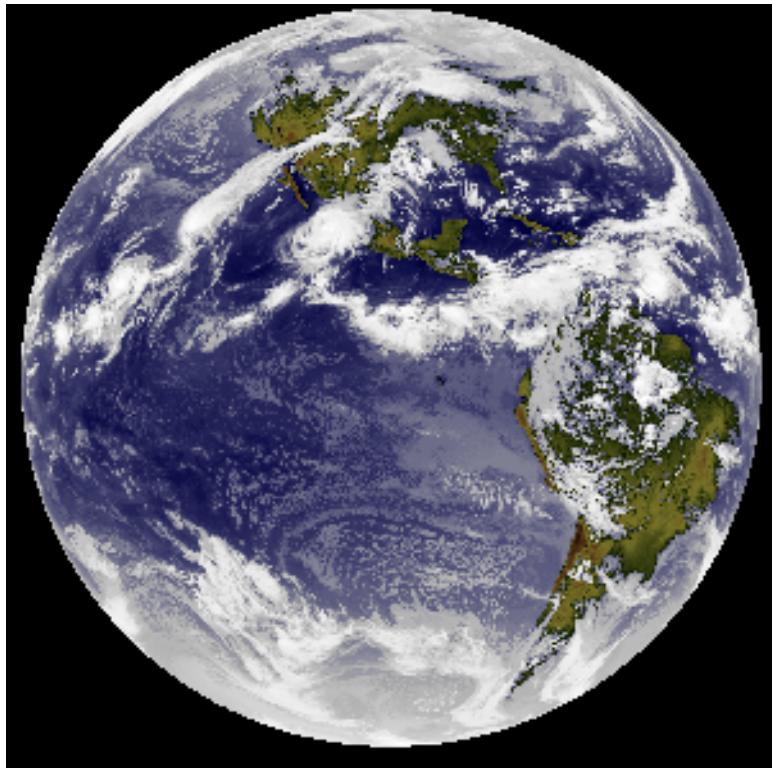


International Energy Annual 1993



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Preface

The *International Energy Annual* presents an overview of key international energy trends for production, consumption, imports, and exports of primary energy commodities in over 200 countries, dependencies, and areas of special sovereignty. Also included are population and gross domestic product data, as well as prices for crude oil and petroleum products in selected countries. Renewable energy reported in the *International Energy Annual* includes hydroelectric power, geothermal, solar and wind electric power and alcohol for fuel.

This report is published to keep the public and other interested parties fully informed of primary energy supplies on a global basis. The data presented have been largely derived from published sources and from reports from U.S. Embassy personnel in foreign posts. The data have been converted to units of measurement and thermal values familiar to the American public.

Although EIA has mandatory data collection authority for collecting energy information within the United States, it has no authority to require reporting of data from foreign countries. Data for the *International Energy Annual* must be researched and collected from the most authoritative available sources outside EIA. Because EIA does not have access to the statistical surveys in other countries, it is not able to develop error estimates or revision errors such as might be developed in EIA's domestic surveys.

EIA attempts to identify and collect the best data available for foreign countries. The most authoritative sources are usually the official national statistical reports of a country. However, data from official sources are not always available. Therefore, EIA also uses data from reputable secondary sources such as the international organizations—the United Nations, the International Energy Agency, the World Bank, and others. In addition, EIA uses industry reports, academic studies, trade publications, and other sources.

Many factors beyond EIA's control affect the reliability and integrity of foreign country data. These include a country's level of economic development, commitment to statistical programs, openness with information, and other considerations.

Publication of this report is in keeping with responsibilities given the Energy Information Administration (EIA) in Public Law 95-91/Section 205(a) that states:

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....

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The database for the Energy Information Administration *International Energy Annual*, together with a system for accessing the data, can now be downloaded to most personal computers, via the Internet. The database information is more detailed and often more timely than the information in the printed publication. The printed tables show the most important countries in each category, typically 25 to 60 countries per table. Many of these tables are for 1992. The database has data for over 200 countries, and for 1990 through 1992, with estimates for 1993. These data are updated quarterly. Internet access can be obtained through the EIA Home Page on the Mosaic/World Wide Web system. The Internet address is: <http://www.eia.doe.gov>. To use the database, users need Microsoft Windows 3.1 or higher, a Mosaic client, and 8 megabytes of free disk space on their hard drive. The personal computer should be an IBM type, with a 386, 486, or Pentium processor with at least 8 megabytes of random-access memory. The database is also available on diskettes. Any questions about the EIA Home Page or the World Energy database can be handled by the EIA National Energy Information Center, by telephone at (202)586-8800, or by Internet e-mail at infoctr@eia.doe.gov.

