOPUS
BMTCB	Biomass total consumed.	Billion Btu	BMTCBZZ = WDRCBZZ + WDCCBZZ + WWICBZZ + ENACBZZ + WWEOBZZ BMTCBUS = $\Sigma$ BMTCBZZ
CCEXBUS	Coal coke exported from the United States.	Billion Btu	CCEXBUS = CCEXPUS * 24.80
CCEXPUS	Coal coke exported from the United States.	Thousand short tons	CCEXPUS is independent.
CCIMBUS	Coal coke imported into the United States.	Billion Btu	CCIMBUS = CCIMPUS * 24.80
CCIMPUS	Coal coke imported into the United States.	Thousand short tons	CCIMPUS is independent.
CCNIBUS	Coal coke net imports into the United States.	Billion Btu	CCNIBUS = CCIMBUS – CCEXBUS
CCNIPUS	Coal coke net imports into the United States.	Thousand short tons	CCNIPUS = CCIMPUS – CCEXPUS
CGVAV	Value added in the manufacture of corrugated and solid fiber boxes.	Million dollars	CGVAVZZ is independent. CGVAVUS = $\Sigma$ CGVAVZZ
CLACB	Coal consumed by the transportation sector.	Billion Btu	CLACBZZ = BCACBZZ CLACBUS = BCACBUS
CLACP	Coal consumed by the transportation sector.	Thousand short tons	CLACPZZ = BCACPZZ CLACPUS = BCACPUS

CLCCB	Coal consumed by the commercial sector.	Billion Btu	CLCCBZZ = ACCCBZZ + BCCCBZZ CLCCBUS = ACCCBUS + BCCCBUS
CLCCP	Coal consumed by the commercial sector.	Thousand short tons	CLCCPZZ = ACCCPZZ + BCCCPZZ CLCCPUS = ACCCPUS + BCCCPUS
CLEUB	Coal consumed by the electric utilities.	Billion Btu	CLEUBZZ = ACEUBZZ + BCEUBZZ CLEUBUS = ACEUBUS + BCEUBUS
CLEUP	Coal consumed by the electric utilities.	Thousand short tons	CLEUPZZ = ACEUPZZ + BCEUPZZ CLEUPUS = ACEUPUS + BCEUPUS
CLICB	Coal consumed by the industrial sector.	Billion Btu	CLICBZZ = ACICBZZ + BCICBZZ CLICBUS = ACICBUS + BCICBUS
CLICP	Coal consumed by the industrial sector.	Thousand short tons	CLICPZZ = ACICPZZ + BCICPZZ CLICPUS = ACICPUS + BCICPUS
CLKCB	Coal consumed at coke plants (coking coal).	Billion Btu	CLKCBZZ = ACKCBZZ + BCKCBZZ CLKCBUS = ACKCBUS + BCKCBUS
CLOCB	Coal consumed by other industrial users.	Billion Btu	CLOCBZZ = ACOCBZZ + BCOCBZZ CLOCBUS = ACOCBUS + BCOCBUS
CLOCP	Coal consumed by other industrial users.	Thousand short tons	CLOCPZZ = ACOCPPZZ + BCOCPPZZ CLOCPUS = ACOCBUS + BCOCBUS
CLRCB	Coal consumed by the residential sector.	Billion Btu	CLRCBZZ = ACRCBZZ + BCRBZZ CLRCBUS = ACRCBUS + BCRBUS
CLRCP	Coal consumed by the residential sector.	Thousand short tons	CLRCPZZ = ACRCPPZZ + BCRCPZZ CLRCPUS = ACRCBUS + BCRBUS
CLSCB	Coal consumed other than at coke plants (steam coal).	Billion Btu	CLSCBZZ = CLTCBZZ - CLKCBZZ CLSCBUS = CLTCBUS - CLKCBUS
CLTCB	Coal total consumed.	Billion Btu	CLTCBZZ = ACTCBZZ + BCTCBZZ CLTCBUS = ACTCBUS + BCTCBUS
CLTCP	Coal total consumed.	Thousand short tons	CLTCPZZ = ACTCPZZ + BCTCPZZ CLTCPUS = ACTCPUS + BCTCPUS
COCAP	Crude oil operating capacity at refineries.	Barrels per calendar day	COCAPZZ is independent. COCAPUS = ΣCOCAPZZ
COICB	Crude oil consumed by the industrial sector.	Billion Btu	COICBZZ = COTCBZZ COICBUS = COTCBUS

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

COICP	Crude oil consumed by the industrial sector.	Thousand barrels	COICPZZ = COTCPZZ COICPUS = COTCPUS
COTCB	Crude oil consumed in petroleum industry operations.	Billion Btu	COTCBZZ = COTCPZZ * 5.800 COTCBUS = ΣCOTCBZZ
COTCP	Crude oil consumed in petroleum industry operations.	Thousand barrels	COTCPZZ is independent. COTCPUS = ΣCOTCPZZ
CTCAP	Catalytic cracking charge capacity of petroleum refineries.	1960 through 1979: Barrels per calendar day 1980 forward: Barrels per stream day	CTCAPZZ is independent. CTCAPUS = ΣCTCAPZZ
DFACB	Distillate fuel consumed by the transportation sector.	Billion Btu	DFACBZZ = DFACPZZ * 5.825 DFACBUS = ΣDFACBZZ
DFACP	Distillate fuel consumed by the transportation sector.	Thousand barrels	DFACPZZ = (DFTRPZZ / DFNDPZZ) * DFNCPZZ DFACPUS = ΣDFACPZZ
DFBKP	Distillate fuel adjusted sales for vessel bunkering use, excluding that sold to the Armed Forces.	Thousand barrels	DFBKPZZ is independent. DFBKPUS = ΣDFBKPZZ
DFCCB	Distillate fuel consumed by the commercial sector.	Billion Btu	DFCCBZZ = DFCCPZZ * 5.825 DFCCBUS = ΣDFCCBZZ
DFCCP	Distillate fuel consumed by the commercial sector.	Thousand barrels	DFCCPZZ = (DFCMPZZ / DFNDPZZ) * DFNCPZZ DFCCPUS = ΣDFCCPZZ
DFCMP	Distillate fuel adjusted sales to the commercial sector.	Thousand barrels	DFCMPZZ is independent. DFCMPUS = ΣDFCMPZZ
DFEUB	Distillate fuel consumed by the electric utilities.	Billion Btu	DFEUBZZ = DFEUPZZ * 5.825 DFEUBUS = ΣDFEUBZZ
DFEUP	Distillate fuel (excluding kerosene-type jet fuel) consumed by the electric utilities.	Thousand barrels	DFEUPZZ = DKEUPZZ - JKEUPZZ DFEUPUS = ΣDFEUPZZ
DFIBP	Distillate fuel adjusted sales for industrial space heating and other industrial use, including farm use.	Thousand barrels	DFIBPZZ is independent. DFIBPUS = ΣDFIBPZZ
DFICB	Distillate fuel consumed by the industrial sector.	Billion Btu	DFICBZZ = DFICPZZ * 5.825 DFICBUS = ΣDFICBZZ

DFICP	Distillate fuel consumed by the industrial sector.	Thousand barrels	$DFICPZZ = (DFINPZZ / DFNDPZZ) * DFNCPZZ$ $DFICPUS = \Sigma DFICPZZ$
DFINP	Distillate fuel adjusted sales to the industrial sector.	Thousand barrels	$DFINPZZ = DFIBPZZ + DFOCPZZ +$ $DFOFPZZ + DFOTPZZ$ $DFINPUS = \Sigma DFINPZZ$
DFMIP	Distillate fuel adjusted sales to the Armed Forces, regardless of use.	Thousand barrels	DFMIPZZ is independent. $DFMIPUS = \Sigma DFMIPZZ$
DFNCP	Distillate fuel consumption by all sectors other than the electric utility sector.	Thousand barrels	$DFNCPZZ = (DFNDPZZ / DFNDPUS) * DFNCPUS$ $DFNCPUS = DFTCPUS - DFEUPUS$
DFNDP	Distillate fuel adjusted sales to all sectors other than the electric utility sector.	Thousand barrels	$DFNDPZZ = DFRSPZZ + DFCMPZZ +$ $DFINPZZ + DFTRPZZ$ $DFNDPUS = \Sigma DFNDPZZ$
DFOCP	Distillate fuel adjusted sales for use by oil companies.	Thousand barrels	DFOCPZZ is independent. $DFOCPUS = \Sigma DFOCPZZ$
DFOFP	Distillate fuel adjusted sales as diesel fuel for off-highway use.	Thousand barrels	DFOFPZZ is independent. $DFOFPUS = \Sigma DFOFPZZ$
DFONP	Distillate fuel adjusted sales as diesel fuel for on-highway use.	Thousand barrels	DFONPZZ is independent. $DFONPUS = \Sigma DFONPZZ$
DFOTP	Distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories.	Thousand barrels	DFOTPZZ is independent. $DFOTPUS = \Sigma DFOTPZZ$
DFRCB	Distillate fuel consumed by the residential sector.	Billion Btu	$DFRCBZZ = DFRCPZZ * 5.825$ $DFRCBUS = \Sigma DFRCBZZ$
DFRCP	Distillate fuel consumed by the residential sector.	Thousand barrels	$DFRCPZZ = (DFRSPZZ / DFNDPZZ) * DFNCPZZ$ $DFRCPUS = \Sigma DFRCPZZ$
DFRRP	Distillate fuel adjusted sales for use by railroads.	Thousand barrels	DFRRPZZ is independent. $DFRRPUS = \Sigma DFRRPZZ$
DFRSP	Distillate fuel adjusted sales to the residential sector.	Thousand barrels	DFRSPZZ is independent. $DFRSPUS = \Sigma DFRSPZZ$
DFTCB	Distillate fuel total consumed.	Billion Btu	$DFTCBZZ = DFRCBZZ + DFCCBZZ +$ $DFICBZZ + DFACBZZ + DFEUBZZ$ $DFTCBUS = \Sigma DFTCBZZ$

DFTCP	Distillate fuel total consumed.	Thousand barrels	DFTCPZZ = DFNCPZZ + DFEUPZZ DFTCPUS is independent.
DFTRP	Distillate fuel adjusted sales to the transportation sector.	Thousand barrels	DFTRPZZ = DFBKPZZ + DFMI PZZ + DFRRPZZ + DFONPZZ DFTRPUS = ΣDFTRPZZ
DKEUB	Distillate fuel and kerosene-type jet fuel consumed by the electric utilities.	Billion Btu	DKEUBZZ = DFEUBZZ + JKEUBZZ DKEUBUS = ΣDKEUBZZ
DKEUP	Distillate fuel and kerosene-type jet fuel consumed by the electric utilities.	Thousand barrels	DKEUPZZ is independent. DKEUPUS = ΣDKEUPZZ
ELEXB	Electricity exported from the United States (assumed to be produced from hydroelectric power through 1989).	Billion Btu	ELEXBZZ = HYEXBZZ + EXEXBZZ ELEXBUS = ΣELEXBZZ
ELEXP	Electricity exported from the United States (assumed to be produced from hydroelectric power through 1989).	Million kilowatthours	ELEXPZZ is independent. ELEXPUS = ΣELEXPZZ
ELIMB	Electricity imported into the United States (assumed to be produced from hydroelectric power through 1989).	Billion Btu	ELIMBZZ = HYIMBZZ + GEIMBZZ + EXIMBZZ ELIMBUS = ΣELIMBZZ
ELIMP	Electricity imported into the United States (assumed to be produced from hydroelectric power through 1989).	Million kilowatthours	ELIMPZZ is independent. ELIMPUS = ΣELIMPZZ
ELISB	Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.)	Billion Btu	ELISBZZ = (ESTCBZZ + LOTCBZZ) – TEEUBZZ ELISBUS = ΣELISBZZ
ELISP	Net interstate flow of electricity. (Negative indicates flow out of State; positive indicates flow into State.)	Million kilowatthours	ELISPZZ = ELISBZZ / 3.412 ELISPUS = ΣELISPZZ
ELLSS48	The ratio of electrical system energy losses to electricity sold in the contiguous 48 States and the District of Columbia.	Fraction	ELLSS48 = LOTCB48 / ESTCB48
ENACB	Ethanol consumed by the transportation sector.	Billion Btu	ENACBZZ = ENACPZZ * 0.0764 ENACBUS = ΣENACBZZ
ENACP	Ethanol consumed by the transportation sector.	Thousand gallons	ENACPZZ = (ENTRPZZ / ENTRPUS) * ENACPUS ENACPUS is independent.

ENTRP	Ethanol blended into motor gasoline.	Thousand gallons	ENTRPZZ is independent. ENTRPUS = $\Sigma$ ENTRPZZ
EREXB	Electricity produced from renewable energy sources and exported from the United States.	Billion Btu	EREXBZZ = HYEXBZZ EREXBUS = $\Sigma$ EREXBZZ
EREXP	Electricity produced from renewable energy sources and exported from the United States.	Million kilowatthours	EREXPZZ = HYEXPZZ EREXPUS = $\Sigma$ EREXPZZ
ERIMB	Electricity produced from renewable energy sources and imported into the United States.	Billion Btu	ERIMBZZ = HYIMBZZ + GEIMBZZ ERIMBUS = $\Sigma$ ERIMBZZ
ERIMP	Electricity produced from renewable energy sources and imported into the United States.	Million kilowatthours	ERIMPZZ = HYIMPZZ + GEIMPZZ ERIMPUS = $\Sigma$ ERIMPZZ
ESACB	Electricity consumed by (i.e., sold to) the transportation sector.	Billion Btu	ESACBZZ = ESACPZZ * 3.412 ESACBUS = $\Sigma$ ESACBZZ
ESACP	Electricity consumed by (i.e., sold to) the transportation sector.	Million kilowatthours	ESACPZZ = (ESTRPZZ / ESTRPUS) * ESACPUS ESACPUS = ESOTPUS * ESTRSUS
ESCCB	Electricity consumed by (i.e., sold to) the commercial sector.	Billion Btu	ESCCBZZ = ESCCPZZ * 3.412 ESCCBUS = $\Sigma$ ESCCBZZ
ESCCP	Electricity consumed by (i.e., sold to) the commercial sector.	Million kilowatthours	ESCCPZZ = ESCMPZZ + ESOTPZZ - ESACPZZ ESCCPUS = $\Sigma$ ESCCPZZ
ESCMP	Electricity sold to a portion of the commercial sector.	Million kilowatthours	ESCMPZZ is independent. ESCMPUS = $\Sigma$ ESCMPZZ
ESICB	Electricity consumed by (i.e., sold to) the industrial sector.	Billion Btu	ESICBZZ = ESICPZZ * 3.412 ESICBUS = $\Sigma$ ESICBZZ
ESICP	Electricity consumed by (i.e., sold to) the industrial sector.	Million kilowatthours	ESICPZZ is independent. ESICPUS = $\Sigma$ ESICPZZ
ESOTP	Electricity sold to the "Other" sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales).	Million kilowatthours	ESOTPZZ is independent. ESOTPUS = $\Sigma$ ESOTPZZ
ESRCB	Electricity consumed by (i.e., sold to) the residential sector.	Billion Btu	ESRCBZZ = ESRCPZZ * 3.412 ESRCBUS = $\Sigma$ ESRCBZZ

ESRCP	Electricity consumed by (i.e., sold to) the residential sector.	Million kilowatthours	ESRCPZZ is independent. ESRCPUS = $\Sigma$ ESRCPZZ
ESTCB	Electricity total consumed (i.e., sold).	Billion Btu	ESTCBZZ = ESTCPZZ * 3.412 ESTCBUS = $\Sigma$ ESTCBZZ ESTCB48 = ESTCBUS - (ESTCBAK + ESTCBHI)
ESTCP	Electricity total consumed (i.e., sold).	Million kilowatthours	ESTCPZZ = ESRCPZZ + ESCCPZZ + ESICPZZ + ESACPZZ ESTCPUS = $\Sigma$ ESTCPZZ
ESTRP	Electricity consumed by transit systems.	Million kilowatthours	ESTRPZZ is independent. ESTRPUS = $\Sigma$ ESTRPZZ
ESTRSUS	The share of electricity sold to the "Other" sector (ESOTP) that is used for transportation.	Fraction	ESTRSUS is independent.
EXEXB	Electricity produced from nonrenewable energy sources and exported from the United States.	Billion Btu	EXEXBZZ = EXEXPZZ * FFEOKUS EXEXBUS = $\Sigma$ EXEXBZZ
EXEXP	Electricity produced from nonrenewable energy sources and exported from the United States.	Million kilowatthours	EXEXPZZ = ELEXPZZ - EREXPZZ EXEXPUS = $\Sigma$ EXEXPZZ
EXIMB	Electricity produced from nonrenewable energy sources and imported into the United States.	Billion Btu	EXIMBZZ = EXIMPZZ * FFEOKUS EXIMBUS = $\Sigma$ EXIMBZZ
EXIMP	Electricity produced from nonrenewable energy sources and imported into the United States.	Million kilowatthours	EXIMPZZ = ELIMPZZ - ERIMPZZ EXIMPUS = $\Sigma$ EXIMPZZ
EXNIB	Net imports of electricity into the United States produced from nonrenewable energy sources.	Billion Btu	EXNIBZZ = EXIMBZZ - EXEXBZZ EXNIBUS = $\Sigma$ EXNIBZZ
EXNIP	Net imports of electricity into the United States produced from nonrenewable energy sources.	Million kilowatthours	EXNIPZZ = EXIMPZZ - EXEXPZZ EXNIPUS = $\Sigma$ EXNIPZZ
FFEOKUS	Fossil fuel steam-electric power plant conversion factor.	Thousand Btu per kilowatthour	FFEOKUS is independent.
FNICB	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Billion Btu	FNICBZZ = FNTCBZZ FNICBUS = FNTCBUS
FNICP	Petrochemical feedstocks, naphtha less than 401° F, consumed by the industrial sector.	Thousand barrels	FNICPZZ = FNTCPZZ FNICPUS = FNTCPUS
FNTCB	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Billion Btu	FNTCBZZ = FNTCPZZ * 5.248 FNTCBUS = $\Sigma$ FNTCBZZ



FNTCP	Petrochemical feedstocks, naphtha less than 401° F, total consumed.	Thousand barrels	$FNTCPZZ = (OCVAVZZ / OCVAVUS) * FNTCPUS$ FNTCPUS is independent.
FOICB	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Billion Btu	$FOICBZZ = FOTCBZZ$ $FOICBUS = FOTCBUS$
FOICP	Petrochemical feedstocks, other oils equal to or greater than 401° F, consumed by the industrial sector.	Thousand barrels	$FOICPZZ = FOTCPZZ$ $FOICPUS = FOTCPUS$
FOTCB	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Billion Btu	$FOTCBZZ = FOTCPZZ * 5.825$ $FOTCBUS = \Sigma FOTCBZZ$
FOTCP	Petrochemical feedstocks, other oils equal to or greater than 401° F, total consumed.	Thousand barrels	$FOTCPZZ = (OCVAVZZ / OCVAVUS) * FOTCPUS$ FOTCPUS is independent.
FSICB	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Billion Btu	$FSICBZZ = FSTCBZZ$ $FSICBUS = FSTCBUS$
FSICP	Petrochemical feedstocks, still gas, consumed by the industrial sector.	Thousand barrels	$FSICPZZ = FSTCPZZ$ $FSICPUS = FSTCPUS$
FSTCB	Petrochemical feedstocks, still gas, total consumed.	Billion Btu	$FSTCBZZ = FSTCPZZ * 6.000$ $FSTCBUS = \Sigma FSTCBZZ$
FSTCP	Petrochemical feedstocks, still gas, total consumed.	Thousand barrels	$FSTCPZZ = (COCAPZZ / COCAPUS) * FSTCPUS$ FSTCPUS is independent.
GEENB	Geothermal subtotal: electricity produced from geothermal energy at electric utilities plus imports of electricity into the United States.	Billion Btu	$GEENBZZ = GEEOBZZ + GEIMBZZ$ $GEENBUS = \Sigma GEENBZZ$
GEENP	Geothermal subtotal: electricity produced from geothermal energy at electric utilities plus imports of electricity into the United States.	Million kilowatthours	$GEENPZZ = GEEOPZZ + GEIMPZZ$ $GEENPUS = \Sigma GEENPZZ$
GEEOB	Electricity produced from geothermal energy at electric utilities.	Billion Btu	$GEEOBZZ = GEEOPZZ * GEEOKUS$ $GEEOBUS = \Sigma GEEOBZZ$
GEEOKUS	Factor for converting electricity produced from geothermal energy from physical units to Btu.	Thousand Btu per kilowatthour	GEEOKUS is independent.

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

GEEOP	Electricity produced from geothermal energy at electric utilities.	Million kilowatthours	GEEOPZZ is independent. GEEOPUS = $\Sigma$ GEEOPZZ
GEICB	Electricity produced from geothermal energy in the industrial sector.	Billion Btu	GEICBZZ is independent. GEICBUS = $\Sigma$ GEICBZZ
GEIMB	Electricity produced from geothermal energy and imported into the United States.	Billion Btu	GEIMBZZ = GEIMPZZ * GEEOKUS GEIMBUS = $\Sigma$ GEIMBZZ
GEIMP	Electricity produced from geothermal energy and imported into the United States.	Million kilowatthours	GEIMPZZ is independent. GEIMPUS = $\Sigma$ GEIMPZZ
GETCB	Geothermal total: electricity produced.	Billion Btu	GETCBZZ = GEICBZZ + GEENBZZ GETCBUS = $\Sigma$ GETCBZZ
GETCP	Geothermal total: electricity produced (available for 1960–1989 only).	Million kilowatthours	GETCPZZ = GEEOPZZ GETCPUS = $\Sigma$ GETCPZZ
GOICB	Electricity produced from geothermal, wind, photovoltaic, and solar thermal energy sources in the industrial sector.	Billion Btu	GOICBZZ = GEICBZZ + SOICBZZ + WYICBZZ GOICBUS = $\Sigma$ GOICBZZ
GOTCB	Electricity produced from geothermal, wind, photovoltaic, and solar thermal energy sources; total produced.	Billion Btu	GOTCBZZ = GETCBZZ + SOTCBZZ + WYTCBZZ GOTCBUS = $\Sigma$ GOTCBZZ
GOTCP	Electricity produced from geothermal, wind, photovoltaic, and solar thermal energy sources; total produced (available for 1960–1989 only).	Million kilowatthours	GOTCPZZ = GETCPZZ + SOTCPZZ + WYTCPZZ GOTCPUS = $\Sigma$ GOTCPZZ
HPEOB	Electricity produced from pumped storage hydroelectric power at electric utilities.	Billion Btu	HPEOBZZ = HPEOPZZ * FFEOKUS HPEOBUS = $\Sigma$ HPEOBZZ
HPEOP	Electricity produced from pumped storage hydroelectric power at electric utilities.	Million kilowatthours	HPEOPZZ is independent. HPEOPUS = $\Sigma$ HPEOPZZ
HVENB	Renewable hydroelectric subtotal: electricity produced from conventional hydropower at electric utilities plus net imports of electricity into the United States.	Billion Btu	HVENBZZ = HVEOBZZ + HYIMBZZ – HYEXBZZ HVENBUS = $\Sigma$ HVENBZZ
HVENP	Renewable hydroelectric subtotal: electricity produced from conventional hydropower at electric utilities plus net imports of electricity into the United States.	Million kilowatthours	HVENPZZ = HVEOPZZ + HYIMPZZ – HYEXPZZ HVENPUS = $\Sigma$ HVENPZZ

HVEOB	Electricity produced from conventional hydropower at electric utilities.	Billion Btu	HVEOBZZ = HVEOPZZ * FFEOKUS HVEOBUS = ΣHVEOBZZ
HVEOP	Electricity produced from conventional hydropower at electric utilities.	Million kilowatthours	HVEOPZZ is independent. HVEOPUS = ΣHVEOPZZ
HYENB	Hydroelectric subtotal: electricity produced from all types hydropower at electric utilities plus net imports of electricity into the United States.	Billion Btu	HYENBZZ = HYEOBZZ + HYIMBZZ – HYEXBZZ HYENBUS = ΣHYENBZZ
HYENP	Hydroelectric subtotal: electricity produced from all types of hydropower at electric utilities plus net imports of electricity into the United States.	Million kilowatthours	HYENPZZ = HYEOPZZ + HYIMPZZ – HYEXPZZ HYENPUS = ΣHYENPZZ
HYEOB	Electricity produced from all types of hydropower at electric utilities.	Billion Btu	HYEOBZZ = HPEOBZZ + HVEOBZZ HYEOBUS = ΣHYEOBZZ
HYEOP	Electricity produced from all types of hydropower at electric utilities.	Million kilowatthours	HYEOPZZ = HPEOPZZ + HVEOPZZ HYEOPUS = ΣHYEOPZZ
HYEXB	Electricity produced from hydroelectric power and exported from the United States.	Billion Btu	HYEXBZZ = HYEXPZZ * FFEOKUS HYEXBUS = ΣHYEXBZZ
HYEXP	Electricity produced from hydroelectric power and exported from the United States.	Million kilowatthours	HYEXPZZ is independent. HYEXPUS = ΣHYEXPZZ
HYICB	Electricity produced from hydroelectric power at industrial facilities.	Billion Btu	HYICBZZ is independent. HYICBUS = ΣHYICBZZ
HYICP	Electricity produced from hydroelectric power at industrial facilities (available for 1960–1989 only).	Million kilowatthours	HYICPZZ is independent. HYICPUS = ΣHYICPZZ
HYIMB	Electricity produced from hydroelectric power and imported into the United States.	Billion Btu	HYIMBZZ = HYIMPZZ * FFEOKUS HYIMBUS = ΣHYIMBZZ
HYIMP	Electricity produced from hydroelectric power and imported into the United States.	Million kilowatthours	HYIMPZZ is independent. HYIMPUS = ΣHYIMPZZ
HYTCB	Hydroelectric total: electricity produced from hydropower at electric utilities (including net imports of electricity) and at industrial facilities.	Billion Btu	HYTCBZZ = HYENBZZ + HYICBZZ HYTCBUS = ΣHYTCBZZ

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

HYTCP	Hydroelectric total: electricity produced from hydropower at electric utilities (including net imports of electricity) and at industrial facilities (available for 1960–1989 only).	Million kilowatthours	HYTCPZZ = HYENPZZ + HYICPZZ HYTCPUS = ΣHYTCPZZ
JFACB	Jet fuel consumed by the transportation sector.	Billion Btu	JFACBZZ = JKACBZZ + JNACBZZ JFACBUS = ΣJFACBZZ
JFACP	Jet fuel consumed by the transportation sector.	Thousand barrels	JFACPZZ = JKACPZZ + JNACPZZ JFACPUS = ΣJFACPZZ
JFEUB	Jet fuel consumed by electric utilities.	Billion Btu	JFEUBZZ = JKEUBZZ JFEUBUS = JKEUBUS
JFEUP	Jet fuel consumed by electric utilities.	Thousand barrels	JFEUPZZ = JKEUPZZ JFEUPUS = JKEUPUS
JFTCB	Jet fuel total consumed.	Billion Btu	JFTCBZZ = JFACBZZ + JFEUBZZ JFTCBUS = ΣJFTCBZZ
JFTCP	Jet fuel total consumed.	Thousand barrels	JFTCPZZ = JFACPZZ + JFEUPZZ JFTCPUS = ΣJFTCPZZ
JKACB	Kerosene-type jet fuel consumed by the transportation sector.	Billion Btu	JKACBZZ = JKACPZZ * 5.670 JKACBUS = ΣJKACBZZ
JKACP	Kerosene-type jet fuel consumed by the transportation sector.	Thousand barrels	JKACPZZ = (JKTTPZZ / JKTTTPUS) * JKACPUS JKACPUS = JKTCPUS - JKEUPUS
JKEUB	Kerosene-type jet fuel consumed by electric utilities.	Billion Btu	JKEUBZZ = JKEUPZZ * 5.670 JKEUBUS = ΣJKEUBZZ
JKEUP	Kerosene-type jet fuel consumed by electric utilities.	Thousand barrels	JKEUPZZ is independent. JKEUPUS = ΣJKEUPZZ
JKTCB	Kerosene-type jet fuel total consumed.	Billion Btu	JKTCBZZ = JKTCPZZ * 5.670 JKTCBUS = ΣJKTCBZZ
JKTCP	Kerosene-type jet fuel total consumed.	Thousand barrels	JKTCPZZ = JKACPZZ + JKEUPZZ JKTCPUS is independent.
JKTTP	Kerosene-type jet fuel total sold.	Thousand gallons	JKTTPZZ is independent. JKTTPUS = ΣJKTTPZZ
JNACB	Naphtha-type jet fuel consumed by the transportation sector.	Billion Btu	JNACBZZ = JNTCBZZ JNACBUS = JNTCBUS

JNACP	Naphtha-type jet fuel consumed by the transportation sector.	Thousand barrels	JNACPZZ = JNTCPZZ JNACPUS = JNTCPUS
JNMIP	Naphtha-type jet fuel issued to the military.	Thousand barrels	JNMIPZZ is independent. JNMIPUS = $\Sigma$ JNMIPZZ
JNTCB	Naphtha-type jet fuel total consumed.	Billion Btu	JNTCBZZ = JNTCPZZ * 5.355 JNTCBUS = $\Sigma$ JNTCBZZ
JNTCP	Naphtha-type jet fuel total consumed.	Thousand barrels	JNTCPZZ = (JNMIPZZ / JNMIPUS) * JNTCPUS JNTCPUS is independent.
KSCCB	Kerosene consumed by the commercial sector.	Billion Btu	KSCCBZZ = KSCCPZZ * 5.670 KSCCBUS = $\Sigma$ KSCCBZZ
KSCCP	Kerosene consumed by the commercial sector.	Thousand barrels	KSCCPZZ = (KSCMPZZ / KSTTPZZ) * KSTCPZZ KSCCPUS = $\Sigma$ KSCCPZZ
KSCMP	Kerosene sold to the commercial sector.	Thousand barrels	KSCMPZZ is independent. KSCMPUS = $\Sigma$ KSCMPZZ
KSICB	Kerosene consumed by the industrial sector.	Billion Btu	KSICBZZ = KSICPZZ * 5.670 KSICBUS = $\Sigma$ KSICBZZ
KSICP	Kerosene consumed by the industrial sector.	Thousand barrels	KSICPZZ = (KSINPZZ / KSTTPZZ) * KSTCPZZ KSICPUS = $\Sigma$ KSICPZZ
KSIHP	Kerosene sold for industrial heating.	Thousand barrels	KSIHPZZ is independent. KSIHPUS = $\Sigma$ KSIHPZZ
KSINP	Kerosene sold to the industrial sector.	Thousand barrels	KSINPZZ = KSOTPZZ + KSIHPZZ KSINPUS = $\Sigma$ KSINPZZ
KSOTP	Kerosene sold for all other uses, including farm use.	Thousand barrels	KSOTPZZ is independent. KSOTPUS = $\Sigma$ KSOTPZZ
KSRCB	Kerosene consumed by the residential sector.	Billion Btu	KSRCBZZ = KSRCPZZ * 5.670 KSRCBUS = $\Sigma$ KSRCBZZ
KSRCP	Kerosene consumed by the residential sector.	Thousand barrels	KSRCPZZ = (KSRSPZZ / KSTTPZZ) * KSTCPZZ KSRCPUS = $\Sigma$ KSRCPZZ
KSRSP	Kerosene sold to the residential sector.	Thousand barrels	KSRSPZZ is independent. KSRSPUS = $\Sigma$ KSRSPZZ

**A  
P  
P  
E  
N  
D  
I  
X**

**B**

KSTCB	Kerosene total consumed.	Billion Btu	$KSTCBZZ = KSRCBZZ + KSICBZZ + KSCCBZZ$ $KSTCBUS = \Sigma KSTCBZZ$
KSTCP	Kerosene total consumed.	Thousand barrels	$KSTCPZZ = (KSTTPZZ / KSTTPUS) * KSTCPUS$ KSTCPUS is independent.
KSTTP	Kerosene total sold.	Thousand barrels	$KSTTPZZ = KSRSPZZ + KSCMPZZ + KSINPZZ$ $KSTTPUS = \Sigma KSTTPZZ$
LGACB	LPG consumed by the transportation sector.	Billion Btu	$LGACBZZ = LGACPZZ * LGTCKUS$ $LGACBUS = \Sigma LGACBZZ$
LGACP	LPG consumed by the transportation sector.	Thousand barrels	$LGACPZZ = LGCBPZZ * LGTRSUS$ $LGACPUS = \Sigma LGACPZZ$
LGCBM	LPG sales for internal combustion engine use.	Thousand gallons	LGCBMZZ is independent. $LGCBMUS = \Sigma LGCBMZZ$
LGCBP	LPG consumed for internal combustion engine use.	Thousand barrels	$LGCBPZZ = LGCBMZZ / 42$ $LGCBPUS = \Sigma LGCBPZZ$
LGCCB	LPG consumed by the commercial sector.	Billion Btu	$LGCCBZZ = LGCCPZZ * LGTCKUS$ $LGCCBUS = \Sigma LGCCBZZ$
LGCCP	LPG consumed by the commercial sector.	Thousand barrels	$LGCCPZZ = LGHCPZZ * 0.15$ $LGCCPUS = \Sigma LGCCPZZ$
LGHCM	LPG sold for residential and commercial use.	Thousand gallons	LGHCMZZ is independent. $LGHCMUS = \Sigma LGHCMZZ$
LGHCP	LPG consumed by the residential and commercial sectors.	Thousand barrels	$LGHCPZZ = LGHCMZZ / 42$ $LGHCPUS = \Sigma LGHCPZZ$
LGICB	LPG consumed by the industrial sector.	Billion Btu	$LGICBZZ = LGICPZZ * LGTCKUS$ $LGICBUS = \Sigma LGICBZZ$
LGICP	LPG consumed by the industrial sector.	Thousand barrels	$LGICPZZ = LGTCPZZ - (LGRCPZZ + LGCCPZZ + LGACPZZ)$ $LGICPUS = \Sigma LGICPZZ$
LGRCB	LPG consumed by the residential sector.	Billion Btu	$LGRCBZZ = LGRCPZZ * LGTCKUS$ $LGRCBUS = \Sigma LGRCBZZ$
LGRCP	LPG consumed by the residential sector.	Thousand barrels	$LGRCPZZ = LGHCPZZ * 0.85$ $LGRCPUS = \Sigma LGRCPZZ$

LGTCB	LPG total consumed.	Billion Btu	$\text{LGTCBZZ} = \text{LGRCBZZ} + \text{LGCCBZZ} + \text{LGICBZZ} + \text{LGACBZZ}$ $\text{LGTCBUS} = \Sigma \text{LGTCBZZ}$
LGTKUS	Factor for converting LPG from physical units to Btu.	Million Btu per barrel	LGTKUS is independent.
LGTCP	LPG total consumed.	Thousand barrels	$\text{LGTCPZZ} = (\text{LGTPPZZ} / \text{LGTPPUS}) * \text{LGTCPUS}$ LGTCPUS is independent.
LGTRSUS	The transportation sector's share of LPG internal combustion engine sales.	Fraction	LGTRSUS is independent.
LGTPP	LPG total sold.	Thousand gallons	LGTPPZZ is independent. $\text{LGTPPUS} = \Sigma \text{LGTPPZZ}$
LOACB	The transportation sector's share of electrical system energy losses.	Billion Btu	$\text{LOACBZZ} = \text{ESACBZZ} * \text{ELLSS48}$ Exceptions: $\text{LOACBAK} = (\text{ESACBAK} / \text{ESTCBAK}) * \text{LOTGBAK}$ $\text{LOACBHI} = (\text{ESACBHI} / \text{ESTCBHI}) * \text{LOTGBHI}$ $\text{LOACBUS} = \Sigma \text{LOACBZZ}$
LOACP	The transportation sector's share of electrical system energy losses.	Million kilowatthours	$\text{LOACPZZ} = \text{LOACBZZ} / 3.412$ $\text{LOACPUS} = \text{LOACBUS} / 3.412$
LOCCB	The commercial sector's share of electrical system energy losses.	Billion Btu	$\text{LOCCBZZ} = \text{ESCCBZZ} * \text{ELLSS48}$ Exceptions: $\text{LOCCBAK} = (\text{ESCCBAK} / \text{ESTCBAK}) * \text{LOTGBAK}$ $\text{LOCCBHI} = (\text{ESCCBHI} / \text{ESTCBHI}) * \text{LOTGBHI}$ $\text{LOCCBUS} = \Sigma \text{LOCCBZZ}$
LOCCP	The commercial sector's share of electrical system energy losses.	Million kilowatthours	$\text{LOCCPZZ} = \text{LOCCBZZ} / 3.412$ $\text{LOCCPUS} = \text{LOCCBUS} / 3.412$
LOICB	The industrial sector's share of electrical system energy losses.	Billion Btu	$\text{LOICBZZ} = \text{ESICBZZ} * \text{ELLSS48}$ Exceptions: $\text{LOICBAK} = (\text{ESICBAK} / \text{ESTCBAK}) * \text{LOTGBAK}$ $\text{LOICBHI} = (\text{ESICBHI} / \text{ESTCBHI}) * \text{LOTGBHI}$ $\text{LOICBUS} = \Sigma \text{LOICBZZ}$
LOICP	The industrial sector's share of electrical system energy losses.	Million kilowatthours	$\text{LOICPZZ} = \text{LOICBZZ} / 3.412$ $\text{LOICPUS} = \text{LOICBUS} / 3.412$
LORCB	The residential sector's share of electrical system energy losses.	Billion Btu	$\text{LORCBZZ} = \text{ESRCBZZ} * \text{ELLSS48}$ Exceptions: $\text{LORCBAK} = (\text{ESRCBAK} / \text{ESTCBAK}) * \text{LOTGBAK}$

				$\text{LORCBHI} = (\text{ESRCBHI} / \text{ESTCBHI}) * \text{LOT CBHI}$ $\text{LORCBUS} = \Sigma \text{LORCBZZ}$
LORCP	The residential sector's share of electrical system energy losses.	Million kilowatthours		$\text{LORCPZZ} = \text{LORCBZZ} / 3.412$ $\text{LORCPUS} = \text{LORCBUS} / 3.412$
LOT CB	Total electrical system energy losses.	Billion Btu		$\text{LOT CBZZ} = \text{ESTCBZZ} * \text{ELLSS48}$ <p>Exceptions:</p> $\text{LOT CBAK} = \text{TEEUBAK} - \text{ESTCBAK}$ $\text{LOT CBHI} = \text{TEEUBHI} - \text{ESTCBHI}$ $\text{LOT CBUS} = \text{TEEUBUS} - \text{ESTCBUS}$ $\text{LOT CB48} = \text{LOT CBUS} - (\text{LOT CBAK} + \text{LOT CBHI})$
LOT CP	Total electrical system energy losses.	Million kilowatthours		$\text{LOT CPZZ} = \text{LOT CBZZ} / 3.412$ $\text{LOT CPUS} = \text{LOT CBUS} / 3.412$
LUACB	Lubricants consumed by the transportation sector.	Billion Btu		$\text{LUACBZZ} = \text{LUACPZZ} * 6.065$ $\text{LUACBUS} = \Sigma \text{LUACBZZ}$
LUACP	Lubricants consumed by the transportation sector.	Thousand barrels		$\text{LUACPZZ} = (\text{LUTRPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ}$ $\text{LUACPUS} = \Sigma \text{LUACPZZ}$
LUICB	Lubricants consumed by the industrial sector.	Billion Btu		$\text{LUICBZZ} = \text{LUICPZZ} * 6.065$ $\text{LUICBUS} = \Sigma \text{LUICBZZ}$
LUICP	Lubricants consumed by the industrial sector.	Thousand barrels		$\text{LUICPZZ} = (\text{LUINPZZ} / \text{LUTTPZZ}) * \text{LUTCPZZ}$ $\text{LUICPUS} = \Sigma \text{LUICPZZ}$
LUINP	Lubricants sold to the industrial sector.	Thousand barrels		$\text{LUINPZZ}$ is independent. $\text{LUINPUS} = \Sigma \text{LUINPZZ}$
LUTCB	Lubricants total consumed.	Billion Btu		$\text{LUTCBZZ} = \text{LUICBZZ} + \text{LUACBZZ}$ $\text{LUTCBUS} = \Sigma \text{LUTCBZZ}$
LUTCP	Lubricants total consumed.	Thousand barrels		$\text{LUTCPZZ} = (\text{LUTTPZZ} / \text{LUTTPUS}) * \text{LUTCPUS}$ $\text{LUTCPUS}$ is independent.
LUTRP	Lubricants sold to the transportation sector.	Thousand barrels		$\text{LUTRPZZ}$ is independent. $\text{LUTRPUS} = \Sigma \text{LUTRPZZ}$
LUTTP	Lubricants total sold.	Thousand barrels		$\text{LUTTPZZ} = \text{LUINPZZ} + \text{LUTRPZZ}$ $\text{LUTTPUS} = \Sigma \text{LUTTPZZ}$
MBICB	Motor gasoline blending components consumed by the industrial sector.	Billion Btu		$\text{MBICBZZ} = \text{MBTCBZZ}$ $\text{MBICBUS} = \text{MBTCBUS}$



MBICP	Motor gasoline blending components consumed by the industrial sector.	Thousand barrels	MBICPZZ = MBTCPZZ MBICPUS = MBTCPUS
MBTCB	Motor gasoline blending components total consumed.	Billion Btu	MBTCBZZ = MBTCPZZ * 5.253 MBTCBUS = $\Sigma$ MBTCBZZ
MBTCP	Motor gasoline blending components total consumed.	Thousand barrels	MBTCPZZ = (COCAPZZ / COCAPUS) * MBTCPUS MBTCPUS is independent.
MGACB	Motor gasoline consumed by the transportation sector.	Billion Btu	MGACBZZ = MGACPZZ * 5.253 MGACBUS = $\Sigma$ MGACBZZ
MGACP	Motor gasoline consumed by the transportation sector.	Thousand barrels	MGACPZZ = (MGTRPZZ / MGTTPZZ) * MGTCPPZZ MGACPUS = $\Sigma$ MGACPZZ
MGAGP	Motor gasoline sold for agricultural use.	Thousand gallons	MGAGPZZ is independent. MGAGPUS = $\Sigma$ MGAGPZZ
MGCCB	Motor gasoline consumed by the commercial sector.	Billion Btu	MGCCBZZ = MGCCPZZ * 5.253 MGCCBUS = $\Sigma$ MGCCBZZ
MGCCP	Motor gasoline consumed by the commercial sector.	Thousand barrels	MGCCPZZ = (MGCMPZZ / MGTTPZZ) * MGTCPPZZ MGCCPUS = $\Sigma$ MGCCPZZ
MGCMP	Motor gasoline sold to the commercial sector.	Thousand gallons	MGCMPZZ = MGMPZZ + MGNPZZ MGCMPUS = $\Sigma$ MGCMPZZ
MGCUP	Motor gasoline sold for construction use.	Thousand gallons	MGCUPZZ is independent. MGCUPUS = $\Sigma$ MGCUPZZ
MGICB	Motor gasoline consumed by the industrial sector.	Billion Btu	MGICBZZ = MGICPZZ * 5.253 MGICBUS = $\Sigma$ MGICBZZ
MGICP	Motor gasoline consumed by the industrial sector.	Thousand barrels	MGICPZZ = (MGINPZZ / MGTTPZZ) * MGTCPPZZ MGICPUS = $\Sigma$ MGICPZZ
MGINP	Motor gasoline sold to the industrial sector.	Thousand gallons	MGINPZZ = MGAGPZZ + MGCUPZZ + MGIYPZZ MGINPUS = $\Sigma$ MGINPZZ
MGIYP	Motor gasoline sold for industrial and commercial use (Federal Highway Administration terminology).	Thousand gallons	MGIYPZZ is independent MGIYPUS = $\Sigma$ MGIYPZZ
MGMFP	Motor gasoline sold for highway use.	Thousand gallons	MGMFPZZ is independent. MGMFPUS = $\Sigma$ MGMFPZZ