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WORLD ENERGY OVERVIEW

ENERGY TRENDS

Historical trends in world energy supply and demand often provide important guidelines for understanding the pressures and issues that are likely to occur in the international energy markets. Total world energy consumption has not changed meaningfully between 1990 and 1993. The no-growth years between 1990 and 1993 have been well below the stronger global energy growth rates of 1.7 percent from 1980 to 1985 and 2.8 percent from 1986 to 1989. However, the aggregated growth rates mask important developments in individual countries and regions of the world. The countries of the Organization for Economic Cooperation and Development (OECD) have dominated global energy use throughout the organization's existence and continue to account for a major part of the world's energy demand. The key reason is that the OECD membership includes some of the world's largest economies—the United States, Japan, and Germany—and virtually all of Western Europe. In 1993, the 24 countries of the OECD consumed over half (about 53 percent) of the world's primary energy supply. In 1980 the OECD countries consumed about 57 percent of the world's energy. Table WEO1 compares the OECD energy consumption growth rates with the rest of the world. Figure WEO1 shows the year-by-year pattern of energy consumption by OECD and non-OECD countries.

Table WEO1. Energy Consumption Growth Rates in OECD and Non-OECD Countries

	<u>OECD</u>	<u>Non-OECD</u>
1980-1985	0.0	3.9
1986-1989	2.5	3.2
1990-1993	0.9	-0.8

Source: Table 1.8

During the 1980-1993 period OECD countries experienced average increases in energy consumption of about 1.5 quadrillion British thermal units (Btu) per year or the equivalent of about 0.8 million barrels of oil per day. Non-OECD countries had average increases in energy consumption of about 3.3 quadrillion Btu (the equivalent of 1.7 million barrels of oil per day).

However, Figure WEO1 shows that the growth patterns of the two major groups are not well correlated. High crude oil prices, slow economic growth, and gains in energy efficiency contributed to a downturn in OECD energy use in the early 1980's but, since 1985, OECD countries have had fairly steady gains in energy use. Meanwhile, in the latter part of the 1980's, the non-OECD countries experienced a different set of pressures. A surge of economic growth and expansion of energy demand in Asia and other developing countries was offset by significant downturns in most of the countries of Eastern Europe and the former Soviet Union.

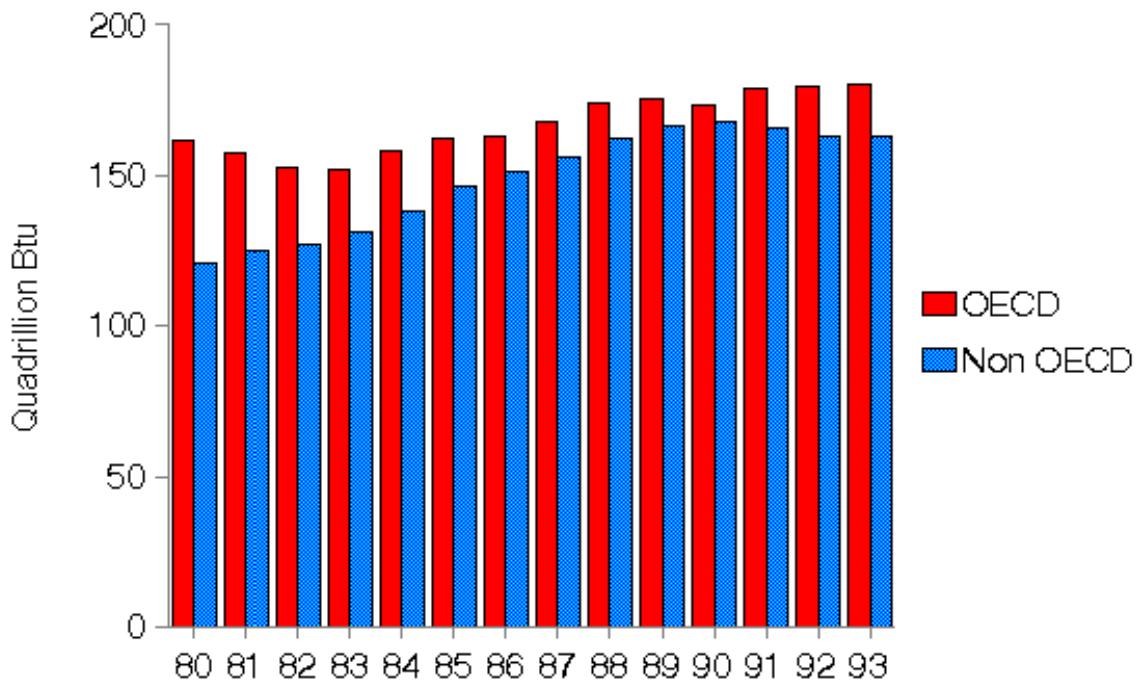


Fig. WEO1: Energy Consumption in OECD and Non-OECD Countries, 1980 to 1993 (Quadrillion Btu)

The trends of energy demand differ from country to country. The United States is the world's most developed economy and is also the largest energy user—accounting for almost one-fourth (24 percent) of world energy demand and almost half (46 percent) of the OECD's energy requirement in 1993. These proportions have declined slightly since 1980 when the United States accounted for 27 percent of world energy use and 47 percent of OECD energy use.