**A  
P  
P  
E  
N  
D  
I  
X  
B**

MGMRP	Motor gasoline sold for marine use.	Thousand gallons	MGMRPZZ is independent. MGMRPUS = $\Sigma$ MGMRPZZ
MGMSPP	Motor gasoline sold for miscellaneous and unclassified uses.	Thousand gallons	MGMSPPZZ is independent. MGMSPPUS = $\Sigma$ MGMSPPZZ
MGPNP	Motor gasoline sold for public nonhighway use.	Thousand gallons	MGPNPZZ is independent. MGPNPUS = $\Sigma$ MGPNPZZ
MGSFP	Motor gasoline special fuels sold (primarily diesel fuel with small amounts of liquefied petroleum gases).	Thousand gallons	MGSFPZZ is independent. MGSFPUS = $\Sigma$ MGSFPZZ
MGTCB	Motor gasoline total consumed.	Billion Btu	MGTCBZZ = MGCCBZZ + MGICBZZ + MGACBZZ MGTCBUS = $\Sigma$ MGTCBZZ
MGTCP	Motor gasoline total consumed.	Thousand barrels	MGTCPZZ = (MGTTPZZ / MGTTPUS) * MGTCBUS MGTCPUS is independent.
MGTRP	Motor gasoline sold to the transportation sector.	Thousand gallons	MGTRPZZ = MGMFPZZ + MGMRPZZ - MGSFPZZ MGTRPUS = $\Sigma$ MGTRPZZ
MGTTP	Motor gasoline total sold.	Thousand gallons	MGTTPZZ = MGCMPZZ + MGINPZZ + MGTRPZZ MGTTPUS = $\Sigma$ MGTTPZZ
MSICB	Miscellaneous petroleum products consumed by the industrial sector.	Billion Btu	MSICBZZ = MSTCBZZ MSICBUS = MSTCBUS
MSICP	Miscellaneous petroleum products consumed by the industrial sector.	Thousand barrels	MSICPZZ = MSTCPZZ MSICPUS = MSTCPUS
MSTCB	Miscellaneous petroleum products total consumed.	Billion Btu	MSTCBZZ = MSTCPZZ * 5.796 MSTCBUS = $\Sigma$ MSTCBZZ
MSTCP	Miscellaneous petroleum products total consumed.	Thousand barrels	MSTCPZZ = (OCVAVZZ / OCVAVUS) * MSTCPUS MSTCPUS is independent.
NAICB	Natural gasoline consumed by the industrial sector.	Billion Btu	NAICBZZ = NATCBZZ NAICBUS = NATCBUS
NAICP	Natural gasoline consumed by the industrial sector.	Thousand barrels	NAICPZZ = NATCPZZ NAICPUS = NATCPUS
NATCB	Natural gasoline total consumed.	Billion Btu	NATCBZZ = NATCPZZ * 4.620 NATCBUS = $\Sigma$ NATCBZZ

NATCP	Natural gasoline total consumed.	Thousand barrels	$NATCPZZ = (OCVAVZZ / OCVAVUS) * NATCPUS$ NATCPUS is independent.
NGACB	Natural gas consumed by the transportation sector.	Billion Btu	$NGACBZZ = NGACPZZ * NGNUKZZ$ $NGACBUS = \Sigma NGACBZZ$
NGACP	Natural gas consumed by the transportation sector.	Million cubic feet	$NGACPZZ = NGPZPZZ + NGVHPZZ$ $NGACPUS = \Sigma NGACPZZ$
NGCCB	Natural gas delivered to the commercial sector, used as consumption.	Billion Btu	$NGCCBZZ = NGCCPZZ * NGNUKZZ$ $NGCCBUS = \Sigma NGCCBZZ$
NGCCP	Natural gas delivered to the commercial sector, used as consumption.	Million cubic feet	NGCCPZZ is independent. $NGCCPUS = \Sigma NGCCPZZ$
NGEUB	Natural gas consumed by the electric utilities.	Billion Btu	$NGEUBZZ = NGEUPZZ * NGEUKZZ$ $NGEUBUS = \Sigma NGEUBZZ$
NGEUK	Factor for converting natural gas consumed by the electric utilities from physical units to Btu.	Thousand Btu per cubic foot	NGEUKZZ is independent. $NGEUKUS = NGEUBUS / NGEUPUS$
NGEUP	Natural gas consumed by the electric utilities.	Million cubic feet	NGEUPZZ is independent. $NGEUPUS = \Sigma NGEUPZZ$
NGICB	Natural gas consumed by the industrial sector.	Billion Btu	$NGICBZZ = NGICPZZ * NGNUKZZ$ $NGICBUS = \Sigma NGICBZZ$
NGICP	Natural gas consumed by the industrial sector.	Million cubic feet	$NGICPZZ = NGINPZZ + NGLPZZ + NGPLPZZ$ $NGICPUS = \Sigma NGICPZZ$
NGINP	A portion of the natural gas delivered to the industrial sector.	Million cubic feet	NGINPZZ is independent. $NGINPUS = \Sigma NGINPZZ$
NGLPB	Natural gas consumed as lease and plant fuel.	Billion Btu	$NGLPBZZ = NGLPPZZ * NGNUKZZ$ $NGLPBUS = \Sigma NGLPBZZ$
NGLPP	Natural gas consumed as lease and plant fuel.	Million cubic feet	$NGLPPZZ = NGLPZZ + NGPLPZZ$ $NGLPPUS = \Sigma NGLPPZZ$
NGLEP	Natural gas consumed as lease fuel.	Million cubic feet	NGLEPZZ is independent. $NGLEPUS = \Sigma NGLEPZZ$
NGNUK	Factor for converting natural gas consumed by all sectors other than the electric utility sector from physical units to Btu.	Thousand Btu per cubic foot	$NGNUKZZ = (NGTCBZZ - NGEUBZZ) / (NGTCPZZ - NGEUPZZ)$ $NGNUKUS = (NGTCBUS - NGEUBUS) / (NGTCPUS - NGEUPUS)$

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

NGPLP	Natural gas consumed as plant fuel.	Million cubic feet	NGPLPZZ is independent. NGPLPUS = $\Sigma$ NGPLPZZ
NGPZB	Natural gas consumed as pipeline fuel.	Billion Btu	NGPZBZZ = NGPZPZZ * NGNUKZZ NGPZBUS = $\Sigma$ NGPZBZZ
NGPZP	Natural gas consumed as pipeline fuel.	Million cubic feet	NGPZPZZ is independent. NGPZPUS = $\Sigma$ NGPZPZZ
NGRCB	Natural gas delivered to the residential sector, used as consumption.	Billion Btu	NGRCBZZ = NGRCPZZ * NGNUKZZ NGRCBUS = $\Sigma$ NGRCBZZ
NGRCP	Natural gas delivered to the residential sector, used as consumption.	Million cubic feet	NGRCPZZ is independent. NGRCPUS = $\Sigma$ NGRCPZZ
NGTCB	Natural gas total consumed.	Billion Btu	NGTCBZZ = NGTCPZZ * NGTCKZZ NGTCBUS = $\Sigma$ NGTCBZZ
NGTCK	Factor for converting natural gas total consumed from physical units to Btu.	Thousand Btu per cubic foot	NGTCKZZ is independent. NGTCKUS = NGTCBUS / NGTCPUS
NGTCP	Natural gas total consumed.	Million cubic feet	NGTCPZZ = NGRCPZZ + NGCCPZZ + NGICPZZ + NGACPZZ + NGEUPZZ NGTCPUS = $\Sigma$ NGTCPZZ
NGVHB	Natural gas consumed as vehicle fuel.	Billion Btu	NGVHBZZ = NGVHPZZ * NGNUKZZ NGVHBUS = $\Sigma$ NGVHBZZ
NGVHP	Natural gas consumed as vehicle fuel.	Million cubic feet	NGVHPZZ is independent. NGVHPUS = $\Sigma$ NGVHPZZ
NUEOB	Electricity produced from nuclear power at electric utilities.	Billion Btu	NUEOBZZ = NUEOPZZ * NUEOKUS NUEOBUS = $\Sigma$ NUEOBZZ
NUEOKUS	Factor for converting electricity produced from nuclear power from physical units to Btu.	Thousand Btu per kilowatthour	NUEOKUS is independent.
NUEOP	Electricity produced from nuclear power at electric utilities.	Million kilowatthours	NUEOPZZ is independent. NUEOPUS = $\Sigma$ NUEOPZZ
OCVAV	Value added in manufacture of industrial organic chemicals.	Million dollars	OCVAVZZ is independent. OCVAVUS = $\Sigma$ OCVAVZZ
PAACB	All petroleum products consumed by the transportation sector.	Billion Btu	PAACBZZ = AVACBZZ + DFACBZZ + JKACBZZ + JNACBZZ + LGACBZZ + LUACBZZ + MGACBZZ + RFACBZZ

			PAACBUS = $\Sigma$ PAACBZZ
PAACKUS	Factor for converting all petroleum products consumed by the transportation sector from physical units to Btu.	Million Btu per barrel	PAACKUS = PAACBUS / PAACPUS
PAACP	All petroleum products consumed by the transportation sector.	Thousand barrels	PAACPZZ = AVACPZZ + DFACPZZ + JKACPZZ + JNACPZZ + LGACPZZ + LUACPZZ + MGACPZZ + RFACPZZ PAACPUS = $\Sigma$ PAACPZZ
PACCB	All petroleum products consumed by the commercial sector.	Billion Btu	PACCBZZ = DFCCBZZ + KSCCBZZ + LGCCBZZ + MGCCBZZ + RFCCBZZ PACCBUS = $\Sigma$ PACCBZZ
PACCKUS	Factor for converting all petroleum products consumed by the commercial sector from physical units to Btu.	Million Btu per barrel	PACCKUS = PACCBUS / PACCPUS
PACCP	All petroleum products consumed by the commercial sector.	Thousand barrels	PACCPZZ = DFCCPZZ + KSCCPZZ + LGCCPZZ + MGCCPZZ + RFCCPZZ PACCPUS = $\Sigma$ PACCPZZ
PAEUB	All petroleum products consumed by the electric utilities.	Billion Btu	PAEUBZZ = DFEUBZZ + JKEUBZZ + PCEUBZZ + RFEUBZZ PAEUBUS = $\Sigma$ PAEUBZZ
PAEUKUS	Factor for converting all petroleum products consumed by the electric utilities from physical units to Btu.	Million Btu per barrel	PAEUKUS = PAEUBUS / PAEUPUS
PAEUP	All petroleum products consumed by the electric utilities.	Thousand barrels	PAEUPZZ = DFEUPZZ + JKEUPZZ + PCEUPZZ + RFEUPZZ PAEUPUS = $\Sigma$ PAEUPZZ
PAHCBUS	All petroleum products consumed by the residential and commercial sectors combined.	Billion Btu	PAHCBUS = PARCBUS + PACCBUS
PAHCKUS	Factor for converting all petroleum products consumed by the residential and commercial sectors combined from physical units to Btu.	Million Btu per barrel	PAHCKUS = PAHCBUS / PAHCPUS
PAHCPUS	All petroleum products consumed by the residential and commercial sectors combined.	Thousand barrels	PAHCPUS = PARCPUS + PACCPUS

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

PAICB	All petroleum products consumed by the industrial sector.	Billion Btu	$\text{PAICBZZ} = \text{ARICBZZ} + \text{DFICBZZ} + \text{KSICBZZ} + \text{LGICBZZ} + \text{LUICBZZ} + \text{MGICBZZ} + \text{RFICBZZ} + \text{POICBZZ}$ $\text{PAICBUS} = \Sigma \text{PAICBZZ}$
PAICKUS	Factor for converting all petroleum products consumed by the industrial sector from physical units to Btu.	Million Btu per barrel	$\text{PAICKUS} = \text{PAICBUS} / \text{PAICPUS}$
PAICP	All petroleum products consumed by the industrial sector.	Thousand barrels	$\text{PAICPZZ} = \text{ARICPZZ} + \text{DFICPZZ} + \text{KSICPZZ} + \text{LGICPZZ} + \text{LUICPZZ} + \text{MGICPZZ} + \text{RFICPZZ} + \text{POICPZZ}$ $\text{PAICPUS} = \Sigma \text{PAICPZZ}$
PARCB	All petroleum products consumed by the residential sector.	Billion Btu	$\text{PARCBZZ} = \text{DFRCBZZ} + \text{KSRCBZZ} + \text{LGRCBZZ}$ $\text{PARCBUS} = \Sigma \text{PARCBZZ}$
PARCKUS	Factor for converting all petroleum products consumed by the residential sector from physical units to Btu.	Million Btu per barrel	$\text{PARCKUS} = \text{PARCBUS} / \text{PARCPUS}$
PARCP	All petroleum products consumed by the residential sector.	Thousand barrels	$\text{PARCPZZ} = \text{DFRCPZZ} + \text{KSRCPZZ} + \text{LGRCPZZ}$ $\text{PARCPUS} = \Sigma \text{PARCPZZ}$
PATCB	All petroleum products consumed by all sectors.	Billion Btu	$\text{PATCBZZ} = \text{ARTCBZZ} + \text{AVTCBZZ} + \text{DFTCBZZ} + \text{JKTCBZZ} + \text{JNTCBZZ} + \text{KSTCBZZ} + \text{LGTCBZZ} + \text{LUTCBZZ} + \text{MGTCBZZ} + \text{RFTCBZZ} + \text{POTCBZZ}$ $\text{PATCBUS} = \Sigma \text{PATCBZZ}$
PATCKUS	Factor for converting all petroleum products consumed by all sectors from physical units to Btu.	Million Btu per barrel	$\text{PATCKUS} = \text{PATCBUS} / \text{PATCPUS}$
PATCP	All petroleum products consumed by all sectors.	Thousand barrels	$\text{PATCPZZ} = \text{ARTCPZZ} + \text{AVTCPZZ} + \text{DFTCPZZ} + \text{JKTCPZZ} + \text{JNTCPZZ} + \text{KSTCPZZ} + \text{LGTCPZZ} + \text{LUTCPZZ} + \text{MGTCPZZ} + \text{RFTCPZZ} + \text{POTCPZZ}$ $\text{PATCPUS} = \Sigma \text{PATCPZZ}$
PCRFP	Petroleum coke used at refineries as both catalytic and marketable coke.	Thousand barrels	$\text{PCRFPZZ} = (\text{CTCAPZZ} / \text{CTCAPUS}) * \text{PCRFPUS}$ <p>PCRFPUS is independent.</p>
PCEUB	Petroleum coke consumed by the electric utilities.	Billion Btu	$\text{PCEUBZZ} = \text{PCEUPZZ} * 6.024$ $\text{PCEUBUS} = \Sigma \text{PCEUBZZ}$

PCEUM	Petroleum coke consumed by the electric utilities.	Thousand tons	PCEUMZZ is independent. PCEUMUS = $\Sigma$ PCEUMZZ
PCEUP	Petroleum coke consumed by the electric utilities.	Thousand barrels	PCEUPZZ = PCEUMZZ * 5 PCEUPUS = $\Sigma$ PCEUPZZ
PCICB	Petroleum coke consumed by the industrial sector.	Billion Btu	PCICBZZ = PCICPZZ * 6.024 PCICBUS = $\Sigma$ PCICBZZ
PCICP	Petroleum coke consumed by the industrial sector.	Thousand barrels	PCICPZZ = PCRFPPZZ + PCOCPZZ PCICPUS = PCTCPUS - PCEUPUS
PCOCP	Industrial use of petroleum coke other than that used for catalytic cracking.	Thousand barrels	PCOCPZZ = (AICAPZZ / AICAPUS) * PCOCPUS PCOCPUS = PCICPUS - PCRFPPZZ
PCTCB	Petroleum coke total consumed.	Billion Btu	PCTCBZZ = PCICBZZ + PCEUBZZ PCTCBUS = $\Sigma$ PCTCBZZ
PCTCP	Petroleum coke total consumed.	Thousand barrels	PCTCPZZ = PCICPZZ + PCEUPZZ PCTCPUS is independent.
PIVAV	Value added in the manufacture of paints and allied products.	Million dollars	PIVAVZZ is independent. PIVAVUS = $\Sigma$ PIVAVZZ
PLICB	Plant condensate consumed by the industrial sector.	Billion Btu	PLICBZZ = PLTCBZZ PLICBUS = PLTCBUS
PLICP	Plant condensate consumed by the industrial sector.	Thousand barrels	PLICPZZ = PLTCPZZ PLICPUS = PLTCPUS
PLTCB	Plant condensate total consumed.	Billion Btu	PLTCBZZ = PLTCPZZ * 5.418 PLTCBUS = $\Sigma$ PLTCBZZ
PLTCP	Plant condensate total consumed.	Thousand barrels	PLTCPZZ = (OCVAVZZ / OCVAVUS) * PLTCPUS PLTCPUS is independent.
POICB	Other petroleum products consumed by the industrial sector.	Billion Btu	POICBZZ = ABICBZZ + COICBZZ + FNICBZZ + FOICBZZ + FSICBZZ + MBICBZZ + MSICBZZ + NAICBZZ + PCICBZZ + PLICBZZ + PPICBZZ + SGICBZZ + SNICBZZ + UOICBZZ + USICBZZ + WXICBZZ POICBUS = $\Sigma$ POICBZZ
POICP	Other petroleum products consumed by the industrial sector.	Thousand barrels	POICPZZ = ABICPZZ + COICPZZ + FNICPZZ + FOICPZZ + FSICPZZ +

MBICPZZ + MSICPZZ + NAICPZZ +  
 PCICPZZ + PLICPZZ + PPICPZZ +  
 SGICPZZ + SNICPZZ + UOICPZZ +  
 USICPZZ + WXICPZZ

POICPUS =  $\Sigma$ POICPZZ

POTCBZZ = ABTCBZZ + COTCBZZ +  
 FNTCBZZ + FOTCBZZ + FSTCBZZ +  
 MBTCBZZ + MSTCBZZ + NATCBZZ +  
 PCTCBZZ + PLTCBZZ + PPTCBZZ +  
 SGTCBZZ + SNTCBZZ + UOTCBZZ +  
 USTCBZZ + WXTCBZZ

POTCBUS =  $\Sigma$ POTCBZZ

POTCPZZ = ABTCPZZ + COTCPZZ +  
 FNTCPZZ + FOTCPZZ + FSTCPZZ +  
 MBTCPZZ + MSTCPZZ + NATCPZZ +  
 PCTCPZZ + PLTCPZZ + PPTCPZZ +  
 SGTCPZZ + SNTCPZZ + UOTCPZZ +  
 USTCPZZ + WXTCPZZ

POTCPUS =  $\Sigma$ POTCPZZ

PPICBZZ = PPTCBZZ  
 PPICBUS = PPTCBUS

PPICPZZ = PPTCPZZ  
 PPICPUS = PPTCPUS

PPTCBZZ = PPTCPZZ \* 4.620  
 PPTCBUS =  $\Sigma$ PPTCBZZ

PPTCPZZ = (OCVAVZZ / OCVAVUS) \* PPTCPUS  
 PPTCPUS is independent.

RDICPZZ = (RDINPZZ / RDINPUS) \* RDTCPUS  
 RDICPUS =  $\Sigma$ RDICPZZ

RDINPZZ is independent.  
 RDINPUS =  $\Sigma$ RDINPZZ

RDTCPZZ = RDICPZZ  
 RDTCPUS is independent.

REACBZZ = ENACBZZ  
 REACBUS = ENACBUS

POTCB Other petroleum products total consumed. Billion Btu

POTCP Other petroleum products total consumed. Thousand barrels

PPICB Pentanes plus consumed by the industrial sector. Billion Btu

PPICP Pentanes plus consumed by the industrial sector. Thousand barrels

PPTCB Pentanes plus total consumed. Billion Btu

PPTCP Pentanes plus total consumed. Thousand barrels

RDICP Road oil consumed by the industrial sector. Thousand barrels

RDINP Road oil sold to the industrial sector. Short tons

RDTCP Road oil total consumed. Thousand barrels

REACB Renewable energy sources consumed by the transportation sector. Billion Btu



REACP	Renewable energy sources consumed by the transportation sector.	Thousand gallons	REACPZZ = ENACPZZ REACPUS = ENACPUS
REEOB	Renewable energy sources consumed by the electric utilities.	Billion Btu	REEOBZZ = HVENBZZ + GEENBZZ + WWEOBZZ + WNEOBZZ REEOBUS = HVENBUS + GEENBUS + WWEOBUS + WNEOBUS
REEOP	Renewable energy sources consumed by the electric utilities.	Million kilowatthours	REEOPZZ = HVENPZZ + GEENPZZ + WWEOPZZ + WNEOPZZ REEOPUS = HVENPUS + GEENPUS + WWEOPUS + WNEOPUS
RECCB	Renewable energy sources consumed by the commercial sector.	Billion Btu	RECCBZZ = WDCCBZZ RECCBUS = WDCCBUS
RECCP	Renewable energy sources consumed by the commercial sector.	Thousand cords	RECCPZZ = WDCCPZZ RECCPUS = WDCCPUS
REICB	Renewable energy sources consumed by the industrial sector.	Billion Btu	REICBZZ = HYICBZZ + WWICBZZ + GOICBZZ REICBUS = HYICBUS + WWICBUS + GOICBUS
RERCB	Renewable energy sources consumed by the residential sector.	Billion Btu	RERCBZZ = WDRCBZZ + SOHCBZZ RERCBUS = WDRCBUS + SOHCBUS
RETCB	Renewable energy sources total consumed.	Billion Btu	RETCBZZ = RERCBZZ + RECCBZZ + REICBZZ + REACBZZ + REEOBZZ RETCBUS = RERCBUS + RECCBUS + REICBUS + REACBUS + REEOBUS
RFACB	Residual fuel consumed by the transportation sector.	Billion Btu	RFACBZZ = RFACPZZ * 6.287 RFACBUS = ΣRFACBZZ
RFACP	Residual fuel consumed by the transportation sector.	Thousand barrels	RFACPZZ = (RFTRPZZ / RFNDPZZ) * RFNCPZZ RFACPUS = ΣRFACPZZ
RFBKP	Residual fuel sold for vessel bunkering use, excluding deliveries to the Armed Forces.	Thousand barrels	RFBKPZZ is independent. RFBKPUS = ΣRFBKPZZ
RFCCB	Residual fuel consumed by the commercial sector.	Billion Btu	RFCCBZZ = RFCCPZZ * 6.287 RFCCBUS = ΣRFCCBZZ
RFCCP	Residual fuel consumed by the commercial sector.	Thousand barrels	RFCCPZZ = (RFCMPZZ / RFNDPZZ) * RFNCPZZ RFCCPUS = ΣRFCCPZZ

**A  
P  
P  
E  
N  
D  
I  
X  
  
B**

RFCMP	Residual fuel sold to the commercial sector.	Thousand barrels	RFCMPZZ is independent. RFCMPUS = $\Sigma$ RFCMPZZ
RFEUB	Residual fuel consumed by the electric utilities.	Billion Btu	RFEUBZZ = RFEUPZZ * 6.287 RFEUBUS = $\Sigma$ RFEUBZZ
RFEUP	Residual fuel consumed by the electric utilities.	Thousand barrels	RFEUPZZ is independent. RFEUPUS = $\Sigma$ RFEUPZZ
RFIBP	A portion of residual fuel sold for industrial use, including industrial space heating.	Thousand barrels	RFIBPZZ is independent. RFIBPUS = $\Sigma$ RFIBPZZ
RFICB	Residual fuel consumed by the industrial sector.	Billion Btu	RFICBZZ = RFICPZZ * 6.287 RFICBUS = $\Sigma$ RFICBZZ
RFICP	Residual fuel consumed by the industrial sector.	Thousand barrels	RFICPZZ = (RFINPZZ / RFNDPZZ) * RFNCPZZ RFICPUS = $\Sigma$ RFICPZZ
RFINP	Residual fuel sold to the industrial sector.	Thousand barrels	RFINPZZ = RFIBPZZ + RFOCPZZ + RFMSPZZ RFINPUS = $\Sigma$ RFINPZZ
RFMIP	Residual fuel sold to the Armed Forces, regardless of use.	Thousand barrels	RFMIPZZ is independent. RFMIPUS = $\Sigma$ RFMIPZZ
RFMSP	Residual fuel sold for miscellaneous uses.	Thousand barrels	RFMSPZZ is independent. RFMSPUS = $\Sigma$ RFMSPZZ
RFNCP	Residual fuel consumption by all sectors other than the electric utility sector.	Thousand barrels	RFNCPZZ = (RFNDPZZ / RFNDPUS) * RFNCPUS RFNCPUS = RFTCPUS - RFEUPUS
RFNDP	Residual fuel sold to all sectors other than the electric utility sector.	Thousand barrels	RFNDPZZ = RFCMPZZ + RFINPZZ + RFTRPZZ RFNDPUS = $\Sigma$ RFNDPZZ
RFOCP	Residual fuel sold for use by oil companies.	Thousand barrels	RFOCPZZ is independent. RFOCPUS = $\Sigma$ RFOCPZZ
RFRRP	Residual fuel sold for use by railroads.	Thousand barrels	RFRRPZZ is independent. RFRRPUS = $\Sigma$ RFRRPZZ
RFTCB	Residual fuel total consumed.	Billion Btu	RFTCBZZ = RFCCBZZ + RFICBZZ + RFACBZZ + RFEUBZZ RFTCBUS = $\Sigma$ RFTCBZZ
RFTCP	Residual fuel total consumed.	Thousand barrels	RFTCPZZ = RFNCPZZ + RFEUPZZ RFTCPUS is independent.

RFTRP	Residual fuel sold to the transportation sector.	Thousand barrels	RFTRPZZ = RFBKPZZ + RFMIPZZ + RFRRPZZ RFTRPUS = ΣRFTRPZZ
SGICB	Still gas consumed by the industrial sector.	Billion Btu	SGICBZZ = SGTCBZZ SGICBUS = SGTCBUS
SGICP	Still gas consumed by the industrial sector.	Thousand barrels	SGICPZZ = SGTCPZZ SGICPUS = SGTCPUS
SGTCB	Still gas total consumed.	Billion Btu	SGTCBZZ = SGTCPZZ * 6.000 SGTCBUS = ΣSGTCBZZ
SGTCP	Still gas total consumed.	Thousand barrels	SGTCPZZ = (COCAPZZ / COCAPUS) * SGTCPUS SGTCPUS is independent.
SNICB	Special naphthas consumed by the industrial sector.	Billion Btu	SNICBZZ = SNTCBZZ SNICBUS = SNTCBUS
SNICP	Special naphthas consumed by the industrial sector.	Thousand barrels	SNICPZZ = SNTCPZZ SNICPUS = SNTCPUS
SNTCB	Special naphthas total consumed.	Billion Btu	SNTCBZZ = SNTCPZZ * 5.248 SNTCBUS = ΣSNTCBZZ
SNTCP	Special naphthas total consumed.	Thousand barrels	SNTCPZZ = (PIVAVZZ / PIVAVUS) * SNTCPUS SNTCPUS is independent.
SOEOB	Electricity produced from photovoltaic and solar thermal energy by electric utilities.	Billion Btu	SOEOBZZ = SOEOPZZ * FFEOKUS SOEOBUS = ΣSOEOBZZ
SOEOP	Electricity produced from photovoltaic and solar thermal energy by electric utilities.	Million kilowatthours	SOEOPZZ is independent. SOEOPUS = ΣSOEOPZZ
SOHCB	Solar thermal energy consumed by the residential and commercial sectors.	Billion Btu	SOHCBZZ is independent. SOHCBUS = ΣSOHCBZZ
SOHCP	Solar thermal energy consumed by the residential and commercial sectors.	Million kilowatthours	SOHCPZZ = SOHCBZZ / 3.412 SOHCPUS = ΣSOHCPZZ
SOICB	Electricity produced from photovoltaic and solar thermal energy sources in the industrial sector.	Billion Btu	SOICBZZ is independent. SOICBUS = ΣSOICBZZ
SOTCB	Photovoltaic and solar thermal energy sources total consumed.	Billion Btu	SOTCBZZ = SOHCBZZ + SOICBZZ + SOEOBZZ SOTCBUS = ΣSOTCBZZ

**A  
P  
P  
E  
N  
D  
I  
X  
B**

SOTCP	Photovoltaic and solar thermal energy sources total consumed (available for 1960–1989 only).	Million kilowatthours	SOTCPZZ = SOEOPZZ SOTCPUS = ΣSOTCPZZ
TEACB	Total energy consumed by the transportation sector.	Billion Btu	TEACBZZ = CLACBZZ + NGACBZZ + PAACBZZ + ESACBZZ + LOACBZZ TEACBUS = CLACBUS + NGACBUS + PAACBUS + ESACBUS + LOACBUS
TEAPB	The transportation sector's energy consumption per capita.	Million Btu	TEAPBZZ = TEACBZZ / TPOPPZZ TEAPBUS = TEACBUS / TPOPPUS
TECCB	Total energy consumed by the commercial sector.	Billion Btu	TECCBZZ = CLCCBZZ + NGCCBZZ + PACCBZZ + WDCCBZZ + ESCCBZZ + LOCCBZZ TECCBUS = CLCCBUS + NGCCBUS + PACCBUS + WDCCBUS + ESCCBUS + LOCCBUS
TECPB	The commercial sector's energy consumption per capita.	Million Btu	TECPBZZ = TECCBZZ / TPOPPZZ TECPBUS = TECCBUS / TPOPPUS
TEEUB	Total energy consumed by the electric utilities plus net imports of electricity into the United States.	Billion Btu	TEEUBZZ = CLEUBZZ + NGEUBZZ + PAEUBZZ + HYENBZZ + NUEOBZZ + GEENBZZ + WVEOBZZ + WNEOBZZ + EXNIBZZ TEEUBUS = CLEUBUS + NGEUBUS + PAEUBUS + HYENBUS + NUEOBUS + GEENBUS + WVEOBUS + WNEOBUS + EXNIBUS
TEICB	Total energy consumed by the industrial sector.	Billion Btu	TEICBZZ = CLICBZZ + NGICBZZ + PAICBZZ + HYICBZZ + WWICBZZ + GOICBZZ + ESICBZZ + LOICBZZ TEICBUS = CLICBUS + NGICBUS + PAICBUS + HYICBUS + WWICBUS + GOICBUS + ESICBUS + LOICBUS + CCNIBUS
TEIPB	The industrial sector's energy consumption per capita.	Million Btu	TEIPBZZ = TEICBZZ / TPOPPZZ TEIPBUS = TEICBUS / TPOPPUS
TERCB	Total energy consumed by the residential sector.	Billion Btu	TERCBZZ = CLRCBZZ + NGRCBZZ + PARCBZZ + WDRCBZZ + SOHCBZZ + ESRCBZZ + LORCBZZ TERCBUS = CLRCBUS + NGRCBUS + PARCBUS + WDRCBUS + SOHCBUS + ESRCBUS + LORCBUS
TERPB	The residential sector's energy consumption per capita.	Million Btu	TERPBZZ = TERCBZZ / TPOPPZZ TERPBUS = TERCBUS / TPOPPUS

TESSB	Total energy consumed (sum of the four end-use sectors). CSEDS cross-check not used in <i>SEDR</i> tables.	Billion Btu	$\text{TESSBZZ} = \text{TERCBZZ} + \text{TECCBZZ} + \text{TEICBZZ} + \text{TEACBZZ}$ $\text{TESSBUS} = \text{TERCBUS} + \text{TECCBUS} + \text{TEICBUS} + \text{TEACBUS}$
TETCB	Total energy consumed (sum of all energy sources) used in <i>SEDR</i> tables.	Billion Btu	$\text{TETCBZZ} = \text{CLTCBZZ} + \text{NGTCBZZ} + \text{PATCBZZ} + \text{NUEOBZZ} + \text{HYTCBZZ} + \text{BMTCBZZ} - \text{ENACBZZ} + \text{GOTCBZZ} + \text{ELISBZZ}$ $\text{TETCBUS} = \text{CLTCBUS} + \text{CCNIBUS} + \text{NGTCBUS} + \text{PATCBUS} + \text{NUEOBUS} + \text{HYTCBUS} + \text{BMTCBUS} - \text{ENACBUS} + \text{GOTCBUS} + \text{EXNIBUS}$
TETPB	Total energy consumption per capita.	Million Btu	$\text{TETPBZZ} = \text{TETCBZZ} / \text{TPOPPZZ}$ $\text{TETPBUS} = \text{TETCBUS} / \text{TPOPPUS}$
TNACB	Total net energy consumed by the transportation sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\text{TNACBZZ} = \text{TEACBZZ} - \text{LOACBZZ}$ $\text{TNACBUS} = \text{TEACBUS} - \text{LOACBUS}$
TNCCB	Total net energy consumed by the commercial sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\text{TNCCBZZ} = \text{TECCBZZ} - \text{LOCCBZZ}$ $\text{TNCCBUS} = \text{TECCBUS} - \text{LOCCBUS}$
TNICB	Total net energy consumed by the industrial sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\text{TNICBZZ} = \text{TEICBZZ} - \text{LOICBZZ}$ $\text{TNICBUS} = \text{TEICBUS} - \text{LOICBUS}$
TNRCB	Total net energy consumed by the residential sector excluding the sector's share of electrical system energy losses.	Billion Btu	$\text{TNRCBZZ} = \text{TERCBZZ} - \text{LORCBZZ}$ $\text{TNRCBUS} = \text{TERCBUS} - \text{LORCBUS}$
TPOPP	The resident population including the Armed Forces residing in each State.	Thousand	<p>TPOPPZZ is independent. TPOPPUS is independent.</p>
UOICB	Unfinished oils consumed by the industrial sector.	Billion Btu	$\text{UOICBZZ} = \text{UOTCBZZ}$ $\text{UOICBUS} = \text{UOTCBUS}$
UOICP	Unfinished oils consumed by the industrial sector.	Thousand barrels	$\text{UOICPZZ} = \text{UOTCPZZ}$ $\text{UOICPUS} = \text{UOTCPUS}$
UOTCB	Unfinished oils total consumed.	Billion Btu	$\text{UOTCBZZ} = \text{UOTCPZZ} * 5.825$ $\text{UOTCBUS} = \Sigma \text{UOTCBZZ}$
UOTCP	Unfinished oils total consumed.	Thousand barrels	$\text{UOTCPZZ} = (\text{COCAPZZ} / \text{COCAPUS}) * \text{UOTCPUS}$ <p>UOTCPUS is independent.</p>

**A  
P  
P  
E  
N  
D  
I  
X**

USICB	Unfractionated stream consumed by the industrial sector.	Billion Btu	USICBZZ = USTCBZZ USICBUS = USTCBUS
USICP	Unfractionated stream consumed by the industrial sector.	Thousand barrels	USICPZZ = USTCPZZ USICPUS = USTCPUS
USTCB	Unfractionated stream total consumed.	Billion Btu	USTCBZZ = USTCPZZ * 5.418 USTCBUS = ΣUSTCBZZ
USTCP	Unfractionated stream total consumed.	Thousand barrels	USTCPZZ = (OCVAVZZ / OCVAVUS) * USTCPUS USTCPUS is independent.
WDCCB	Wood energy consumed by the commercial sector.	Billion Btu	WDCCBZZ = (DFCCPZZ / DFCCPUS) * WDCCBUS WDCCBUS is independent.
WDCCP	Wood energy consumed by the commercial sector.	Thousand cords	WDCCPZZ = WDCCBZZ / 20 WDCCPUS = ΣWDCCPZZ
WDEOB	Electricity produced from wood energy sources at electric utilities.	Billion Btu	WDEOBZZ = WDEOPZZ * FFEOKUS WDEOBUS = ΣWDEOBZZ
WDEOP	Electricity produced from wood energy sources at electric utilities.	Million kilowatthours	WDEOPZZ is independent. WDEOPUS = ΣWDEOPZZ
WDRCB	Wood energy consumed by the residential sector.	Billion Btu	WDRCBZZ = WDRCPZZ * 20 WDRCBUS = ΣWDRCBZZ
WDRCP	Wood energy consumed by the residential sector.	Thousand cords	WDRCPZZ is independent. WDRCPUS = ΣWDRCPZZ
WNEOB	Electricity produced from wind, photo-voltaic, and solar thermal energy sources at electric utilities.	Billion Btu	WNEOBZZ = SOEOBZZ + WYEOBZZ WNEOBUS = ΣWNEOBZZ
WNEOP	Electricity produced from wind, photo-voltaic, and solar thermal energy sources at electric utilities.	Million kilowatthours	WNEOPZZ = SOEOPZZ + WYEOBZZ WNEOPUS = ΣWNEOPZZ
WSEOB	Electricity produced from waste energy sources at electric utilities.	Billion Btu	WSEOBZZ = WSEOPZZ * FFEOKUS WSEOBUS = ΣWSEOBZZ
WSEOP	Electricity produced from waste energy sources at electric utilities.	Million kilowatthours	WSEOPZZ is independent. WSEOPUS = ΣWSEOPZZ
WWEOB	Electricity produced from wood and waste at electric utilities.	Billion Btu	WWEOBZZ = WDEOBZZ + WSEOBZZ WWEOBUS = ΣWWEOBZZ

WWEOP	Electricity produced from wood and waste at electric utilities.	Million kilowatthours	WWEOPZZ = WDEOPZZ + WSEOPZZ WWEOPUS = $\Sigma$ WWEOPZZ
WWICB	Wood and waste consumed by the industrial sector.	Billion Btu	WWICBZZ is independent. WWICBUS = $\Sigma$ WWICBZZ
WXICB	Waxes consumed by the industrial sector.	Billion Btu	WXICBZZ = WXTCBZZ WXICBUS = WXTCBUS
WXICP	Waxes consumed by the industrial sector.	Thousand barrels	WXICPZZ = WXTCPZZ WXICPUS = WXTCPUS
WXTCB	Waxes total consumed.	Billion Btu	WXTCBZZ = WXTCPZZ * 5.537 WXTCBUS = $\Sigma$ WXTCBZZ
WXTCP	Waxes total consumed.	Thousand barrels	WXTCPZZ = (CGVAVZZ / CGVAVUS) * WXTCPUS WXTCPUS is independent.
WYEOB	Electricity produced from wind energy at electric utilities.	Billion Btu	WYEOBZZ = WYEOPZZ * FFEOKUS WYEOBUS = $\Sigma$ WYEOBZZ
WYEOP	Electricity produced from wind energy at electric utilities.	Million kilowatthours	WYEOPZZ is independent. WYEOPUS = $\Sigma$ WYEOPZZ
WYICB	Electricity produced from wind energy by the industrial sector.	Billion Btu	WYICBZZ is independent. WYICBUS = $\Sigma$ WYICBZZ
WYTCB	Electricity produced from wind energy total produced.	Billion Btu	WYTCBZZ = WYICBZZ + WYEOBZZ WYTCBUS = $\Sigma$ WYTCBZZ
WYTCP	Electricity produced from wind energy total produced (available for 1960–1989 only).	Million kilowatthours	WYTCPZZ = WYEOPZZ WYTCPUS = $\Sigma$ WYTCPZZ

## Appendix C

## Sources of Independent Variables in the Combined State Energy Data System

### Aluminum Ingot Production Capacity

AICAPZZ — Aluminum ingot production capacity in each State.

- 1960 through 1973: American Bureau of Metal Statistics, *Year Book*.
- 1974 through 1994: American Bureau of Metal Statistics, *Non-Ferrous Metal Data*, table titled “Aluminum Ingot Production Capacity.”

Note: Capacities for individual plants owned by one company have been withheld since 1986. The company’s total capacity has been apportioned to the individual plants on the basis of their proportional capacities in 1985.

- 1995 forward: Data series is discontinued. 1994 data used for all years.

### Anthracite

ACEUKUS — Factor for converting anthracite consumed by the electric utilities from physical units to Btu.

- 1960 through 1972: Energy Information Administration (EIA) assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17.500 million Btu per short ton.
- 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite receipts at electric utilities by the quantity of anthracite received at electric utilities. These data are reported on the

Federal Energy Regulatory Commission (FERC) Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants,” and predecessor forms.

ACEUPZZ — Anthracite consumed by the electric utilities by State.

- EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms.

ACHCPUS — Anthracite consumed by the residential and commercial sectors in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal-Pennsylvania Anthracite Annual.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 9.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 8.
- 1988 forward: EIA, Unpublished data from Form EIA-6.

ACHDPZZ — Anthracite distributed to the residential and commercial sectors.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: Consumption estimates are used for this distribution series. Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1982 final data are



published in the *Quarterly Coal Report, October–December 1983*.

The specific tables are:

- 1980: Unpublished data.
- 1981 through 1983: Table 27.
- 1984 through 1990: Table 29.
- 1991 through 1994: Table 51.
- 1995: Table 43.
- 1996: Table 44.

Withheld State values for consumption of all types of coal are estimated by using distribution data. When U.S. residential and commercial coal distribution does not equal U.S. residential and commercial coal consumption, the State distribution values are adjusted proportionally until the sum of State distribution values equals the U.S. consumption value published in the *Quarterly Coal Report*. The distribution data are published in:

- 1980 through 1984: EIA, *Coal Distribution, January–December 1984*, Table 21.
- 1985 through 1989: EIA, *Coal Distribution, January–December 1989*, Table 15.
- 1990 and 1991: EIA, *Coal Distribution, January–December* for each year, Table 16.
- 1992 through 1994: EIA, *Quarterly Coal Report, October–December* for the following year, Table 10.
- 1995 forward: Unpublished data from Form EIA-6.

Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January–December* for each year.

The specific tables are:

(“District 24” represents all anthracite.)

- 1980 through 1983: Tables 8 and 9.
- 1984: Tables 6 and 8.
- 1985 through 1989: Tables 6 and 3.

(“Origin: Pennsylvania, Anthracite” represents all anthracite.)

- 1990 and 1991: Table 33.

- 1992 forward: Unpublished data from Form EIA-6.

State distribution data are increased or decreased proportionally until the sum of the States’ distribution values equals the U.S. consumption (ACHCPUS).

ACKCPUS — Anthracite carbonized by coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal-Pennsylvania Anthracite Annual.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 9.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 8.
- 1988 forward: EIA, Unpublished data from Form EIA-5.

ACKDPZZ - Anthracite distributed to coke plants by State.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: Consumption estimates are used for this distribution series. Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October–December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October–December 1983*. The specific tables are:

- 1980: Unpublished data.
- 1981 through 1983: Table 25.
- 1984, 1985, and 1987: Table 27.
- 1986, 1988, and 1989: Unpublished State revisions that are components of the U.S. revisions published in the *Quarterly Coal Report, October–December 1991*, Table 45.
- 1990: Table 27.
- 1991 through 1994: Table 48.
- 1995: Table 40.
- 1996: Table 41.

Withheld State values for consumption of all types of coal are estimated by using distribution data. After withheld residential and commercial coal consumption values have been estimated, withheld coke plant consumption is the difference between the sum of the published and estimated end-use sectors’ consumption and the published State total consumption.

Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January–December* for each year.

The specific tables are:

(“District 24” represents all anthracite.)

- 1980 through 1983: Tables 8 and 9.
- 1984: Tables 6 and 8.
- 1985 through 1989: Tables 6 and 33.

(“Origin: Pennsylvania, Anthracite” represents all anthracite.)

- 1990 and 1991: Table 33.
- 1992 forward: Unpublished data from Form EIA-6. State distribution data are increased or decreased proportionally until the sum of the States' distribution values equals the U.S. consumption (ACKCPUS).

ACNUKUS — Factor for converting anthracite consumed by all sectors other than the electric utility sector from physical units to Btu.

- Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumption by all sectors other than the electric utility sector less the quantity of anthracite stock changes, losses, and “unaccounted for.”

ACOCBUS — Anthracite consumed by industrial users other than coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal-Pennsylvania Anthracite, Annual.”
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 9.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 8.
- 1988 forward: EIA, Unpublished data from Forms EIA-3 and EIA-6.

ACODPZZ — Anthracite distributed to industrial plants (other than coke plants) by State.

- 1960 through 1979: No data available. The 1980 State data are used for years 1960 through 1979.
- 1980 forward: Consumption estimates are used for this distribution series. Consumption of all types of coal by State is published in EIA, *Quarterly Coal Report, October-December* for each year. Data are from the report of the following year, i.e., 1982 final data are published in the *Quarterly Coal Report, October-December 1983*. The specific tables are:
  - 1980: Unpublished data.
  - 1981 through 1983: Table 26.
  - 1984 through 1990: Table 28.
  - 1991 through 1994: Table 49.
  - 1995: Table 41.

- 1996: Table 42. Withheld State values for consumption of all types of coal are estimated by using distribution data. After withheld residential and commercial coal consumption values have been estimated, withheld consumption by other industrial users is the difference between the sum of the published and estimated end-use sectors' consumption and the published State total consumption. Anthracite consumption is estimated by using distribution data published in EIA, *Coal Distribution, January-December* for each year. The specific tables are:
  - 1980 through 1983: Tables 8 and 9.
  - 1984: Tables 6 and 8.
  - 1985 through 1989: Tables 6 and 33. (“Origin: Pennsylvania, Anthracite” represents all anthracite.)
  - 1990 and 1991: Table 33.
  - 1992 forward: Unpublished data from Form EIA-6. State distribution data are increased or decreased proportionally until the sum of the States' distribution values equals total U.S. consumption (ACOCBUS).

### Asphalt

ASINPZZ — Asphalt sold to the industrial sector by State.

- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Asphalt,” the specific tables are:
  - 1960 through 1962: Table 6.
  - 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, “Sales of Asphalt,” Table 2.
- 1981 through 1986: The Asphalt Institute, *Asphalt Usage 1987 United States and Canada*, Table B.
- 1987 and 1988: The Asphalt Institute, *Asphalt Usage 1988 United States and Canada*, Tables A and B for State data. *Asphalt Usage 1989 United States and Canada*, page 2 for revised U.S. totals. The Asphalt Institute did not publish corresponding revised State data but did advise EIA on an estimation procedure to adjust 19 State values to sum to the revised U.S. totals.
- 1989 forward: The Asphalt Institute, *Asphalt Usage United States and Canada*, table titled “U.S. Asphalt Usage.”

ASTCPUS — Asphalt total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2. (Beginning in 1983, this variable includes road oil.)

**Aviation Gasoline**

AVMIPZZ — Aviation fuel issued to the military in the United States by State.

- 1960 through 1974: No data are available. The 1977 data are used for each year.
- 1975 and 1976: No consistent data series are available. The 1977 data are used for both years.
- 1977 through 1988: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data. The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1989 and 1990: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. State data for the fiscal year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia.
- 1991 through 1995: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. State data for the calendar year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia.
- 1996: The data series for 1996 is temporarily unavailable. Simple averages of 1995 and 1997 State data are used to estimate 1996 values.

AVNMMZZ — Aviation gasoline sold to nonmilitary users by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

AVTFCUS — Aviation gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

**Aviation Gasoline Blending Components**

ABTFCUS — Aviation gasoline blending components total consumed in the United States.

- 1960 through 1980: No data available. Values are assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

**Biomass**

ENACFUS — Ethanol consumed by the transportation sector in the United States.

- 1960 through 1989: No data are available. Values are assumed to be zero.
- 1990 through 1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table 12. Data in trillion Btu are converted to gallons by using the conversion factor of 76,400 Btu per gallon.
- 1993 forward: EIA, *Petroleum Supply Monthly* (January issue of each year), Table D1. Data in thousand barrels are converted to thousand gallons by using the conversion factor of 42 gallons per barrel.

ENTRPFZZ — Ethanol blended into motor gasoline by State.

- 1960 through 1989: No data are available. Values are assumed to be zero.

- 1990 through 1992: No data are available. The 1993 data are used for each year.
- 1993 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-233E, columns “Total Ethanol Used in Gasohol.”
- 1996: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-33E, column “Total Ethanol Used in Gasohol.”

WDCCBUS — Wood consumed by the commercial sector in the United States.

- 1960 through 1992: No data available. Values are assumed to be zero.
- 1993 forward: EIA, *Annual Energy Review 1997*, Table 10.3.

WDEOPZZ — Electricity produced from wood energy sources at electric utilities by State.

- 1960 through 1981: Data included in waste energy sources, see WSEOPZZ.
- 1982 forward: EIA, Form EIA-759, “Monthly Power Plant Report.”

WWICBZZ — Wood and waste consumed by the industrial sector by State.

- 1960 through 1989: No data available. Values are assumed to be zero.
- 1990 forward: EIA estimates are developed by using four data sources. U.S. totals for each year are from EIA, *Renewable Energy Annual*, Table 2.
  - A portion of the total for each year is allocated to the States by using State estimates of wood and waste consumption from the Form EIA-867, “Annual Nonutility Power Producers Report.”
  - The remaining portion of the U.S. total for each year is assumed to be consumed by manufacturing industries. The Form EIA-846, “1991 Manufacturing Energy Consumption Survey (MECS),” identifies the largest manufacturing wood and waste consumers to be industries in Standard Industrial Code (SIC) 2421, “Sawmills and Planing Mills;” SIC 2541, “Wood Partitions and Fixtures;” and SIC 2621, “Paper Mills.” A State-level allocating data series is developed by using MECS U.S. totals for the three series and the U.S. Department of Commerce, Bureau of

the Census, 1992 Census of Manufactures, Industry Series State-level “Value Added in Manufacture” series for each SIC. The weighted-average State allocator was applied to the U.S. remaining portion (assumed manufacturing) for each year.

The two portions are summed by State and year to equal the original U.S. totals from the EIA, *Renewable Energy Annual*, Table 2.

WDRCPZZ — Wood energy consumed by the residential sector by State.

- 1960 through 1989: No data available. Values are assumed to be zero.
- 1990: U.S. Census Division wood consumption data are from Form EIA-457, “1990 Residential Energy Consumption Survey.” State-level estimates are derived by using the U.S. Department of Commerce, Bureau of the Census, American Housing Survey, Total Housing Units for 1990 by State, to allocate the division-level wood consumption to the States. Hawaii residential wood consumption is assumed to be zero; and the Census Division 9 consumption is allocated to the other four States in the Division.
- 1991 and 1992: U.S. totals published in trillion Btu in the EIA, *Renewable Energy Annual 1995*, Table 6, are converted to thousand cords and allocated to the States in proportion to the 1990 estimates.
- 1993: Data for U.S. Census Divisions and CA, FL, NY, and TX are from Form EIA-457, “1993 Residential Energy Consumption Survey.” Data for other States are derived by using the U.S. Department of Commerce, Bureau of the Census, American Housing Survey, Total Housing Units for 1993 by State, to allocate the Division-level wood consumption, minus known State consumption, to the remaining States in each Division. Hawaii residential wood consumption is assumed to be zero; and the Census Division 9 consumption is allocated to the other four States in the Division.
- 1994 forward: U.S. total published in trillion Btu in the EIA, *Annual Energy Review 1997*, Table 10.3, is converted to thousand cords and allocated to the States in proportion to the 1993 estimates.

WSEOPZZ — Electricity produced from waste energy sources at electric utilities by State.

- 1960 forward: EIA, Form EIA-759, “Monthly Power Plant Report” (includes wood energy sources from 1960 through 1981).

**Bituminous Coal and Lignite**

BCACPUS — Bituminous coal and lignite consumed by the transportation sector in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coal-Bituminous and Lignite.”
- 1976 and 1977: EIA, *Energy Data Reports*, “Coal-Bituminous and Lignite by Consumer and Retail Deliveries.”
- 1978 forward: Small amounts of bituminous coal and lignite consumed by the transportation sector are included in the other industrial category (see BCOCPUS). Zero is entered for this variable.

BCEUKZZ — Factor for converting bituminous coal and lignite consumed by the electric utilities from physical units to Btu by State.

- 1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from the Federal Power Commission’s (FPC) Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. The specific tables are:
  - 1960 and 1961: Table 1.
  - 1962 through 1972: Table 2.
- 1973 through 1982: The average heat content of coal received at steam electric plants 25 megawatts or greater from FPC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, tables titled “Destination and Origin of Coal ‘Delivered to’ (1973–1979) ‘Receipts to’ (1980) ‘Received at’ (1981–1982) Steam-Electric Plants 25-MW or Greater.”
- 1983 forward: The average heat content of coal received at steam electric plants 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*. The specific tables are:
  - 1983 and 1984: Table 58.
  - 1985 through 1989: Table 48.
  - 1990 and 1991: Table 35.
  - 1992: Table 22.
  - 1993 forward: Both Table 4 and Table 22.
 Data for 1996 are also available via internet at:  
<http://www.eia.doe.gov/cneaf/electricity/cq/cq96.pdf>

Notes: The State conversion factors for 1960 through 1972 were derived from actual consumption data, while the conversion factors for 1973 to the present were based on receipts of coal. The factors for 1960 through 1972 may also have included some quantities of anthracite. These breaks in the series create some data discrepancies. Alaska and Hawaii were excluded from the NCA report, FPC Form 423, and FERC Form 423. However, Alaska reported consumption of bituminous coal and lignite at electric utilities for all years. An FPC heat rate for coal at electric utilities in Alaska was used for 1960 through 1978 as published in EIA, *Federal Energy Data System (FEDS) Technical Documentation*, June 1978, Table 21. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1972 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 and following years. In instances where a State had no receipts for a particular year but did report consumption, it was assumed that the coal received in one year was consumed during the following year and the Btu value of the previous year’s receipts was used.

BCEUPZZ — Bituminous coal and lignite consumed by the electric utilities by State.

- EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms.

BCHCKZZ — State factor for converting bituminous coal and lignite consumed by the residential and commercial sectors from physical units to Btu.

- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average.
- 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on the Federal Energy Regulatory Commission (FERC) Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants.” The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing

district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.

BCHCPUS — Bituminous coal and lignite consumed by the residential and commercial sectors in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," column titled "Retail dealers" or "Retail sales."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Form EIA-6.

BCHDPZZ — Bituminous coal and lignite distributed to the residential and commercial sectors by State.

- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," column titled "Retail dealers."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
  - 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination," columns titled "Retail dealers."
  - 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States," column titled "Retail sales."
  - 1979: "Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States," column titled "Retail sales."
- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. (See ACHDPZZ for data sources and estimation procedures.) Consumption shown as "Unknown" is assumed to be bituminous coal and lignite and is allocated to six States (Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia) in proportion to their total distribution of all coal.

BCKCPUS — Bituminous coal and lignite carbonized at coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," sum of columns "Beehive coke plants" and "Oven coke plants."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Form EIA-5.

BCKDPZZ — Bituminous coal and lignite distributed to coke plants, a portion of the industrial sector by State.

- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
  - 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination."
  - 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States."
  - 1979: "Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States."
- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. See ACKDPZZ for data sources and estimation procedures.

BCOCKZZ — State factor for converting bituminous coal and lignite consumed by other industrial users from physical units to Btu.

- 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average.
- 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous

coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on Federal Energy Regulatory Commission (FERC) Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6, "Coal Distribution Report," and predecessor Bureau of Mines Form 6-1419-Q.

**BCOCPUS** — Bituminous coal and lignite consumed by industrial users other than coke plants in the United States.

- 1960 through 1972: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite," table titled "Consumption of bituminous coal and lignite, by consumer class, and retail deliveries in the United States." Sum of columns titled "Steel and rolling mills," "Cement mills," and "Other manufacturing and mining industries."
- 1973 through 1984: EIA, *Weekly Coal Production*, August 9, 1986, Table 8.
- 1985 through 1987: EIA, *Weekly Coal Production*, July 16, 1988, Table 7.
- 1988 forward: EIA, Unpublished data from Forms EIA-3 and EIA-6.

**BCODPZZ** — Bituminous coal and lignite distributed to industrial plants (other than coke plants) by State.

- 1960 through 1976: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, "Coal-Bituminous and Lignite."
- 1977 through 1979: EIA, *Energy Data Reports*, "Coal-Bituminous and Lignite." The specific tables are:
  - 1977: "Comparative Summary of Distribution of Bituminous Coal and Lignite Produced in the United States During the First Nine Months of 1977" and "Distribution of Bituminous Coal and Lignite Produced in the United States During October-December 1977, by Geographic Division and State Destination."
  - 1978: "Distribution of Bituminous Coal and Lignite Produced in the United States."
  - 1979: "Overall Summary of Distribution of Bituminous, Subbituminous, and Lignite Coal Produced in the United States."

- 1980 forward: Consumption estimates are used for this distribution series. Bituminous coal and lignite consumption is the remainder when estimated anthracite consumption is subtracted from all coal consumption in each State. (See ACODPZZ for data sources and estimation procedures.) Consumption shown as "Unknown" is assumed to be bituminous coal and lignite and is allocated to six States (Alabama, Illinois, Kentucky, Pennsylvania, Tennessee, and West Virginia) in proportion to their total distribution of all coal.

### **Catalytic Cracking Charge Capacity**

**CTCAPZZ** — Catalytic cracking charge capacity of petroleum refineries by State.

- 1960: Data are unavailable from published reports. The 1961 values are used for 1960.
- 1961 through 1963: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States." The specific tables are:
  - 1961 and 1962: Table 7, under "Cracking Capacity" column heading "Charge."
  - 1963: Table 6, under "Catalytic-Cracking Capacity" column heading "Charge."
- 1964 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1977: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and Puerto Rico," Table 2, all entries next to "Cat. Ck." summed by State.
- 1978: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories," Table 2, all entries next to "Cat. Ck." summed by State.
- 1979 and 1980: EIA, *Energy Data Reports*, "Petroleum Refineries in the United States and U.S. Territories." The specific tables are:
  - 1979: Table 2, sum of "Catalytic Cracking" columns, "Fresh" and "Recycle."
  - 1980: Table 1, sum of "Catalytic Cracking (fresh)" and "Catalytic Cracking (recycle)" columns.

- 1981 forward: EIA, *Petroleum Supply Annual*, sum of “Catalytic Cracking (Fresh)” and “Catalytic Cracking (Recycled)” columns in the following tables:
  - 1981 through 1983: Table 1.
  - 1984: Table 30.
  - 1985 through 1989: Table 29.
  - 1989 through 1994: Table 36.
  - 1995: Data series became biannual. 1994 data used for 1995
  - 1996: Table 36.

### Coal Coke

CCEXPUS — Coal coke exported from the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coke and Coal Chemicals Annual.”
- 1976 through 1979: EIA, *Energy Data Reports*, “Coke and Coal Chemicals Monthly.”
- 1980 forward: EIA, *Quarterly Coal Report* (January-March of the following year). The specific tables are:
  - 1980 through 1990: Table A1.
  - 1991 forward: Table 2.

CCIMPUS — Coal coke imported into the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, “Coke and Coal Chemicals Annual.”
- 1976 through 1979: EIA, *Energy Data Reports*, “Coke and Coal Chemicals Monthly.”
- 1980 forward: EIA, *Quarterly Coal Report* (October-December of the same year). The specific tables are:
  - 1980 and 1981: Table 8.
  - 1982 through 1985: Table A12.
  - 1986 through 1988: Table A11.
  - 1989 through 1991: Table A10.
  - 1992 through 1995: Table 27.
  - 1996 forward: Table 19.

### Crude Oil (including lease condensate)

COCAPZZ — Crude oil operating capacity at refineries by State.

- 1960: U.S. Department of the Interior, Bureau of Mines, *Petroleum Refineries, Including Cracking Plants, in the United States*, Table 3.
- 1961 through 1963: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Refineries in the United States.” The specific tables are:
  - 1961 and 1962: Table 3.
  - 1963: Table 1.
- 1964 through 1976: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Refineries in the United States and Puerto Rico,” Table 1.
- 1977: EIA, *Energy Data Reports*, “Petroleum Refineries in the United States and Puerto Rico,” Table 1.
- 1978 through 1980: EIA, *Energy Data Reports*, “Petroleum Refineries in the United States and U.S. Territories,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*. The specific tables are:
  - 1981 through 1983: Table 1.
  - 1984: Table 30.
  - 1985 through 1988: Table 29.
  - 1989 through 1994: Table 36.
  - 1995: Unpublished data based on Form EIA-810.
  - 1996: Table 36.

COTCPZZ — Crude oil consumed in petroleum industry operations by State.

- 1960 through 1982: Crude oil used directly was included in distillate and residual fuel product supplied when reported to EIA. Zeros are entered for all years.
- 1983 forward: Data are available for Petroleum Administration for Defense (PAD) Districts, not by State. State estimates are calculated by allocating all crude oil consumption to the six States (Alaska, California, Colorado, Louisiana, Texas, and Utah) that reported distillate and residual fuels consumed by pipeline and leases in 1982. (Data on pipeline and lease consumption of fuels are not available after 1982.) Each State’s 1982 ratio of distillate and residual fuels consumed by pipeline and leases to its respective 1982 PAD District total consumption of those fuels is calculated. This ratio is then applied to the 1983 forward PAD District totals of crude oil product supplied. The 1982 ratios are taken from the Form EIA-90, “Crude Oil Stocks Report,” and the crude oil product supplied data are taken from the EIA *Petroleum Supply Annual*. The specific tables are:



- 1983 through 1988: Tables 2 and 4 through 8.
- 1989 forward: Tables 2, 4, 6, 8, 10, and 12.

**Distillate Fuel**

DFBKPZZ — Distillate fuel adjusted sales for vessel bunkering use by State, excluding that sold to the Armed Forces.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 17.
  - 1962 and 1963: Table 16.
  - 1964 and 1965: Table 15.
  - 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFCMPZZ — Distillate fuel adjusted sales to the commercial sector for space heating, water heating, and cooking.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 1. State ratios based on 1979 commercial sector deliveries were applied to each State’s sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 354.)

- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFIBPZZ — Distillate fuel adjusted sales to industrial establishments for space heating and for other industrial use, including farm use.

- 1960 through 1978: EIA estimates based on statistics of industrial sector deliveries of distillate fuel from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 1. State ratios based on 1979 industrial sector deliveries were applied to each State’s sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 354.)
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFMIPZZ — Distillate fuel adjusted sales for military use (including imports for the military) by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:

- 1960 and 1961: Table 18.
- 1962 and 1963: Table 17.
- 1964 and 1965: Table 16.
- 1966 through 1975: Table 12.

- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 12.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFOCPZZ — Distillate fuel adjusted sales for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 14.
  - 1962 and 1963: Table 13.
  - 1964 and 1965: Table 12.
  - 1966 through 1975: Table 9.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.

- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFOFPZZ — Distillate fuel adjusted sales as diesel fuel for off-highway use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 through 1962: Table 19.
  - 1963 and 1964: Table 18.
  - 1965 through 1967: Table 17.
  - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFONPZZ — Distillate fuel adjusted sales as diesel fuel for on-highway use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 through 1962: Table 19.
  - 1963 and 1964: Table 18.
  - 1965 through 1967: Table 17.
  - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

C

DFOTPZZ — Distillate fuel adjusted sales for all other uses not identified in other adjusted sales categories.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 through 1962: Table 19.
  - 1963 and 1964: Table 18.
  - 1965 through 1967: Table 17.
  - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFRRPZZ — Distillate fuel adjusted sales for use by railroads by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 16.
  - 1962 and 1963: Table 15.

— 1964 and 1965: Table 14.

— 1966 through 1975: Table 10.

- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 10.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFRSPZZ — Distillate fuel adjusted sales to the residential sector for space heating, water heating, and cooking.

- 1960 through 1978: EIA estimates based on statistics of residential sector deliveries of distillate fuel from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 1. State ratios based on 1979 residential sector deliveries were applied to each State’s sum of heating plus industrial (including farm use) deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 354.)
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 4.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983 and 1984: July 1985 issue, Table A12.
  - 1985 and 1986: July 1987 issue, Table A16.
  - 1987: June 1988 issue, Table A16.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 16.

DFTCPUS — Distillate fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

DKEUPZZ — Distillate fuel consumed by the electric utilities, including kerosene-type jet fuel.

- EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms. The following assumptions have been made:
  - 1960 through 1969: Only total fuel oil consumed at electric utilities by State is available. State estimates of distillate fuel consumption were created for each year by applying the shares of internal combustion and gas turbine plants (primarily distillate fuel plus small amounts of jet kerosene) by State from 1970 to each year’s total fuel oil consumption at electric utilities for 1960 through 1969.
  - 1970 through 1979: Fuel oil consumed by plant type by State is available. Fuel oil consumed by internal combustion and gas turbine plants combined is assumed to equal distillate and jet kerosene consumption.
  - 1980 forward: Consumption of light and heavy oil at all plant types by State is available. Total light oil consumption at all plant types is assumed to equal distillate and jet kerosene consumption.

### **Electricity Exports and Imports**

ELEXPZZ — Electricity exported from the United States (assumed to be produced by hydroelectric power through 1989) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, “Report on Electric Energy Exchanges with Canada and Mexico.” Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.
- 1982 and 1983: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data.” State estimates are consistent

with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders*.

- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data,” the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders*.
- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, “Annual Report of International Electrical Export/Import Data,” and predecessor forms, the Federal Energy Regulatory Commission Form 1, the Bonneville Power Administration data, and the Canada National Energy Board Annual Report.

ELIMPZZ — Electricity imported into the United States (assumed to be produced by hydroelectric power through 1989) by State.

- 1960 through 1981: Economic Regulatory Administration, *Staff Reports*, “Report on Electric Energy Exchanges with Canada and Mexico.” Source data are arranged by the Regional Reliability Council Areas and then by the electric utility. State data were tabulated by aggregating the data of all electric utilities within each State.
- 1982 and 1983: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data.” State estimates are consistent with national and regional totals published in the ERA, *Electricity Exchanges Across International Borders*.
- 1984 through 1987: EIA State estimates are based on data from Economic Regulatory Administration Form ERA-781R, “Annual Report of Electrical Export/Import Data,” the Federal Energy Regulatory Commission Form 1, and the Bonneville Power Administration Annual Report. State estimates are consistent with national and regional totals published in the ERA, *Electricity Transactions Across International Borders*.
- 1988 forward: EIA State estimates are based on data from DOE, Fossil Fuels, Fuels Programs, Office of Coal and Electricity, Form FE-781R, “Annual Report of International Electrical Export/Import Data,” and predecessor forms, the Federal Energy Regulatory Commission Form 1, the Bonneville Power Administration data, and the Canada National Energy Board Annual Report.

## Electricity Sales

ESCMPZZ — A portion of the electricity sold to the commercial sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 392.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 125.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours in EIA, *Electric Power Annual 1988*, Table 19.
- 1988 forward: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours.
  - 1988 through 1990: EIA, *Electric Power Annual*, Table 27.
  - 1991 forward: EIA, *Electric Sales and Revenue*, Table 15.

ESICPZZ — Electricity consumed by the industrial sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 392.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 126.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours in EIA, *Electric Power Annual 1988*, Table 19.

- 1988 forward: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours in EIA, *Electric Power Annual (Volume I for 1994)*. The specific tables are:
  - 1988 through 1990: EIA, *Electric Power Annual*, Table 27.
  - 1991 forward: EIA, *Electric Sales and Revenue*, Table 16.

ESOTPZZ — Electricity sold to the “Other” sector (i.e., public street and highway lighting, sales to other public authorities, railroads and railways, and interdepartmental sales) by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 392.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 127.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.
- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours in EIA, *Electric Power Annual 1988*, Table 19.
- 1988 forward: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours.
  - 1988 through 1990: EIA, *Electric Power Annual*, Table 27.
  - 1991 forward: EIA, *Electric Sales and Revenue*, Table 6.

ESRCPZZ — Electricity consumed by the residential sector by State.

Note: Data for Maryland and the District of Columbia were combined for 1960 through 1983. The method for disaggregating the data is explained in Appendix A, Note 3, on page 392.

- 1960 through 1975: Federal Power Commission, *Electric Power Statistics*, “Sales of Electric Energy to Ultimate Consumers.”
- 1976 through 1980: EIA, *Electric Power Annual* (November 1982), Table 124.
- 1981 through 1983: EIA, Form EIA-826, “Electric Utility Company Monthly Statement,” and predecessor forms. Published data rounded to gigawatthours in EIA, *Electric Power Annual 1983*, Table 51.

- 1984 through 1986: EIA, Form EIA-861, “Annual Electric Utility Report.” Unpublished data.
- 1987: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours in EIA, *Electric Power Annual 1988*, Table 19.
- 1988 forward: EIA, Form EIA-861, “Annual Electric Utility Report.” Published data rounded to gigawatthours.
  - 1988 through 1990: *Electric Power Annual*, Table 27.
  - 1991 forward: EIA, *Electric Sales and Revenue*, Table 14.

ESTRPZZ — Electricity consumed by transit systems by State.

Note: The transit system data include electricity used to operate commuter rail, rapid rail, streetcars or light rail, cable cars, trolley-buses, motorbuses, automated guideways, inclined plane railways, and aerial tramways. These data do not include electricity used by Amtrak.

- 1960 through 1978: EIA estimates are based on data from:
  - The American Public Transit Association (formerly the American Transit Association) annual operating reports.
  - Pushkarev, Boris S. and others, *Urban Rail in America*. (Bloomington, IN: Indiana University Press, 1982.)
  - U.S. Department of Transportation, *A Directory of Regularly Scheduled, Fixed Route, Local Public Transportation Service in Urbanized Areas Over 50,000 Population*, 1980 and 1981.
- 1979 through 1989: U.S. Department of Transportation, Urban Mass Transportation Administration, *National Urban Mass Transportation Statistics, Section 15 Annual Report*, table titled “Energy Consumption: Details by Transit System.”
  - 1979 and 1980: Table 2.13.1.
  - 1981 and 1982: Table 3.13.1.
  - 1983 through 1989: Table 3.12.
- 1990 forward: U.S. Department of Transportation, Federal Transit Administration, *Data Tables for the Section 15 Report Year*.
  - 1990: Table 2.12.
  - 1991: Table 13.
  - 1992 forward: Table 15.
- Data for 1996 also available via internet at <http://www.ntdprogram.com/NTD/NTDDData.nsf/Data+Tables>

Notes: These data are available on a fiscal year basis (July 1 through June 30) for 1979 through 1982 and for calendar years 1983 forward. Some data

for 1979 through 1983 were adjusted by EIA on the basis of an analysis of historical trends. Electricity consumption for the District of Columbia for 1976 forward is partially apportioned to Maryland and Virginia on the basis of electricity consumption data from the Washington Metropolitan Area Transit Authority.

ESTRSUS — The share of electricity sold to the “Other” sector (ESOTPZZ) that is used for transportation (i.e., by railroads and railways) by State. (See further explanation of this share in Appendix A, Note 2, on page 392.) Based on kilowatthour sales from:

- 1960 through 1971: Federal Power Commission, *Statistics of Privately Owned Electric Utilities in the United States, 1971*, Table 15.
- 1972 and 1973: EIA, *Financial Statistics of Selected Electric Utilities 1976*, Table 13.
- 1974 through 1983: EIA, *Financial Statistics of Selected Electric Utilities 1983*, Table 8.
- 1984 through 1987: EIA, *Financial Statistics of Selected Electric Utilities 1987*, Table 17.
- 1988 through 1992: EIA, *Financial Statistics of Major U.S. Investor-Owned Electric Utilities 1992*, Table 15.
- 1993 forward: EIA, *Financial Statistics of Major U.S. Investor-Owned Electric Utilities 1996*, Table 15.

### **Petrochemical Feedstocks**

FNTCPUS — Petrochemical feedstocks, naphtha, less than 401° F, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

FOTCPUS — Petrochemical feedstocks, other oils, equal to or greater than 401° F, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

FSTCPUS — Petrochemical feedstocks, still gas, total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, Table 2, included in "Still Gas."

### **Fossil Fuels**

FFEOKUS — Fossil fuel steam-electric power plant conversion factor.

- 1960 through 1991: Estimated by EIA as the weighted annual average heat rate for fossil-fueled steam-electric plants in the United States as published in the EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9.
- 1992 forward: Unpublished factors calculated on the basis of data from Form EIA-767.

### **Geothermal**

GEEOKUS — Factor for converting electricity produced from geothermal energy from physical units to Btu.

- 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Federal Power Commission Form 12.
- 1982 forward: Estimated annually by the EIA on the basis of an informal survey of relevant plants.

GEEOPZZ — Electricity produced from geothermal energy at electric utilities by State.

- EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms.

GEICBZZ — Electricity produced from geothermal energy in the industrial sector by State.

- 1960 through 1989: No data available. Values assumed to be zero.
- 1990 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report."

GEIMPZZ — Electricity produced from geothermal energy and imported into the United States by State.

- 1960 through 1989: No data available. Values assumed to be zero.
- 1990 forward: EIA estimates based on data from U.S. Department of Energy, Fossil Energy, Form FE-781R, "Annual Report of International Electricity Export/Import Data."

### **Hydroelectric Power**

HPEOPZZ — Electricity produced from pumped storage hydropower at electric utilities by State.

- 1960 through 1989: Included in conventional hydroelectric power.
- 1990 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

HVEOPZZ — Electricity produced from conventional hydropower at electric utilities (includes pumped storage hydroelectric power through 1989) by State.

- 1960 through 1977: Federal Power Commission, News Release, "Power Production, Fuel Consumption, and Installed Capacity Data."
- 1978 through 1980: EIA, *Energy Data Reports*, "Power Production, Fuel Consumption and Installed Capacity Data."
- 1981 forward: EIA, Form EIA-759, "Monthly Power Plant Report," and predecessor forms. Published data rounded to gigawatthours in the following reports:
  - 1981 through 1985: EIA, *Electric Power Annual 1985*, Table 6.
  - 1986 and 1987: EIA, *Electric Power Annual 1987*, Table 18.
  - 1988 and 1989: EIA, *Electric Power Annual 1989*, Table 14.
- 1990 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

HYEXPZZ — Electricity produced from hydroelectric power and exported from the United States by State.

- 1960 through 1989: Assumed to be equal to total electricity exports (ELEXPZZ).
- 1990 forward: EIA estimates based on data from Natural Resources Canada, *Electric Power in Canada 1996*, and National Energy Board of Canada, *Electricity Exports and Imports* (Ottawa, Canada, 1996).

HYICBZZ — Electricity produced from hydropower at industrial facilities by State.

- 1960 through 1989: Calculated by EIA by multiplying the average factor for fossil fuels burned at steam-electric power plants (FFEOKUS) times the data in SEDS series HYICPZZ.
- 1990 forward: EIA estimates from data collected on Form EIA-867, “Annual Nonutility Power Producers Report.”

HYICPZZ — Electricity produced from hydropower at industrial facilities by State (available for 1960 through 1989 only).

- 1960 through 1978: Federal Power Commission, Form 4, “Monthly Power Plant Report.”
- 1979 and 1980: EIA estimates based on previous years’ data.
- 1981 through 1989: No data available. The 1980 data are repeated for each year.

HYIMPZZ — Electricity produced from hydroelectric power and imported into the United States by State.

- 1960 through 1989: Assumed to be equal to total electricity imports (ELIMPZZ).
- 1990 forward: EIA estimates based on data from Natural Resources Canada, *Electric Power in Canada 1996*, and National Energy Board of Canada, *Electricity Exports and Imports* (Ottawa, Canada, 1996).

### Jet Fuel

JKEUPZZ — Kerosene-type jet fuel consumed by electric utilities by State.

- 1960 through 1971: No data available. Values are assumed to be zero.
- 1972 through 1974: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Fuel Oil and Kerosene,”

Table 15 footnote for U.S. value. These data were apportioned to the States by using the 1975 State proportions of the 1975 U.S. total from the source below.

- 1975 through 1979: Office of Electric Power Regulation, Federal Energy Regulatory Commission, *Annual Summary of Cost and Quality of Electric Utility Plant Fuels*, “Fuel Oil Deliveries for Combustion Turbine and Internal Combustion Units.”
- 1980 through 1982: EIA, *Cost and Quality of Fuel for Electric Utility Plants*, Table 30.
- 1983 forward: Series discontinued; no data available. Values are assumed to be zero.

JKTTPZZ — Kerosene-type jet fuel total sold by State.

- 1960 through 1983: Ethyl Corporation, Petroleum Chemicals Division, *Yearly Report of Gasoline Sales by States*, “Aviation Turbine Fuel Sales.”
- 1984 and 1985: EIA, *Petroleum Marketing Annual 1985*, Volume 2. — 1984: Table A6. — 1985: Table 34.
- 1986 through 1988: EIA, *Petroleum Marketing Annual*, Table 46.
- 1989 through 1993: EIA, *Petroleum Marketing Annual*, Table 48.
- 1994 forward: Unpublished data from Form EIA-782C, “Monthly Report of Prime Supplier Sales of Petroleum Products Sold for Local Consumption.” Data published in thousand gallons per day in EIA, *Petroleum Marketing Annual*, Table 49 and on the EIA, *Energy Info-Disc* in the Oil and Gas Information System database. Withheld data were estimated by using averages of published months to fill in withheld months; subtracting published States from published PAD District totals; and assigning values based on previous years’ quantities.

JKTCPUS — Kerosene-type jet fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

JNMIPZZ — Naphtha-type jet fuel issued to the military in the United States.



- 1960 through 1974: No data are available. The 1977 data are used for each year.
- 1975 and 1976: No consistent data series are available. The 1977 data are used for both years.
- 1977 through 1987: The U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Energy Information System, military retail issues based on fiscal year data. The District of Columbia issues are assumed to be zero; therefore, values reported for the District of Columbia are added to Maryland.
- 1988: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, average of 1987 data (see source above) and 1989 data (see source below).
- 1989 and 1990: U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center, Defense Fuel Automated Management System, military wholesale issues based on fiscal year data.
- 1991 through 1995 : U.S. Department of Defense, Defense Logistics Agency, Defense Fuel Supply Center. State data for the calendar year from two databases are summed: Defense Fuel Automated Management System (military wholesale issues) and Into-Plane Database (military purchases from commercial airports). Into-plane values reported for the District of Columbia are added to Virginia.
- 1996: The data series for 1996 is temporarily unavailable. Simple averages of 1995 and 1997 State data are used to estimate 1996 values.

JNTCPUS — Naphtha-type jet fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Kerosene**

KSCMPZZ — Kerosene sold to the commercial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of kerosene from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene, in 1979,” Table 3. State ratios based on 1979 commercial sector deliveries were applied to each

State’s heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 359.)

- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A14.
  - 1984: July 1986 issue, Table A4.
  - 1985 and 1986: July 1987 issue, Table A6.
  - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 6.

KSIHPZZ — Kerosene sold to the industrial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of industrial sector deliveries of kerosene from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 3. State ratios based on 1979 industrial sector deliveries were applied to each State’s heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 359.)
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A14.
  - 1984: July 1986 issue, Table A4.
  - 1985 and 1986: July 1987 issue, Table A6.
  - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 6.

KSOTPZZ — Kerosene sold for all other uses, including farm use.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 10.
  - 1962 and 1963: Table 9.
  - 1964 and 1965: Table 8.
  - 1966 through 1975: Table 5.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 5.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene.” Calculated as the sum of kerosene delivered for farm and other use from Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A14.
  - 1984: July 1986 issue, Table A4.
  - 1985 and 1986: July 1987 issue, Table A6.
  - 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 6.

KSRSPZZ — Kerosene sold to the residential sector for heating.

- 1960 through 1978: EIA, *Energy Data Report* “Deliveries of Fuel Oil and Kerosene in 1979,” Table 3. State ratios based on 1979 residential sector deliveries were applied to each State’s heating deliveries category from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 3, on page 359.)
- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 3.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 6.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A14.

- 1984: July 1986 issue, Table A4.
- 1985 and 1986: July 1987 issue, Table A6.
- 1987: June 1988 issue, Table A6.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 6.

KSTCPUS — Kerosene total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Liquefied Petroleum Gases (LPG)**

LGCBMZZ — LPG sold for internal combustion engine use by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Appendix A, Note 1, on page 361.

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Liquefied Petroleum Gases and Ethane.” The specific tables are:
  - 1960 and 1961: Table 5 (data called “Shipments”).
  - 1962 through 1966: Table 2 (data called “Consumption”).
  - 1967: Table 2 (data called “Shipments”).
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Appendix A, Note 7, on page 363.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.

- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, Table 3. Final data for each year is published in the report for the next year.

LGHCMZZ — LPG sold for residential and commercial use by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Appendix A, Note 1, on page 361.

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Liquefied Petroleum Gases and Ethane.” The specific tables are:
  - 1960 and 1961: Table 5 (data called “Shipments”).
  - 1962 through 1966: Table 2 (data called “Consumption”).
  - 1967: Table 2 (data called “Shipments”).
- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Appendix A, Note 7, on page 363.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, Table 3. Final data for each year is published in the report for the next year.

LGTCCKUS — Factor for converting LPG from physical units to Btu.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Crude Petroleum and Petroleum

Products, 1956,” Table 4 footnote, constant value of 4.011 million Btu per barrel.

- 1967 forward: Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product’s conversion factor (given with source references in Appendix D) and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Quantities consumed are from:
  - 1967 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
  - 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

LGTCPCUS — LPG total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

LGTRSUS — The transportation sector share of LPG internal combustion engine sales.

- EIA estimates based on the LPG portion of the special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration (variable MGSFPUS in SEDS), as a percentage of the LPG sold for internal combustion engine use published by the American Petroleum Institute (variable LGCBMUS in SEDS). For an explanation of the estimation method, see Appendix A, Note 2, on page 361.

LGTTTPZZ — LPG total sales for all uses by State.

Note: Data for Maryland and the District of Columbia were combined for all years. The method for disaggregating the data is explained in Appendix A, Note 1, on page 361.

- 1960 through 1967: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Liquefied Petroleum Gases and Ethane.” The specific tables are:
  - 1960 and 1961: Table 5 (data called “Shipments”).
  - 1962 through 1966: Table 2 (data called “Consumption”).

— 1967: Table 2 (data called “Shipments”).

- 1968 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1976 through 1980: EIA, *Energy Data Reports*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, “Sales of Liquefied Petroleum Gases and Ethane,” Table 3.
- 1983: EIA estimates.

Note: For 1984 forward, some data are adjusted and estimated by EIA. (See explanation in Appendix A, Note 7, on page 363.)

- 1984 through 1988: American Petroleum Institute, *1990 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 24 through 33.
- 1989 through 1991: American Petroleum Institute, *1992 Sales of Natural Gas Liquids and Liquefied Refinery Gases*, pages 4, 5, 18, and 19.
- 1992 forward: American Petroleum Institute, *Sales of Natural Gas Liquids and Liquefied Refinery Gases*, Table 3. Final data for each year are published in the report for the next year.

### Lubricants

LUINPZZ — Lubricants sold to the industrial sector by State. Calculated from:

- U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, “Sales of Lubricating and Industrial Oils and Greases,” for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Appendix A, Notes 1 and 2, on page 365.)

LUTCPUS — Lubricants total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

LUTRPZZ — Lubricants sold to the transportation sector by State. Calculated from:

- U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, “Sales of Lubricating and Industrial Oils and Greases,” for 1960, 1962, 1965, 1967, 1969, 1971, 1973, 1975, and 1977. (See explanation in Appendix A, Notes 1 and 2, on page 365.)

### Motor Gasoline

MGAGPZZ — Motor gasoline sold for agricultural use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGCUPZZ — Motor gasoline sold for construction use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGIYPZZ — Motor gasoline sold for industrial and commercial use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.
- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMFPZZ — Motor fuel sold for highway use by State.

- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics Summary to 1995*, Table MF-221 gives revised U.S. totals. State revisions can be calculated by adding data from Tables MF-225 and MF-226.
- 1996: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-21.

MGMRPZZ — Motor gasoline sold for marine use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24.

- 1965 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24 in 1965 and Table MF-24 in 1966 forward.