As was mentioned above, two important trends in developing countries and former centrally-planned economies started in the mid-to-late 1980's and have had a major impact on energy markets. The first trend is that some developing countries, particularly in Asia, began a period of rapid economic development and strong increases in energy demand. Table WEO2 highlights some countries that have had particularly high growth in energy demand during the period from 1980 through 1993.

Table WEO2. Economic and Energy Demand Growth Rates in Selected Developing Countries, 1980-1993

<u>Gross Domestic Product Growth Rate</u>		<u>Energy Demand Growth Rate</u>
Brazil	1.5	3.1
China	9.2	4.8
Hong Kong	6.3	5.8
India	5.1	6.2
Singapore	7.1	5.9
South Korea	8.6	8.3
Taiwan	7.5	5.5

Source: Tables B2 and 1.8.

Notable developments occurred in China and India. These two countries had an estimated 38 percent of the world's population at the end of 1993 and had a combined total energy demand growth rate of 5.1 percent over the 1980-1993 period. In 1993, the combined energy demand for China and India totaled about 12 percent of world energy demand but had accounted for over 30 percent of the world's increase in energy use between 1980 and 1993. Energy use per capita in China rose from 17.3 million Btu in 1980 to 26.3 million Btu in 1993. In India the increase was from 6.2 million Btu to 10.2 million Btu.

Energy demand in the Far East and Oceania grew at a rate of 4.3 percent in the 1980-1993 period— faster than in any other geographic region in the world. Energy demand in Central and South America grew at a rate of 2.2 percent during the same period.

The second overriding development in non-OECD countries was the end of the Cold War in the late 1980's and the ensuing transition of former centrally-planned economies to market economies. Table WEO3 highlights three important former centrally planned economies that are in economic transition.

Table WEO3. Economic and Energy Demand Growth Rates in Key Former Centrally Planned Economies, 1980-1993

<u>Gross Domestic Product Growth Rate</u>		<u>Energy Demand Growth Rate</u>
Hungary	-0.5	-1.2
Poland	-0.3	-1.3
Romania	-1.9	-2.5

Source: Tables B2 and 1.8

Global economic development during the 1980-1993 period was accompanied by greater diversification of sources of energy and a more intensive electrification of homes, businesses, and other human activities.

Gradual changes occurred in the proportionate mix of fossil fuels (oil, natural gas, and coal) as energy sources. Oil remains the most important source for meeting the world's energy needs but its share of the market has lessened and the sources of new supply have changed. In 1980, petroleum accounted for 46 percent of primary energy consumption. In 1993, oil provided about 39 percent of the world's energy.

Natural gas's share of the world energy market has increased, rising from 19 percent in 1980 to 22 percent in 1993. Among the fossil fuels, natural gas's relatively clean-burning properties make it a preferred fuel in many countries for environmental reasons.

Coal use has held steady, in spite of its problems as a relatively high carbon emitting fuel. Coal satisfied about 26 percent of world primary energy demand in 1980 and about 25 percent in 1993.

Figure WEO2 shows the trends in the consumption of fossil fuels from 1980 through 1993.