MGMSPPZZ — Motor gasoline sold for miscellaneous uses by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-24. Sum of the “Miscellaneous” column plus the “Unclassified” column minus the “Total Classified” column.
- 1965: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-24. Sum of the “Miscellaneous” column plus the “Unclassified” column minus the “Total Classified” column.
- 1966 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-24. The specific columns are:
  - 1966 through 1981: Sum of the “Miscellaneous” and “Unclassified” columns.
  - 1982 forward: The “Miscellaneous” column.

MGPNNPZZ — Motor fuel sold for public nonhighway use by State.

- 1960 through 1964: U.S. Department of Commerce, Bureau of Public Roads, *Highway Statistics*, Table G-21.
- 1985, 1987, and 1992: Unpublished revised State data comparable to the U.S. values published in *Highway Statistics Summary to 1995*, Table 221.
- 1965 through 1984, 1986, 1988 through 1991, and 1993 forward: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table G-21 in 1965 and Table MF-21 in 1966 forward.

MGSFPZZ — Motor gasoline special fuels sales by State (primarily diesel fuel with small amounts of liquefied petroleum gases).

- 1960 through 1995: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics, Summary to 1995*, Table MF-225.
- 1996: U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Table MF-21.

MGTCPUS — Motor gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.

For 1960 through 1963, motor gasoline was combined with aviation gasoline and published as “gasoline” in the source table. Table 19 in the “Petroleum Statement, Annual” titled “Salient Statistics of Aviation Gasoline” provided separate data for aviation gasoline for those years. The aviation gasoline data from the second table were subtracted from the gasoline data in the first table to derive the motor gasoline consumption series used in SEDS.

- 1976 through 1980: EIA, *Energy Data Reports*. “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Motor Gasoline Blending Components**

MBTCPUS — Motor gasoline blending components total consumed in the United States.

- 1960 through 1980: No data available. Values are assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Miscellaneous Petroleum Products**

MSTCPUS — Miscellaneous petroleum products consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*. “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Natural Gasoline**

NATCPUS — Natural gasoline total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*. “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, Table 2, included in “Pentanes Plus.”

### Natural Gas

NGCCPZZ — Natural gas delivered to the commercial sector and to other consumers (municipalities and public authorities for institutional heating and street lighting), including natural gas consumed as vehicle fuel through 1989, by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Natural Gas Production and Consumption,” table titled “Number of consumers and volume of natural gas consumed by principal users in the United States,” column “Commercial.”
- 1967 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select “Natural Gas” then select “Historical Natural Gas Annual - 1930 Through 1997”).

NGEUKZZ — Factor for converting natural gas consumed by the electric utilities from physical units to Btu.

- 1960 through 1971: Assumed by the EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users (NGTCKZZ).
- 1972 forward: Calculated annually by EIA by dividing the total heat content of natural gas received at electric utilities by the total quantity received at electric utilities. The heat contents and quantities received are from the Federal Energy Regulatory Commission (FERC) Form 423, “Monthly Report of Cost and Quality of Fuels for Electric Plants,” and predecessor forms. Data in Btu per cubic foot for 1996 are published in EIA, *Cost and Quality of Fuels for Electric Utility Plants 1996*, Table 14. Data are also available via internet at <http://www.eia.doe.gov/cneaf/electricity/cq/cq96.pdf>

Note: For States that reported consumption on EIA-759 but were not large enough to report on FERC Form 423, factors were estimated by using previous years’ factors or the factor for total natural gas consumption in the State.

NGEUPZZ — Natural gas consumed by the electric utilities by State.

- 1960 through 1975: Federal Power Commission, News Release, “Power Production, Fuel Consumption, and Installed Capacity Data,” table titled “Consumption of Fuel by Electric Utilities for Production of Electric Energy by State, Kind of Fuel, and Type of Prime Mover,” sum of columns, “steam and gas turbine” and “internal combustion” under column heading “gas.”
- 1976 through 1981: EIA, *Electric Power Annual* (1981), Table 67.
- 1982 forward: Unrounded data as published in rounded form in the following reports:
  - 1982 through 1986: EIA, *Electric Power Annual 1986*, Table 14.
  - 1987 and 1988: EIA, *Electric Power Annual 1988*, Table 13.
  - 1989 and 1990: EIA, *Electric Power Annual 1990*, Table 19.
  - 1991: EIA, *Electric Power Annual 1992*, Table 20.
  - 1992 and 1993: EIA, *Electric Power Annual 1993*, Table 20.
  - 1994: EIA, *Electric Power Annual 1994 Volume I*, Table 18.
  - 1995 forward: EIA, *Electric Power Annual 1996 Volume I*, Table 15.

NGINPZZ — A portion of the natural gas delivered to the industrial sector by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Natural Gas Production and Consumption,” table titled “Number of consumers and volume of natural gas consumed by principal users in the United States.” Sum of data in columns “Carbon black,” “Refinery fuel,” and “Other industrial fuel” (which includes electric utility fuel) minus data in column “Fuel used at electric utility plants.”
- 1967 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select “Natural Gas” then select “Historical Natural Gas Annual - 1930 Through 1997”).

NGLEPZZ — Natural gas consumed as lease fuel by State (includes natural gas consumed as plant fuel in 1960 through 1992).

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook*, Natural Gas chapter. State data are not available from 1960 through 1966, although U.S. totals are available. State estimates were calculated by apportioning the U.S. totals to the States on the basis of each State's share of the U.S. total in 1967.
- 1967 through 1992: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 15.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

NGPLPZZ — Natural gas consumed as plant fuel by State.

- 1960 through 1992: Included with natural gas consumed as lease fuel (see NGLEPZZ).
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 15.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

NGPZPZZ — Natural gas consumed as pipeline fuel by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Used as pipeline fuel."
- 1967 through 1992: EIA, *Natural Gas Annual 1994 Volume II*, Table 14.
- 1993 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 15.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

NGRCPZZ — Natural gas delivered to the residential sector, used as consumption, by State.

- 1960 through 1966: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," table titled "Number of consumers and volume of natural gas consumed by principal users in the United States," column "Residential."
- 1967 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16.

Data also available via internet:

- 1967 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

NGVHPZZ — Natural gas delivered for use as vehicle fuel by State.

- 1960 through 1989: Included in natural gas consumed by the commercial sector (See NGCCPZZ).
- 1990 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16.

Data also available via internet:

- 1990 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

NGTCKZZ — Factor for converting natural gas consumed by all users from physical units to Btu.

- 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.
- 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual.
- 1980 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16.

Data also available via internet:

- 1980 forward:  
<http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997").

**Nuclear**

NUEOKUS — Factor for converting electricity produced from nuclear power from physical units to Btu.

- 1960 through 1991: Calculated annually by EIA by dividing the total heat content consumed in reactors at nuclear plants by the total (net) electricity generated by nuclear plants. The heat content and electricity generation are reported on FERC Form 1, “Annual Report of Major Electric Utilities, Licensees, and Others;” Form EIA-412, “Annual Report of Public Electric Utilities;” and predecessor forms. The factors for 1982 through 1991 are published in the following:
  - 1982: EIA, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215.
  - 1983 through 1991: EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 13.
- 1992 forward: Unpublished factors calculated annually by EIA by dividing the total heat content of the steam leaving nuclear generating units to generate electricity by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported in the Nuclear Regulatory Commission, *Licensed Operating Reactors—Status Summary Report*.

NUEOPZZ — Electricity produced from nuclear power at electric utilities by State.

- 1960 through 1977: Federal Power Commission, News Release, “Power Production, Fuel Consumption, and Installed Capacity Data,” table titled “Net Generation of Electric Utilities by State and Source.”
- 1978 through 1980: EIA, *Energy Data Reports*, “Power Production, Fuel Consumption and Installed Capacity Data;” 1978: table titled “Net Generation of Electric Utilities by State and Source;” 1979 and 1980: Table 36.
- 1981 forward: EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms. Published data rounded to gigawatthours in the following reports:
  - 1981 through 1985: EIA, *Electric Power Annual 1985*, Table 6.
  - 1986 and 1987: EIA, *Electric Power Annual 1987*, Table 19.
  - 1988 and 1989: EIA, *Electric Power Annual 1989*, Table 14.
  - 1990 through 1994: EIA, *Electric Power Annual*, Table 13.
  - 1995 forward: EIA, *Electric Power Annual, Vol. I*, Table 10.

**Pentanes Plus**

PPTCPUS — Pentanes plus total consumed in the United States.

- 1960 through 1983: Data were reported separately as natural gasoline, isopentane, and plant condensate.
- 1984 forward: EIA, *Petroleum Supply Annual*, Table 2.

**Petroleum Coke**

PCEUMZZ — Petroleum coke consumed by the electric utilities by State.

- 1960 through 1969: No data available. Values are assumed to be zero.
- 1970 forward: EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms.

PCRFPUS — Petroleum coke consumed at refineries (both catalyst and marketable) in the United States.

- 1960: No data available. The 1961 value is used for 1960.
- 1961 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual.” The specific tables are:
  - 1961 and 1962: Table 18.
  - 1962 through 1966: Table 19.
  - 1967: Table 18.
  - 1968: Table 19.
  - 1969 through 1972: Table 18.
  - 1973 and 1974: Table 21.
  - 1975: Table 22.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual.” The specific tables are:
  - 1976: Table 22.
  - 1977: Table 21.
  - 1978 through 1980: Table 20.
- 1981 forward: EIA, *Petroleum Supply Annual*. The specific tables are:
  - 1981 and 1982: Table 17.
  - 1983: Table 15.
  - 1984: Table 44.
  - 1985: Table 43.
  - 1986 through 1988: Table 38.



- 1989 through 1992: Table 45.
- 1993 forward: Table 47. (1995 data published in the *Petroleum Supply Annual 1996*.)

PCTCPUS — Petroleum coke total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Report*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Plant Condensate**

PLTCPUS — Plant condensate total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*. “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, Table 2, included in “Pentanes Plus.”

### **Population**

TPOPPUS — Resident population of the United States. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, “Population Estimates and Projections,” Series P-25. Specific publication numbers and table numbers:
  - 1960 through 1969: Number 990, Table 4.
  - 1970 through 1979: Number 957, Table 4.
  - 1980 through 1989: Number 1058, Table 3.
  - 1990 forward: Press Release Number CB96-224, December 30, 1996.

Data also available via internet:

- 1990 forward:  
<http://www.census.gov/population/estimates/state/ST9096T1.txt>

TPOPPZZ — Resident population by State. April 1 census for 1960, 1970, 1980, and 1990, and July 1 estimates for all other years.

- U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*, “Population Estimates and Projections,” Series P-25. Specific publication numbers and table numbers:
  - 1960 through 1969: Number 460, Table 1.
  - 1970 through 1979: Number 957, Table 4.
  - 1980 through 1989: Number 1058, Table 3.
  - 1990 forward: Press Release Number CB96-224, December 30, 1996.

Data also available via internet:

- 1990 forward:  
<http://www.census.gov/population/estimates/state/ST9096T1.txt>

### **Residual Fuel**

RFBKPZZ — Residual fuel sold for vessel bunkering use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 17.
  - 1962 and 1963: Table 16.
  - 1964 and 1965: Table 15.
  - 1966 through 1975: Table 11.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 11.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFCMPZZ — Residual fuel sold to the commercial sector for heating.

- 1960 through 1978: EIA estimates based on statistics of commercial sector deliveries of residual fuel from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 2. State ratios based on 1979 commercial sector deliveries were applied to each State’s sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 2, on page 370.)
- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Notes: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS. Data for Hawaii in 1986 through 1990 reflect unpublished revisions from an EIA internal memorandum from the Office of Oil and Gas to the Office of Energy Markets and End Use, “Revising Historical Petroleum Data,” February 26, 1993.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFEUPZZ — Residual fuel consumed at electric utilities.

- EIA, Form EIA-759, “Monthly Power Plant Report,” and predecessor forms. The following assumptions have been made:
  - 1960 through 1969: Only total fuel oil consumed at electric utilities by State is available. State estimates of residual fuel consumption were created for each year by applying the shares of steam plants (primarily residual fuel) by State from 1970 to each year’s total fuel oil consumption at electric utilities for 1960 through 1969.
  - 1970 through 1979: Fuel oil consumed by plant type by State is available. Fuel oil consumed by steam plants is assumed to equal residual fuel consumption.
  - 1980 forward: Consumption of light and heavy oil at all plant types by State is available. Total heavy oil consumption at all plant types is assumed to equal residual fuel consumption.

RFIBPZZ — Residual fuel sold to industrial establishments for heating and for other industrial use.

- 1960 through 1978: EIA, estimates based on statistics of industrial sector deliveries of residual fuel from the EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene in 1979,” Table 2. State ratios based on 1979 industrial sector deliveries were applied to each State’s sum of heating plus industrial deliveries categories from the fuel oil deliveries reports for each year 1960 through 1978. (See explanation in Appendix A, Note 2, on page 370.)
- 1979 and 1980: EIA, *Energy Data Report*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFMIPZZ — Residual fuel sold to the Armed Forces regardless of use by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 18.
  - 1962 and 1963: Table 17.
  - 1964 and 1965: Table 16.
  - 1966 through 1975: Table 12.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 12.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.

- 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFMSPZZ — Residual fuel sold for miscellaneous uses by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 through 1962: Table 19.
  - 1963 and 1964: Table 18.
  - 1965 through 1967: Table 17.
  - 1968 through 1975: Table 14.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 14.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2, column “Other.”
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5, column “All Other.”

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS. The data series is titled “All Other.”

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFOCPZZ — Residual fuel sold for use by oil companies by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 14.
  - 1962 and 1963: Table 13.
  - 1964 and 1965: Table 12.
  - 1966 through 1975: Table 9.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 9.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5.

RFRRPZZ — Residual fuel sold for use by railroads by State.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Shipments of Fuel Oil and Kerosene.” The specific tables are:
  - 1960 and 1961: Table 16.
  - 1962 and 1963: Table 15.
  - 1964 and 1965: Table 14.
  - 1966 through 1975: Table 10.
- 1976 through 1978: EIA, *Energy Data Reports*, “Sales of Fuel Oil and Kerosene,” Table 10.
- 1979 and 1980: EIA, *Energy Data Reports*, “Deliveries of Fuel Oil and Kerosene,” Table 2.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 5.

Note: Data for 1983 forward were published in thousand gallons. They were converted to thousand barrels by dividing by 42 before being entered into SEDS.

- 1983 through 1987: EIA, *Petroleum Marketing Monthly*. The specific tables are:
  - 1983: July 1985 issue, Table A13.
  - 1984 and 1985: July 1986 issue, Table A3.
  - 1986 and 1987: June 1988 issue, Table A5.
- 1988 and 1989: EIA, *Fuel Oil and Kerosene Sales 1989*, Table 5.
- 1990 forward: EIA, *Fuel Oil and Kerosene Sales*, Table 5, included in the “All Other” data (RFMSPZZ in SEDS).

RFTCPUS — Residual fuel total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.

- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### Road Oil

RDINPZZ — Road oil sold to the industrial sector by State.

- 1960 through 1977: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Sales of Asphalt.” The specific tables are:
  - 1960 through 1962: Table 6.
  - 1963 through 1977: Table 5.
- 1978 through 1980: EIA, *Energy Data Reports*, “Sales of Asphalt,” Table 2.
- 1981 and 1982: EIA estimates. (See explanation in Appendix A, under “Asphalt and Road Oil,” on page 350.)
- 1983 forward: Road oil is included in asphalt data (see ASINPZZ).

RDTCPUS — Road oil total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 2.
- 1983 forward: EIA, *Petroleum Supply Annual*, Table 2, included in “Asphalt and Road Oil.”

### Solar Thermal and Photovoltaic Energy

SOEOPZZ — Electricity produced from solar thermal energy sources at electric utilities by State.

- 1960 through 1983: No data available. Values are assumed to be zero.
- 1984 forward: EIA, Form EIA-759, “Monthly Power Plant Report.”

SOHCBZZ — Electricity produced from solar thermal energy sources in the residential and commercial sectors combined by State.

- 1960 through 1989: Values are assumed to be zero for consistency with other EIA reports.
- 1990 forward: EIA estimates are developed by using the same method as used for the U.S. data published in the EIA, *Renewable Energy Annual 1995*, Table 11. Shipments of solar thermal collectors in the United States, in thousand square feet, for 1974 forward that are collected on the EIA Form CE-63A, “Annual Solar Thermal Collector Manufacturers Survey,” are accumulated each year on the basis of the assumption that the replacement/retirement period for solar thermal collectors is 20 years. The following factors affected the State estimates:
  - Data for 1974 through 1985 are available for the U.S. total only. U.S. values are allocated to the States by using an allocating series that is the simple average of each State’s 1986 and 1987 data.
  - The U.S. data are adjusted to remove Puerto Rico and the Virgin Islands. California data for 1986 forward are reduced by the number of high-temperature solar thermal collectors (used at an electric utility in California) shown in the EIA, *Renewable Energy Annual 1995*, Table 13.
- State data for 1986 through 1992 used in the accumulated data series are published in the EIA, *Solar Collector Manufacturing Activity* for each year. The table numbers are:
  - 1986 through 1988: Table 5.
  - 1989: Table 4.
  - 1990 through 1992: Table 13.
- 1993 and 1994: EIA, *Renewable Energy Annual 1995*, Table H3.
- 1995: EIA, *Renewable Energy Annual 1996*, Table F10.
- 1996: EIA, *Renewable Energy Annual 1997*, Table 17.

SOICBZZ — Electricity produced from solar thermal energy sources in the industrial sector by State.

- 1960 through 1989: No data available. Values are assumed to be zero.
- 1990 forward: EIA estimates based on data collected on Form EIA-867, “Annual Nonutility Power Producers Report.”

### Still Gas

SGTCPUS — Still gas total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 and 1982: EIA, *Petroleum Supply Annual*, Table 14.
- 1983 through 1985: EIA, *Petroleum Supply Annual*, Table 12.
- 1986 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Special Naphthas**

SNTCPUS — Special naphthas total consumed in the United States.

- 1960 through 1963: Data included in motor gasoline.
- 1964 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, “Petroleum Statement, Annual,” Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Unfinished Oils**

UOTCPUS — Unfinished oils total consumed in the United States.

- 1960 through 1980: No data available. Values assumed to be zero.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

### **Unfractionated Stream**

USTCPUS — Unfractionated stream total consumed in the United States.

- 1960 through 1978: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1, included in “Plant Condensate.”
- 1979 and 1980: EIA, *Energy Data Reports*, “Petroleum Statement, Annual,” Table 1.
- 1981 through 1983: EIA, *Petroleum Supply Annual*, Table 2.
- 1984 forward: EIA, *Petroleum Supply Annual*, Table 2, individual components are reported separately.

### **Value Added by Manufacture**

CGVAVZZ — Value added by the manufacture of sanitary food containers by State. Beginning with 1992 data, this series became value added by the manufacture of corrugated and solid fiber boards by State.

- 1960 through 1965: U.S. Department of Commerce, *1963 Census of Manufactures*, Volume II, Part 1, SIC 2654. The 1963 State data are used for the years 1960 through 1965.
- 1966 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2654. The 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2654. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1990: U.S. Department of Commerce, *1982 Census of Manufactures* (Final Report), Industry Series, SIC 2654. The 1982 State data are used for 1981 through 1990.
- 1991 forward: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2653. The 1992 State data are used for 1991 forward.

OCVAVZZ — Value added by the manufacture of industrial organic chemicals by State.

- 1960 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2818. The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2869. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1980 through 1985: U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1982 State data are used for 1981 through 1985.
- 1986 forward: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2869. The 1987 State data are used for 1986 through 1990, and the 1992 State data are used for 1991 forward.

PIVAVZZ — Value added by the manufacture of paints and allied products by State.

- 1960 through 1970: U.S. Department of Commerce, *1967 Census of Manufactures*, Volume II, Part 2, SIC 2851. The 1963 State data are used for the years 1960 through 1965, and the 1967 State data are used for 1966 through 1970.
- 1971 through 1980: U.S. Department of Commerce, *1977 Census of Manufactures*, Industry Series, SIC 2851. The 1972 State data are used for 1971 through 1975, and the 1977 State data are used for 1976 through 1980.
- 1981 through 1985: U.S. Department of Commerce, *1987 Census of Manufactures* (Final Report), Industry Series, SIC 2851. The 1982 State data are used for the years 1981 through 1985.
- 1986 forward: U.S. Department of Commerce, *1992 Census of Manufactures* (Final Report), Industry Series, SIC 2851. The 1987 State data are used for the years 1986 through 1990, and the 1992 State data are used for 1991 forward.

### **Wind Energy**

WYEOPZZ — Electricity produced from wind at electric utilities by State.

- 1960 through 1982: No data available. Values are assumed to be zero.
- 1983 forward: EIA, Form EIA-759, "Monthly Power Plant Report."

WYICBZZ — Electricity produced from wind in the industrial sector by State.

- 1960 through 1989: No data available. Values are assumed to be zero.
- 1990 forward: EIA estimates based on data collected on Form EIA-867, "Annual Nonutility Power Producers Report."

### **Waxes**

WXTCPUS — Waxes total consumed in the United States.

- 1960 through 1975: U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual," Table 1.
- 1976 through 1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual," Table 1.
- 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

Appendix D

## Thermal Conversion Factors

**Table D1. Approximate Heat Content of Petroleum and Coal and Heat Rates for Electricity, 1960-1996**

Year	Petroleum Consumption		Anthracite Consumption			Bituminous Coal and Lignite Consumption <sup>a</sup> (BCTCKUS)	Electricity Consumption		
	Liquefied Petroleum Gases (LGTKCUS)	Total Petroleum Products <sup>a</sup> (PATCKUS)	Sectors Other Electric (ACNUKUS)	Electric Utilities (ACEUKUS)	Total <sup>a</sup> (ACTCKUS)		Fossil-Fueled Steam-Electric Plants <sup>b</sup> (FFEOKUS)	Nuclear Steam-Electric Plants (NUEOKUS)	Geothermal Energy Plants (GEEOKUS)
	Million Btu per Barrel		Million Btu per Short Ton				Btu per Kilowatthour		
1960	4.011	5.555	24.721	17.500	23.592	24.765	10,760	11,629	23,200
1961	4.011	5.552	24.870	17.500	23.707	24.693	10,650	11,629	23,200
1962	4.011	5.545	24.666	17.500	23.515	24.668	10,558	11,629	23,200
1963	4.011	5.534	24.110	17.500	23.107	24.639	10,482	11,877	22,182
1964	4.011	5.528	24.164	17.500	23.128	24.652	10,462	11,912	22,182
1965	4.011	5.532	24.316	17.500	23.175	24.575	10,453	11,804	22,182
1966	4.011	5.532	24.193	17.500	22.906	24.431	10,415	11,623	22,182
1967	3.838	5.515	23.506	17.500	22.291	24.287	10,432	11,555	21,770
1968	3.818	5.504	23.293	17.500	22.037	24.229	10,398	11,297	21,606
1969	3.805	5.492	23.200	17.500	22.003	24.011	10,447	11,037	21,606
1970	3.779	5.503	23.476	17.500	22.102	23.461	10,494	10,977	21,606
1971	3.772	5.504	23.572	17.500	22.210	23.138	10,478	10,837	21,655
1972	3.760	5.500	23.403	17.500	21.822	23.050	10,379	10,792	21,668
1973	3.746	5.515	22.674	17.920	21.464	23.073	10,389	10,903	21,674
1974	3.730	5.504	22.330	17.200	20.919	22.694	10,442	11,161	21,674
1975	3.715	5.494	22.272	17.064	20.762	22.522	10,406	11,013	21,611
1976	3.711	5.504	22.618	17.526	21.254	22.509	10,373	11,047	21,611
1977	3.677	5.518	24.101	17.244	22.066	22.266	10,435	10,769	21,611
1978	3.669	5.519	24.388	17.104	22.398	22.014	10,361	10,941	21,611
1979	3.680	5.494	24.272	17.454	22.069	22.100	10,353	10,879	21,545
1980	3.674	5.479	22.719	17.652	21.405	21.950	10,388	10,908	21,639
1981	3.643	5.448	23.749	18.168	22.080	21.710	10,453	11,030	21,639
1982	3.615	5.415	24.578	18.160	22.518	21.670	10,454	11,073	21,629
1983	3.614	5.406	24.536	16.516	21.583	21.576	10,520	10,905	21,290
1984	3.599	5.395	25.128	17.018	22.322	21.570	10,440	10,843	21,303
1985	3.603	5.387	23.031	16.784	20.817	21.368	10,447	10,813	21,263
1986	3.640	5.418	24.399	15.578	21.512	21.462	10,446	10,799	21,263
1987	3.659	5.403	26.293	15.962	22.435	21.514	10,419	10,776	21,263
1988	3.652	5.410	26.021	17.312	22.423	21.324	10,324	10,743	21,096
1989	3.683	5.410	27.196	16.310	22.623	21.268	10,432	10,724	21,096
1990	3.625	5.411	25.199	16.140	21.668	21.330	10,399	10,680	21,096
1991	3.614	5.384	25.268	15.858	21.410	21.146	10,425	10,740	20,997
1992	3.624	5.378	24.617	16.944	21.423	21.142	10,340	10,678	20,914
1993	3.606	5.379	24.096	16.534	21.262	20.983	10,309	10,682	20,914
1994	3.635	5.371	25.037	14.680	20.828	21.011	10,309	10,676	20,914
1995	3.623	5.358	24.696	14.572	20.808	20.845	10,304	10,658	20,914
1996	3.613	5.352	24.638	14.360	20.652	20.857	10,338	10,623	20,960

<sup>a</sup> This factor is not actually applied in CSEDS but is displayed here for information.

<sup>b</sup> This factor is the average for electricity generated at U.S. fossil-fueled steam-electric plants. In CSEDS, it is applied to convert hydroelectricity, electricity generated for distribution from wood, waste, wind, photovoltaic, and

solar thermal energy, and imports and exports of electricity produced at hydroelectric and conventional power plants.

Sources: See source listing at the end of this appendix.

**Table D2. Approximate Heat Content of Natural Gas Consumed by Electric Utilities, 1960, 1970-1982**  
(Thousand Btu per Cubic Foot)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama .....	1.035	1.031	1.031	1.032	1.034	1.041	1.033	1.153	1.182	1.126	1.121	1.133	1.134	1.125
Alaska .....	-	1.005	1.005	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.005	1.006
Arizona .....	1.035	1.059	1.059	1.070	1.067	1.076	1.071	1.072	1.066	1.064	1.057	1.057	1.049	1.051
Arkansas .....	1.035	1.004	1.004	1.017	1.005	1.011	1.011	1.013	1.051	1.053	1.026	1.026	1.023	1.032
California .....	1.035	1.054	1.054	1.062	1.062	1.066	1.063	1.061	1.059	1.060	1.055	1.052	1.055	1.053
Colorado .....	1.035	0.974	0.974	0.879	0.879	0.921	0.996	0.992	0.988	0.992	0.982	0.981	0.975	0.964
Connecticut .....	1.035	1.016	1.016	1.016	1.015	1.012	1.005	1.008	-	-	-	-	-	-
Delaware .....	1.035	1.020	1.020	1.025	1.024	1.001	1.073	1.078	1.103	1.070	1.043	1.042	1.036	1.033
Dist. of Columbia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	1.035	1.041	1.041	1.019	1.024	1.023	1.009	1.014	1.019	1.024	1.020	1.015	1.013	1.014
Georgia .....	1.035	1.031	1.031	1.032	1.030	1.029	1.029	1.029	1.026	1.026	1.097	1.035	1.027	1.028
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	1.057	1.053	1.059	1.056	1.048	1.042	1.037	1.087	1.075
Illinois .....	1.035	1.025	1.025	1.028	1.026	1.030	1.029	1.028	1.028	1.028	1.021	1.024	1.023	1.024
Indiana .....	1.035	1.006	1.006	1.018	1.005	1.003	1.000	1.003	1.008	1.001	1.002	1.004	1.002	1.002
Iowa .....	1.035	1.009	1.009	1.007	1.004	1.008	1.008	1.011	1.012	1.021	1.009	1.008	1.007	1.019
Kansas .....	1.035	0.998	0.998	0.995	0.996	0.996	0.991	0.982	0.980	0.968	0.962	0.960	0.962	0.956
Kentucky .....	1.035	1.017	1.017	1.025	1.025	1.026	1.017	1.018	1.020	1.024	1.023	1.024	1.024	1.024
Louisiana .....	1.035	1.029	1.029	1.060	1.060	1.063	1.059	1.061	1.053	1.056	1.047	1.041	1.041	1.046
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	1.035	1.022	1.022	0.990	0.990	0.990	0.943	0.946	0.998	1.062	1.076	1.023	1.015	1.025
Massachusetts .....	1.035	1.012	1.012	1.003	1.002	1.000	1.002	1.001	1.000	1.000	1.001	1.000	1.000	1.048
Michigan .....	1.035	1.015	1.015	0.788	0.685	0.761	0.834	0.767	0.698	0.774	0.677	0.737	0.653	0.662
Minnesota .....	1.035	1.002	1.002	0.997	0.995	0.988	0.984	0.972	0.972	0.928	0.992	0.994	0.994	0.999
Mississippi .....	1.035	1.025	1.025	1.042	1.033	1.045	1.030	1.016	1.020	1.009	1.009	1.017	1.016	1.022
Missouri .....	1.035	1.007	1.007	0.973	0.979	0.972	0.977	0.974	0.973	0.974	0.976	0.979	0.986	1.022
Montana .....	1.035	1.032	1.032	1.162	1.170	1.168	1.149	1.192	1.173	1.146	1.084	1.049	1.075	1.173
Nebraska .....	1.035	1.008	1.008	0.984	0.981	0.983	0.982	0.971	0.967	0.968	0.954	0.950	0.942	0.982
Nevada .....	1.035	1.082	1.082	1.071	1.068	1.070	1.067	1.068	1.063	1.077	1.064	1.071	1.075	1.068
New Hampshire .....	-	-	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	-	1.025	-
New Jersey .....	1.035	1.026	1.026	1.030	1.030	1.029	1.028	1.029	1.028	1.030	1.039	1.034	1.036	1.033
New Mexico .....	1.035	1.083	1.083	1.058	1.038	1.031	1.033	1.029	1.028	1.042	1.034	1.029	1.029	1.021
New York .....	1.035	1.021	1.021	1.030	1.029	1.027	1.025	1.025	1.028	1.029	1.030	1.036	1.032	1.030
North Carolina .....	1.035	1.024	1.024	1.039	1.033	1.032	1.031	1.033	1.033	1.033	1.030	1.034	1.035	1.033
North Dakota .....	1.035	1.031	1.031	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054	1.054
Ohio .....	1.035	1.023	1.023	0.949	0.948	0.964	0.864	0.825	0.696	0.653	0.862	1.004	1.010	1.014
Oklahoma .....	1.035	1.032	1.032	1.051	1.040	1.041	1.038	1.042	1.046	1.048	1.050	1.048	1.047	1.045
Oregon .....	1.035	1.045	-	-	1.033	1.040	1.037	1.035	1.042	-	1.046	0.998	1.047	0.990
Pennsylvania .....	1.035	1.033	1.033	1.027	1.027	1.030	1.000	1.000	1.000	1.000	1.004	1.020	1.015	1.009
Rhode Island .....	1.035	1.021	1.021	1.042	1.042	1.042	1.042	1.042	-	-	1.046	1.022	1.022	1.020
South Carolina .....	1.035	1.028	1.028	1.032	1.030	1.028	1.028	1.028	1.028	1.048	1.076	1.030	1.023	1.029
South Dakota .....	1.035	1.004	1.004	1.001	0.998	0.999	1.000	0.996	0.990	0.928	0.983	0.988	0.993	0.948
Tennessee .....	1.035	1.022	1.022	1.045	1.055	-	-	1.029	-	-	-	1.016	1.016	-
Texas .....	1.035	1.027	1.027	1.022	1.019	1.016	1.019	1.018	1.026	1.033	1.038	1.037	1.030	1.033
Utah .....	1.035	0.938	0.938	0.940	0.943	0.946	0.941	0.952	0.945	0.951	0.963	0.955	0.932	0.940
Vermont .....	-	-	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Virginia .....	1.035	1.026	1.026	1.065	1.059	1.035	1.098	1.091	1.174	1.218	1.101	1.104	1.097	1.081
Washington .....	-	-	-	-	-	-	-	-	-	1.030	1.030	1.030	1.031	1.033
West Virginia .....	1.035	1.029	1.029	0.509	0.507	0.545	0.575	0.683	1.000	1.000	1.000	1.000	1.000	1.000
Wisconsin .....	1.035	1.019	1.019	1.020	1.015	1.015	1.016	1.014	1.014	1.005	1.010	1.007	1.008	1.012
Wyoming .....	1.035	1.023	1.023	0.833	0.833	0.833	0.843	0.843	0.854	0.837	0.847	0.847	0.855	0.847
U.S. Average .....	1.035	1.029	1.029	1.027	1.021	1.020	1.023	1.023	1.028	1.033	1.033	1.033	1.033	1.034

- =Not applicable.  
Sources: See source listing at the end of this appendix.



**Table D3. Approximate Heat Content of Natural Gas Consumed by Electric Utilities, 1983-1996**  
(Thousand Btu per Cubic Foot)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	1.103	1.124	1.099	1.091	1.054	1.039	1.030	1.030	1.022	1.021	1.016	1.011	1.016	1.024
Alaska	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.001	1.000	0.999	0.999	1.002	1.001
Arizona	1.042	1.051	1.059	1.044	1.034	1.034	1.035	1.034	1.027	1.031	1.027	1.023	1.022	1.015
Arkansas	1.035	1.037	1.055	1.053	1.031	1.029	1.019	1.018	1.020	1.025	1.029	1.024	1.023	1.024
California	1.048	1.050	1.051	1.045	1.038	1.036	1.040	1.033	1.028	1.033	1.030	1.029	1.027	1.026
Colorado	0.989	0.988	0.989	0.994	0.988	0.985	0.977	0.988	0.995	1.000	1.012	1.042	1.008	0.998
Connecticut	-	1.028	1.031	1.036	1.031	1.031	1.030	1.033	1.033	1.031	1.032	1.017	1.017	1.019
Delaware	1.035	1.039	1.038	1.046	1.036	1.072	1.075	1.054	1.052	1.037	1.033	1.037	1.032	1.034
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	1.011	1.011	1.011	1.008	1.008	1.008	1.010	1.011	1.014	1.011	1.009	1.010	1.010	1.008
Georgia	1.025	1.023	1.024	1.024	1.023	1.023	1.024	1.024	1.025	1.024	1.023	1.025	1.024	1.024
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	1.047	1.045	1.049	1.021	1.017	-	-	-	-	-	-	-	-	-
Illinois	1.029	1.031	1.027	1.026	1.025	1.021	1.017	1.021	1.018	1.016	1.016	1.022	1.016	1.020
Indiana	1.002	1.003	1.005	1.006	1.005	1.002	1.002	1.002	1.001	1.001	1.013	1.023	1.021	1.021
Iowa	1.027	1.035	1.021	1.017	1.007	1.007	1.007	1.006	1.004	1.004	1.006	1.006	1.005	1.003
Kansas	0.953	0.975	0.968	0.969	0.988	0.993	0.971	0.990	0.968	0.970	0.975	0.983	0.980	0.973
Kentucky	1.023	1.024	1.024	1.022	1.021	1.023	1.021	1.020	1.020	1.020	1.020	1.021	1.022	1.022
Louisiana	1.049	1.048	1.047	1.044	1.043	1.045	1.044	1.045	1.042	1.043	1.043	1.046	1.043	1.043
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	1.025	1.025	1.025	1.058	1.043	1.042	1.045	1.042	1.046	1.045	1.041	1.043	1.039	1.041
Massachusetts	1.054	1.060	1.039	1.029	1.026	1.029	1.048	1.052	1.041	1.032	1.034	1.037	1.026	1.037
Michigan	0.213	0.592	0.460	0.346	0.404	0.161	0.108	0.224	0.389	0.414	0.379	0.403	0.365	0.274
Minnesota	1.011	1.001	1.002	0.999	0.998	1.003	1.005	1.003	1.008	1.008	1.008	1.005	1.006	1.003
Mississippi	1.029	1.027	1.039	1.038	1.028	1.026	1.025	1.036	1.025	1.029	1.022	1.043	1.039	1.038
Missouri	0.995	0.998	0.992	0.983	0.990	0.994	1.016	1.018	1.014	1.008	1.008	1.000	1.006	1.011
Montana	1.197	1.179	1.204	1.201	1.205	1.208	1.213	1.218	1.194	1.206	1.165	1.055	1.073	1.075
Nebraska	0.949	0.948	0.957	0.971	0.977	0.954	0.959	0.946	0.942	0.959	0.976	0.987	0.998	1.004
Nevada	1.063	1.060	1.065	1.053	1.035	1.027	1.027	1.031	1.024	1.025	1.029	1.033	1.029	1.029
New Hampshire	1.025	1.027	-	-	1.027	1.027	1.027	-	-	1.018	1.016	1.015	1.018	1.018
New Jersey	1.037	1.036	1.046	1.036	1.033	1.033	1.033	1.032	1.032	1.034	1.034	1.035	1.031	1.020
New Mexico	0.992	0.996	1.013	1.041	1.026	1.026	1.033	1.034	1.016	1.017	1.016	1.022	1.017	1.012
New York	1.031	1.033	1.035	1.036	1.030	1.031	1.028	1.033	1.031	1.030	1.031	1.031	1.026	1.029
North Carolina	1.033	1.033	1.033	1.033	1.033	1.033	1.033	1.033	1.032	1.036	1.033	1.038	1.033	1.036
North Dakota	1.054	1.054	1.054	1.054	1.072	1.065	1.050	1.038	1.004	1.037	1.080	1.095	1.066	1.059
Ohio	1.011	1.014	1.014	1.018	1.009	1.012	1.007	1.008	1.007	1.033	1.030	1.029	1.027	1.028
Oklahoma	1.051	1.040	1.044	1.043	1.047	1.039	1.043	1.045	1.040	1.037	1.039	1.034	1.034	1.028
Oregon	0.990	0.990	-	0.990	-	-	1.035	1.023	1.011	1.011	1.011	1.011	1.012	1.009
Pennsylvania	1.000	1.000	1.000	1.025	1.031	1.035	1.029	1.032	1.034	1.031	1.030	1.031	1.030	1.028
Rhode Island	1.039	1.030	1.034	-	1.031	1.032	1.031	1.033	1.032	1.031	1.051	1.029	1.028	1.028
South Carolina	1.026	1.027	1.029	1.023	1.027	1.032	1.023	1.023	1.025	1.022	1.021	1.023	1.024	1.025
South Dakota	1.011	1.011	1.010	1.005	1.013	1.020	1.017	1.016	1.006	1.019	1.014	0.972	1.002	1.014
Tennessee	1.023	-	-	-	-	1.031	1.032	1.035	1.033	1.031	1.035	1.032	1.031	1.032
Texas	1.024	1.030	1.036	1.035	1.035	1.033	1.034	1.035	1.030	1.026	1.026	1.023	1.023	1.023
Utah	0.941	1.030	1.075	1.087	1.078	1.078	1.078	1.000	1.067	1.074	1.063	1.044	1.055	1.021
Vermont	1.000	1.000	1.000	1.000	-	-	1.000	1.000	0.988	0.988	0.998	0.996	1.001	1.015
Virginia	1.046	1.041	1.040	1.053	1.039	1.054	1.041	1.041	1.044	1.050	1.038	1.037	1.031	1.057
Washington	1.033	1.033	1.033	1.033	1.033	1.033	1.033	1.033	1.050	1.050	1.050	1.050	1.050	1.050
West Virginia	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Wisconsin	0.991	0.992	1.000	1.003	0.992	1.002	1.003	1.007	1.008	1.009	1.012	1.011	1.009	1.010
Wyoming	1.039	1.047	1.048	1.022	1.019	1.026	1.036	1.035	1.051	1.039	1.044	1.033	1.043	1.040
U.S. Average	1.028	1.033	1.037	1.033	1.032	1.027	1.027	1.027	1.023	1.023	1.023	1.023	1.018	1.015

- =Not applicable.

Sources: See source listing at the end of this appendix.

**Table D4. Approximate Heat Content of Natural Gas Consumed by Sectors Other Than Electric Utilities, 1960, 1970-1982**  
(Thousand Btu per Cubic Foot)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama .....	1.035	1.031	1.031	1.031	1.029	1.028	1.029	1.028	1.029	1.030	1.026	1.033	1.035	1.052
Alaska .....	1.035	1.005	1.005	1.005	1.011	1.005	1.005	1.005	1.005	0.999	0.999	1.002	1.004	0.999
Arizona .....	1.035	1.059	1.059	1.053	1.052	1.062	1.050	1.049	1.054	1.065	1.041	1.046	1.055	1.055
Arkansas .....	1.035	1.004	1.004	1.000	0.998	0.997	0.995	0.996	1.020	0.999	1.016	0.994	0.995	0.997
California .....	1.035	1.054	1.054	1.051	1.050	1.054	1.056	1.051	1.050	1.052	1.048	1.044	1.044	1.047
Colorado .....	1.035	0.974	0.974	1.000	0.980	0.979	0.896	0.901	0.888	0.862	0.880	0.995	0.995	1.001
Connecticut .....	1.035	1.016	1.016	1.016	1.015	1.012	1.005	1.008	1.010	1.013	1.012	1.022	1.025	1.027
Delaware .....	1.035	1.020	1.020	1.019	1.020	1.021	1.015	1.018	1.024	1.028	1.028	1.033	1.035	1.033
Dist. of Columbia .....	1.035	1.016	1.016	1.016	1.013	1.012	1.012	1.012	1.016	1.016	1.016	1.003	1.014	1.017
Florida .....	1.035	1.041	1.041	1.070	1.065	1.066	1.078	1.062	1.067	1.070	1.054	1.070	1.106	1.082
Georgia .....	1.035	1.031	1.031	1.031	1.030	1.028	1.027	1.027	1.027	1.028	1.038	1.032	1.027	1.030
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	0.963	0.959	0.989
Idaho .....	1.035	1.061	1.061	1.061	1.058	1.042	1.055	1.057	1.060	1.053	1.047	1.053	1.070	1.072
Illinois .....	1.035	1.025	1.025	1.025	1.023	1.023	1.026	1.025	1.028	1.018	1.024	1.022	1.020	1.022
Indiana .....	1.035	1.006	1.006	1.006	0.998	0.997	0.990	0.990	0.990	0.989	0.990	0.989	0.993	1.016
Iowa .....	1.035	1.009	1.009	1.009	1.014	1.012	1.008	1.008	1.004	1.002	1.002	1.003	1.003	1.008
Kansas .....	1.035	0.998	0.998	0.999	0.985	0.982	0.982	0.981	0.981	0.981	0.982	0.994	0.993	1.007
Kentucky .....	1.035	1.017	1.017	1.017	1.019	1.015	1.008	1.011	1.011	1.010	1.010	1.009	1.014	1.014
Louisiana .....	1.035	1.029	1.029	1.021	1.025	1.023	1.032	1.033	1.035	1.042	1.034	1.037	1.036	1.047
Maine .....	-	1.012	1.012	1.012	1.011	1.011	1.024	1.024	1.024	1.024	1.000	1.024	1.025	1.025
Maryland .....	1.035	1.022	1.022	1.023	1.022	1.023	1.013	1.014	1.016	1.030	1.043	1.020	1.014	1.018
Massachusetts .....	1.035	1.012	1.012	1.012	1.011	1.009	1.004	1.006	1.007	1.009	1.009	1.016	1.017	1.022
Michigan .....	1.035	1.015	1.015	1.032	1.034	1.027	1.024	1.023	1.020	1.017	1.020	1.020	1.026	1.028
Minnesota .....	1.035	1.002	1.002	1.003	1.000	1.003	1.002	0.999	0.997	0.997	0.995	0.997	0.995	1.005
Mississippi .....	1.035	1.025	1.025	1.019	1.022	1.021	1.022	1.024	1.026	1.024	1.029	1.034	1.029	1.031
Missouri .....	1.035	1.007	1.007	1.012	0.997	1.009	1.008	1.005	1.004	1.006	0.980	1.016	1.016	1.018
Montana .....	1.035	1.032	1.032	1.030	1.028	1.020	1.019	1.012	1.007	0.999	0.987	1.009	1.008	1.010
Nebraska .....	1.035	1.008	1.008	1.015	1.012	1.007	0.996	0.997	1.001	1.000	0.997	0.980	0.979	0.981
Nevada .....	1.035	1.082	1.082	1.097	1.066	1.064	1.067	1.065	1.037	1.003	0.968	1.052	1.078	1.071
New Hampshire .....	1.035	1.010	1.010	1.010	1.008	1.007	1.010	1.010	1.000	1.007	1.040	1.020	1.022	1.020
New Jersey .....	1.035	1.026	1.026	1.026	1.027	1.026	1.031	1.034	1.034	1.035	1.035	1.033	1.033	1.031
New Mexico .....	1.035	1.083	1.083	1.089	1.077	1.073	1.076	1.066	1.070	1.060	1.065	1.048	1.054	1.052
New York .....	1.035	1.021	1.021	1.020	1.030	1.023	1.015	1.014	1.011	1.012	1.013	1.023	1.018	1.021
North Carolina .....	1.035	1.024	1.024	1.022	1.027	1.025	1.018	1.018	1.019	1.021	1.022	1.012	1.012	1.033
North Dakota .....	1.035	1.031	1.031	1.031	1.024	1.002	1.001	1.000	1.000	1.000	1.000	1.052	1.042	1.026
Ohio .....	1.035	1.023	1.023	1.024	1.026	1.027	1.024	1.026	1.025	1.024	1.026	1.016	1.023	1.029
Oklahoma .....	1.035	1.032	1.032	1.019	1.010	1.025	0.996	0.992	1.012	1.004	1.005	1.002	1.026	1.010
Oregon .....	1.035	1.045	1.045	1.045	1.060	1.044	1.039	1.036	1.042	1.045	1.045	1.046	1.044	1.044
Pennsylvania .....	1.035	1.033	1.033	1.033	1.036	1.024	1.025	1.025	1.021	1.022	1.021	1.022	1.022	1.028
Rhode Island .....	1.035	1.021	1.021	1.021	1.016	1.010	1.014	1.012	1.013	1.013	1.009	1.021	1.022	1.036
South Carolina .....	1.035	1.028	1.028	1.027	1.025	1.024	1.023	1.023	1.022	1.031	1.015	1.033	1.023	1.030
South Dakota .....	1.035	1.004	1.004	1.004	1.003	0.999	1.000	0.999	1.000	0.999	0.996	0.998	1.002	0.999
Tennessee .....	1.035	1.022	1.022	1.021	1.021	1.020	1.031	1.029	1.031	1.028	1.033	1.016	1.016	1.024
Texas .....	1.035	1.027	1.027	1.029	1.030	1.032	1.030	1.029	1.028	1.025	1.030	1.031	1.033	1.031
Utah .....	1.035	0.938	0.938	0.938	0.945	0.952	0.950	0.948	0.950	0.957	0.960	1.092	1.077	0.939
Vermont .....	-	1.006	1.006	1.007	1.007	1.011	1.009	1.008	1.009	1.011	1.012	0.989	0.993	0.993
Virginia .....	1.035	1.025	1.025	1.025	1.024	1.022	1.019	1.019	1.021	1.019	1.019	1.015	1.023	1.026
Washington .....	1.035	1.055	1.055	1.055	1.051	1.047	1.042	1.041	1.045	1.048	1.047	1.052	1.050	1.053
West Virginia .....	1.035	1.029	1.029	1.030	1.031	1.024	1.038	1.044	1.042	1.031	1.024	1.032	1.040	1.047
Wisconsin .....	1.035	1.019	1.019	1.019	1.015	1.015	1.020	1.017	1.015	1.012	1.013	1.008	1.009	1.012
Wyoming .....	1.035	1.023	1.023	1.024	1.018	0.997	0.935	0.951	0.938	0.914	0.930	1.061	1.059	1.002
U.S. Average .....	1.035	1.025	1.026	1.026	1.025	1.025	1.022	1.021	1.022	1.020	1.020	1.024	1.026	1.027

- =Not applicable.  
Sources: See source listing at the end of this appendix.

**Table D5. Approximate Heat Content of Natural Gas Consumed by Sectors Other Than Electric Utilities, 1983-1996**  
(Thousand Btu per Cubic Foot)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	1.038	1.033	1.038	1.036	1.033	1.029	1.030	1.029	1.027	1.028	1.030	1.030	1.029	1.033
Alaska	1.001	1.001	1.006	1.010	1.009	1.004	0.998	0.948	1.002	1.002	0.994	1.001	1.006	0.989
Arizona	1.046	1.046	1.046	1.037	1.037	1.034	1.043	1.032	1.025	1.031	1.028	1.028	1.037	1.010
Arkansas	1.021	1.019	1.017	1.013	1.012	1.007	1.004	1.008	1.017	1.007	1.012	1.022	1.084	1.026
California	1.041	1.038	1.038	1.037	1.026	1.029	1.036	1.032	1.027	1.027	1.038	1.021	1.013	1.033
Colorado	1.006	1.002	0.999	1.003	1.000	1.007	1.012	1.005	1.030	1.023	1.011	1.004	1.018	1.024
Connecticut	1.029	1.029	1.030	1.030	1.031	1.032	1.034	1.033	1.031	1.028	1.027	1.031	1.030	1.029
Delaware	1.015	1.017	1.022	1.016	1.009	1.018	1.014	1.015	1.025	1.034	1.036	1.035	1.036	1.036
Dist. of Columbia	1.010	1.012	1.015	1.013	1.014	1.011	1.010	1.008	1.006	1.007	1.007	1.011	1.006	1.009
Florida	1.097	1.101	1.109	1.076	1.095	1.080	1.086	1.087	1.098	1.100	1.098	1.124	1.070	1.109
Georgia	1.026	1.026	1.028	1.027	1.026	1.025	1.026	1.027	1.027	1.025	1.027	1.030	1.026	1.023
Hawaii	1.023	1.026	1.082	1.086	1.068	1.078	1.080	1.070	1.080	1.073	1.062	1.051	1.048	1.057
Idaho	1.047	1.045	1.049	1.021	1.017	1.020	1.027	1.028	1.033	1.030	1.038	1.038	1.030	1.030
Illinois	1.041	1.040	1.040	1.021	1.015	1.018	1.022	1.022	1.019	1.018	1.021	1.021	1.020	1.019
Indiana	1.006	1.007	1.008	1.009	1.009	1.015	1.016	1.018	1.014	1.011	1.013	1.013	1.012	1.011
Iowa	1.014	1.015	1.011	1.010	1.008	1.007	1.011	1.007	1.008	1.004	1.003	1.008	1.005	1.006
Kansas	1.006	0.994	1.000	0.986	1.049	0.986	0.993	1.000	1.011	0.988	0.988	0.999	1.004	0.998
Kentucky	1.020	1.022	1.030	1.038	1.037	1.037	1.039	1.040	1.047	1.058	1.048	1.062	1.096	1.049
Louisiana	1.040	1.041	1.038	1.039	1.039	1.041	1.043	1.041	1.048	1.044	1.036	1.039	1.033	1.044
Maine	1.026	1.032	1.035	1.031	1.040	1.027	1.003	1.005	1.006	1.013	1.014	1.014	1.016	1.016
Maryland	1.021	1.026	1.034	1.036	1.033	1.032	1.031	1.026	1.025	1.027	1.027	1.030	1.025	1.028
Massachusetts	1.021	1.025	1.024	1.026	1.030	1.030	1.036	1.034	1.039	1.038	1.038	1.025	1.026	1.026
Michigan	1.039	1.023	1.023	1.038	1.031	1.040	1.052	1.045	1.039	1.037	1.035	1.033	1.042	1.036
Minnesota	1.023	1.003	1.004	0.999	0.999	1.007	1.006	1.004	1.012	1.011	1.011	1.011	1.013	1.018
Mississippi	1.026	1.031	1.025	1.021	1.016	1.015	1.031	1.032	1.030	1.052	1.023	1.028	1.018	1.026
Missouri	1.027	1.017	1.017	1.011	1.011	1.006	1.008	1.011	1.009	1.002	1.004	1.006	1.007	1.011
Montana	1.007	1.004	0.999	0.998	1.018	1.024	1.019	1.026	1.028	1.022	1.017	1.024	1.030	1.030
Nebraska	0.982	0.981	0.982	0.993	0.985	0.983	0.988	0.984	0.985	0.979	0.975	0.985	0.980	1.007
Nevada	1.067	1.059	1.061	1.060	1.004	0.996	1.032	1.031	1.036	1.034	1.036	1.036	1.035	1.040
New Hampshire	1.021	1.027	1.027	1.027	1.029	1.025	1.019	1.014	1.007	1.009	1.010	1.013	1.010	1.019
New Jersey	1.029	1.020	1.022	1.026	1.024	1.025	1.025	1.025	1.025	1.025	1.036	1.039	1.034	1.037
New Mexico	1.041	1.061	1.088	1.083	1.081	1.074	1.050	1.056	1.042	1.043	1.042	1.000	1.021	1.032
New York	1.026	1.025	1.027	1.027	1.030	1.029	1.029	1.029	1.027	1.029	1.029	1.027	1.029	1.026
North Carolina	1.033	1.034	1.034	1.033	1.031	1.030	1.031	1.032	1.032	1.034	1.035	1.036	1.033	1.036
North Dakota	1.045	1.049	1.062	1.043	1.048	1.055	1.049	1.032	1.046	1.045	1.060	1.058	1.050	1.051
Ohio	1.034	1.037	1.044	1.046	1.045	1.040	1.042	1.040	1.044	1.036	1.038	1.037	1.038	1.038
Oklahoma	1.037	1.017	1.020	1.023	1.031	1.038	1.022	1.020	1.013	1.022	1.021	1.026	1.015	1.023
Oregon	1.041	1.036	1.030	1.022	1.028	1.023	1.035	1.023	1.031	1.038	1.041	1.046	1.044	1.043
Pennsylvania	1.029	1.034	1.034	1.036	1.036	1.036	1.037	1.037	1.035	1.036	1.037	1.036	1.035	1.034
Rhode Island	1.035	1.030	1.033	1.029	1.027	1.027	1.027	1.027	1.028	1.018	1.029	1.029	1.026	1.074
South Carolina	1.027	1.026	1.028	1.030	1.028	1.027	1.026	1.028	1.027	1.027	1.029	1.031	1.027	1.030
South Dakota	1.011	1.011	1.010	1.005	1.013	1.020	1.017	1.016	1.018	1.015	1.013	1.010	1.014	1.014
Tennessee	1.023	1.024	1.034	1.032	1.032	1.031	1.032	1.035	1.033	1.031	1.035	1.032	1.031	1.032
Texas	1.032	1.040	1.039	1.043	1.042	1.040	1.040	1.042	1.040	1.050	1.029	1.043	1.042	1.037
Utah	1.077	1.075	1.075	0.948	1.080	1.081	1.087	1.089	1.073	1.078	1.081	1.069	1.063	1.043
Vermont	0.992	0.992	0.992	0.987	0.987	0.990	0.986	0.986	0.988	0.996	0.998	0.996	0.996	1.015
Virginia	1.030	1.036	1.039	1.040	1.040	1.041	1.041	1.042	1.042	1.038	1.045	1.038	1.031	1.038
Washington	1.043	1.045	1.040	1.029	1.033	1.026	1.032	1.030	1.031	1.032	1.037	1.041	1.040	1.037
West Virginia	1.038	1.053	1.067	1.076	1.074	1.077	1.077	1.071	1.073	1.065	1.065	1.064	1.061	1.061
Wisconsin	1.009	1.008	1.010	1.010	1.008	1.008	1.005	1.006	1.007	1.009	1.011	1.012	1.011	1.013
Wyoming	1.059	1.053	1.051	1.050	1.057	1.053	1.055	1.099	1.060	1.058	1.056	1.056	1.063	1.061
U.S. Average	1.031	1.030	1.032	1.030	1.031	1.030	1.032	1.031	1.031	1.032	1.029	1.030	1.030	1.031

Sources: See source listing at the end of this appendix.

**Table D6. Approximate Heat Content of Natural Gas Total Consumption, 1960, 1970-1982**  
(Thousand Btu per Cubic Foot)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	1.035	1.031	1.031	1.031	1.029	1.028	1.029	1.030	1.031	1.032	1.028	1.034	1.036	1.052
Alaska	1.035	1.005	1.005	1.005	1.010	1.005	1.005	1.005	1.005	1.000	1.000	1.003	1.004	1.000
Arizona	1.035	1.059	1.059	1.059	1.056	1.065	1.052	1.052	1.056	1.065	1.045	1.049	1.053	1.054
Arkansas	1.035	1.004	1.004	1.004	0.999	0.999	0.997	0.997	1.021	1.001	1.017	1.001	1.001	1.002
California	1.035	1.054	1.054	1.054	1.053	1.056	1.057	1.053	1.052	1.053	1.050	1.046	1.048	1.049
Colorado	1.035	0.974	0.974	0.974	0.962	0.967	0.913	0.914	0.900	0.876	0.892	0.993	0.994	1.000
Connecticut	1.035	1.016	1.016	1.016	1.015	1.012	1.005	1.008	1.010	1.013	1.012	1.022	1.025	1.027
Delaware	1.035	1.020	1.020	1.020	1.020	1.020	1.020	1.025	1.030	1.031	1.031	1.035	1.035	1.033
Dist. of Columbia	1.035	1.016	1.016	1.016	1.013	1.012	1.012	1.012	1.016	1.016	1.016	1.003	1.014	1.017
Florida	1.035	1.041	1.041	1.041	1.043	1.043	1.043	1.041	1.045	1.047	1.037	1.041	1.059	1.044
Georgia	1.035	1.031	1.031	1.031	1.030	1.028	1.027	1.027	1.027	1.028	1.039	1.032	1.027	1.030
Hawaii	1.035	0.962	0.962	0.962	0.935	0.921	0.947	0.911	0.949	0.958	0.950	0.963	0.959	0.989
Idaho	1.035	1.061	1.061	1.061	1.058	1.042	1.055	1.057	1.060	1.053	1.047	1.053	1.070	1.072
Illinois	1.035	1.025	1.025	1.025	1.023	1.023	1.026	1.025	1.028	1.018	1.024	1.022	1.020	1.022
Indiana	1.035	1.006	1.006	1.006	0.998	0.997	0.990	0.990	0.990	0.989	0.990	0.989	0.993	1.016
Iowa	1.035	1.009	1.009	1.009	1.012	1.011	1.008	1.008	1.004	1.002	1.002	1.003	1.003	1.008
Kansas	1.035	0.998	0.998	0.998	0.988	0.986	0.984	0.981	0.981	0.978	0.978	0.987	0.987	0.999
Kentucky	1.035	1.017	1.017	1.017	1.019	1.015	1.008	1.011	1.011	1.010	1.010	1.009	1.014	1.014
Louisiana	1.035	1.029	1.029	1.029	1.031	1.030	1.037	1.038	1.038	1.045	1.037	1.038	1.037	1.047
Maine	1.035	1.012	1.012	1.012	1.011	1.011	1.024	1.024	1.024	1.024	1.000	1.024	1.025	1.025
Maryland	1.035	1.022	1.022	1.022	1.020	1.020	1.013	1.014	1.016	1.030	1.045	1.020	1.014	1.018
Massachusetts	1.035	1.012	1.012	1.012	1.011	1.009	1.004	1.006	1.007	1.009	1.009	1.016	1.016	1.024
Michigan	1.035	1.015	1.015	1.015	1.010	1.007	1.012	1.008	1.006	1.006	1.005	1.011	1.017	1.022
Minnesota	1.035	1.002	1.002	1.002	0.999	1.001	1.001	0.998	0.997	0.997	0.995	0.997	0.995	1.005
Mississippi	1.035	1.025	1.025	1.025	1.024	1.025	1.023	1.023	1.025	1.021	1.024	1.028	1.025	1.028
Missouri	1.035	1.007	1.007	1.007	0.995	1.005	1.006	1.003	1.002	1.004	0.980	1.014	1.015	1.018
Montana	1.035	1.032	1.032	1.032	1.032	1.022	1.021	1.014	1.009	1.000	0.990	1.012	1.011	1.011
Nebraska	1.035	1.008	1.008	1.008	1.005	1.002	0.994	0.994	0.998	0.998	0.994	0.978	0.978	0.981
Nevada	1.035	1.082	1.082	1.082	1.067	1.067	1.067	1.066	1.049	1.028	1.013	1.061	1.076	1.070
New Hampshire	1.035	1.010	1.010	1.010	1.008	1.007	1.010	1.010	1.000	1.007	1.040	1.020	1.022	1.020
New Jersey	1.035	1.026	1.026	1.026	1.027	1.026	1.031	1.034	1.034	1.035	1.036	1.033	1.034	1.031
New Mexico	1.035	1.083	1.083	1.083	1.067	1.062	1.064	1.057	1.057	1.055	1.056	1.043	1.047	1.045
New York	1.035	1.021	1.021	1.021	1.030	1.023	1.015	1.014	1.011	1.012	1.016	1.025	1.020	1.023
North Carolina	1.035	1.024	1.024	1.024	1.027	1.025	1.018	1.018	1.019	1.021	1.022	1.012	1.012	1.033
North Dakota	1.035	1.031	1.031	1.031	1.024	1.002	1.001	1.000	1.000	1.000	1.000	1.052	1.042	1.026
Ohio	1.035	1.023	1.023	1.023	1.025	1.026	1.023	1.025	1.024	1.023	1.025	1.016	1.023	1.029
Oklahoma	1.035	1.032	1.032	1.032	1.023	1.032	1.015	1.014	1.027	1.024	1.024	1.023	1.035	1.023
Oregon	1.035	1.045	1.045	1.045	1.059	1.044	1.039	1.036	1.042	1.045	1.045	1.046	1.044	1.044
Pennsylvania	1.035	1.033	1.033	1.033	1.036	1.024	1.025	1.025	1.021	1.022	1.021	1.022	1.022	1.028
Rhode Island	1.035	1.021	1.021	1.021	1.016	1.013	1.014	1.013	1.013	1.013	1.011	1.021	1.022	1.036
South Carolina	1.035	1.028	1.028	1.028	1.026	1.025	1.024	1.023	1.022	1.032	1.018	1.033	1.023	1.030
South Dakota	1.035	1.004	1.004	1.004	1.002	0.999	1.000	0.999	1.000	0.999	0.996	0.998	1.002	0.999
Tennessee	1.035	1.022	1.022	1.022	1.022	1.020	1.031	1.029	1.031	1.028	1.033	1.016	1.016	1.024
Texas	1.035	1.027	1.027	1.027	1.027	1.027	1.026	1.025	1.027	1.028	1.032	1.033	1.032	1.032
Utah	1.035	0.938	0.938	0.938	0.945	0.952	0.950	0.948	0.950	0.956	0.960	1.086	1.073	0.939
Vermont	1.035	1.006	1.006	1.006	1.006	1.006	1.008	1.008	1.008	1.010	1.010	0.990	0.993	0.993
Virginia	1.035	1.026	1.026	1.026	1.025	1.022	1.019	1.019	1.023	1.021	1.021	1.016	1.024	1.027
Washington	1.035	1.055	1.055	1.055	1.051	1.047	1.042	1.041	1.045	1.048	1.047	1.052	1.050	1.053
West Virginia	1.035	1.029	1.029	1.029	1.030	1.023	1.037	1.043	1.042	1.031	1.024	1.032	1.040	1.047
Wisconsin	1.035	1.019	1.019	1.019	1.015	1.015	1.020	1.017	1.015	1.012	1.013	1.008	1.009	1.012
Wyoming	1.035	1.023	1.023	1.023	1.017	0.996	0.934	0.950	0.937	0.914	0.929	1.060	1.059	1.002
U.S. Average	1.035	1.026	1.026	1.026	1.025	1.024	1.022	1.022	1.023	1.022	1.022	1.025	1.027	1.029

Sources: See source listing at the end of this appendix.

**Table D7. Approximate Heat Content of Natural Gas Total Consumption, 1983-1996**  
(Thousand Btu per Cubic Foot)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	1.038	1.033	1.038	1.036	1.033	1.029	1.030	1.029	1.027	1.028	1.030	1.030	1.029	1.033
Alaska	1.002	1.002	1.006	1.009	1.009	1.004	0.999	0.954	1.002	1.002	0.994	1.001	1.006	0.990
Arizona	1.045	1.047	1.050	1.039	1.036	1.034	1.040	1.032	1.025	1.031	1.028	1.027	1.035	1.011
Arkansas	1.023	1.021	1.019	1.019	1.016	1.009	1.006	1.009	1.017	1.009	1.014	1.022	1.076	1.026
California	1.043	1.042	1.043	1.039	1.030	1.031	1.037	1.032	1.027	1.029	1.036	1.023	1.016	1.032
Colorado	1.006	1.002	0.999	1.003	1.000	1.006	1.011	1.005	1.029	1.023	1.011	1.005	1.018	1.024
Connecticut	1.029	1.029	1.030	1.030	1.031	1.032	1.034	1.033	1.031	1.028	1.027	1.030	1.028	1.028
Delaware	1.018	1.021	1.025	1.018	1.015	1.023	1.028	1.026	1.034	1.035	1.035	1.036	1.034	1.035
Dist. of Columbia	1.010	1.012	1.015	1.013	1.014	1.011	1.010	1.008	1.006	1.007	1.007	1.011	1.006	1.009
Florida	1.048	1.049	1.053	1.036	1.044	1.042	1.042	1.043	1.049	1.049	1.052	1.068	1.033	1.050
Georgia	1.026	1.026	1.028	1.027	1.026	1.025	1.026	1.027	1.027	1.025	1.027	1.030	1.026	1.023
Hawaii	1.023	1.026	1.082	1.086	1.068	1.078	1.080	1.070	1.080	1.073	1.062	1.051	1.048	1.057
Idaho	1.047	1.045	1.049	1.021	1.017	1.020	1.027	1.028	1.033	1.030	1.038	1.038	1.030	1.030
Illinois	1.041	1.040	1.040	1.021	1.015	1.018	1.022	1.022	1.019	1.018	1.021	1.021	1.020	1.019
Indiana	1.006	1.007	1.008	1.009	1.009	1.015	1.016	1.018	1.014	1.011	1.013	1.013	1.012	1.011
Iowa	1.014	1.015	1.011	1.010	1.008	1.007	1.011	1.007	1.008	1.004	1.003	1.008	1.005	1.006
Kansas	0.999	0.992	0.998	0.985	1.046	0.986	0.992	0.999	1.007	0.987	0.987	0.998	1.002	0.996
Kentucky	1.020	1.022	1.030	1.038	1.037	1.037	1.039	1.040	1.047	1.058	1.048	1.062	1.096	1.049
Louisiana	1.042	1.042	1.040	1.040	1.040	1.042	1.043	1.042	1.047	1.044	1.037	1.040	1.035	1.044
Maine	1.026	1.032	1.035	1.031	1.040	1.027	1.003	1.005	1.006	1.013	1.014	1.014	1.016	1.016
Maryland	1.021	1.026	1.034	1.036	1.034	1.032	1.032	1.028	1.027	1.028	1.028	1.031	1.026	1.029
Massachusetts	1.025	1.030	1.027	1.026	1.029	1.030	1.038	1.038	1.039	1.037	1.038	1.026	1.026	1.027
Michigan	1.024	1.017	1.015	1.027	1.021	1.022	1.029	1.022	1.020	1.020	1.021	1.021	1.017	1.012
Minnesota	1.023	1.003	1.004	0.999	0.999	1.007	1.006	1.004	1.012	1.011	1.011	1.011	1.013	1.018
Mississippi	1.027	1.030	1.028	1.025	1.018	1.017	1.030	1.033	1.029	1.047	1.023	1.033	1.026	1.030
Missouri	1.027	1.017	1.017	1.011	1.011	1.006	1.008	1.011	1.009	1.002	1.004	1.006	1.007	1.011
Montana	1.008	1.005	1.001	1.000	1.020	1.025	1.020	1.028	1.029	1.023	1.018	1.024	1.030	1.030
Nebraska	0.982	0.981	0.982	0.993	0.985	0.983	0.987	0.983	0.984	0.979	0.975	0.985	0.980	1.007
Nevada	1.066	1.059	1.062	1.059	1.009	1.003	1.030	1.031	1.032	1.031	1.034	1.035	1.033	1.036
New Hampshire	1.021	1.027	1.027	1.027	1.029	1.025	1.019	1.014	1.007	1.009	1.010	1.013	1.011	1.019
New Jersey	1.031	1.024	1.026	1.027	1.026	1.026	1.026	1.026	1.026	1.026	1.036	1.039	1.034	1.036
New Mexico	1.033	1.049	1.074	1.077	1.074	1.068	1.048	1.054	1.039	1.040	1.039	1.003	1.020	1.029
New York	1.027	1.027	1.029	1.029	1.030	1.029	1.029	1.030	1.028	1.029	1.029	1.028	1.028	1.026
North Carolina	1.033	1.034	1.034	1.033	1.031	1.030	1.031	1.032	1.032	1.034	1.035	1.036	1.033	1.036
North Dakota	1.045	1.049	1.062	1.043	1.048	1.055	1.049	1.032	1.046	1.045	1.060	1.058	1.050	1.051
Ohio	1.034	1.037	1.044	1.046	1.045	1.040	1.042	1.040	1.044	1.036	1.038	1.037	1.038	1.038
Oklahoma	1.042	1.025	1.028	1.030	1.036	1.038	1.028	1.027	1.021	1.026	1.026	1.028	1.020	1.024
Oregon	1.041	1.036	1.030	1.022	1.028	1.023	1.035	1.023	1.029	1.035	1.037	1.040	1.040	1.040
Pennsylvania	1.029	1.034	1.034	1.036	1.036	1.036	1.037	1.037	1.035	1.036	1.037	1.036	1.035	1.034
Rhode Island	1.035	1.030	1.033	1.029	1.028	1.027	1.027	1.028	1.028	1.018	1.029	1.029	1.026	1.060
South Carolina	1.027	1.026	1.028	1.030	1.028	1.027	1.026	1.028	1.027	1.027	1.029	1.031	1.027	1.030
South Dakota	1.011	1.011	1.010	1.005	1.013	1.020	1.017	1.016	1.018	1.015	1.013	1.010	1.014	1.014
Tennessee	1.023	1.024	1.034	1.032	1.032	1.031	1.032	1.035	1.033	1.031	1.035	1.032	1.031	1.032
Texas	1.029	1.036	1.038	1.040	1.040	1.038	1.038	1.040	1.037	1.043	1.028	1.037	1.037	1.033
Utah	1.075	1.075	1.075	0.948	1.080	1.081	1.087	1.088	1.073	1.078	1.080	1.067	1.063	1.042
Vermont	0.992	0.992	0.992	0.987	0.987	0.990	0.986	0.987	0.988	0.995	0.998	0.996	0.996	1.015
Virginia	1.030	1.036	1.039	1.040	1.040	1.041	1.041	1.042	1.042	1.039	1.044	1.038	1.031	1.039
Washington	1.043	1.045	1.040	1.029	1.033	1.026	1.032	1.030	1.031	1.033	1.037	1.041	1.040	1.037
West Virginia	1.038	1.053	1.067	1.076	1.074	1.077	1.077	1.071	1.073	1.065	1.065	1.064	1.061	1.061
Wisconsin	1.009	1.008	1.010	1.010	1.008	1.008	1.005	1.006	1.007	1.009	1.011	1.012	1.011	1.013
Wyoming	1.059	1.053	1.051	1.050	1.057	1.053	1.055	1.099	1.060	1.058	1.056	1.056	1.063	1.061
U.S. Average	1.030	1.031	1.033	1.031	1.031	1.030	1.031	1.030	1.030	1.030	1.028	1.029	1.028	1.029

Sources: See source listing at the end of this appendix.

**Table D8. Approximate Heat Content of Bituminous Coal and Lignite Consumed by the Residential and Commercial Sector, 1960, 1970-1982**  
(Million Btu per Short Ton)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	24.910	23.933	23.742	23.674	23.701	23.324	23.520	23.618	23.507	23.946	24.013	24.042	24.226	24.314
Alaska	18.906	18.165	18.020	17.969	17.989	17.703	17.683	17.734	17.658	17.641	15.800	15.800	15.800	15.800
Arizona	-	-	-	-	-	-	-	-	23.139	23.039	-	-	19.985	19.995
Arkansas	23.588	22.663	22.483	22.418	22.444	22.087	22.785	-	23.258	24.556	-	23.900	26.519	22.890
California	23.013	22.111	21.935	21.871	21.896	21.548	21.373	-	21.421	22.184	22.381	23.109	23.029	23.286
Colorado	22.953	22.053	21.877	21.814	21.839	21.492	20.826	21.418	21.557	19.872	21.735	21.461	21.339	21.516
Connecticut	25.062	24.080	23.888	23.819	23.846	23.467	-	-	-	22.406	24.094	24.454	24.291	25.138
Delaware	-	-	-	-	-	-	-	-	-	-	-	24.415	24.286	24.416
Dist. of Columbia	25.109	24.124	23.932	23.863	23.890	23.510	23.241	23.714	-	-	24.146	24.541	24.304	24.494
Florida	24.336	23.382	23.195	23.129	23.155	22.787	23.493	-	-	-	24.068	24.283	24.328	22.985
Georgia	24.742	23.772	23.583	23.515	23.542	23.167	23.494	23.849	23.591	23.628	24.100	24.321	24.311	24.361
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	24.831	23.858	23.668	23.600	23.626	23.251	22.663	21.311	21.636	20.090	19.148	22.292	21.717	21.670
Illinois	24.041	23.098	22.914	22.848	22.874	22.511	22.523	22.456	22.233	22.266	22.264	22.066	22.065	22.019
Indiana	24.063	23.120	22.935	22.869	22.895	22.531	22.132	22.479	22.899	22.295	22.384	21.878	21.953	22.064
Iowa	21.321	20.485	20.322	20.264	20.287	19.964	18.277	18.944	21.895	19.929	21.334	20.223	20.611	20.526
Kansas	21.788	20.934	20.767	20.707	20.731	20.401	19.746	-	-	21.092	20.909	21.182	21.183	22.421
Kentucky	24.410	23.453	23.266	23.199	23.226	22.856	23.209	23.737	23.444	23.407	23.942	23.865	23.962	23.976
Louisiana	-	-	-	-	-	-	20.474	-	-	-	-	21.365	-	21.428
Maine	25.152	24.166	23.973	23.904	23.931	23.551	23.260	23.714	23.362	23.474	24.187	24.441	24.400	24.507
Maryland	25.119	24.134	23.942	23.873	23.900	23.520	23.334	23.760	23.575	23.808	24.318	24.468	24.310	24.519
Massachusetts	25.073	24.090	23.898	23.830	23.857	23.477	23.241	23.714	23.336	23.599	23.063	24.510	24.738	24.828
Michigan	24.760	23.789	23.599	23.531	23.558	23.184	23.474	23.577	23.311	23.069	24.086	24.363	24.243	24.385
Minnesota	21.971	21.109	20.941	20.881	20.905	20.572	19.257	23.255	23.224	20.599	18.757	20.829	18.497	18.046
Mississippi	23.044	22.140	21.964	21.900	21.925	21.577	21.950	-	-	23.315	24.094	22.993	-	-
Missouri	22.942	22.042	21.867	21.804	21.828	21.481	21.404	21.611	21.511	21.346	21.246	21.807	21.541	21.471
Montana	21.336	20.499	20.336	20.277	20.300	19.977	20.389	20.037	18.942	18.432	18.696	22.042	17.671	17.598
Nebraska	20.913	20.093	19.933	19.876	19.898	19.582	18.406	18.410	18.074	17.967	18.441	18.038	17.701	19.195
Nevada	25.231	24.242	24.049	23.980	24.007	23.625	23.521	22.478	23.080	18.680	17.793	22.334	22.625	23.094
New Hampshire	24.958	23.979	23.788	23.720	23.747	23.369	-	-	-	-	-	24.458	-	24.493
New Jersey	24.744	23.774	23.584	23.516	23.543	23.169	21.821	-	-	-	-	24.321	24.286	24.884
New Mexico	22.993	22.091	21.916	21.852	21.877	21.529	-	-	21.827	19.972	20.007	19.786	20.017	20.070
New York	24.624	23.659	23.470	23.403	23.429	23.057	23.386	23.836	23.383	23.874	24.012	24.370	24.211	24.363
North Carolina	24.762	23.791	23.602	23.534	23.561	23.186	23.493	23.865	23.592	23.469	24.100	24.422	24.326	24.493
North Dakota	15.550	14.940	14.821	14.779	14.796	14.560	13.757	13.487	13.495	13.289	13.451	13.243	13.221	13.263
Ohio	23.849	22.914	22.732	22.666	22.692	22.331	22.325	22.925	22.697	22.658	22.977	23.213	23.470	23.571
Oklahoma	22.727	21.836	21.662	21.600	21.624	21.280	20.673	20.965	21.305	21.531	25.722	23.291	21.667	21.842
Oregon	24.605	23.640	23.452	23.384	23.411	23.039	22.383	21.539	21.413	20.447	19.560	22.722	20.262	19.758
Pennsylvania	24.791	23.819	23.629	23.561	23.588	23.213	23.495	23.808	23.824	24.034	24.023	24.183	24.126	24.485
Rhode Island	25.879	24.865	24.667	24.596	24.624	24.232	-	-	-	-	-	24.415	-	-
South Carolina	24.762	23.791	23.601	23.533	23.560	23.185	23.493	23.865	23.592	23.628	24.100	24.414	24.146	24.493
South Dakota	19.412	18.650	18.502	18.449	18.470	18.176	16.860	19.541	19.155	22.224	17.793	18.426	18.300	18.032
Tennessee	24.715	23.746	23.557	23.489	23.516	23.142	23.485	23.855	23.521	23.323	23.373	23.975	24.156	24.005
Texas	14.952	14.366	14.251	14.210	14.226	14.000	13.104	-	13.202	-	-	15.200	19.316	17.793
Utah	25.892	24.877	24.679	24.608	24.636	24.244	23.740	22.410	23.083	22.962	23.365	23.179	23.140	23.279
Vermont	25.148	24.162	23.969	23.900	23.927	23.547	24.282	-	-	-	-	-	24.328	25.165
Virginia	24.786	23.814	23.624	23.556	23.583	23.208	23.473	23.851	23.586	23.564	24.044	24.432	24.362	24.588
Washington	22.909	22.011	21.836	21.773	21.798	21.451	19.968	19.349	22.164	21.807	21.653	22.771	22.976	23.039
West Virginia	24.997	24.017	23.826	23.757	23.784	23.406	23.709	24.025	23.886	24.189	24.148	24.059	24.184	24.716
Wisconsin	21.916	21.056	20.889	20.828	20.852	20.520	18.972	23.536	23.470	20.615	20.484	24.296	23.348	23.423
Wyoming	20.625	19.817	19.659	19.602	19.625	19.312	18.572	18.614	18.372	18.058	17.849	17.809	17.907	17.584
U.S. Average	24.054	23.111	22.927	22.861	22.887	22.523	22.258	22.819	22.594	22.078	21.884	22.488	22.010	22.226

- =Not applicable.

Sources: See source listing at the end of this appendix.

**Table D9. Approximate Heat Content of Bituminous Coal and Lignite Consumed by the Residential and Commercial Sector, 1983-1996**  
(Million Btu per Short Ton)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	24.155	24.305	24.407	24.640	25.083	25.793	24.434	24.629	24.643	24.203	24.251	24.436	24.646	24.638
Alaska	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800
Arizona	19.866	19.790	19.788	19.886	20.384	19.884	21.631	18.698	18.612	21.701	21.389	-	21.962	19.285
Arkansas	22.948	22.811	22.990	-	21.490	21.920	24.250	24.834	25.968	24.968	23.898	26.558	-	-
California	23.096	23.142	23.555	18.982	22.688	23.128	22.373	23.184	23.140	23.078	23.201	23.236	23.296	23.282
Colorado	21.370	21.559	21.217	21.565	21.399	21.956	21.382	21.435	21.575	20.916	21.812	22.145	22.169	22.107
Connecticut	25.928	-	24.664	24.955	24.959	25.044	24.804	24.954	25.026	25.043	25.188	25.236	23.338	25.230
Delaware	24.594	-	24.660	24.724	24.772	24.987	24.697	24.850	25.026	25.184	23.831	23.808	-	25.037
Dist. of Columbia	24.785	24.814	24.888	24.962	25.063	25.103	24.817	24.961	25.040	24.940	24.992	24.957	25.178	24.743
Florida	24.684	24.750	24.882	24.962	25.036	25.044	24.884	24.832	-	23.205	24.980	24.946	24.644	25.044
Georgia	24.501	24.745	24.881	24.960	25.129	25.210	24.653	25.142	25.187	25.196	25.013	25.347	24.980	25.044
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	22.121	22.229	22.832	22.858	22.577	22.582	21.568	22.478	22.573	22.430	22.432	22.456	21.717	21.725
Illinois	22.217	22.273	22.267	22.340	22.531	22.452	22.621	22.439	22.560	22.811	22.611	22.446	22.506	22.668
Indiana	22.052	22.081	22.257	22.394	22.712	22.588	22.300	22.448	22.431	22.440	22.587	22.620	22.244	22.178
Iowa	21.648	20.925	21.390	21.129	20.632	20.475	22.674	23.947	24.086	23.698	23.405	23.489	24.361	24.529
Kansas	21.328	21.438	21.146	21.376	21.490	21.920	23.701	24.280	24.172	24.410	22.719	24.513	23.945	24.108
Kentucky	24.004	24.284	24.344	24.557	24.580	24.406	23.506	24.448	24.712	24.799	24.880	24.862	24.928	24.356
Louisiana	-	22.778	-	-	-	-	24.884	-	-	-	-	-	25.078	-
Maine	24.750	24.748	24.883	25.113	25.276	25.169	25.208	24.832	24.980	25.084	24.983	-	25.276	-
Maryland	24.604	24.741	24.854	24.865	24.839	24.923	24.938	25.056	25.157	25.253	25.320	25.289	24.844	25.095
Massachusetts	25.018	24.824	25.079	24.889	24.992	25.600	25.462	24.957	24.994	24.953	24.964	24.949	25.075	24.987
Michigan	24.565	24.381	24.472	24.862	24.927	25.028	24.858	24.812	24.885	24.916	24.730	24.476	24.661	24.850
Minnesota	19.199	18.573	19.142	18.976	17.942	18.198	19.272	17.892	17.726	17.735	18.349	19.597	20.258	17.548
Mississippi	23.879	24.750	24.541	24.962	24.407	23.619	23.288	24.852	-	-	-	-	-	-
Missouri	21.665	21.677	22.802	22.616	21.777	22.011	22.362	21.936	21.949	22.017	22.436	22.866	22.634	22.661
Montana	20.405	17.707	17.680	17.579	17.576	17.761	19.706	18.781	18.015	18.178	18.888	18.055	21.228	18.188
Nebraska	20.616	21.375	21.526	20.809	20.935	18.275	21.379	21.374	21.544	20.436	21.706	21.888	20.321	17.300
Nevada	23.096	21.784	23.562	23.234	23.416	23.150	22.876	23.184	23.148	23.096	23.200	23.236	23.443	23.282
New Hampshire	24.750	24.588	-	24.962	-	24.732	24.934	24.862	25.026	25.184	-	-	25.216	25.230
New Jersey	24.594	24.745	24.871	24.724	24.750	-	24.664	24.862	25.026	25.184	25.188	-	25.178	25.031
New Mexico	19.866	19.790	19.817	19.886	17.960	19.892	22.985	18.698	18.639	19.688	19.185	19.322	19.232	19.329
New York	24.660	24.568	24.660	24.622	24.815	24.783	24.696	24.531	24.787	24.845	24.977	25.056	25.233	25.027
North Carolina	24.749	24.750	24.878	24.962	25.058	25.056	24.886	25.187	25.268	25.039	25.017	24.996	25.164	24.839
North Dakota	13.157	13.001	13.138	13.129	13.195	13.098	13.084	13.910	13.898	14.549	14.765	14.920	15.535	14.753
Ohio	23.746	23.800	23.848	23.980	24.144	24.274	23.876	24.142	24.171	24.361	24.325	24.319	24.438	23.782
Oklahoma	21.318	21.501	23.394	21.895	22.901	21.875	23.174	24.834	25.968	24.968	23.898	26.558	25.894	26.128
Oregon	20.240	21.754	22.607	20.674	22.835	24.270	24.376	23.184	23.148	23.096	23.200	23.236	23.296	23.282
Pennsylvania	24.626	24.645	24.842	24.947	24.896	24.991	25.076	24.877	25.020	25.166	25.178	25.115	25.190	25.175
Rhode Island	24.594	24.588	24.660	24.724	-	-	-	21.388	-	-	24.808	-	-	-
South Carolina	24.750	24.679	24.882	24.962	25.036	25.044	24.884	24.855	25.138	24.986	24.983	24.939	25.693	24.717
South Dakota	19.839	23.336	19.369	20.802	17.784	16.940	17.328	18.375	17.287	17.262	17.294	20.512	19.072	21.619
Tennessee	24.582	24.279	24.389	24.089	24.327	24.718	24.357	24.722	25.103	24.277	25.121	25.164	25.281	25.043
Texas	23.105	-	22.511	24.960	23.528	23.446	23.695	25.896	25.723	21.625	18.085	26.558	-	25.230
Utah	23.096	23.142	23.562	23.234	23.416	23.048	22.829	23.150	23.148	23.096	23.200	23.236	23.296	23.282
Vermont	24.594	24.743	24.882	24.995	24.750	-	24.664	24.862	25.026	-	25.188	24.832	-	25.230
Virginia	24.843	24.797	24.877	25.011	25.071	25.175	25.004	25.087	25.124	25.142	24.997	24.984	24.998	25.106
Washington	22.744	22.788	23.452	22.190	22.475	22.022	22.057	21.737	22.330	22.180	22.502	22.429	22.634	23.098
West Virginia	24.897	24.820	24.930	25.213	25.271	25.277	25.227	25.017	25.013	24.986	24.909	24.954	24.831	24.680
Wisconsin	23.249	24.168	24.629	24.600	24.069	24.400	24.678	24.906	25.063	25.063	24.968	24.944	25.078	25.052
Wyoming	17.468	17.913	17.262	17.650	17.369	17.836	17.550	19.935	23.148	18.916	18.551	18.457	18.241	18.193
U.S. Average	22.438	22.406	22.568	22.669	22.800	23.135	22.917	22.678	22.635	22.768	22.749	22.683	22.767	22.649

- =Not applicable.  
Sources: See source listing at the end of this appendix.