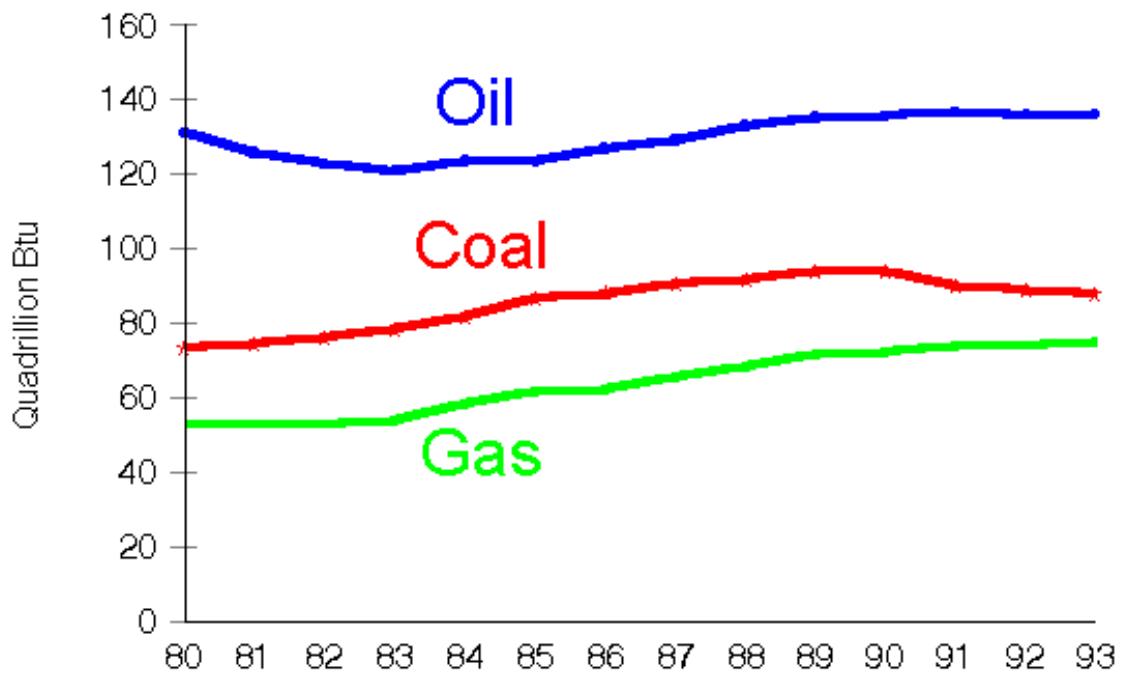


Fig. WEO2: World Consumption of Oil, Natural Gas, and Coal, 1980 to 1993 (Quadrillion Btu)

Electricity generation by all sources (conventional thermal, hydroelectric power, nuclear, geothermal, solar, and wind) shows steady increases. Figure WEO3 shows the long-term trends in generation of electricity by thermal, hydroelectric, and nuclear power plants.

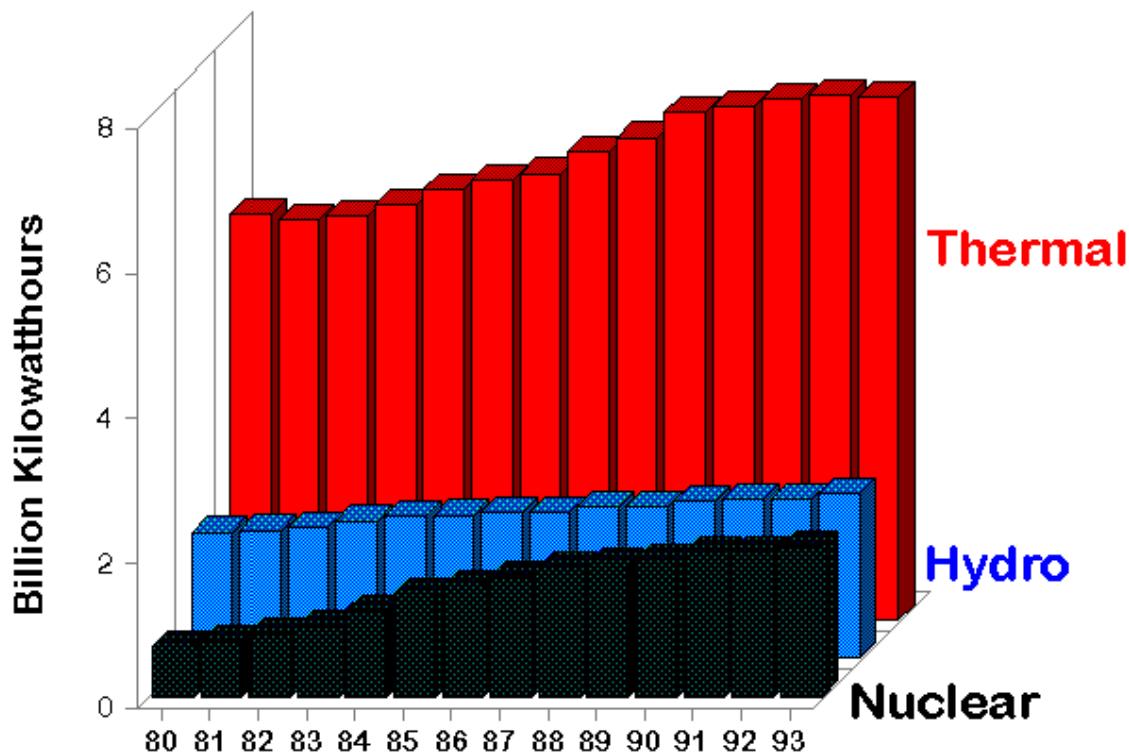


Fig. WEO3: World Electricity Generation by Type, 1980 - 1993 (Billion Kilowatthours)

Crude oil prices generally declined between 1990 and the end of 1993. If energy demand in the former Soviet Union had remained at pre-breakup levels, there would have been considerably more upward pressure on crude oil prices during this time frame.