**Table D10. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Other Industrial Users, 1960, 1970-1982**  
(Million Btu per Short Ton)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama .....	25.215	23.543	23.215	23.098	23.145	22.976	22.997	23.447	23.466	23.817	24.032	24.119	24.219	24.200
Alaska .....	19.428	18.140	17.887	17.797	17.834	17.703	17.684	17.734	17.717	-	-	-	-	-
Arizona .....	21.614	20.181	19.900	19.800	19.840	19.695	19.778	20.069	20.528	20.366	20.233	20.373	20.358	20.322
Arkansas .....	25.428	23.742	23.412	23.294	23.341	23.170	21.336	21.422	21.162	21.385	21.263	21.406	21.484	21.437
California .....	26.052	24.325	23.986	23.865	23.914	23.739	22.985	22.103	22.532	22.278	22.459	22.173	22.209	22.121
Colorado .....	23.558	21.996	21.690	21.581	21.625	21.466	21.392	20.816	21.031	21.446	21.588	21.818	21.417	21.384
Connecticut .....	25.780	24.071	23.735	23.616	23.664	23.491	23.627	23.865	24.281	23.132	24.372	24.458	24.328	25.036
Delaware .....	25.445	23.758	23.427	23.309	23.356	23.185	23.493	23.865	23.784	24.129	24.410	24.482	24.290	24.428
Dist. of Columbia .....	25.884	24.167	23.831	23.711	23.759	23.585	23.786	24.162	23.962	24.276	24.377	24.357	24.328	-
Florida .....	25.659	23.958	23.624	23.505	23.553	23.381	23.541	23.618	23.509	23.599	22.822	22.892	23.911	24.483
Georgia .....	25.423	23.737	23.407	23.289	23.337	23.166	23.508	23.779	23.551	23.698	24.069	24.331	24.313	24.476
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-	-	24.688
Idaho .....	22.544	21.049	20.756	20.651	20.693	20.542	19.935	19.029	18.897	18.402	18.786	17.684	17.680	17.495
Illinois .....	23.828	22.248	21.938	21.828	21.872	21.712	21.684	21.833	21.837	21.670	22.084	22.350	22.345	22.471
Indiana .....	24.011	22.419	22.106	21.995	22.040	21.879	21.824	21.885	21.877	21.829	22.008	22.253	22.453	22.172
Iowa .....	23.492	21.934	21.629	21.520	21.564	21.406	21.291	20.985	20.915	20.973	21.336	21.489	21.667	21.954
Kansas .....	22.671	21.168	20.873	20.768	20.810	20.658	20.480	21.062	21.237	21.432	21.162	21.568	21.443	21.402
Kentucky .....	24.737	23.096	22.775	22.660	22.707	22.540	22.946	23.223	23.104	23.288	23.693	24.118	24.048	24.153
Louisiana .....	24.036	22.442	22.130	22.018	22.063	21.902	21.034	-	22.546	21.734	21.424	22.153	21.999	22.873
Maine .....	25.905	24.187	23.850	23.730	23.779	23.605	24.106	24.472	23.611	23.639	24.675	24.475	24.300	24.496
Maryland .....	25.909	24.191	23.854	23.734	23.782	23.608	23.663	24.026	24.036	24.265	24.175	24.487	24.255	24.483
Massachusetts .....	26.159	24.425	24.085	23.963	24.012	23.837	23.831	23.922	24.104	23.912	24.327	24.641	24.426	24.683
Michigan .....	24.832	23.186	22.863	22.748	22.794	22.627	22.897	23.397	23.176	23.321	23.685	24.053	24.048	24.242
Minnesota .....	19.521	18.227	17.973	17.883	17.919	17.788	18.917	18.666	17.381	17.784	17.746	17.084	17.808	16.768
Mississippi .....	25.681	23.978	23.644	23.525	23.573	23.401	23.213	23.655	23.214	22.756	22.724	23.442	22.971	24.197
Missouri .....	23.598	22.033	21.726	21.617	21.661	21.502	21.429	21.791	21.707	21.658	21.782	22.002	21.952	21.994
Montana .....	22.827	21.313	21.017	20.911	20.954	20.800	20.879	19.469	18.702	18.189	19.523	19.035	19.406	19.552
Nebraska .....	21.975	20.517	20.232	20.130	20.171	20.023	19.285	19.243	19.044	18.541	18.821	19.194	18.666	18.830
Nevada .....	26.618	24.853	24.507	24.384	24.434	24.255	23.457	22.170	22.684	23.039	23.332	23.168	23.147	23.286
New Hampshire .....	24.439	22.819	22.501	22.388	22.433	22.269	23.627	-	23.621	23.898	24.407	24.267	24.241	24.427
New Jersey .....	25.419	23.734	23.403	23.286	23.333	23.162	23.909	24.321	24.028	23.807	24.239	24.622	24.600	24.497
New Mexico .....	23.038	21.510	21.210	21.104	21.147	20.992	20.849	19.874	20.022	20.617	21.641	21.867	21.594	21.740
New York .....	25.787	24.077	23.742	23.623	23.671	23.498	23.714	24.076	24.056	24.085	24.313	24.543	24.361	24.680
North Carolina .....	25.446	23.759	23.428	23.310	23.358	23.187	23.490	23.863	23.591	23.628	24.100	24.419	24.346	24.495
North Dakota .....	14.812	13.830	13.637	13.569	13.596	13.497	13.038	13.137	13.154	13.203	13.205	13.120	13.146	13.192
Ohio .....	24.790	23.147	22.824	22.709	22.756	22.589	22.679	23.093	22.870	22.855	23.021	23.346	23.343	23.698
Oklahoma .....	25.383	23.700	23.370	23.253	23.300	23.130	23.439	21.249	21.137	21.328	20.976	21.212	21.298	21.169
Oregon .....	22.677	21.173	20.879	20.774	20.816	20.664	20.348	19.037	18.627	18.424	18.274	17.693	18.860	17.629
Pennsylvania .....	25.636	23.936	23.603	23.484	23.532	23.360	23.551	23.910	23.867	23.924	24.102	24.271	24.177	24.430
Rhode Island .....	25.890	24.173	23.837	23.717	23.765	23.591	23.628	24.026	-	23.901	24.094	24.559	24.803	-
South Carolina .....	25.448	23.761	23.430	23.312	23.359	23.188	23.493	23.864	23.592	23.626	24.100	24.415	24.328	24.493
South Dakota .....	19.909	18.589	18.330	18.238	18.275	18.141	18.765	18.397	18.317	18.134	18.330	19.220	18.909	19.537
Tennessee .....	25.074	23.411	23.085	22.969	23.016	22.848	23.144	23.607	23.283	23.530	23.894	24.160	24.077	24.220
Texas .....	16.664	15.559	15.342	15.265	15.296	15.184	18.822	15.360	15.195	15.530	15.974	16.290	16.097	17.145
Utah .....	26.198	24.461	24.121	23.999	24.048	23.872	23.644	22.292	22.520	22.580	22.851	22.331	22.379	22.748
Vermont .....	26.525	24.766	24.421	24.298	24.348	24.170	24.056	24.472	24.254	24.144	24.611	24.888	24.821	24.947
Virginia .....	25.467	23.778	23.447	23.329	23.377	23.206	23.477	23.868	23.602	23.641	24.116	24.453	24.309	24.522
Washington .....	25.955	24.234	23.896	23.776	23.825	23.650	23.546	21.426	22.046	21.845	22.142	21.363	21.141	20.835
West Virginia .....	25.524	23.831	23.499	23.381	23.429	23.257	23.525	23.973	23.898	23.751	24.241	24.353	24.241	24.492
Wisconsin .....	24.597	22.966	22.646	22.532	22.578	22.413	21.957	22.523	22.555	22.315	22.703	22.735	22.598	22.860
Wyoming .....	20.539	19.177	18.910	18.814	18.853	18.715	18.356	18.410	18.227	18.020	18.110	17.955	17.970	17.821
U.S. Average .....	24.604	22.973	22.653	22.539	22.585	22.420	22.439	22.528	22.290	22.175	22.436	22.690	22.572	22.695

- =Not applicable.  
Sources: See source listing at the end of this appendix.



**Table D11. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Other Industrial Users, 1983-1996**

(Million Btu per Short Ton)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	24.142	24.284	24.387	24.618	24.795	24.641	24.393	24.679	24.581	24.643	24.536	24.656	24.848	24.785
Alaska	-	-	-	-	-	-	-	-	-	-	15.800	15.800	-	15.800
Arizona	20.172	20.307	20.257	20.214	19.876	20.718	20.704	20.070	19.942	20.317	19.993	20.156	19.962	19.789
Arkansas	21.395	21.543	21.310	22.447	22.337	22.224	22.396	22.808	24.188	24.001	23.450	24.827	23.957	23.987
California	21.998	22.302	23.299	22.804	23.249	23.006	22.709	22.522	22.731	22.970	23.200	23.229	23.296	23.282
Colorado	21.385	21.620	21.568	21.475	21.015	21.293	20.793	21.105	21.081	20.107	20.921	21.494	21.650	21.450
Connecticut	24.639	22.060	24.882	24.834	21.649	24.745	24.781	-	24.843	24.936	24.804	25.276	-	24.629
Delaware	24.599	24.616	24.728	24.808	24.820	24.768	24.719	24.938	25.073	25.263	25.301	25.259	25.220	25.176
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	24.681	24.579	24.785	24.910	25.048	25.128	24.789	25.004	25.131	25.002	24.887	24.927	25.110	25.118
Georgia	24.717	24.721	24.819	24.939	25.022	24.997	24.791	25.148	25.140	25.147	25.103	25.073	25.198	25.137
Hawaii	24.688	24.688	24.688	24.688	24.970	24.830	24.830	24.810	24.850	24.830	24.830	21.500	21.500	21.500
Idaho	17.614	17.598	17.762	18.122	17.710	17.856	17.701	17.858	17.756	17.528	18.160	17.690	19.035	18.166
Illinois	22.573	22.701	22.798	23.051	23.041	22.860	22.756	22.555	21.862	22.753	22.856	22.650	22.832	22.847
Indiana	22.247	22.354	22.431	22.449	22.449	22.461	22.523	22.711	22.920	22.950	22.856	22.636	23.055	22.715
Iowa	22.045	22.342	22.606	22.676	22.835	22.035	22.909	22.552	22.176	20.554	20.118	20.060	20.923	21.255
Kansas	21.443	21.440	21.506	21.377	21.747	21.927	22.211	24.224	24.424	24.488	23.551	23.961	24.241	25.476
Kentucky	24.323	24.409	24.531	24.625	24.822	24.936	24.746	24.630	24.900	24.893	24.844	24.756	24.848	24.746
Louisiana	22.605	23.218	24.054	24.023	24.002	19.278	20.309	19.979	18.361	18.564	18.323	18.371	17.969	25.044
Maine	24.667	24.706	24.885	24.748	24.978	24.857	24.838	24.923	25.010	25.070	24.975	24.961	25.102	25.026
Maryland	24.682	24.674	24.732	24.748	24.769	24.691	24.738	25.118	25.146	25.207	25.262	25.402	25.326	25.133
Massachusetts	24.766	24.829	24.881	25.057	25.161	25.209	25.159	24.865	24.929	24.897	24.908	24.964	25.176	24.907
Michigan	24.503	24.634	24.745	24.822	24.862	24.852	24.660	24.450	24.521	24.400	24.208	24.224	24.024	24.345
Minnesota	16.839	18.343	20.688	20.997	20.250	19.155	19.588	18.562	19.361	18.530	18.128	18.488	19.048	19.120
Mississippi	23.751	23.420	23.399	23.793	23.708	23.664	23.349	23.254	23.265	23.341	24.019	23.893	24.073	23.907
Missouri	22.079	22.351	22.329	22.561	23.012	23.106	22.948	22.988	23.267	23.434	23.578	23.002	23.175	23.134
Montana	19.534	18.987	18.068	17.738	18.894	18.282	18.778	18.376	18.478	18.549	18.333	18.549	18.100	18.108
Nebraska	19.699	19.391	18.597	18.412	18.612	18.722	19.127	19.036	18.908	18.448	18.730	19.098	19.359	18.823
Nevada	23.085	23.150	23.562	23.234	23.416	23.150	21.186	23.184	23.148	23.096	23.200	23.236	22.668	22.620
New Hampshire	24.594	24.652	24.665	24.724	24.750	24.756	24.876	24.836	25.261	25.319	24.980	-	25.216	-
New Jersey	25.256	25.154	25.186	25.347	25.251	25.308	25.185	25.237	25.267	25.334	25.344	25.073	22.502	-
New Mexico	21.460	21.644	21.625	21.813	21.380	21.920	24.437	21.388	21.544	20.398	21.706	21.926	22.008	21.976
New York	24.826	24.766	24.901	25.153	25.105	25.108	25.050	25.107	25.191	25.162	25.183	25.212	25.128	25.037
North Carolina	24.757	24.750	24.880	24.964	25.033	25.042	24.882	24.938	25.108	25.086	25.145	25.105	25.269	25.150
North Dakota	13.111	13.159	13.160	13.243	13.374	13.281	13.322	13.489	13.413	13.327	13.329	13.450	13.353	13.382
Ohio	23.961	24.029	24.187	24.400	24.463	24.519	24.309	24.301	24.443	24.421	24.553	24.549	24.511	24.469
Oklahoma	21.596	21.225	21.434	21.488	21.103	21.259	21.314	22.802	23.805	22.755	22.427	21.088	22.675	22.232
Oregon	17.854	18.799	17.868	17.833	17.908	17.397	17.660	17.352	17.334	17.890	18.419	19.419	18.496	20.836
Pennsylvania	24.711	24.684	24.759	24.954	24.993	24.946	24.878	24.905	25.054	25.109	25.118	25.126	25.163	25.088
Rhode Island	24.750	24.750	24.882	25.331	25.036	25.044	24.884	-	-	-	-	-	-	-
South Carolina	24.748	24.745	24.874	24.962	25.036	25.039	24.881	25.118	25.226	25.196	25.175	25.075	25.193	25.064
South Dakota	17.491	17.307	17.262	17.347	17.274	17.418	17.352	17.338	17.466	17.296	17.294	17.268	17.258	17.300
Tennessee	24.139	24.444	24.582	24.686	24.814	24.778	24.676	25.133	25.124	25.253	25.163	25.056	25.138	25.023
Texas	15.679	15.953	15.575	15.907	15.153	14.068	14.565	14.788	15.052	14.306	15.180	15.477	14.960	15.340
Utah	22.499	22.297	22.274	21.755	22.089	22.915	22.465	23.189	23.124	23.096	23.493	22.921	23.003	23.282
Vermont	25.296	24.750	24.882	-	25.036	25.044	24.884	24.846	25.747	25.700	25.188	-	-	-
Virginia	24.880	24.783	24.903	25.007	25.067	25.092	24.974	25.069	25.165	25.196	25.103	25.051	25.086	25.099
Washington	20.198	21.429	21.634	19.849	19.764	20.929	20.755	22.707	21.745	20.694	20.218	19.275	19.006	19.658
West Virginia	24.699	24.636	24.855	25.054	25.064	25.106	24.995	24.888	24.994	24.948	24.940	24.977	24.979	24.945
Wisconsin	22.764	22.651	23.323	23.602	23.106	21.876	22.595	24.149	24.306	24.271	23.958	24.161	24.218	23.889
Wyoming	17.723	17.514	17.555	17.337	17.463	17.771	17.741	22.178	22.051	21.118	21.281	21.756	21.941	21.896
U.S. Average	22.680	22.525	22.013	22.185	22.360	22.341	22.324	22.444	22.448	22.242	22.111	22.046	21.931	22.087

- =Not applicable.

Sources: See source listing at the end of this appendix.

**Table D12. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Electric Utilities, 1960, 1970-1982**  
(Million Btu per Short Ton)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	24.126	23.314	22.750	23.124	23.068	22.911	23.164	23.136	23.170	23.632	23.754	23.912	23.998	24.041
Alaska	17.729	17.080	17.240	17.400	17.400	17.400	17.400	17.400	17.400	17.400	15.800	15.800	15.800	15.800
Arizona	-	21.238	20.976	20.822	20.656	21.685	21.090	21.102	21.557	21.525	21.225	21.243	21.013	21.086
Arkansas	-	-	-	-	-	-	-	-	-	16.795	16.814	17.009	16.963	17.045
California	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	20.546	21.530	22.058	21.342	21.235	19.939	19.808	19.594	20.197	20.069	20.262	19.992	20.120	19.628
Connecticut	26.548	23.548	23.382	22.574	23.438	23.904	23.904	23.904	23.904	23.904	23.904	-	-	-
Delaware	25.982	24.186	24.618	25.070	24.738	24.247	24.534	24.936	24.177	24.502	24.731	24.922	24.963	25.217
Dist. of Columbia	27.460	25.920	25.708	26.300	26.260	25.068	25.619	25.619	-	-	-	-	-	-
Florida	24.606	22.748	22.862	22.622	22.976	22.909	23.093	23.294	23.121	23.579	23.756	23.686	23.826	24.021
Georgia	25.042	23.756	23.282	23.548	23.951	23.665	23.751	23.767	23.711	23.747	23.765	23.805	23.909	23.992
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	21.694	21.002	20.714	20.682	20.680	20.539	20.259	20.493	20.596	20.565	20.561	20.593	20.815	20.859
Indiana	22.640	22.030	21.720	21.656	21.612	21.350	21.229	21.472	21.462	21.360	21.648	21.632	21.643	21.776
Iowa	20.768	20.888	20.988	20.656	21.043	20.592	20.385	20.255	20.002	19.721	18.895	18.633	18.288	18.275
Kansas	23.754	24.100	24.216	24.052	20.783	19.985	19.957	20.385	19.041	18.273	18.643	18.370	18.122	17.745
Kentucky	22.972	21.852	21.684	21.632	21.739	21.405	21.481	21.893	22.002	22.053	22.523	22.917	22.896	22.803
Louisiana	-	-	-	-	-	-	-	-	-	-	-	16.038	16.187	16.714
Maine	28.580	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	26.616	24.612	24.580	25.118	24.891	23.070	24.323	24.542	24.407	24.402	24.572	24.757	24.515	24.822
Massachusetts	26.352	23.260	25.062	26.288	24.182	23.768	24.347	-	-	-	27.004	26.751	26.114	26.310
Michigan	24.884	24.202	24.190	24.360	24.094	23.529	23.662	23.695	23.562	23.099	23.624	24.025	23.487	23.906
Minnesota	22.390	20.274	19.286	19.020	18.177	17.861	17.940	17.808	17.584	17.461	17.643	17.557	17.544	17.614
Mississippi	24.858	24.098	24.184	24.046	23.654	22.942	23.164	23.284	22.851	23.708	23.413	23.994	24.105	24.176
Missouri	21.904	21.518	21.644	21.630	21.618	21.566	21.494	21.688	21.775	21.490	21.473	21.306	21.183	21.398
Montana	13.500	15.474	15.252	15.498	15.727	15.564	15.959	16.676	16.984	16.911	17.056	17.003	17.087	17.011
Nebraska	24.782	23.914	22.954	23.030	22.309	21.253	20.954	20.823	21.313	20.575	19.181	18.809	18.015	17.851
Nevada	-	25.654	23.704	22.494	22.434	22.436	22.388	22.237	22.149	22.061	22.092	22.078	22.062	22.099
New Hampshire	25.448	27.432	26.956	27.182	26.880	26.789	26.701	26.918	26.728	26.028	26.854	26.816	26.951	27.040
New Jersey	26.772	24.944	24.616	25.252	25.570	24.540	25.401	26.119	25.974	26.120	26.098	26.182	26.226	26.402
New Mexico	25.000	17.966	18.034	18.052	17.843	17.771	17.849	17.858	17.915	18.013	17.817	17.695	18.279	18.283
New York	26.596	24.664	24.348	24.468	24.752	23.504	24.050	24.499	24.259	24.065	24.504	24.635	24.420	24.844
North Carolina	26.242	24.114	23.804	23.912	24.419	23.888	23.788	24.081	23.867	24.053	24.363	24.538	24.443	24.538
North Dakota	13.836	13.666	13.342	13.356	13.452	13.385	13.344	13.212	13.290	13.387	13.350	13.234	13.247	13.286
Ohio	23.770	22.500	22.146	22.576	22.700	21.889	21.919	22.005	21.789	21.827	22.240	22.880	22.706	23.106
Oklahoma	25.942	25.076	23.000	25.076	25.076	25.076	25.076	16.548	16.803	17.080	17.409	17.393	17.118	17.060
Oregon	-	-	-	-	-	-	-	-	-	-	20.054	16.393	16.573	16.613
Pennsylvania	24.446	23.748	23.754	24.026	24.194	23.716	23.769	24.183	24.149	24.202	24.277	24.326	24.195	24.411
Rhode Island	28.152	-	-	-	-	24.152	-	-	-	-	-	-	-	-
South Carolina	26.734	24.274	24.288	24.388	24.284	24.055	24.161	24.359	23.868	24.176	24.735	24.843	24.605	24.764
South Dakota	17.168	16.572	17.276	16.906	16.317	16.318	12.616	12.695	12.623	12.457	12.660	12.599	12.627	12.687
Tennessee	24.040	22.594	21.980	22.146	22.187	21.903	21.983	22.431	22.195	22.566	22.975	23.254	23.227	23.621
Texas	-	14.000	14.000	14.000	14.000	14.000	13.103	13.232	14.077	14.226	14.427	14.791	14.997	14.983
Utah	24.940	24.812	24.560	24.232	24.132	23.833	23.650	23.199	23.280	23.284	23.358	22.900	22.919	23.082
Vermont	27.760	24.870	24.976	25.000	26.462	25.786	25.744	25.709	25.709	25.709	25.926	25.926	25.096	25.628
Virginia	26.726	24.782	24.804	24.758	24.444	23.600	23.930	24.529	24.356	24.451	24.748	25.013	24.791	24.975
Washington	-	-	-	16.200	16.213	16.200	16.200	16.200	16.200	16.200	16.200	16.200	16.200	16.200
West Virginia	23.908	23.318	23.058	23.468	23.641	22.976	23.221	23.496	23.304	23.462	23.900	24.269	24.208	24.451
Wisconsin	24.208	22.446	22.366	22.692	22.842	21.925	21.236	21.344	21.119	20.901	20.844	20.523	19.760	20.087
Wyoming	14.846	16.534	16.180	16.490	16.724	16.998	16.626	17.532	17.626	17.550	17.489	17.590	17.311	17.337
U.S. Average	24.029	22.603	22.325	22.225	22.262	21.799	21.659	21.692	21.521	21.284	21.372	21.301	21.091	21.200

- =Not applicable.  
Sources: See source listing at the end of this appendix.

**Table D13. Approximate Heat Content of Bituminous Coal and Lignite Consumed by Electric Utilities, 1983-1996**  
(Million Btu per Short Ton)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	23.972	24.059	24.111	24.349	24.445	24.328	24.045	24.188	24.214	24.122	24.184	24.176	23.722	23.588
Alaska	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800	15.800
Arizona	21.269	21.190	20.986	21.044	21.217	21.300	21.193	20.963	20.712	20.607	20.543	20.561	20.548	20.465
Arkansas	17.461	17.184	17.207	17.339	17.364	17.328	17.439	17.480	17.469	17.448	17.329	17.414	17.374	17.405
California	-	22.780	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	19.467	19.310	19.497	19.540	19.685	19.543	19.697	19.616	19.775	19.840	19.775	19.892	19.790	19.717
Connecticut	-	26.272	26.317	26.344	26.268	26.277	26.616	26.466	26.477	26.334	26.289	26.188	26.220	26.200
Delaware	25.592	25.973	25.924	26.000	26.131	25.802	25.887	26.070	26.106	26.128	26.053	25.907	26.171	26.040
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	24.369	24.456	24.450	24.551	24.799	24.849	24.766	24.729	24.701	24.740	24.664	24.585	24.593	24.386
Georgia	24.129	24.251	24.241	24.291	24.350	24.345	24.199	23.786	23.873	24.078	24.296	23.549	23.152	23.162
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	20.809	21.187	20.969	21.075	21.397	21.271	21.411	21.578	21.442	21.333	20.723	20.362	19.941	19.755
Indiana	21.898	21.575	21.314	21.358	21.757	21.668	21.397	21.124	21.139	21.257	21.078	21.069	20.676	20.714
Iowa	18.289	17.945	18.197	18.372	18.304	18.422	18.797	17.783	17.781	17.733	17.320	17.566	17.357	17.316
Kansas	17.556	17.580	17.537	17.457	17.529	17.956	17.751	17.897	17.996	17.799	17.307	17.417	17.460	17.654
Kentucky	22.973	22.871	22.769	23.047	22.992	23.056	22.986	23.117	23.103	23.240	23.394	23.366	23.250	23.072
Louisiana	17.059	17.015	16.907	16.241	16.320	16.385	16.374	16.388	16.446	16.243	16.185	16.273	16.220	16.342
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	25.342	25.236	25.326	25.377	25.351	25.449	25.395	25.469	25.591	25.506	25.504	25.648	25.931	25.758
Massachusetts	26.592	26.466	26.561	26.437	26.257	26.218	26.017	26.125	26.283	26.140	25.902	25.629	25.396	25.267
Michigan	23.355	23.340	23.393	23.443	23.128	23.224	22.557	22.263	22.103	21.990	21.706	21.851	21.354	21.008
Minnesota	17.676	17.354	17.451	17.451	17.483	17.477	17.534	17.576	17.605	17.605	17.687	17.642	17.656	17.827
Mississippi	24.271	24.231	24.252	24.457	25.347	25.328	25.308	25.086	25.110	25.014	24.675	22.623	22.441	22.047
Missouri	21.423	21.414	21.289	21.377	21.195	20.808	20.735	20.800	20.596	20.641	19.719	19.437	18.432	18.126
Montana	16.693	17.023	17.307	17.100	17.180	17.040	17.018	17.129	17.044	17.151	16.991	17.000	17.040	16.877
Nebraska	17.572	17.797	17.299	17.427	17.202	17.239	17.329	17.122	17.083	17.105	17.123	17.141	17.188	17.198
Nevada	22.279	22.382	22.768	22.444	22.365	22.159	22.233	22.245	22.242	22.103	22.024	22.582	22.150	22.279
New Hampshire	27.094	27.081	26.905	26.887	26.832	26.666	26.718	26.605	26.494	26.521	26.359	26.064	26.221	26.291
New Jersey	26.443	26.425	26.475	26.458	26.472	26.647	26.638	26.859	26.804	26.930	26.795	26.683	26.565	25.987
New Mexico	18.199	18.069	18.376	18.215	18.097	18.072	18.257	18.234	18.185	18.025	17.983	18.085	18.065	18.232
New York	24.970	25.106	25.200	25.444	25.575	25.629	25.648	25.692	25.846	25.960	25.827	25.918	26.102	26.026
North Carolina	24.887	24.953	24.975	25.108	25.099	25.151	25.061	25.088	25.012	24.913	24.930	24.832	24.923	24.844
North Dakota	13.187	13.043	13.150	13.158	13.203	13.168	13.160	13.272	13.212	13.115	13.140	13.185	13.169	13.193
Ohio	23.572	23.519	23.625	23.821	23.808	23.790	23.669	23.764	23.891	23.965	24.098	24.104	24.243	24.111
Oklahoma	17.157	17.207	17.168	17.326	17.703	17.823	17.650	17.788	17.584	17.400	17.242	17.146	17.113	17.200
Oregon	16.613	16.654	16.584	-	16.967	17.057	17.057	16.696	16.859	19.283	17.602	17.874	17.765	17.563
Pennsylvania	24.663	24.631	24.640	24.670	24.707	24.651	24.669	24.624	24.604	24.894	24.887	24.917	24.860	24.831
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	25.060	25.058	25.132	25.325	25.297	25.350	25.235	25.310	25.449	25.634	25.604	25.542	25.703	25.515
South Dakota	12.297	12.204	12.210	12.169	12.123	12.677	12.273	12.192	12.050	12.069	12.114	12.098	13.944	18.068
Tennessee	23.556	23.610	23.657	23.816	23.957	24.089	23.790	23.933	24.338	24.364	24.537	24.372	24.260	24.124
Texas	14.856	14.663	14.807	14.583	14.484	14.608	14.573	14.581	14.451	14.468	14.568	14.692	14.691	14.881
Utah	22.866	22.855	23.607	22.975	23.237	22.981	22.644	22.965	22.939	22.769	22.978	22.982	23.099	23.027
Vermont	25.628	25.628	25.628	25.628	-	-	-	-	-	-	-	-	-	-
Virginia	25.314	25.243	25.628	25.708	25.629	25.599	25.386	25.427	25.535	25.660	25.633	25.556	25.487	25.195
Washington	16.200	16.200	16.200	16.200	16.208	16.413	16.322	16.270	16.028	16.378	16.249	16.801	16.533	15.871
West Virginia	24.717	24.667	24.827	24.879	24.873	24.946	24.791	24.903	25.011	25.048	24.979	24.937	24.836	24.757
Wisconsin	19.876	19.908	19.547	19.323	19.260	19.386	19.410	19.284	19.286	19.450	19.880	19.130	18.702	18.443
Wyoming	17.426	17.292	17.510	17.413	17.555	17.511	17.577	17.621	17.511	17.680	17.557	17.532	17.475	17.433
U.S. Average	21.141	21.108	20.965	21.091	21.143	20.905	20.854	20.935	20.761	20.792	20.644	20.681	20.502	20.532

- =Not applicable.

Sources: See source listing at the end of this appendix.

## Thermal Conversion Factor Source Documentation

### Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

**Asphalt.** EIA adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

**Aviation Gasoline.** EIA adopted the Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for “Gasoline, Aviation” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Butane.** EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Butane-Propane Mixture.** EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

**Crude Oil (Including Lease Condensate) Used Directly.** EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950.”

**Distillate Fuel Oil.** EIA adopted the thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950.”

**Ethane.** EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Ethane-Propane Mixture.** EIA calculated 3.308 million Btu per barrel on the basis of an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

**Isobutane.** EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Jet Fuel, Kerosene Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for “Jet Fuel, Commercial” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Jet Fuel, Naphtha Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for “Jet Fuel, Military” as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Kerosene.** EIA adopted the thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, “Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950.”

**Liquefied Petroleum Gases.** (LGTCKUS) • 1960 through 1966: EIA adopted the Bureau of Mines thermal conversion factor of 4.011 million Btu per barrel as published in the *Mineral Industry Surveys*, “Crude Petroleum and Petroleum Products, 1956,” Table 4 footnote. • 1967 forward:

Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane.

**Lubricants.** EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

**Miscellaneous Products.** EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

**Motor Gasoline.** EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Natural Gasoline.** EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

**Pentanes Plus.** EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel, equal to that for natural gasoline. See **Natural Gasoline**.

**Petrochemical Feedstocks, Naphtha Less Than 401 °F.** EIA assumed the thermal conversion factor to be 5.248 million Btu per barrel, equal to that for special naphthas. See **Special Naphthas**.

**Petrochemical Feedstock, Other Oils Equal to or Greater Than 401 °F.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil. See **Distillate Fuel Oil**.

**Petrochemical Feedstock, Still Gas.** Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

**Petroleum Coke.** EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30,120,000 Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

**Petroleum Products, Total Consumption.** Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

**Plant Condensate.** EIA estimated 5.418 million Btu per barrel from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane.** EIA adopted the thermal conversion factor of 3.836 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Residual Fuel Oil.** EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Road Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, equal to that of asphalt and first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970*. See **Asphalt**.

**Special Naphthas.** EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, equal to that of total gasoline (aviation and motor) and first published in the *Petroleum Statement, Annual, 1970*.

**Still Gas.** EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970*.

**Unfinished Oil.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel, equal to that for distillate fuel oil and first published

in the *Annual Report to Congress, Volume 3, 1977*. See **Distillate Fuel Oil**.

**Unfractionated Stream.** EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel, equal to that for plant condensate and first published in the EIA, *Annual Report to Congress, Volume 2, 1981*. See **Plant Condensate**.

**Waxes.** EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the EIA, *Petroleum Statement, Annual, 1956*.

### Approximate Heat Content of Natural Gas

**Natural Gas, Total Consumption.** (NGTCKZZ) • 1960 through 1962: EIA adopted the thermal conversion factor of 1,035 Btu per cubic foot as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*. • 1963 through 1979: EIA adopted the thermal conversion factors calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual. • 1980 forward: EIA, *Historical Natural Gas Annual 1930 Through 1997*, Table 16. Data also available via internet for 1980 forward: <http://www.eia.doe.gov> (select "Natural Gas" then select "Historical Natural Gas Annual - 1930 Through 1997," Table 16).

**Natural Gas, Consumption by Electric Utilities.** (NGEUKZZ) • 1960 through 1971: Assumed by EIA to be equal to the thermal conversion factor for the consumption of natural gas by all users. See **Natural Gas, Total Consumption**. • 1972 forward: Calculated annually by EIA by dividing the total heat content of natural gas received at electric utilities by the total quantity received at electric utilities. The heat contents and quantities received are from Federal Energy Regulatory Commission (FERC) Form 423 and predecessor forms. Data in Btu per cubic foot for 1996 are published in EIA, *Cost and Quality of Fuels for Electric Utility Plants*. Data for 1996 are also available via internet at <http://www.eia.doe.gov/cneaf/electricity/cq/cq96.pdf>

Note: For States that reported consumption on Form EIA-759 but were not large enough to report on FERC Form 423, factors were estimated by using

previous years' factors or the factor for total natural gas consumption in the State.

**Natural Gas, Consumption by Sectors Other Than Electric Utilities.** (NGNUKZZ) • 1960 through 1972: Assumed by EIA to be equal to the thermal conversion factor for the consumption of natural gas. See **Natural Gas, Total Consumption**. • 1973 forward: Calculated annually by EIA by dividing the heat content of all natural gas consumed less the heat content of natural gas consumed at electric utilities by the quantity of all natural gas consumed less the quantity of electric utility consumption. Data are from FERC Form 423, Forms EIA-176 and EIA-759, and predecessor forms.

### Approximate Heat Content of Coal and Coal Coke

**Anthracite, Total Consumption.** Calculated annually by EIA by dividing the sum of the heat content of anthracite consumed by electric utilities and by all other sectors combined by the total quantity of anthracite consumed.

**Anthracite, Consumption by Electric Utilities.** (ACEUKUS) • 1960 through 1972: EIA assumed that all anthracite consumed at electric utilities was recovered from culm banks and river dredging and was estimated to have an average heat content of 17,500 million Btu per short ton. • 1973 forward: Calculated annually by EIA by dividing the heat content of anthracite received at electric utilities by the quantity of anthracite received at electric utilities, as reported on FERC Form 423 and predecessor forms.

**Anthracite, Consumption by Sectors Other Than Electric Utilities.** (ACNUKUS) Calculated annually by EIA by dividing the heat content of anthracite produced less the heat content of the anthracite consumed at electric utilities, net exports, and shipments to U.S. Armed Forces overseas by the quantity of anthracite consumed by all sectors other than electric utilities less the quantity of anthracite stock changes, losses, and "unaccounted for."

**Bituminous Coal and Lignite, Total Consumption.** Calculated annually by EIA by dividing the sum of the heat content of bituminous coal and lignite consumed by electric utilities, coal coke plants, other industrial plants,

the residential and commercial sector, and the transportation sector by the sum of their respective tonnages.

**Bituminous Coal and Lignite, Consumption by Coke Plants.** Estimated by EIA to be 26.800 million Btu per short ton on the basis of an input-output analysis of coal carbonization.

**Bituminous Coal and Lignite, Consumption by Electric Utilities.** (BCEUKZZ) • 1960 through 1972: EIA adopted the average thermal conversion factor of the Bureau of Mines, which used the National Coal Association (NCA) average thermal conversion factor for electric utilities calculated from the Federal Power Commission's (FPC) Form 1 and published in *Steam Electric Plant Factors*, an NCA annual report. • 1973 through 1982: The average heat content of coal received at steam electric plants 25 megawatts or greater from FPC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*, "Destination and Origin of Coal 'Delivered to' (1973-1979) 'Receipts to' (1980) 'Received at' (1981-1982) Steam-Electric Plants 25-MW or Greater." • 1983 forward: The average heat content of coal received at steam electric plants having 50 megawatts capacity or larger from FERC Form 423 and published in Btu per pound in EIA, *Cost and Quality of Fuels for Electric Utility Plants*. Data for 1996 are also available via internet at: <http://www.eia.doe.gov/cneaf/electricity/cq/cq96.pdf>.

Notes: • The State conversion factors for 1960 through 1972 were derived from actual consumption data, while the conversion factors for 1973 to the present were based on receipts of coal. The factors for 1960 through 1972 may also have included some quantities of anthracite. These breaks in the series create some data discrepancies. • Alaska and Hawaii were excluded from the NCA report, FPC Form 423 and FERC Form 423. However, Alaska reported consumption of bituminous coal and lignite at electric utilities for all years. An FPC heat rate for coal at electric utilities in Alaska was used for 1960 through 1978 as published by EIA in *Federal Energy Data System (FEDS) Technical Documentation*, June 1978, Table 21. The 1972 conversion factor (the last year for which a conversion factor was reported for Alaska) was used for 1972 through 1978. According to industry sources, new mines were opened in 1978 and a more representative factor was used for 1979 and following years. • In instances where a State had no receipts for a particular year but did report consumption, it was assumed

that the coal received in one year was consumed during the following year and the Btu value of the previous year's receipts was used.

**Bituminous Coal and Lignite, Consumption by Other Industrial Users.** (BCKKZZ) • 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed by industrial users other than coke plants by the ratios of 1960 through 1973 national averages for the other industrial users to its 1974 average. • 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed by industrial users other than coke plants in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on FERC Form 423. The average Btu content of coal delivered from each coal-producing district was applied to deliveries to other industrial users in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6 and predecessor Bureau of Mines Form 6-1419-Q.

**Bituminous Coal and Lignite, Consumption by Residential and Commercial Users.** (BCHCKZZ) • 1960 through 1973: Estimated by EIA by adjusting the 1974 average heat value of bituminous coal and lignite consumed in the residential and commercial sector by the ratios of 1960 through 1973 national averages for the sector to its 1974 average. • 1974 forward: Calculated by EIA by assuming that the bituminous coal and lignite consumed in the residential and commercial sector in each State contained heating values equal to those of bituminous coal and lignite received at electric utilities in each State from identified coal-producing districts as reported on FERC Form 423. The average Btu content of coal delivered from each coal-producing district was applied to deliveries to the residential and commercial sector in each State and the sum total of the heat content was divided by total tonnages, yielding a weighted average. The coal distribution data by coal-producing district are reported on Form EIA-6 and predecessor Bureau of Mines Form 6-1419-Q.

**Bituminous Coal and Lignite, Consumption by Transportation Users.** Assumed by EIA to be equal to the Btu conversion factor for bituminous coal and lignite consumption by other industrial users. See **Bituminous Coal and Lignite, Consumption by Other Industrial Users**.

**Coal Coke, Imports and Exports.** EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

## Approximate Heat Content of Renewable Energy Sources

**Ethanol, Consumption by the Transportation Sector.** Ethanol, which is accounted for under motor gasoline, is shown separately in *SEDR* to display the use of renewable energy in the transportation sector. The data in thousand gallons are converted to billion Btu by using the conversion factor of 76,400 Btu per gallon as reported in the EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, page 42.

**Solar Energy, Consumption by the Residential and Commercial Sectors.** Photovoltaic and solar thermal energy sources consumed by the residential and commercial sectors are estimated in Btu and converted to kilowatthours by using the standard conversion factor for a kilowatthour of electricity produced, regardless of the generation process, of 3,412 Btu per kilowatthour.

**Wood, Consumption by the Residential and Commercial Sectors.** Estimated by EIA to be 20 million Btu per cord of wood. This rough average factor takes into account a number of variables, such as moisture content and species of wood, as explained in the EIA, *Household Energy Consumption and Expenditures 1993*, page 314.

## Approximate Heat Rates for Electricity

**Fossil-Fueled Steam-Electric Plant Generation.** (FFEOKUS) There is no generally accepted practice for measuring the thermal conversion rates for

power plants that generate electricity from hydroelectric, biomass fuels, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA uses data from Form EIA-767 to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu per kilowatthour. • 1960 through 1991: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published by EIA in *Electric Plant Cost and Power Production Expenses 1991*, Table 9. • 1992 forward: Unpublished factors calculated on the basis of data from Form EIA-767.

**Geothermal Energy Plant Generation.** (GEEOKUS) • 1960 through 1981: Calculated by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on FPC Form 12. • 1982 forward: Estimated annually by EIA based on an informal survey of relevant plants.

**Nuclear Steam-Electric Plant Generation.** (NUEOKUS) • 1960 through 1991: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported on FERC Form 1, Form EIA-412, and predecessor forms. The factors, beginning with 1982 data, are published in the following EIA reports—1982: *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215; 1983 through 1991: *Electric Plant Cost and Power Production Expenses 1991*, Table 13. • 1992 forward: Unpublished factors calculated annually by EIA by dividing the total heat content of the steam leaving nuclear generating units to generate electricity by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation data are reported in the Nuclear Regulatory Commission, *Licensed Operating Reactors—Status Summary Report*.