Petroleum

The sources of oil are less concentrated today than they were in the early 1980's. In 1980, there were 69 oil-producing countries. The top five producers accounted for 59 percent of crude oil production. In 1993, there were 89 oil-producing countries and the top five producers had 47 percent of the crude oil market. The twelve current members of the Organization of Petroleum Exporting Countries (OPEC) had a small drop in their crude oil market share from 45 percent to 43 percent.

Not only did the sources of oil supply become more diverse, the composition of the supply of petroleum liquids changed as well. Liquids from the processing of natural gas were a key part of the additional oil reaching the market. Between 1980 and 1993, there was an increase in the production of crude oil and natural gas liquids totaling 2.8 million barrels per day. About 62 percent (1.7 million barrels per day) of the increased oil supply came from natural gas liquids — liquids produced from associated gas supplies and gas wells. World crude oil production in 1993 was only 1.0 million barrels per day higher than in 1980. In sharp contrast, world crude oil production had increased by almost 14 million barrels per day from 1970 to 1979.

World crude oil production in the first years of the 1990's has been stable — consistently averaging slightly over 60 million barrels per day. However, important changes have occurred among the producing countries. Major drops in crude oil production took place in Iraq (following the August 1990 invasion of Kuwait and the subsequent Persian Gulf conflict) and the countries of the former Soviet Union (following its breakup in August 1991). Between 1990 and 1993, Iraq lost about 1.5 million barrels per day and the countries of the former Soviet Union lost about 3.3 million barrels per day. Crude oil production in the United States continued a steady decline since 1985 and dropped by 0.5 million barrels per day between 1990 and 1993. These supply shortfalls offered opportunities for other producers to gain market shares. Saudi Arabia, Iran, and Norway had a combined production increase of about 2.9 million barrels per day. Emerging producers, such as Yemen, were also able to gain footholds in the market.

As has been described, OPEC has seen some minor erosion in its share of total crude oil production since 1980. The countries in the Persian Gulf have also had some decline in world market share from 30 percent in 1980 to 28 percent in 1993. An important factor in these declines was the loss of crude oil production from Iraq and Kuwait in 1990 and thereafter. In 1980, these two countries had a combined crude oil production of about 4.2 million barrels per day. In 1993, their production totaled an estimated 2.4 million barrels per day. Iraq lost 2.0 million barrels per day of production over that period.

Drilling for oil is essential for maintaining a base of reserve oil for future use. Crude oil reserves at the end of 1993 have been estimated to be between 1.0 and 1.1 trillion barrels. In 1980 world crude oil reserves were estimated at about 0.6 trillion barrels. The countries of the Persian Gulf area dominate the ownership of oil reserves accounting for about 55 to 65 percent of the world total in 1993. In 1980, it was estimated that these countries held about 55 percent of the world's crude oil reserves. Thus, the long-term concentration of oil assets continues to be dominated by the countries of the Middle East.

Expanding requirements for light petroleum products that meet higher environmental standards and increased overall consumption of motor gasoline, jet fuels, lighter fuel oils, and chemical feedstocks have forced many upgrades to refinery distillation capacity. At the end of 1993, world capacity for catalytic cracking, thermal cracking, and reforming totaled about 28 million barrels per day, up from the 1980 capacity of about 19 million barrels per day.

In general, petroleum consumption emits more carbon than natural gas, but less than the consumption of coal. Most petroleum products emit between 19 and 21 million metric tons of carbon per quadrillion Btu of energy consumed.

Natural Gas

Natural gas is the fastest-growing fossil fuel in the world's energy mix. In 1980, natural gas represented about 19 percent of the world's energy consumption. In 1993, natural gas accounted for about 22 percent of the world's energy consumption.

Natural gas use has expanded because of its relatively favorable environmental position among fossil fuels, its reliable availability, improvements in gas handling and transport capabilities, improvements in electric power technology (such as cogeneration of heat and electricity), and important discoveries of new reserves.

Natural gas releases between 14 and 15 million metric tons of carbon per quadrillion Btu of energy consumed, less than petroleum or coal. Typically, natural gas contains little sulphur and nitrogen oxides. Thus, it is a relatively clean-burning fuel and offers advantages to governments and industries seeking to address environmental objectives such as those in the United Nations' Framework Convention on Climate Change. However, natural gas production and handling methods also contribute to carbon emissions. In 1992, global venting and flaring of natural gas totaled over 3.8 trillion cubic feet.

Gas combined-cycle technology is encouraging an expansion of gas demand for electric power generation. This technology offers more efficient fuel use, lower construction costs, abatement of emissions, and flexibility for improvements. The new technology has been favorably received by industry in the United States and in the gas-using countries of Western Europe where regulatory restrictions on the use of gas in electric power generation have been lifted. Other countries in the Far East and Oceania, (India, Indonesia, Japan, and Malaysia) are beginning to introduce combined-cycle technology.

Compared to petroleum and coal, there are few major exporters of natural gas. The natural gas supply chain, particularly for the transport of liquefied natural gas, requires major capital and equipment outlays. In 1992, six countries accounted for about 84 percent of global natural gas exports. Russia is, by far, the world's most

important natural gas exporter. In 1992, Russian exports totaled about 6.9 trillion cubic feet. Algeria, Canada, Indonesia, Netherlands, and Turkmenistan each had exports in excess of 1 billion cubic feet. Russia has the world's greatest wealth of natural gas reserves, totalling about 2 quadrillion cubic feet at the end of 1993. Natural gas reserves in Iran and other countries of the Middle East total about 30 percent of the world's gas reserves.

Coal

After years of steady increases in use, world coal demand peaked in 1989 and declined at a rate of about 1.7 percent between 1989 and 1993. Nonetheless, coal remains a very important source of the world's energy, accounting for about 25 percent of energy use in 1993. Coal consumption grew at a rate of 1.4 percent between 1980 and 1993.

Coal is the world's most abundant commercial fossil fuel. According to the World Energy Council, there about 1.1 trillion short tons of recoverable coal in the world. At 1993 rates of global coal consumption, this represents about 230 years of recoverable coal reserves.

One of the most difficult issues regarding coal use is its release of pollutants when burned. Carbon emissions from coal burning are the highest among the fossil fuels. Coal typically emits between 25 and 28 million metric tons of carbon per quadrillion Btu of energy consumed. In addition, coal emits methane from the processes of production, transportation, and pulverization. Increasingly, countries are placing emissions standards both on new and existing major sources of pollution (power plants, industrial boilers, and smelting). For example, the European Community passed a directive in 1988 limiting emissions of sulfur oxides, nitrogen oxides, and particulate matter from large stationary sources. All OECD countries have established or are currently establishing emission limits on major air pollutants.

Coal is primarily used for making steam for electricity generation and for steelmaking.

Hydroelectric Power and Geothermal Power

Hydroelectric power consumption continues to grow steadily. In the period from 1990 through 1993, the global growth rate was 2.0 percent. Between 1980 and 1993, the growth rate was 2.1 percent.

World hydroelectric power capacity grew from 473 million kilowatts in 1980 to 658 million kilowatts at the beginning of 1993. There have been no new major hydroelectric power facility openings in recent years.

Geothermal electric power generation in 1993 totaled about 34 billion kilowatthours—less than one percent of the world's electricity generation in 1993. About 90 percent of all geothermal electric power capacity is concentrated in five countries—Brazil, Italy, Mexico, the Philippines, and the United States.

Nuclear Electric Power

Nuclear electric power generation continued to grow in the 1990-1993 period in spite of a worldwide curtailment in the development of new plants and capacity. In the United States, no new commercial power plants have been ordered since 1978. At the end of 1993, there were about 430 nuclear power reactors in use in 30 countries in the world. The United States had 109 units in operation, the largest number for any country.

Concerns about costs, radioactive waste, plant safety, and nuclear proliferation have plagued the nuclear power industry in the past decade. Nonetheless, countries have elected to use nuclear power to diversify sources of energy supply and to provide energy where the natural energy resource base is low. Outside the United States, only 29 new nuclear plants with 26 million kilowatts of capacity have been brought into use between 1990 and 1993.

In 1993, four new units entered operation in Japan, while Canada, China, France, Russia, and the United States each connected one new unit to their grids. The net increase to world nuclear power capacity was about 7 to 8 megawatts between 1992 and 1993.