## Appendix E

**Resident Population**

The population data used in the Energy Information Administration Combined State Energy Data System (CSEDS) to calculate per capita consumption are shown in Tables E1 and E2. The data are the U.S. Department of

Commerce, Bureau of the Census, census of resident population by State conducted every 10 years with estimates of population for intervening years. The source documents are listed in Appendix C.

**Table E1. Resident Population by State, 1960, 1970-1982**  
(Thousand)

State	1960	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Alabama	3,267	3,444	3,497	3,539	3,580	3,626	3,679	3,735	3,780	3,832	3,866	3,894	3,919	3,925
Alaska	226	303	316	324	331	341	376	401	403	405	403	402	418	450
Arizona	1,302	1,775	1,896	2,008	2,124	2,223	2,285	2,346	2,425	2,515	2,636	2,718	2,810	2,890
Arkansas	1,786	1,923	1,972	2,019	2,059	2,101	2,160	2,170	2,209	2,243	2,286	2,271	2,293	2,294
California	15,717	19,971	20,346	20,585	20,869	21,174	21,538	21,936	22,352	22,836	23,257	23,668	24,286	24,820
Colorado	1,754	2,210	2,304	2,405	2,496	2,541	2,586	2,632	2,696	2,767	2,849	2,890	2,978	3,062
Connecticut	2,535	3,032	3,061	3,069	3,068	3,074	3,082	3,083	3,086	3,092	3,096	3,108	3,129	3,139
Delaware	446	548	565	573	578	581	587	590	592	595	595	594	596	599
Dist. of Columbia	764	757	750	742	731	718	707	692	677	665	650	638	637	634
Florida	4,952	6,791	7,158	7,511	7,914	8,299	8,518	8,667	8,856	9,102	9,426	9,746	10,193	10,471
Georgia	3,943	4,588	4,712	4,809	4,910	4,999	5,064	5,133	5,220	5,296	5,401	5,463	5,568	5,650
Hawaii	633	770	802	828	852	868	886	904	918	932	953	965	978	994
Idaho	667	713	739	763	782	808	832	857	883	911	933	944	962	974
Illinois	10,081	11,110	11,202	11,252	11,251	11,262	11,292	11,343	11,386	11,413	11,397	11,427	11,443	11,423
Indiana	4,662	5,195	5,253	5,302	5,338	5,362	5,366	5,389	5,426	5,470	5,501	5,490	5,480	5,468
Iowa	2,758	2,825	2,852	2,860	2,864	2,868	2,881	2,903	2,914	2,918	2,916	2,914	2,908	2,888
Kansas	2,179	2,249	2,247	2,256	2,266	2,269	2,281	2,301	2,321	2,336	2,351	2,364	2,385	2,401
Kentucky	3,038	3,221	3,298	3,336	3,371	3,416	3,468	3,529	3,574	3,610	3,642	3,661	3,670	3,683
Louisiana	3,257	3,645	3,710	3,762	3,788	3,820	3,886	3,951	4,014	4,069	4,138	4,206	4,283	4,353
Maine	969	994	1,015	1,034	1,046	1,059	1,072	1,088	1,104	1,114	1,123	1,125	1,133	1,137
Maryland	3,101	3,924	4,018	4,073	4,098	4,119	4,139	4,151	4,170	4,184	4,191	4,217	4,262	4,283
Massachusetts	5,149	5,689	5,738	5,760	5,781	5,774	5,758	5,744	5,738	5,736	5,738	5,737	5,769	5,771
Michigan	7,823	8,882	8,974	9,029	9,078	9,118	9,118	9,129	9,171	9,218	9,266	9,262	9,209	9,115
Minnesota	3,414	3,806	3,853	3,870	3,889	3,904	3,933	3,965	3,989	4,015	4,050	4,076	4,112	4,131
Mississippi	2,178	2,217	2,265	2,307	2,350	2,378	2,399	2,430	2,459	2,488	2,507	2,521	2,539	2,557
Missouri	4,320	4,678	4,726	4,759	4,783	4,796	4,808	4,839	4,863	4,889	4,912	4,917	4,932	4,929
Montana	675	694	711	719	727	736	748	757	770	782	787	787	795	804
Nebraska	1,411	1,485	1,505	1,519	1,530	1,539	1,543	1,551	1,557	1,564	1,567	1,570	1,579	1,582
Nevada	285	489	520	547	569	597	620	647	678	719	765	800	848	882
New Hampshire	607	738	762	781	801	816	829	845	870	892	909	921	937	948
New Jersey	6,067	7,171	7,281	7,335	7,333	7,332	7,338	7,340	7,337	7,351	7,367	7,365	7,407	7,431
New Mexico	951	1,017	1,054	1,079	1,106	1,131	1,160	1,189	1,216	1,238	1,285	1,303	1,333	1,364
New York	16,782	18,241	18,358	18,339	18,177	18,050	18,003	17,941	17,813	17,681	17,584	17,558	17,568	17,590
North Carolina	4,556	5,084	5,204	5,301	5,390	5,471	5,547	5,608	5,686	5,759	5,823	5,882	5,957	6,019
North Dakota	632	618	627	631	633	635	639	646	650	651	653	653	660	669
Ohio	9,706	10,657	10,735	10,747	10,767	10,766	10,770	10,753	10,771	10,796	10,798	10,798	10,788	10,757
Oklahoma	2,328	2,559	2,619	2,659	2,696	2,735	2,775	2,827	2,870	2,917	2,975	3,025	3,096	3,206
Oregon	1,769	2,092	2,151	2,197	2,242	2,285	2,330	2,378	2,447	2,518	2,588	2,633	2,668	2,665
Pennsylvania	11,319	11,801	11,886	11,908	11,891	11,871	11,906	11,897	11,894	11,879	11,888	11,864	11,859	11,845
Rhode Island	859	950	963	975	976	951	943	946	950	952	950	947	953	954
South Carolina	2,383	2,591	2,662	2,719	2,777	2,845	2,902	2,944	2,992	3,044	3,090	3,122	3,179	3,208
South Dakota	681	666	671	677	679	680	681	686	688	689	688	691	690	691
Tennessee	3,567	3,926	4,014	4,095	4,147	4,214	4,276	4,347	4,423	4,486	4,560	4,591	4,628	4,646
Texas	9,580	11,199	11,510	11,759	12,020	12,269	12,569	12,904	13,193	13,500	13,888	14,229	14,746	15,331
Utah	891	1,059	1,101	1,135	1,170	1,200	1,236	1,275	1,320	1,368	1,420	1,461	1,515	1,558
Vermont	390	445	454	463	468	473	480	485	492	498	505	511	516	519
Virginia	3,967	4,651	4,751	4,824	4,901	4,971	5,047	5,122	5,193	5,270	5,308	5,347	5,444	5,493
Washington	2,853	3,413	3,448	3,448	3,479	3,550	3,621	3,694	3,776	3,889	4,018	4,132	4,236	4,277
West Virginia	1,860	1,744	1,771	1,798	1,806	1,815	1,842	1,880	1,908	1,923	1,942	1,950	1,954	1,950
Wisconsin	3,952	4,418	4,462	4,502	4,524	4,546	4,579	4,596	4,627	4,646	4,683	4,706	4,726	4,729
Wyoming	330	332	340	347	354	366	382	397	413	433	454	470	492	506
U.S. Total	179,323	203,302	206,827	209,284	211,357	213,342	215,465	217,563	219,760	222,095	224,567	226,546	229,466	231,664

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*. See Appendix C, "Population," for full source references for each year of data.

**Table E2. Resident Population by State, 1983-1996**  
(Thousand)

State	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	3,934	3,952	3,973	3,992	4,015	4,024	4,030	4,040	4,090	4,138	4,193	4,232	4,262	4,287
Alaska	488	514	532	544	539	542	547	550	569	587	597	601	602	605
Arizona	2,969	3,067	3,184	3,308	3,437	3,535	3,622	3,665	3,763	3,868	3,994	4,149	4,308	4,434
Arkansas	2,306	2,320	2,327	2,332	2,342	2,343	2,346	2,351	2,370	2,394	2,424	2,451	2,481	2,506
California	25,360	25,844	26,441	27,102	27,777	28,464	29,218	29,786	30,413	30,892	31,183	31,369	31,558	31,858
Colorado	3,134	3,170	3,209	3,237	3,260	3,262	3,276	3,294	3,369	3,462	3,563	3,657	3,742	3,816
Connecticut	3,162	3,180	3,201	3,224	3,247	3,272	3,283	3,287	3,288	3,277	3,273	3,270	3,267	3,267
Delaware	605	612	618	628	637	648	658	666	680	689	698	706	716	723
Dist. of Columbia	632	633	635	638	637	630	624	607	594	585	577	566	552	539
Florida	10,750	11,040	11,351	11,668	11,997	12,306	12,638	12,938	13,286	13,501	13,712	13,956	14,181	14,419
Georgia	5,728	5,835	5,963	6,085	6,208	6,316	6,411	6,478	6,622	6,761	6,896	7,049	7,192	7,334
Hawaii	1,013	1,028	1,040	1,052	1,068	1,080	1,095	1,108	1,131	1,150	1,160	1,173	1,179	1,183
Idaho	982	991	994	990	985	986	994	994	1,007	1,039	1,066	1,101	1,135	1,188
Illinois	11,409	11,412	11,400	11,387	11,391	11,390	11,410	11,431	11,518	11,601	11,675	11,737	11,795	11,845
Indiana	5,450	5,458	5,459	5,454	5,473	5,492	5,524	5,544	5,601	5,648	5,700	5,742	5,788	5,828
Iowa	2,871	2,859	2,830	2,792	2,767	2,768	2,771	2,777	2,791	2,807	2,820	2,829	2,841	2,848
Kansas	2,416	2,424	2,427	2,433	2,445	2,462	2,473	2,478	2,493	2,516	2,535	2,554	2,570	2,579
Kentucky	3,694	3,695	3,695	3,688	3,683	3,680	3,677	3,687	3,715	3,752	3,793	3,824	3,856	3,882
Louisiana	4,395	4,400	4,408	4,407	4,344	4,289	4,253	4,222	4,241	4,271	4,285	4,307	4,329	4,341
Maine	1,145	1,156	1,163	1,170	1,185	1,204	1,220	1,228	1,235	1,235	1,237	1,236	1,234	1,239
Maryland	4,313	4,365	4,413	4,487	4,566	4,658	4,727	4,781	4,857	4,904	4,945	4,989	5,027	5,060
Massachusetts	5,799	5,841	5,881	5,903	5,935	5,980	6,015	6,016	5,996	5,991	6,008	6,029	6,061	6,085
Michigan	9,048	9,049	9,076	9,128	9,187	9,218	9,253	9,295	9,390	9,466	9,524	9,580	9,655	9,731
Minnesota	4,141	4,158	4,184	4,205	4,236	4,296	4,338	4,376	4,428	4,472	4,524	4,567	4,607	4,649
Mississippi	2,568	2,578	2,588	2,594	2,589	2,580	2,574	2,575	2,591	2,610	2,635	2,663	2,691	2,711
Missouri	4,944	4,975	5,000	5,023	5,057	5,082	5,096	5,117	5,158	5,194	5,238	5,281	5,325	5,364
Montana	814	821	822	814	805	800	799	808	823	840	855	881	869	877
Nebraska	1,584	1,589	1,585	1,574	1,567	1,571	1,575	1,578	1,591	1,603	1,613	1,623	1,636	1,649
Nevada	902	925	951	981	1,023	1,075	1,137	1,202	1,285	1,333	1,382	1,459	1,530	1,601
New Hampshire	958	977	997	1,025	1,054	1,083	1,105	1,109	1,107	1,113	1,122	1,134	1,146	1,160
New Jersey	7,468	7,515	7,566	7,622	7,671	7,712	7,726	7,748	7,782	7,824	7,869	7,911	7,956	8,002
New Mexico	1,394	1,417	1,438	1,463	1,479	1,490	1,504	1,515	1,548	1,582	1,617	1,656	1,686	1,711
New York	17,687	17,746	17,792	17,833	17,869	17,941	17,983	17,991	18,028	18,080	18,139	18,154	18,146	18,134
North Carolina	6,077	6,164	6,254	6,322	6,404	6,481	6,565	6,632	6,748	6,833	6,948	7,062	7,187	7,309
North Dakota	677	680	677	670	661	655	646	639	634	635	637	640	641	643
Ohio	10,738	10,738	10,735	10,730	10,760	10,799	10,829	10,847	10,929	11,000	11,058	11,095	11,133	11,163
Oklahoma	3,290	3,286	3,271	3,253	3,210	3,167	3,150	3,146	3,166	3,204	3,229	3,248	3,271	3,295
Oregon	2,653	2,667	2,673	2,684	2,701	2,741	2,791	2,842	2,920	2,975	3,036	3,089	3,143	3,196
Pennsylvania	11,838	11,815	11,771	11,783	11,811	11,846	11,866	11,883	11,942	11,981	12,022	12,043	12,046	12,040
Rhode Island	956	962	969	977	990	996	1,001	1,003	1,004	1,001	998	994	990	988
South Carolina	3,234	3,272	3,303	3,343	3,381	3,412	3,457	3,486	3,555	3,593	3,625	3,654	3,683	3,717
South Dakota	693	697	698	696	696	698	697	696	708	715	723	730	735	738
Tennessee	4,660	4,687	4,715	4,739	4,783	4,822	4,854	4,877	4,946	5,013	5,083	5,158	5,235	5,307
Texas	15,752	16,007	16,273	16,561	16,622	16,667	16,807	16,986	17,358	17,680	18,035	18,385	18,738	19,091
Utah	1,595	1,622	1,643	1,663	1,678	1,689	1,706	1,723	1,771	1,821	1,875	1,929	1,974	2,018
Vermont	523	527	530	534	540	550	558	563	567	570	574	579	583	586
Virginia	5,565	5,644	5,715	5,812	5,932	6,037	6,120	6,189	6,282	6,383	6,465	6,538	6,601	6,666
Washington	4,300	4,344	4,400	4,453	4,532	4,640	4,746	4,867	5,016	5,144	5,250	5,339	5,436	5,520
West Virginia	1,945	1,928	1,907	1,882	1,858	1,830	1,807	1,793	1,798	1,806	1,816	1,819	1,822	1,820
Wisconsin	4,721	4,736	4,748	4,756	4,778	4,822	4,857	4,892	4,946	4,991	5,038	5,075	5,113	5,146
Wyoming	510	505	500	496	477	465	458	454	458	464	469	475	479	480
U.S. Total	233,792	235,825	237,924	240,133	242,289	244,499	246,819	248,765	252,124	255,002	257,753	260,292	262,761	265,179

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports*.  
See Appendix C, "Population," for full source references for each year of data.

## Appendix F

**Metric and Other Physical Conversion Factors**

Data presented in the *State Energy Data Report* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94-168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100-418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table F1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units.

For example, 500 short tons are the equivalent of 453.6 metric tons ( $500 \text{ short tons} \times 0.9071847 \text{ metric tons/short ton} = 453.6 \text{ metric tons}$ ).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table F2.

The conversion factors presented in Table F3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons ( $10 \text{ barrels} \times 42 \text{ gallons/barrel} = 420 \text{ gallons}$ ).

**Table F1. Metric Conversion Factors**

U.S. Unit	<i>multiplied by</i>	Conversion Factor	<i>equals</i>	Metric Unit	U.S. Unit	<i>multiplied by</i>	Conversion Factor	<i>equals</i>	Metric Unit
<b>Mass</b>					<b>Volume</b>				
short tons (2,000 lb)	x	0.907 184 7	=	metric tons (t)	barrels of oil (bbl)	x	0.158 987 3	=	cubic meters (cm <sup>3</sup> )
long tons	x	1.016 047	=	metric tons (t)	cubic yards (yd <sup>3</sup> )	x	0.764 555	=	cubic meters (cm <sup>3</sup> )
pounds (lb)	x	0.453 592 37 <sup>a</sup>	=	kilograms (kg)	cubic feet (ft <sup>3</sup> )	x	0.028 316 85	=	cubic meters (cm <sup>3</sup> )
pounds uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	x	0.384 647 <sup>b</sup>	=	kilograms uranium (kgU)	U.S. gallons (gal)	x	3.785 412	=	liters (L)
ounces, avoirdupois (avdp oz)	x	28.349 52	=	grams (g)	ounces, fluid (fl oz)	x	29.573 53	=	milliliters (mL)
					cubic inches (in <sup>3</sup> )	x	16.387 06	=	milliliters (mL)
<b>Length</b>					<b>Area</b>				
miles (mi)	x	1.609 344 <sup>a</sup>	=	kilometers (km)	acres	x	0.404 69	=	hectares (ha)
yard (yd)	x	0.914 4 <sup>a</sup>	=	meters (m)	square miles (mi <sup>2</sup> )	x	2.589 988	=	square kilometers (km <sup>2</sup> )
feet (ft)	x	0.304 8 <sup>a</sup>	=	meters (m)	square yards (yd <sup>2</sup> )	x	0.836 127 4	=	square meters (m <sup>2</sup> )
inches (in)	x	2.54 <sup>a</sup>	=	centimeters (cm)	square feet (ft <sup>2</sup> )	x	0.092 903 04 <sup>a</sup>	=	square meters (m <sup>2</sup> )
					square inches (in <sup>2</sup> )	x	6.451 6 <sup>a</sup>	=	square centimeters (cm <sup>2</sup> )
<b>Energy</b>					<b>Temperature</b>				
British Thermal Units (Btu)	x	1,055.055 852 62 <sup>a,c</sup>	=	joules (J)	degrees Fahrenheit (°F)	x	5/9 (after subtracting 32) <sup>a,d</sup>	=	degrees Celsius (°C)
calories (cal)	x	4.186 8 <sup>a</sup>	=	joules (J)					
kilowatthours (kWh)	x	3.6 <sup>a</sup>	=	megajoules (MJ)					

<sup>a</sup>Exact conversion.

<sup>b</sup>Calculated by the Energy Information Administration.

<sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.

<sup>d</sup>To convert degrees Celsius (°C) to degrees Fahrenheit (°F) exactly, multiply by 9/5, then add 32.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading.

• Most metric units shown belong to the International System of Units (SI), and the liter, hectare, and

metric ton are accepted for use with the SI units. For more information about the SI units, contact Dr. Barry Taylor at Building 221, Room B160, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301-975-4220.

Sources: General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 27, 1993), pp. 9-11, 13, and 16. National Institute of Standards and Technology, Special Publications 330, 811, and 814. American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std 268-1992, pp. 28 and 29.

**Table F2. Metric Prefixes**

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10 <sup>1</sup>	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	c
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	T	10 <sup>-12</sup>	pico	p
10 <sup>15</sup>	peta	P	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	E	10 <sup>-18</sup>	atto	a
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	z
10 <sup>24</sup>	yotta	Y	10 <sup>-24</sup>	yocto	Y

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p. 10.

**Table F3. Other Physical Conversion Factors**

Energy Source	Original Unit		Conversion Factor		Final Unit
<b>Petroleum</b>	barrels (bbl)	x	42 <sup>a</sup>	=	U.S. gallons (gal)
<b>Coal</b>	short tons	x	2,000 <sup>a</sup>	=	pounds (lb)
	long tons	x	2,240 <sup>a</sup>	=	pounds (lb)
	metric tons (t)	x	1,000 <sup>a</sup>	=	kilograms (kg)
<b>Wood</b>	ords (cd)	x	1.25 <sup>b</sup>	=	short tons
	ords (cd)	x	128 <sup>a</sup>	=	cubic feet (ft <sup>3</sup> )

<sup>a</sup>Exact conversion.

<sup>b</sup>Calculated by the Energy Information Administration.

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B-10, C-17, and C-21.

## Appendix G

**Carbon Dioxide Emission Factors for Coal**

The need for accurate estimates of carbon dioxide emissions produced during the combustion of coal has led the Energy Information Administration (EIA) to develop basic emission factors. Basic emission factors reflect the carbon-to-heat-content ratio of coal, a ratio that measures carbon dioxide emissions per unit of energy (pounds per million Btu), assuming complete combustion. These basic factors are derived from 5,426 sample analyses maintained in EIA's Coal Analysis File. Variations in the carbon-to-heat-content of different coals were observed to follow coal rank and geographic origin, leading EIA to develop basic emission factors specific to the rank and the State of origin of the coal.

On the basis of these rank- and State-specific basic emission factors for coal, EIA has also developed emission factors by sector. These sectoral emission factors weight the coal consumed in a given sector by its rank and State of origin. Tables G1 through G5 present the U.S. average carbon dioxide emission factors for coal by sector. Emission factors differ among sectors and within a given sector over time for a number of reasons:

- A higher average emission factor in the residential and commercial sector can be attributed to the steady consumption of bituminous coal and anthracite (presumably for home heating).
- Virtually all of the coal consumed by coke plants comes from only a few States in the Appalachian Coal Basin (West Virginia, Virginia, and eastern Kentucky). Hence, the emission factors for this sector have remained fairly constant.
- Other industrial users of coal (not coke plants) increased consumption of low-rank, high-emission western coals, which has contributed to a rise in their average emission factor.
- Electric utilities, which account for most U.S. coal consumption, have shifted over time away from high-rank, low-emission bituminous coal to low-rank, high-emission subbituminous coal and lignite as reflected in a gradually rising weighted-average carbon dioxide emission factor.

**Table G1. Average Carbon Dioxide Emission Factors for Coal Consumed by the Residential and Commercial Sector, 1980-1996**  
(Pounds of Carbon Dioxide per Million Btu)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama .....	205.4	205.5	205.7	205.2	205.4	205.4	205.4	205.9	205.9	205.7	206.0	205.6	205.5	205.7	205.7	205.7	205.5
Alaska .....	-	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0
Arizona .....	-	209.7	209.7	209.7	209.7	209.7	209.9	212.1	210.8	206.2	208.3	218.3	208.6	212.0	227.4	212.7	206.9
Arkansas .....	205.3	211.3	203.4	206.5	202.5	205.4	227.4	201.3	203.8	205.4	205.9	205.9	222.3	209.9	207.2	-	-
California .....	204.5	205.3	204.6	204.4	204.1	204.1	209.7	203.7	204.2	203.6	204.1	204.2	204.1	204.1	204.1	204.1	204.1
Colorado .....	212.6	212.3	212.4	211.8	212.0	212.4	212.5	212.5	212.5	212.5	212.4	212.4	211.0	212.0	211.2	211.6	211.8
Connecticut .....	226.1	225.7	227.2	227.3	227.4	227.2	226.9	226.9	226.5	226.3	226.7	227.3	220.2	226.9	226.3	211.9	226.4
Delaware .....	221.8	227.0	211.3	213.8	227.4	214.2	213.9	207.0	207.1	206.4	206.7	206.0	221.1	203.0	203.4	227.4	209.7
Dist. of Columbia ..	205.5	204.9	205.0	205.1	205.3	204.9	205.2	205.1	205.3	205.4	206.4	205.5	206.3	206.4	206.5	207.8	207.2
Florida .....	205.0	205.3	203.7	204.9	204.8	204.8	204.8	206.9	214.3	215.2	207.5	227.4	205.7	205.1	205.0	207.8	204.8
Georgia .....	204.7	204.8	204.9	205.4	204.8	205.3	205.2	205.0	205.0	205.4	205.1	206.3	204.9	205.1	206.0	205.9	204.8
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	205.4	205.8	206.0	205.2	205.1	204.8	204.5	205.0	204.7	205.7	204.9	204.7	205.0	204.9	205.0	206.0	205.9
Illinois .....	203.9	204.1	203.6	203.7	203.6	203.6	203.6	203.7	203.6	203.7	203.5	203.9	203.9	203.6	203.6	203.6	203.8
Indiana .....	203.7	203.9	203.8	203.6	203.6	203.6	203.6	203.7	203.6	203.8	203.7	203.8	203.8	204.1	204.1	204.1	204.1
Iowa .....	205.1	202.6	202.8	202.8	202.8	202.9	202.0	205.0	206.9	204.2	204.1	203.7	204.2	204.5	204.6	204.8	-
Kansas .....	202.2	202.3	202.8	201.3	201.3	201.3	201.3	201.3	201.5	203.6	203.2	203.8	202.9	203.9	203.6	202.8	202.8
Kentucky .....	204.6	204.7	204.4	204.2	204.8	204.2	204.4	204.6	204.3	204.0	204.3	204.3	204.6	205.1	205.0	204.7	205.0
Louisiana .....	201.3	-	201.4	-	203.5	-	227.4	-	227.4	204.8	-	227.4	-	227.4	-	204.8	-
Maine .....	216.2	224.1	215.1	215.2	214.2	211.9	210.1	213.0	210.9	213.6	212.0	223.9	213.0	212.2	226.8	226.7	227.4
Maryland .....	210.6	216.0	208.2	207.0	207.9	207.3	207.1	206.8	207.8	207.5	207.8	208.1	211.7	212.1	208.6	207.9	207.8
Massachusetts .....	218.2	220.9	217.0	217.4	214.2	219.1	219.9	223.7	218.1	217.6	213.8	221.5	214.1	217.0	225.8	217.7	214.2
Michigan .....	205.0	205.1	204.8	204.8	204.4	204.6	204.7	204.9	204.8	204.8	204.9	204.9	205.0	204.6	204.3	204.3	204.8
Minnesota .....	208.6	211.6	212.2	209.9	211.0	210.8	210.8	211.8	211.6	209.5	212.0	212.2	212.3	211.7	209.4	208.6	212.5
Mississippi .....	202.6	227.4	227.4	204.6	204.8	205.2	204.8	204.0	202.8	206.2	208.4	227.4	227.4	227.4	-	-	-
Missouri .....	202.1	201.9	201.7	202.0	202.0	204.4	203.9	201.9	201.8	203.4	202.7	202.8	203.4	204.1	203.5	203.1	203.3
Montana .....	205.6	213.1	213.2	209.7	213.3	213.3	213.1	213.1	213.2	209.3	211.7	213.4	213.3	211.3	213.4	207.2	213.4
Nebraska .....	212.6	212.6	212.7	212.9	212.6	212.6	212.7	212.7	212.5	212.7	212.7	217.4	219.2	212.7	212.7	210.1	227.0
Nevada .....	208.4	207.7	204.3	204.3	211.9	204.1	204.1	204.1	204.1	204.1	212.3	204.1	204.1	204.1	204.1	204.3	204.1
New Hampshire .....	227.2	227.4	225.9	225.8	226.9	227.4	227.2	227.4	226.1	226.6	226.4	226.9	225.4	227.4	227.4	217.7	215.5
New Jersey .....	227.2	226.1	227.1	227.3	224.8	225.0	226.7	226.9	227.4	226.1	227.2	226.9	227.1	227.3	227.0	227.3	227.2
New Mexico .....	209.8	209.7	209.8	209.6	209.7	209.7	209.7	209.7	209.7	208.1	205.7	205.8	206.3	206.5	206.6	206.6	207.1
New York .....	218.9	217.3	215.3	215.2	215.1	216.4	213.3	216.1	214.6	215.5	214.0	215.4	218.0	218.8	214.8	216.0	214.1
North Carolina .....	204.9	204.8	204.8	204.9	204.8	205.0	204.8	204.9	204.8	204.9	206.7	206.1	206.2	205.9	206.0	206.4	206.0
North Dakota .....	218.5	218.6	218.6	218.6	218.7	218.6	218.6	218.7	218.8	218.8	217.6	217.6	216.8	216.5	216.4	215.7	216.9
Ohio .....	203.8	203.8	203.6	203.5	203.7	203.9	203.6	203.8	204.3	203.9	204.2	204.4	205.5	204.2	204.5	204.4	203.4
Oklahoma .....	205.7	201.9	202.7	201.4	201.5	205.7	202.6	204.8	212.3	203.0	206.2	205.9	207.0	205.9	206.9	205.9	205.9
Oregon .....	205.6	208.4	209.2	207.5	205.7	205.1	207.2	204.7	204.7	204.6	204.1	204.1	204.1	214.2	213.6	204.1	204.1
Pennsylvania .....	221.2	222.8	219.8	219.8	220.6	219.3	218.9	218.1	218.7	218.8	219.0	218.2	219.7	218.6	220.1	220.4	220.3
Rhode Island .....	223.9	227.4	227.4	224.2	226.7	227.1	225.8	227.4	227.4	227.4	227.3	227.4	227.4	227.2	227.4	227.4	227.4
South Carolina .....	204.8	204.5	204.8	204.8	204.8	205.2	204.8	204.8	204.8	204.8	204.9	205.1	205.3	207.0	207.0	209.5	206.8
South Dakota .....	212.0	212.3	211.7	209.1	205.9	209.9	208.3	211.9	213.2	212.9	211.6	212.8	212.8	212.7	209.9	212.2	208.9
Tennessee .....	204.5	204.6	204.1	204.6	204.2	204.2	203.7	204.0	204.4	204.8	205.4	206.3	204.6	205.1	205.0	205.5	204.8
Texas .....	213.7	209.8	215.3	216.3	227.4	207.5	205.4	204.3	204.5	206.8	206.8	207.1	211.0	213.3	227.0	-	213.0
Utah .....	204.1	204.1	204.1	204.1	204.1	204.1	204.1	204.1	204.2	204.2	204.1	204.1	204.1	204.1	204.1	204.1	204.1
Vermont .....	227.4	227.3	227.3	224.3	227.0	210.4	226.1	227.2	227.4	227.1	227.2	227.1	227.4	227.3	227.2	227.4	227.1
Virginia .....	205.0	205.1	205.2	205.3	205.4	205.2	205.1	205.2	205.3	205.1	205.9	206.2	206.3	206.0	206.4	206.7	206.5
Washington .....	204.3	204.6	204.4	204.4	204.5	204.2	208.5	204.8	205.2	204.8	206.8	207.5	206.9	207.6	209.2	208.1	204.4
West Virginia .....	205.0	205.2	205.9	205.6	205.7	206.8	206.1	206.5	205.3	206.3	206.2	207.0	210.2	208.3	207.0	208.4	207.1
Wisconsin .....	205.8	203.7	205.1	204.4	205.2	205.6	205.3	203.8	205.3	205.8	211.8	205.0	204.9	204.9	204.9	204.9	204.9
Wyoming .....	212.3	211.9	212.5	212.8	212.9	212.7	212.7	212.7	212.7	212.3	212.7	212.7	212.7	212.8	212.8	213.0	212.9
U.S. Average <sup>a</sup> .....	210.6	212.0	210.4	209.2	209.5	209.3	209.2	209.4	209.1	209.7	209.5	210.2	211.2	209.9	209.8	210.2	209.5

<sup>a</sup> Weighted average. The weights used are consumption values by State.  
- =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.



**Table G2. Average Carbon Dioxide Emission Factors for Coal Consumed<sup>a</sup> by Coke Plants, 1980-1996**  
(Pounds of Carbon Dioxide per Million Btu)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama .....	208.7	205.5	205.5	205.4	205.4	205.4	205.5	205.3	205.3	205.4	206.0	206.2	206.1	206.2	206.2	206.2	206.1
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California .....	208.7	207.8	207.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado .....	212.6	212.4	212.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Connecticut .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Delaware .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia ..	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Georgia .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hawaii .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois .....	205.2	205.4	205.6	205.7	205.4	204.6	205.0	204.6	204.7	204.5	205.8	206.4	206.5	206.4	206.8	206.6	206.6
Indiana .....	205.0	205.1	204.9	205.0	204.9	205.1	205.0	204.9	204.9	204.9	205.8	206.0	206.0	206.1	206.3	206.4	206.3
Iowa .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky .....	204.6	204.3	205.9	205.2	205.1	204.9	204.8	204.8	204.8	205.0	206.7	206.8	206.3	206.4	206.7	206.8	206.5
Louisiana .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maine .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland .....	205.9	206.1	205.7	205.5	205.5	205.5	205.5	205.5	205.3	205.1	206.2	205.9	-	-	-	-	-
Massachusetts .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Michigan .....	205.5	205.4	205.4	205.3	205.4	205.4	205.5	205.8	205.4	205.3	206.4	206.7	207.8	207.6	205.7	206.0	206.4
Minnesota .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri .....	205.2	205.6	205.7	205.1	205.4	205.4	204.9	206.0	205.3	-	-	-	-	-	-	-	-
Montana .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebraska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nevada .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Hampshire .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Jersey .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New York .....	205.5	205.4	205.4	205.4	205.5	205.5	205.5	205.4	205.5	205.6	206.2	206.1	206.1	206.8	206.7	206.7	206.7
North Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio .....	205.4	205.3	205.3	205.3	205.2	205.3	205.2	205.1	205.1	205.1	206.6	206.4	206.4	206.0	206.4	206.6	206.6
Oklahoma .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania .....	205.7	205.6	205.5	205.6	205.6	205.7	205.6	205.6	205.5	205.4	206.2	206.2	206.1	206.2	206.2	206.2	206.3
Rhode Island .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee .....	210.2	207.1	205.3	205.1	205.3	205.3	205.2	205.1	204.8	204.8	207.6	207.6	206.2	-	204.8	-	-
Texas .....	209.8	212.2	212.3	212.7	212.7	212.7	212.7	-	-	-	-	-	-	-	-	-	-
Utah .....	210.8	210.6	211.3	212.4	211.7	212.5	207.9	208.3	209.7	209.9	208.2	206.0	205.6	205.5	205.8	207.3	208.4
Vermont .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia .....	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2	206.2
Washington .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia .....	205.4	205.4	205.6	205.5	205.3	205.3	205.0	205.1	204.9	205.1	206.7	206.8	206.7	206.8	206.8	207.0	206.8
Wisconsin .....	205.3	205.3	205.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Average <sup>b</sup> .....	205.8	205.8	205.7	205.5	205.6	205.6	205.4	205.2	205.3	205.3	206.2	206.2	206.2	206.2	206.3	206.4	206.5

<sup>a</sup> No allowances have been made for carbon retained in non-energy coal chemical byproducts from the coal carbonization process.

- =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

<sup>b</sup> Weighted average. The weights used are consumption values by State.

**Table G3. Average Carbon Dioxide Emission Factors for Coal Consumed by Other Industrial Users, 1980-1996**  
(Pounds of Carbon Dioxide per Million Btu)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama .....	205.5	205.5	205.3	205.2	205.5	205.5	205.5	205.4	205.4	205.4	205.5	205.6	205.7	205.4	205.4	205.4	205.4
Alaska .....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.4	-	-
Arizona .....	209.2	210.4	210.3	210.3	210.0	210.1	209.9	210.1	209.4	209.6	207.5	207.0	206.7	206.9	207.2	206.7	207.0
Arkansas .....	201.4	201.4	201.4	201.4	201.5	201.6	203.7	203.2	202.4	203.9	205.3	205.1	205.2	206.0	206.3	205.9	206.0
California .....	205.6	205.9	206.1	206.4	205.6	204.7	205.0	204.4	204.6	204.7	204.6	204.6	204.2	204.1	204.1	204.1	204.1
Colorado .....	212.6	212.7	212.4	212.7	212.7	212.7	212.7	212.1	212.8	212.6	212.0	212.6	212.5	212.7	213.1	213.0	213.1
Connecticut .....	225.4	223.2	213.9	207.6	215.9	209.2	208.2	212.8	207.5	224.8	227.4	205.9	204.7	207.1	207.1	227.4	207.1
Delaware .....	205.9	205.6	205.6	205.8	205.8	205.9	205.9	205.9	205.8	205.9	206.1	206.0	207.4	208.0	207.7	207.6	208.0
Dist. of Columbia ..	205.0	204.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227.4
Florida .....	204.2	204.8	204.8	204.9	204.8	205.0	205.0	205.0	205.2	205.2	205.4	205.2	205.1	205.2	205.1	205.4	205.3
Georgia .....	204.9	204.9	204.9	204.8	204.9	204.9	204.9	204.9	204.8	204.8	205.1	205.0	204.9	204.9	205.0	205.0	205.0
Hawaii .....	-	-	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4
Idaho .....	212.6	212.4	212.5	212.3	212.1	211.9	211.4	212.0	211.8	212.4	212.1	212.1	212.2	211.1	212.1	209.7	211.1
Illinois .....	204.2	204.3	204.1	204.1	204.1	204.0	203.9	203.9	203.7	203.7	203.9	205.1	203.7	203.9	203.9	204.0	204.3
Indiana .....	203.7	203.9	203.8	203.7	203.8	203.7	203.7	203.7	203.7	203.8	204.2	204.4	204.5	204.2	204.1	204.3	204.1
Iowa .....	205.7	205.7	204.5	204.4	204.1	203.6	203.9	203.9	204.1	204.6	205.0	206.1	208.3	208.2	208.6	207.8	204.4
Kansas .....	201.9	201.3	201.7	201.4	201.3	201.8	201.3	201.6	201.4	201.8	203.4	205.2	205.3	203.3	203.2	203.6	205.3
Kentucky .....	205.4	204.9	204.9	205.0	204.9	204.7	204.9	205.1	205.4	205.2	205.5	205.6	205.4	205.3	205.1	205.1	205.0
Louisiana .....	203.9	203.4	204.2	204.4	204.1	204.4	204.3	205.2	209.9	207.5	208.0	211.3	210.9	211.5	211.3	212.3	207.7
Maine .....	206.0	205.7	205.1	205.4	205.1	207.9	206.0	206.5	207.0	205.2	207.0	204.9	204.9	204.9	204.8	205.0	205.0
Maryland .....	206.1	205.9	206.0	205.9	205.8	205.8	205.5	205.8	205.6	205.9	207.8	207.8	208.4	208.7	208.2	208.6	208.3
Massachusetts .....	206.3	207.6	206.9	206.3	206.6	206.4	206.8	207.0	207.1	207.4	208.0	206.7	207.0	206.7	206.6	206.8	206.7
Michigan .....	204.8	204.8	204.7	204.9	205.0	204.9	204.9	204.9	204.8	204.8	204.9	204.9	205.3	205.6	205.6	205.9	205.3
Minnesota .....	211.6	210.8	212.9	213.0	211.8	208.9	208.9	209.8	210.8	210.3	211.6	211.1	211.8	212.1	211.7	211.2	211.2
Mississippi .....	204.0	203.5	205.0	204.5	204.2	204.0	204.4	204.0	204.0	204.0	203.7	204.2	204.6	205.2	205.2	205.2	204.9
Missouri .....	203.6	203.3	203.3	203.2	203.5	203.5	203.6	203.8	203.7	203.3	204.1	204.1	204.5	204.6	204.2	204.4	203.9
Montana .....	211.2	210.3	209.7	209.7	210.5	212.6	213.4	213.1	211.8	211.6	211.7	211.6	211.4	212.1	212.8	213.4	213.4
Nebraska .....	212.3	212.7	212.8	212.7	213.1	213.1	213.2	213.2	213.1	212.9	213.3	213.3	213.1	213.2	212.9	213.2	210.9
Nevada .....	204.5	204.1	204.1	204.1	204.1	204.1	204.1	204.1	204.1	206.7	204.1	204.1	204.1	204.1	204.1	208.2	208.3
New Hampshire .....	207.0	217.3	214.2	206.7	206.9	219.5	218.6	218.8	218.6	207.0	216.2	206.8	207.1	204.8	-	227.4	227.4
New Jersey .....	218.3	224.6	213.8	212.9	213.4	217.5	210.8	210.0	209.1	207.9	207.9	207.7	207.3	208.0	210.3	227.3	227.4
New Mexico .....	212.0	212.7	212.3	212.7	212.7	212.6	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7
New York .....	206.9	206.7	207.0	207.1	206.8	206.9	206.9	207.1	207.4	206.9	206.9	206.9	207.0	206.8	207.0	207.2	207.3
North Carolina .....	204.8	-	204.8	204.8	204.8	204.8	204.8	204.8	204.8	204.8	205.7	205.4	205.7	205.4	205.6	205.5	205.4
North Dakota .....	218.8	218.7	218.7	218.7	218.5	218.6	218.5	218.4	218.5	218.5	218.3	218.3	218.3	218.4	218.2	218.4	218.5
Ohio .....	204.0	203.9	204.0	203.9	204.1	204.3	204.3	204.2	204.4	204.3	204.6	204.7	204.5	204.8	204.9	204.5	204.7
Oklahoma .....	202.2	201.9	201.8	203.3	201.9	202.4	202.5	202.2	203.1	205.7	207.8	207.5	207.5	207.5	209.1	207.8	208.1
Oregon .....	212.7	211.3	211.9	212.0	210.0	211.8	211.9	211.7	212.7	212.2	212.7	212.7	211.5	212.8	210.4	213.0	212.5
Pennsylvania .....	207.9	206.9	207.0	207.0	206.8	207.3	207.4	207.1	208.8	208.8	207.8	208.4	208.5	206.4	206.9	207.1	207.0
Rhode Island .....	210.0	210.3	-	204.8	204.8	205.7	206.9	219.6	204.8	204.8	227.4	-	-	227.4	-	-	-
South Carolina .....	205.0	205.0	205.0	205.0	204.9	205.0	205.1	205.1	205.1	205.0	205.3	205.3	205.3	205.3	205.5	205.4	205.4
South Dakota .....	210.5	210.7	209.6	212.7	212.7	212.7	212.6	212.7	212.7	212.7	212.7	212.6	212.7	212.7	212.7	212.7	212.7
Tennessee .....	204.8	204.9	204.7	204.3	204.8	204.7	204.6	204.7	204.7	204.8	205.2	205.2	205.5	205.4	205.2	205.3	205.3
Texas .....	212.3	212.9	212.9	212.9	213.0	213.1	213.0	213.2	213.3	213.2	212.5	212.1	212.3	212.1	212.1	212.5	212.0
Utah .....	205.2	205.3	204.8	205.0	205.1	205.6	206.0	206.2	204.9	204.6	204.2	204.1	204.1	204.6	206.1	206.0	204.1
Vermont .....	207.8	207.0	220.3	223.8	226.7	216.3	227.4	226.6	223.8	218.5	226.3	206.2	212.2	205.7	-	-	-
Virginia .....	205.1	205.0	205.0	205.1	205.1	205.1	205.1	205.1	205.1	205.1	205.9	205.9	206.2	205.9	206.0	206.0	205.9
Washington .....	206.3	207.1	207.1	207.6	205.6	206.1	208.7	209.7	208.9	208.7	207.9	206.6	205.8	205.5	206.1	206.4	206.3
West Virginia .....	205.4	205.3	205.3	205.1	205.1	205.5	205.8	205.6	205.4	205.4	206.4	206.5	206.6	206.5	206.8	206.9	207.0
Wisconsin .....	205.5	204.9	204.9	205.0	204.6	205.0	205.4	205.6	206.3	206.0	206.1	205.9	206.1	206.5	206.0	205.9	206.2
Wyoming .....	212.0	212.2	212.5	212.7	212.7	212.7	212.7	212.6	212.4	212.1	212.2	212.3	212.5	212.6	212.6	212.5	212.7
U.S. Average <sup>a</sup> .....	205.9	205.9	206.0	205.9	206.2	206.4	206.5	206.4	206.4	206.6	206.8	206.9	207.1	207.0	207.2	207.2	207.0