Section 1
World Energy Consumption,
1980, 1985-1993

Table 1.2. World Petroleum Consumption, 1980, 1985-1993 (Continued)
 (Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	46	42	38	34	32	27	20	18	21	20
Bulgaria.....	306	290	286	275	277	235	193	118	103	103
Former Czechoslovakia.....	355	300	297	320	312	315	281	232	213	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	152
Slovakia.....	--	--	--	--	--	--	--	--	--	65
Hungary.....	244	227	212	203	193	181	179	161	171	172
Poland.....	387	333	333	341	350	346	278	275	297	302
Romania.....	374	320	322	340	330	345	382	277	250	225
Former U.S.S.R.....	8,995	8,950	8,975	8,995	8,890	8,740	8,392	8,350	--	--
Armenia.....	--	--	--	--	--	--	--	--	32	14
Azerbaijan.....	--	--	--	--	--	--	--	--	193	185
Belarus.....	--	--	--	--	--	--	--	--	375	311
Estonia.....	--	--	--	--	--	--	--	--	15	23
Georgia.....	--	--	--	--	--	--	--	--	27	16
Kazakhstan.....	--	--	--	--	--	--	--	--	404	303
Kyrgyzstan.....	--	--	--	--	--	--	--	--	33	24
Latvia.....	--	--	--	--	--	--	--	--	52	48
Lithuania.....	--	--	--	--	--	--	--	--	84	69
Moldova.....	--	--	--	--	--	--	--	--	57	48
Russia.....	--	--	--	--	--	--	--	--	4,423	3,789
Tajikistan.....	--	--	--	--	--	--	--	--	20	17
Turkmenistan.....	--	--	--	--	--	--	--	--	76	66
Ukraine.....	--	--	--	--	--	--	--	--	813	676
Uzbekistan.....	--	--	--	--	--	--	--	--	190	183
Total.....	10,707	10,461	10,463	10,508	10,383	10,190	9,725	9,431	7,847	6,812
Middle East										
Bahrain.....	16	16	16	19	20	23	25	27	28	29
Cyprus.....	20	21	22	24	25	30	32	32	38	40
Iran.....	590	790	830	865	870	965	1,003	1,075	1,083	1,115
Iraq.....	217	258	279	285	320	350	400	263	341	370
Israel.....	160	130	133	141	157	163	165	173	201	205
Jordan.....	37	58	62	66	62	62	66	63	73	76
Kuwait.....	106	121	118	115	120	125	85	45	79	87
Lebanon.....	45	48	46	48	43	35	33	53	55	55
Oman.....	17	30	30	27	26	32	39	39	40	41
Qatar.....	11	25	29	32	28	35	37	43	42	42
Saudi Arabia.....	610	939	974	975	990	1,022	1,057	999	983	988
Syria.....	110	164	163	180	192	198	205	178	185	191
United Arab Emirates.....	75	185	207	211	237	242	243	332	167	168
Yemen.....	45	69	67	66	64	74	76	78	83	84
Total.....	2,058	2,854	2,977	3,055	3,154	3,355	3,465	3,400	3,397	3,489

See footnotes at end of table.

Table 1.2. World Petroleum Consumption, 1980, 1985-1993 (Continued)
 (Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Africa										
Algeria.....	121	165	166	167	172	182	194	208	214	215
Angola.....	20	25	24	24	25	25	24	25	26	26
Cameroon.....	16	20	22	21	20	24	24	25	25	25
Congo.....	5	6	7	6	6	7	7	6	6	6
Cote d'Ivoire (Ivory Coast).....	28	30	31	35	37	40	38	39	40	40
Egypt.....	260	430	428	442	437	443	465	456	444	445
Ethiopia.....	12	18	17	19	18	20	20	16	23	22
Gabon.....	11	11	10	10	12	16	15	16	16	16
Ghana.....	16	14	16	18	21	24	20	20	22	22
Kenya.....	41	37	39	35	38	42	42	37	41	42
Libya.....	100	128	125	134	142	147	155	166	145	144
Morocco.....	89	90	94	92	99	111	117	117	130	132
Nigeria.....	170	222	208	218	234	250	275	277	272	275
Senegal.....	17	19	20	19	16	17	17	16	19	19
South Africa.....	312	350	350	345	342	348	375	403	412	395
Sudan.....	22	25	28	27	30	28	25	36	33	34
Tunisia.....	52	55	61	52	61	64	63	72	71	72
Zaire.....	19	19	21	19	23	22	20	22	24	24
Zimbabwe.....	13	15	16	17	17	19	21	23	21	21
Other.....	149	149	145	143	155	164	182	172	192	193
Total.....	1,474	1,826	1,827	1,844	1,905	1,991	2,100	2,153	2,176	2,170
Far East & Oceania										
Australia.....	594	627	625	643	652	687	711	706	712	760
Bangladesh.....	32	32	34	34	36	38	36	38	37	38
Brunei.....	5	6	5	6	6	7	7	10	7	8
Burma.....	23	29	26	28	30	32	35	29	29	29
China.....	1,765	1,885	2,000	2,120	2,275	2,380	2,296	2,499	2,662	3,112
Guam.....	25	5	8	5	6	5	13	14	15	26
Hong Kong.....	124	110	113	116	121	124	127	133	152	165
India.....	643	895	947	988	1,084	1,150	1,168	1,190	1,275	1,286
Indonesia.....	408	465	470	493	524	583	651	695	707	717
Japan.....	4,960	4,384	4,439	4,484	4,752	4,983	5,140	5,284	5,446	5,381
Korea, North.....	48	64	68	69	65	64	73	76	74	76
Korea, South.....	537	569	607	639	731	843	1,025	1,202	1,456	1,546
Malaysia.....	160	194	192	197	202	220	266	282	302	310
Mongolia.....	12	16	17	17	17	17	16	15	13	13
New Zealand.....	91	77	84	94	95	103	109	105	111	125
Pakistan.....	104	160	166	180	194	206	220	221	227	230
Papua New Guinea.....	12	14	14	16	15	15	16	15	15	16
Philippines.....	225	152	159	188	196	229	236	235	260	289
Singapore.....	202	227	257	285	304	329	363	389	396	420
Sri Lanka.....	34	33	31	36	34	31	35	34	37	38
Taiwan.....	380	378	405	420	483	521	542	545	557	574
Thailand.....	224	225	234	259	283	349	407	437	476	528
Vietnam.....	24	28	29	35	40	46	53	56	61	64
Other.....	98	110	95	67	66	70	71	71	66	67
Total.....	10,729	10,686	11,027	11,419	12,209	13,032	13,614	14,283	15,091	15,817
World Total.....	63,067	60,098	61,762	63,010	64,832	66,030	66,155	66,715	66,574	66,715