<sup>a</sup> Weighted average. The weights used are consumption values by State.  
- =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table G4. Average Carbon Dioxide Emission Factors for Coal Consumed by Electric Utilities, 1980-1996**  
(Pounds of Carbon Dioxide per Million Btu)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama	205.0	204.8	204.9	205.0	205.0	204.9	205.0	204.9	204.9	204.9	205.1	205.3	205.3	205.3	205.3	205.8	205.8
Alaska	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	-	214.0	214.0
Arizona	208.0	208.1	208.0	207.9	207.9	207.8	207.9	208.0	207.8	207.9	207.7	207.7	207.7	207.5	207.5	207.6	207.6
Arkansas	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	211.0	212.7	212.7	212.7	212.7	212.7	212.7
California	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado	211.5	209.5	209.7	211.0	212.1	212.0	211.9	211.9	210.3	210.3	209.9	209.8	209.8	209.9	209.7	209.8	210.1
Connecticut	-	-	-	-	204.8	204.8	204.8	204.8	204.8	204.9	204.8	204.8	204.9	205.0	205.0	204.8	204.8
Delaware	206.0	206.1	206.2	206.4	206.5	206.5	206.1	206.8	206.6	206.7	206.7	206.8	206.9	206.9	207.1	207.3	207.3
Dist. of Columbia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Florida	204.0	204.1	204.0	204.5	204.4	204.3	204.3	204.4	204.6	204.5	204.5	204.4	204.4	204.5	204.6	204.5	204.6
Georgia	204.3	204.4	204.4	204.4	204.7	204.7	204.7	204.7	204.8	204.8	205.2	205.2	204.8	205.3	206.2	206.6	206.6
Hawaii	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Illinois	207.1	207.1	206.5	206.6	205.9	206.6	206.6	206.1	206.3	205.8	205.6	205.9	206.2	206.9	207.3	207.8	207.9
Indiana	204.0	204.2	204.2	204.2	204.3	204.6	204.7	204.5	204.6	205.0	205.4	205.6	205.6	205.8	206.0	206.5	206.5
Iowa	207.2	208.2	210.3	210.3	210.8	210.2	210.1	210.4	209.9	210.5	210.7	210.8	211.1	211.9	211.5	211.9	211.9
Kansas	209.2	209.7	210.8	210.9	210.6	210.5	210.7	210.6	210.7	210.8	210.7	210.6	210.9	211.9	211.4	211.5	211.1
Kentucky	204.0	204.0	204.0	204.0	204.0	203.9	204.1	204.0	204.1	204.0	204.1	204.3	204.1	204.3	204.3	204.3	204.5
Louisiana	212.7	212.7	212.7	212.6	212.7	212.7	212.9	212.7	212.7	212.7	212.7	212.8	212.9	212.9	212.9	212.9	212.9
Maine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland	206.6	206.7	206.9	207.2	206.9	206.9	207.0	207.1	207.0	207.0	207.2	207.2	207.0	206.8	207.0	207.0	207.0
Massachusetts	206.4	206.5	206.4	206.5	206.3	206.4	206.5	206.5	206.7	206.4	206.5	206.7	206.8	206.8	206.7	206.6	206.6
Michigan	206.0	206.6	206.4	207.1	207.1	207.0	207.3	207.8	207.9	208.5	208.7	208.9	208.9	209.1	209.0	209.4	209.8
Minnesota	212.9	213.0	212.9	213.0	213.3	213.0	212.9	212.9	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0	213.0
Mississippi	204.7	204.8	204.7	204.9	205.0	205.2	204.9	204.9	204.6	204.2	204.2	204.5	204.5	204.8	206.9	206.9	207.3
Missouri	204.5	204.6	204.4	204.2	204.3	204.4	204.4	204.7	205.4	205.5	205.7	206.2	206.2	208.4	208.7	210.6	211.1
Montana	213.9	213.8	213.8	214.0	213.7	213.6	213.6	213.6	213.5	213.5	213.5	213.5	213.5	213.6	213.5	213.6	213.5
Nebraska	211.7	212.2	212.4	212.6	212.2	212.4	212.4	212.6	212.6	212.6	212.7	212.7	212.7	212.7	212.6	212.7	212.7
Nevada	208.2	207.9	208.1	207.8	207.8	206.3	207.6	207.8	208.2	207.9	207.7	208.0	208.4	208.4	208.4	208.1	207.7
New Hampshire	206.9	207.1	207.1	207.1	207.1	206.8	206.8	207.0	206.9	206.7	206.7	206.7	206.6	206.3	206.3	206.1	206.2
New Jersey	206.6	206.6	206.7	206.8	206.9	206.9	206.9	206.9	206.8	206.7	206.7	206.7	206.6	206.7	206.5	206.4	206.7
New Mexico	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.9	205.7	205.7	205.7	205.7	205.7	205.7
New York	205.7	205.8	205.8	205.8	206.0	206.1	206.1	206.2	206.0	206.1	206.3	206.2	206.1	206.0	206.0	206.3	206.2
North Carolina	205.6	205.6	205.8	206.0	205.8	205.8	205.8	205.8	205.8	205.7	205.8	205.8	205.8	205.8	205.8	205.8	205.7
North Dakota	218.8	213.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	214.9	218.8	218.8	218.8	218.8	218.8	218.7
Ohio	204.4	204.3	204.5	204.3	204.3	204.3	204.4	204.4	204.4	204.5	204.5	204.4	204.4	204.5	204.6	205.0	205.0
Oklahoma	210.5	212.5	212.7	212.7	212.7	212.7	212.5	212.1	212.2	212.2	212.1	212.4	212.6	212.7	212.6	212.6	212.7
Oregon	212.7	212.7	212.7	212.7	212.7	212.7	-	212.7	212.7	212.7	212.7	212.7	212.9	212.4	212.2	212.7	212.7
Pennsylvania	206.1	206.0	206.1	206.0	205.9	205.9	205.8	206.0	206.1	206.1	206.2	206.2	206.2	206.0	206.0	206.2	206.2
Rhode Island	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Carolina	204.9	204.9	205.0	205.0	204.9	204.9	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0
South Dakota	218.1	218.1	218.0	218.8	218.4	218.8	218.8	218.8	218.3	218.8	218.7	218.8	218.8	218.8	218.8	216.9	213.4
Tennessee	204.0	204.0	204.0	204.0	204.2	204.2	204.0	204.1	204.1	204.2	204.1	204.0	204.0	204.3	204.1	204.0	204.2
Texas	213.0	212.9	212.8	212.9	212.9	212.9	212.9	212.9	213.1	212.9	212.9	212.9	212.9	212.9	213.1	212.8	212.9
Utah	204.1	204.1	204.1	204.1	204.1	204.1	204.5	204.3	204.2	204.3	204.3	204.3	204.3	204.3	204.3	204.2	204.3
Vermont	205.7	205.7	205.7	205.7	205.7	205.7	205.7	-	-	-	-	-	-	-	-	-	-
Virginia	205.9	205.7	205.8	206.0	205.7	205.8	206.0	206.0	206.1	205.9	206.0	206.0	206.0	205.9	205.9	205.9	206.0
Washington	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.8	209.0	209.2	209.0	208.7	209.3	209.4	209.2	209.2	208.8
West Virginia	206.9	206.9	207.0	207.0	207.0	207.0	207.1	207.1	207.2	207.0	206.9	207.1	207.0	207.1	207.1	207.1	207.0
Wisconsin	207.0	208.0	207.7	207.8	207.8	208.6	209.3	209.2	209.3	209.5	209.8	209.7	209.9	210.7	210.4	210.8	211.2
Wyoming	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.6	212.0	212.0	212.0	212.0	211.9	211.9	211.9
U.S. Average <sup>a</sup>	206.7	206.9	207.0	207.1	207.1	207.3	207.3	207.3	207.6	207.5	207.6	207.7	207.7	207.8	207.9	208.1	208.1

<sup>a</sup> Weighted average. The weights used are consumption values by State.  
- =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

**Table G5. Average Carbon Dioxide Emission Factors for Total Coal Consumed, 1980-1996**  
(Pounds of Carbon Dioxide per Million Btu)

State	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Alabama .....	205.1	205.0	205.0	205.0	205.1	205.0	205.1	205.0	205.0	205.0	205.3	205.4	205.4	205.4	205.4	205.9	205.8
Alaska .....	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.0	214.1	214.0	214.0
Arizona .....	208.1	208.2	208.2	208.2	208.1	208.1	208.2	208.1	207.9	207.9	207.7	207.7	207.6	207.4	207.5	207.6	207.5
Arkansas .....	210.7	211.9	212.0	212.1	212.1	212.3	212.4	212.4	209.5	212.4	212.5	212.5	212.5	212.5	212.5	212.5	212.5
California .....	207.5	206.8	206.8	206.4	205.6	204.7	205.0	204.4	204.6	204.7	204.6	204.6	204.1	204.1	204.1	204.1	204.1
Colorado .....	211.7	209.9	210.0	211.1	212.1	212.0	212.0	211.9	210.4	210.4	210.0	210.0	209.9	210.0	209.9	210.0	210.1
Connecticut .....	226.1	225.6	225.6	221.8	221.4	205.7	205.8	205.5	205.2	205.2	205.1	205.1	205.2	205.5	205.3	205.0	204.9
Delaware .....	206.0	206.1	206.2	206.4	206.5	206.4	206.5	206.7	206.6	206.7	206.6	206.7	207.0	206.9	207.1	207.3	207.3
Dist. of Columbia ..	205.4	204.9	205.0	205.1	205.3	204.9	205.2	205.1	205.3	205.4	206.4	205.5	206.3	206.4	206.5	207.8	207.2
Florida .....	204.0	204.1	204.0	204.5	204.4	204.3	204.3	204.4	204.6	204.5	204.5	204.5	204.5	204.5	204.6	204.6	204.6
Georgia .....	204.3	204.4	204.4	204.5	204.7	204.7	204.7	204.8	204.8	204.8	205.2	205.2	204.8	205.3	206.1	206.1	206.5
Hawaii .....	-	-	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4	204.4
Idaho .....	210.7	211.2	211.5	210.9	210.6	211.1	210.7	211.6	210.6	211.2	211.1	211.1	211.3	210.5	211.4	209.3	210.7
Illinois .....	206.7	206.8	206.2	206.3	205.7	206.2	206.2	205.7	205.8	205.4	205.4	205.8	205.9	206.5	206.9	207.3	207.4
Indiana .....	204.3	204.4	204.3	204.3	204.4	204.6	204.7	204.5	204.6	204.8	205.4	205.5	205.5	205.7	205.9	206.3	206.3
Iowa .....	207.0	207.8	209.4	209.4	209.8	209.2	209.1	209.3	209.0	209.4	209.7	209.9	210.7	211.3	211.0	211.2	211.1
Kansas .....	209.0	209.3	210.4	210.6	210.4	210.2	210.5	210.4	210.5	210.6	210.6	210.5	210.8	211.8	211.3	211.4	211.0
Kentucky .....	204.1	204.1	204.1	204.1	204.1	204.0	204.2	204.1	204.2	204.2	204.3	204.4	204.2	204.4	204.4	204.5	204.6
Louisiana .....	212.1	210.3	211.7	212.1	212.1	212.2	212.6	212.3	212.6	212.4	212.4	212.7	212.8	212.8	212.8	212.9	212.8
Maine .....	207.9	211.0	207.1	207.1	207.4	208.8	206.7	207.6	207.6	206.0	207.8	205.6	205.3	205.3	205.1	205.2	205.3
Maryland .....	206.3	206.5	206.5	206.7	206.5	206.5	206.6	206.7	206.7	206.7	207.1	207.1	207.1	207.0	207.1	207.2	207.1
Massachusetts .....	207.6	208.2	206.8	206.9	206.7	206.8	206.8	206.8	206.8	206.6	206.6	206.8	206.9	206.9	206.8	206.6	206.7
Michigan .....	205.7	206.2	206.1	206.6	206.6	206.6	206.8	207.4	207.4	208.0	208.2	208.5	208.7	208.5	208.5	208.8	209.2
Minnesota .....	212.7	212.8	212.8	212.9	213.1	212.6	212.5	212.7	212.9	212.8	212.9	212.9	212.9	212.9	212.8	212.9	212.9
Mississippi .....	204.7	204.8	204.7	204.9	204.9	205.1	204.8	204.8	204.5	204.2	204.2	204.4	204.5	204.8	206.7	206.7	207.2
Missouri .....	204.5	204.5	204.4	204.1	204.2	204.4	204.4	204.7	205.3	205.4	205.6	206.0	206.1	208.1	208.5	210.3	210.7
Montana .....	213.7	213.5	213.4	213.7	213.5	213.5	213.6	213.6	213.5	213.5	213.5	213.5	213.5	213.5	213.5	213.5	213.5
Nebraska .....	211.7	212.2	212.5	212.6	212.2	212.4	212.4	212.6	212.6	212.6	212.7	212.7	212.7	212.7	212.6	212.7	212.7
Nevada .....	208.1	207.7	208.0	207.7	207.7	206.2	207.6	207.7	208.1	207.9	207.6	207.9	208.3	208.3	208.3	208.1	207.7
New Hampshire .....	207.0	207.3	207.6	207.3	207.3	207.2	207.1	207.2	207.1	206.9	207.1	206.5	206.5	206.3	206.2	206.2	206.2
New Jersey .....	207.1	207.3	207.6	207.7	207.6	208.2	207.6	207.3	207.1	206.9	206.9	206.9	206.8	206.8	206.7	206.5	206.8
New Mexico .....	205.7	205.8	205.8	205.8	205.8	205.8	205.8	205.7	205.7	205.7	205.7	205.7	205.7	205.7	205.8	205.8	205.8
New York .....	206.3	206.3	206.5	206.4	206.5	206.6	206.5	206.5	206.4	206.4	206.5	206.5	206.5	206.5	206.4	206.6	206.6
North Carolina .....	205.6	205.6	205.7	205.9	205.7	205.7	205.7	205.6	205.6	205.6	205.8	205.8	205.8	205.7	205.8	205.7	205.7
North Dakota .....	218.8	214.1	218.8	218.8	218.7	218.7	218.7	218.7	218.7	218.7	218.6	218.6	218.6	218.7	218.6	218.7	218.7
Ohio .....	204.5	204.4	204.5	204.4	204.3	204.4	204.5	204.4	204.6	204.5	204.7	204.6	204.6	204.6	204.8	205.0	205.0
Oklahoma .....	210.0	211.5	211.9	212.2	212.0	211.9	211.8	211.5	211.8	211.9	211.9	212.1	212.3	212.3	212.5	212.2	212.4
Oregon .....	212.5	212.4	212.5	208.3	211.9	212.4	211.9	212.3	212.6	212.4	212.7	212.7	212.8	212.4	212.1	212.8	212.7
Pennsylvania .....	206.4	206.4	206.5	206.3	206.3	206.2	206.2	206.3	206.5	206.5	206.6	206.7	206.7	206.4	206.4	206.6	206.5
Rhode Island .....	217.2	222.8	227.4	223.0	223.7	217.9	210.1	226.6	205.3	207.5	227.3	227.4	227.4	227.3	227.4	227.4	227.4
South Carolina .....	204.9	204.9	205.0	205.0	204.9	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.0	205.1	205.1	205.1	205.0
South Dakota .....	217.6	217.3	216.6	218.0	218.0	217.8	217.7	217.1	217.7	217.9	218.0	217.9	217.9	217.7	217.5	216.1	213.3
Tennessee .....	204.1	204.1	204.1	204.1	204.3	204.3	204.1	204.2	204.2	204.3	204.3	204.2	204.2	204.5	204.3	204.2	204.3
Texas .....	212.8	212.9	212.8	212.9	212.9	212.9	212.9	212.9	213.1	212.9	212.9	212.9	212.9	212.9	213.0	212.8	212.9
Utah .....	205.7	205.7	205.2	205.3	205.6	205.6	204.9	204.3	204.8	204.8	204.6	204.4	204.4	204.4	204.5	204.5	204.6
Vermont .....	216.0	218.3	213.1	208.4	212.7	209.2	216.6	227.1	226.3	222.7	227.1	215.2	216.8	226.9	227.2	227.4	227.1
Virginia .....	205.7	205.5	205.5	205.8	205.5	205.6	205.7	205.8	205.8	205.7	206.0	206.0	206.1	205.9	205.9	206.0	206.0
Washington .....	208.3	208.4	208.3	208.4	208.3	208.3	208.7	208.8	208.9	209.1	208.9	208.6	209.1	209.3	209.1	209.0	208.7
West Virginia .....	206.6	206.6	206.8	206.8	206.8	206.8	206.9	206.9	206.9	206.7	206.9	207.0	207.0	207.0	207.1	207.0	207.0
Wisconsin .....	206.8	207.5	207.2	207.4	207.4	208.1	208.8	208.8	208.9	209.1	209.4	209.3	209.5	210.3	209.9	210.3	210.8
Wyoming .....	212.6	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.7	212.6	212.0	212.1	212.1	212.1	212.0	212.0	212.0
U.S. Average <sup>a</sup> .....	206.5	206.7	206.9	207.0	207.0	207.1	207.1	207.2	207.3	207.3	207.4	207.5	207.6	207.7	207.8	207.9	208.0

<sup>a</sup> Weighted average. The weights used are consumption values by sector and State.  
- =Not applicable.

Source: Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels.

## Appendix H

## Summary of Changes Since the *State Energy Data Report 1995*

Modifications to the Combined State Energy Data System (CSEDS) that are incorporated in this edition of the *State Energy Data Report (SEDR)* are summarized in this appendix. The constraint of page size in *SEDR* does not allow for all 37 years of CSEDS data to be included in the published tables. Data for selected years from 1961 through 1979 are not shown in the tables but are included in the data files and ASCII-formatted tables available via the Internet and are covered by this section of documentation.

### Coal

**Residential, Commercial, and Industrial Sectors, 1995.** Estimates of anthracite and bituminous and lignite coal consumption in the residential, commercial, and industrial sectors were revised by EIA subsequent to the publication of the source document, the *Quarterly Coal Report, October through December 1997*. Most of the revisions were caused by the reclassification of consumption among sectors within each State. Only Alabama, Hawaii, Kansas, Michigan, New York, Pennsylvania, and Virginia have revisions to total coal consumption in 1995. All are revisions of less than 1 percent, with the exception of the 58-percent increase in Hawaii.

**Coal Coke Net Imports, 1980 through 1995.** Coal coke imports and exports for 1980 forward are revised to include three additional decimal places of accuracy. These data are not available by State and appear only in the U.S. industrial sector and total tables. The small revisions are visible in the CSEDS data files, but only the revision to the Btu value for 1986, which was rounded up by 0.1 trillion Btu, can be seen in *SEDR* tables.

### Petroleum Products

#### *Liquefied Petroleum Gases*

**Industrial and Transportation Sectors, 1984, 1987, 1989, 1990, and 1992 through 1994.** The data series for highway use of special fuels from 1950 through 1995 were recently republished by the U.S. Department of Transportation, Federal Highway Administration in *Highway Statistics, Summary to 1995*. The data for 1984, 1987, 1989, 1990, and 1992 through 1994 were revised. This series is used in CSEDS to estimate liquefied petroleum gases (LPG) consumption in the industrial and transportation sectors. Although the total LPG consumption estimates for each State are unchanged, the portions allocated to the transportation and industrial sectors are revised in all States by less than one-half of a percent.

**Maryland and the District of Columbia, Industrial Sector and Total, 1995.** The American Petroleum Institute publishes LPG sales data for Maryland and the District of Columbia combined. The method EIA uses to estimate each State's portion of the combined data was revised for 1995. This causes the District of Columbia's estimated industrial consumption of LPG to decrease by 665 barrels (from 5,953 to 5,288 barrels) while the consumption in Maryland increases by the same amount (from 2,686,555 to 2,687,220 barrels). Total LPG consumption for the two States also is revised by the same amount.

**Motor Gasoline**

**Commercial, Industrial, and Transportation Sectors, 1984 through 1995.** The U.S. Department of Transportation, Federal Highway Administration data series for highway use of special fuels, highway use of motor gasoline, and non-highway use of motor gasoline from 1950 through 1995 were recently republished in *Highway Statistics, Summary to 1995*. There were small revisions in these series for 1984 through 1995.

Although the national total for motor gasoline consumption remains the same for all years in CSEDS, every State’s portion is slightly changed, and each consuming sector’s portion within the States is revised. Industrial use of motor gasoline is revised for all States in 1985 through 1995 by less than 0.6 percent. Commercial sector revisions for all States from 1985 through 1995 are by the same percentages as those in the industrial sector with the exception of a 27-percent increase in the estimate for Mississippi in 1987 and an 8-percent increase for Virginia in 1992.

The revisions to CSEDS input variables MGMFP and MGSFP in the Highway Statistics publication for Indiana in 1984 offset each other so that there are no revisions in the 1984 motor gasoline data published in *SEDR* tables. Other transportation sector revisions are by 1 percent or less with the exception of a 9-percent decrease for Tennessee in 1987, a 2-percent decrease for New York in 1988, a 15-percent increase in South Carolina in 1988, a 2-percent increase for Idaho in 1989, a 12-percent decrease for Illinois in 1990. These transportation sector revisions are reflected in the State totals for motor gasoline use.

**Petroleum Coke**

The data series for petroleum coke used at refineries as both catalytic and marketable coke, PCCTP, was renamed PCRFP in CSEDS to be compatible with the name previously used for the same data series in the State Energy Price and Expenditure Data System. No data are changed. This series is used to calculate estimates of petroleum coke consumption as explained in Appendix A on page 367, but is not published in *SEDR* tables.

**Table H1. CSEDS 1996 Data Series Name Changes**

Previous		Current	
Data Identifiers	Table Columns	Data Identifiers	Table Columns
<b>Residential/Commercial</b>		<b>Residential</b>	
BFHC	Biofuels	WDRC	Wood
		<b>Commercial</b>	
		WDCC	Wood
<b>Industrial</b>		<b>Industrial</b>	
BFIC	Biofuels	WWIC	Wood and Waste
PCCT	Not Shown	PCRF	Not Shown
<b>Transportation</b>		<b>Transportation</b>	
BFAC	Biofuels	ENAC	Ethanol
<b>Electric Utilities</b>		<b>Electric Utilities</b>	
BFEO	Biofuels	WWEO	Wood and Waste
<b>Total</b>		<b>Total</b>	
BFTC	Biofuels	BMTC	Biomass

**Renewable Energy Sources**

**Biomass**

**Data Series Name Changes.** To maintain consistent terminology within EIA publications, the data series previously called “biofuels” have been re-named to indicate the specific energy sources included in the series. The *SEDR* table column headings have also been revised as shown in Table H1.

**Residential and Commercial Sectors, 1993 through 1995.** In previous editions of *SEDR*, residential wood consumption was estimated by State, but commercial wood consumption was available only on the U.S. level and was added into the U.S. total residential value shown in *SEDR* tables. In CSEDS 1996, a methodology has been developed to estimate commercial wood consumption by State and a new “Wood” column is added to the commercial sector tables for each State and the United States. Removing the commercial sector wood consumption from the U.S. residential sector number causes that value to be reduced by 7 percent in 1993 and 1995, and by 8 percent in 1994.

**Industrial Sector, 1994 and 1995.** Data from the recently released EIA *1994 Manufacturing Energy Consumption Survey (MECS)* are used to revise estimates for wood and waste consumption in the industrial sector for 1994 forward. Data from the *1991 MECS* are still used for earlier years in CSEDS. Consumption of wood and waste by nonutility power producers are also revised for 1994 and 1995. The U.S. total industrial use of wood and waste remains the same in 1994, but was revised from 2,184 trillion Btu to 2,084 trillion Btu for 1995 in the source publication, EIA *Annual Energy Review 1997*. These changes in all three data series used in CSEDS to estimate State-level industrial wood and waste caused every State's consumption to be revised in 1994 and 1995. The largest quantitative changes of 14 or 15 trillion Btu occurred in States with the largest consumption (Alabama, California, Maine, and Wisconsin) and represented 9-percent or 10-percent revisions. The largest percentage changes, 93-percent increases in Nebraska and Nevada and a 75-percent increase in Utah, occurred in States with less than 3 trillion Btu total consumption.

**Transportation Sector, 1990 through 1995.** State-level estimates of ethanol used as an additive to motor gasoline are revised due to a review of methodology and data sources. The U.S. value remains the same for all years, but all of the State allocations are revised and the State identifier "OT" for States that did not report is no longer needed. The reported quantities of ethanol consumed are contained in the motor gasoline data; therefore, the revised estimates of ethanol consumption, shown in *SEDR* as additional information, cause no revisions in the transportation sector or total energy consumption totals.

**Electric Utilities, 1989 through 1994.** Electricity produced from wood and waste sources is converted into British thermal units (Btu) by use of a conversion factor that is the U.S. average heat content of fossil fuels burned at steam-electric power plants, FFEOKUS. Although electricity generation from wood and waste by electric utilities was not revised, the equivalent values in Btu were revised due to changes in the conversion factor. The Btu values in all States for 1989 through 1995 are revised proportionally by the percentages shown in Table H2.

**Hydroelectric Power**

**Industrial Sector, 1992, 1993, and 1995.** Small adjustments in the source data for estimates of hydropower used by nonutility power producers to generate electricity for 1992, 1993, and 1995 cause CSEDS industrial sector

**Table H2. Revisions to Fossil-Fueled Steam-Electric Plants Thermal Conversion Factor**

Year	Previous	Current	Percent Change
1989	10,317	10,432	1.11
1990	10,335	10,399	0.62
1991	10,352	10,425	0.71
1992	10,302	10,340	0.37
1993	10,280	10,309	0.28
1994	10,272	10,309	0.36
1995	10,301	10,304	0.03

hydroelectricity in billion Btu to be revised. The corresponding data in million kilowatthours are not available. All of the revisions are by 1 percent or less and most are too small to be seen in *SEDR* tables due to the level of rounding.

**Electric Utilities, 1989 through 1995.** Although there are no revisions to electricity generation by electric utilities from hydropower in kilowatthours or to imports and exports of hydroelectricity in kilowatthours in this edition of CSEDS, the heat rate conversion factor used to convert the kilowatthours to Btu are revised. This factor, FFEOKUS, is the annual average heat rate factor for fossil-fueled steam-electric power plants. The Btu values for hydroelectric power in all States and the U.S. total for 1989 through 1995 are revised proportionally by the percentages shown in Table H2.

**Solar**

**Industrial Sector, 1992, 1993, and 1995.** Electricity generation from solar energy by nonutility power producers in California was revised in the source database from 7,688 to 7,666 billion Btu in 1992; from 9,219 to 9,212 billion Btu in 1993; and from 8,490 to 8,466 billion Btu in 1995.

**Electric Utilities, 1989 through 1995.** Although there are no revisions to electricity generation by electric utilities from solar energy in kilowatthours in this edition of CSEDS, the heat rate conversion factor used to convert the

kilowatthours to Btu are revised. This factor, FFEOKUS, is the annual average heat rate factor for fossil-fueled steam-electric power plants. Solar energy is used by electric utilities in California, Texas, and Virginia. The Btu values for solar-based electricity generation in those States and the U.S. total for 1989 through 1995 are revised proportionally by the percentages shown in Table H2.

### *Wind*

**Industrial Sector, 1992, 1993, and 1995.** Electricity generation from wind energy by nonutility power producers in California was revised in the source database by less than 0.5 percent in California and Hawaii in 1992, California in 1993, and California, Hawaii, and Minnesota in 1995.

**Electric Utilities, 1989 through 1995.** Although there are no revisions to electricity generated from wind energy by electric utilities from 1989 through 1994 in kilowatthours in this edition of CSEDS, the heat rate conversion factor used to convert the kilowatthours to Btu are revised. This factor, FFEOKUS, is the annual average heat rate factor for fossil-fueled steam-electric power plants. The Btu values for wind-generated electricity in California, Iowa, Kansas, Minnesota, Wisconsin, and Wyoming, as well as the U.S. total, for 1989 through 1994 are revised proportionally by the percentages shown in Table H2.

Data for wind generation of electricity by electric utilities in 1996 had previously been used for 1995 in error. Incorporating the 1995 data causes generation in California, Iowa, Kansas and Minnesota to be increased by small amounts. The revision of the fossil-fueled steam-electric power plant conversion factor for 1995 causes additional small increases of 0.03 percent in the comparable Btu values.

### **Population, 1961 through 1995**

To implement consistent population data series in EIA's integrated statistical reports, resident population data developed by the U.S. Department of Commerce, Bureau of the Census, are revised in CSEDS for 1961 through 1995. In 1961 through 1969, the State values remain the same, but the U.S. values are revised by 0.04 percent or less each year. CSEDS population data for all States and the U.S. total from 1970 through 1980 are revised to include three additional decimal places of accuracy. Population estimates from 1981 through 1989, are revised to include the three additional decimal places, as well as final adjustments to population estimates. Although most revisions are by less than 0.05 percent, some States have revisions of 1 percent and a few States register 2 percent or 3 percent adjustments. The population revisions from 1990 forward are by 1 percent or less for all States, with most States having revisions of less than 0.5 percent.

These population estimates, which are used in the calculation of the data shown in the "Total Energy per Capita" ranking column of Table 9, are shown in Appendix E, and are included in the Internet data files.



## Glossary

**Anthracite:** The highest rank of coal; used primarily for residential and commercial space heating. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. The moisture content of fresh-mined anthracite generally is less than 15 percent. The heat content of anthracite ranges from 22 to 28 million Btu per ton on a moist, mineral-matter-free basis. The heat content of anthracite coal consumed in the United States averages 25 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). Note: Since the 1980's anthracite refuse or mine waste has been used for steam electric power generation. This fuel typically has a heat content of 15 million Btu per ton or less.

**Asphalt:** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents. It is obtained by petroleum processing. The definition includes crude asphalt, as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

**ASTM:** The American Society for Testing and Materials.

**Aviation Gasoline:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572.

**Aviation Gasoline Blending Components:** Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excluded are oxygenates (alcohols and ethers), butane, and pentanes plus.

**Barrel (petroleum):** A unit of volume equal to 42 U.S. gallons.

**Barrels per Calendar Day (operable refinery capacity):** The maximum number of barrels of input that can be processed during a 24-hour period after making allowances for the following limitations: the capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery (no reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation); the types and grades of inputs to be processed; the types and grades of products to be manufactured; the environmental constraints associated with refinery operations; the reduction of capacity for scheduled downtime, such as routine inspection, mechanical problems, maintenance, repairs, and turnaround; and the reduction of capacity for unscheduled downtime, such as mechanical problems, repairs, and slowdowns.

**Barrels per Stream Day (operable refinery capacity):** The maximum number of barrels of input that can be processed in an atmospheric distillation facility running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

**Biomass:** Energy sources from recent-term organic (plant and animal) matter. Nonfossil biomass energy sources are essentially unprocessed; they are burned or gasified, as received, to produce thermal energy or electricity. Examples are fuelwood, waste wood, garbage, and crop waste. Biomass-derived fuels, on the other hand, result from the processing of biomass energy sources. They may be byproducts of industrial or agricultural processes or they may be fuels made from biomass feedstocks. Biomass-derived fuels generally have concentrated energy density and are more easily transported and used. Examples are wood byproducts (such as wood chips and dewatered wood liquors), pellets, briquettes, refuse-derived fuel (made from garbage), ethanol (made from crops, such as corn), and

methanol (made from wood). Different mixes of biomass sources are used by each consuming sector. The residential and commercial sectors burn wood and pellets for space heating. The industrial sector's largest biomass source is combustible byproducts used for electricity generation and process steam, followed in importance by wood chips. The transportation sector uses ethanol as an additive to motor gasoline. Some electric utilities use wood, industrial wood waste, and municipal waste as cofiring or primary fuels.

**Bituminous Coal:** A dense, black coal, often with well-defined bands of bright and dull material; used primarily as fuel in steam-electric power generation, with substantial quantities also used for heat and power applications in manufacturing and to make coke. Bituminous coal is the most abundant coal in active U.S. mining regions. Its moisture content usually is less than 20 percent. The heat content of bituminous coal ranges from 21 to 30 million Btu per ton on a moist, mineral-matter-free basis. The heat content of bituminous coal consumed in the United States averages 24 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). In this report, bituminous coal includes subbituminous coal.

**British Thermal Unit (Btu):** The quantity of heat needed to raise the temperature of 1 pound of water by 1° F at or near 39.2° F. See **Heat Content of a Quantity of Fuel, Gross, and Heat Content of a Quantity of Fuel, Net.**

**Butane:** A normally gaseous straight-chain or branched-chain hydrocarbon (C<sub>4</sub>H<sub>10</sub>). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

- *Isobutane:* A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.
- *Normal Butane:* A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene:** An olefinic hydrocarbon (C<sub>4</sub>H<sub>8</sub>) recovered from refinery processes.

**Catalytic Cracking:** A refining process that consists of using a catalyst and heat to break down the heavier and more complex hydrocarbon molecules into lighter and simpler molecules.

**Coal:** A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time. Coals are classified according to their degree of progressive alteration from lignite to anthracite. In the U.S. classification, the ranks of coal include lignite, subbituminous coal, bituminous coal, and anthracite and are based on fixed carbon, volatile matter, heating value, and agglomerating (or caking) properties.

**Coal Coke:** A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace.

**Coke Plants:** Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

**Commercial Sector:** The commercial sector, as defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

**Conversion Factor:** A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit.**

**Cord (wood):** A cord of wood measures 4 feet by 4 feet by 8 feet or 128 cubic feet.

**Crude Oil (Including Lease Condensate):** A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

**Crude Oil Used Directly:** Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

**Cubic Foot (natural gas):** A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

**Diesel Fuel:** Fuel used for internal combustion in diesel engines; usually that fraction of crude oil that distills after kerosene. See **Distillate Fuel Oil**.

**Distillate Fuel Oil:** A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No. 1, No. 2, and No. 4 fuel oils and No. 1, No. 2, and No. 4 diesel fuels. It is used primarily for space heating, to fuel on-and off-highway diesel engines (including railroad engines and agricultural machinery), and for electric power generation.

**Electrical System Energy Losses:** The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

**Electricity Production:** Net generation of electricity (gross output measured at generator terminals minus power plant use) by publicly and privately owned electric utilities. Excludes industrial generation of electricity (except autogeneration of hydroelectric power).

**Electricity Sales:** The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and

highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

**Electric Power Plant:** A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

**Electric Utility:** A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy, primarily for use by the public, and that files forms listed in the *Code of Federal Regulations*, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act are not considered electric utilities.

**Electric Utility Sector:** The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

**End-Use Sectors:** The residential, commercial, industrial, and transportation sectors of the economy.

**Energy:** The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

**Energy Consumption:** The use of energy as a source of heat or power or as an input in the manufacturing process.

**Energy Consumption, End-Use:** The sum of fossil fuel consumption by the four end-use sectors (residential, commercial, industrial, and transportation) plus electric utility sales to those sectors and generation of hydroelectric power by nonelectric utilities. **Net** end-use energy consumption

excludes electrical system energy losses. **Total** end-use energy consumption includes electrical system energy losses.

**Energy Consumption, Total:** The sum of fossil fuel consumption by the five sectors (residential, commercial, industrial, transportation, and electric utility) plus hydroelectric power, nuclear electric power, net imports of coal coke, and electricity generated for distribution from wood and waste and geothermal, wind, photovoltaic, and solar thermal energy.

**Ethane:** A normally gaseous straight-chain hydrocarbon (C<sub>2</sub>H<sub>6</sub>). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ethanol:** An anhydrous, denatured aliphatic alcohol (C<sub>2</sub>H<sub>5</sub>OH) intended for motor gasoline blending.

**Ethylene:** An olefinic hydrocarbon (C<sub>2</sub>H<sub>4</sub>) recovered from refinery processes or petrochemical processes.

**Exports:** Shipments of goods from the 50 States and the District of Columbia to foreign countries and to Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Federal Energy Regulatory Commission (FERC):** The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

**Federal Power Commission (FPC):** The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

**Fiscal Year:** The U.S. Government's fiscal year runs from October 1 through September 30. The fiscal year is designated by the calendar year in

which it ends; e.g., fiscal year 1992 begins on October 1, 1991, and ends on September 30, 1992.

**Fossil Fuel:** Any naturally occurring fuel, such as petroleum, coal, and natural gas, formed in the Earth's crust from long-term organic matter.

**Fossil-Fueled Steam-Electric Power Plant:** An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

**Gasohol:** A blend of finished motor gasoline containing 10 percent or less alcohol (generally ethanol but sometimes methanol).

**Gas-Turbine Electric Power Plant:** A plant in which the prime mover is a gas turbine. A gas turbine typically consists of an axial-flow air compressor, one or more combustion chambers where liquid or gaseous fuel is burned and the hot gases expand to drive the generator and then are used to run the compressor.

**Geothermal Energy:** Hot water or steam extracted from geothermal reservoirs in the Earth's crust and supplied to steam turbines that drive generators to produce electricity.

**Heat Content of a Quantity of Fuel, Gross:** The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. Also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

**Heat Content of a Quantity of Fuel, Net:** The amount of usable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

**Heavy Oil:** The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil.

**Hydroelectric Power:** The production of electricity from the kinetic energy of falling water.

**Hydroelectric Power Plant:** A plant in which the turbine generators are driven by falling water.

**Imports:** Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

**Industrial Sector:** The industrial sector comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in this sector range from steel mills to small farms to companies assembling electronic components.

**Internal Combustion Electric Power Plant:** A power plant in which the prime mover is an internal combustion engine. Diesel or gas-fired engines are the principal types used in electric power plants. The plant is usually operated during periods of high demand for electricity.

**Isopentane:** A saturated branched-chain hydrocarbon (C<sub>5</sub>H<sub>12</sub>) obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Jet Fuel, Kerosene-Type:** A kerosene-based product with a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point and a final maximum boiling point of 572 degrees Fahrenheit and meeting ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used for commercial and military turbojet and turboprop aircraft engines.

**Jet Fuel, Naphtha-Type:** A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used primarily for military turbojet and turboprop aircraft engines because it has a lower freeze point than other aviation fuels and meets engine requirements at high altitudes and speeds.

**Kerosene:** A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

**Lease and Plant Fuel:** Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors), and as fuel in natural gas processing plants.

**Lease Condensate:** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Light Oil:** Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

**Lignite:** The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 14 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Liquefied Petroleum Gases (LPG):** Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

**Lubricants:** Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to

cylinder oil and those used in greases. Lubricants categories are paraffinic and naphthenic.

**Methanol:** A light, volatile alcohol ( $\text{CH}_3\text{OH}$ ) eligible for motor gasoline blending.

**Miscellaneous Petroleum Products:** All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

**Motor Gasoline:** A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122 to 158 degrees Fahrenheit at the 10-percent recovery point to 365 to 374 degrees Fahrenheit at the 90-percent recovery point. “Motor Gasoline” includes conventional gasoline; all types of oxygenated gasoline, including gasohol; and reformulated gasoline, but excludes aviation gasoline. *Note:* Volumetric data on blending components, such as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

**Motor Gasoline Blending Components:** Naphthas (e.g., straight-run gasoline, alkylate, reformat, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock for oxygenate blending (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus.

**Natural Gas:** A mixture of hydrocarbons (principally methane) and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gasoline:** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas that meets specifications for natural gasoline set by the Gas Processors Association. Natural gasoline includes isopentane.

**Net Interstate Flow of Electricity:** The difference between the sum of electricity sales and losses within a State and the total amount of electricity generated within that State. A positive number indicates that more

electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

**Nonutilities:** See **Nonutility Power Producer**.

**Nonutility Power Producer:** A corporation, person, agency, authority, or other legal entity or instrumentality that owns electric generating capacity and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated, franchised service area and that do not file forms listed in the *Code of Federal Regulations*, Title 18, Part 141.

**Nuclear Electric Power:** Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

**Nuclear Electric Power Plant:** A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

**Pentanes Plus:** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Included are isopentane, natural gasoline, and plant condensate.

**Petrochemical Feedstocks:** Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are “Naphthas Less Than 401° F. Endpoint” and “Other Oils Equal to or Greater Than 401° F. Endpoint.”

**Petroleum:** A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

**Petroleum Coke:** A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke.

**Petroleum Coke, Catalyst:** The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

**Petroleum Coke, Marketable:** Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining.

**Petroleum Consumption:** The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

**Petroleum Products:** Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Products Supplied:** See **Petroleum Consumption**.

**Photovoltaic and Solar Thermal Energy:** Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

**Plant Condensate:** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Propane:** A normally gaseous straight-chain hydrocarbon (C<sub>3</sub>H<sub>8</sub>). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene:** An olefinic hydrocarbon (C<sub>3</sub>H<sub>6</sub>) recovered from refinery or petrochemical processes.

**Refinery (petroleum):** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Residential Sector:** The residential sector is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

**Residual Fuel Oil:** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and D975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

**Road Oil:** Any heavy petroleum oil, including residual asphaltic oil, used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

**Short Ton (coal):** A unit of weight equal to 2,000 pounds.

**SIC:** See **Standard Industrial Classification**.

**Solar Energy:** The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity.

**Special Naphthas:** All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor

gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

**Standard Industrial Classification (SIC):** A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities.

**Steam-Electric Power Plant:** A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

**Still Gas (refinery gas):** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

**Subbituminous Coal:** A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown or black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter). In this report, subbituminous coal is included in bituminous coal.

**Supplemental Gaseous Fuels:** Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, and air or inert gases added for Btu stabilization.

**Transportation Sector:** The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including street-cars), aircraft, ships, barges, and natural gas pipelines.

**Unfinished Oils:** All oils requiring further refinery processing, except those requiring only mechanical blending. Included are naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

**Unfractionated Streams:** Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

**United States:** The 50 States and the District of Columbia.

**Value Added by Manufacture:** A measure of manufacturing activity that is derived by subtracting the cost of materials (which covers materials, supplies, containers, fuel, purchased electricity, and contract work) from the value of shipments. This difference is then adjusted by the net change in finished goods and work-in-progress between the beginning and end-of-year inventories.

**Waxes:** Solid or semisolid materials derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

**Wind Energy:** The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from a hub) that drive generators to produce electricity for distribution.