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table 1.3. World Dry Natural Gas Consumption, 1980, 1985-1993
(Billion Cubic Feet)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	1,883	2,165	2,131	2,112	2,331	2,498	2,420	2,454	2,574	2,789
Mexico.....	908	955	923	865	926	943	946	994	1,015	968
United States.....	19,877	17,281	16,221	17,211	18,030	18,801	18,716	19,035	19,544	20,293
Total.....	22,668	20,401	19,275	20,188	21,287	22,242	22,082	22,483	23,133	24,051
Central & South America										
Argentina.....	359	578	625	605	713	801	707	721	620	628
Brazil.....	30	92	90	105	97	123	97	117	130	145
Chile.....	75	44	26	26	35	57	66	52	54	54
Colombia.....	95	144	144	140	149	146	151	155	151	158
Trinidad and Tobago.....	85	216	152	143	154	162	177	201	194	218
Venezuela.....	517	618	674	657	656	769	864	826	763	862
Other.....	57	62	68	63	67	71	54	47	54	55
Total.....	1,218	1,754	1,779	1,739	1,872	2,128	2,116	2,119	1,967	2,120
Western Europe										
Austria.....	167	188	182	191	183	195	215	228	224	234
Belgium.....	419	345	307	343	337	375	341	345	374	392
Denmark.....	0	27	41	52	56	68	73	82	86	97
Finland.....	32	34	42	55	58	78	95	100	104	108
France.....	1,006	1,120	1,127	1,057	961	991	1,022	1,143	1,139	1,168
Germany.....	--	--	--	--	--	--	--	2,883	2,858	2,893
Germany, East.....	493	580	602	555	602	588	357	--	--	--
Germany, West.....	1,972	1,789	1,806	2,037	1,917	2,047	2,267	--	--	--
Ireland.....	32	87	59	59	71	80	83	84	83	94
Italy.....	973	1,156	1,238	1,371	1,460	1,578	1,672	1,773	1,757	1,801
Netherlands.....	1,493	1,613	1,620	1,672	1,513	1,550	1,538	1,715	1,669	1,714
Norway.....	35	45	87	73	71	73	80	78	131	148
Spain.....	56	82	87	100	129	172	192	216	228	221
Switzerland.....	37	52	53	63	63	69	74	83	78	82
Turkey.....	0	2	16	26	43	114	122	150	159	182
United Kingdom.....	1,702	1,991	2,020	2,079	1,972	1,951	2,059	2,218	2,127	2,383
Former Yugoslavia.....	127	208	224	263	258	287	248	247	196	168
Other.....	20	17	23	27	32	39	45	45	49	52
Total.....	8,564	9,335	9,534	10,022	9,726	10,255	10,483	11,390	11,262	11,739
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	180	219	225	223	221	223	241	200	186	170
Former Czechoslovakia.....	325	407	427	444	416	451	532	504	411	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	240
Slovakia.....	--	--	--	--	--	--	--	--	--	238
Hungary.....	353	404	418	395	407	428	396	391	342	395
Poland.....	412	433	445	461	447	465	413	379	362	383
Romania.....	1,251	1,336	1,410	1,405	1,306	1,384	1,261	1,040	917	911
Former U.S.S.R.....	13,328	20,302	21,522	22,462	24,092	24,529	24,961	25,014	--	--
Azerbaijan.....	--	--	--	--	--	--	--	--	521	431
Belarus.....	--	--	--	--	--	--	--	--	645	590
Georgia.....	--	--	--	--	--	--	--	--	173	128
Kazakhstan.....	--	--	--	--	--	--	--	--	652	586
Kyrgyzstan.....	--	--	--	--	--	--	--	--	65	65
Lithuania.....	--	--	--	--	--	--	--	--	114	64
Moldova.....	--	--	--	--	--	--	--	--	121	109
Russia.....	--	--	--	--	--	--	--	--	15,967	15,892
Tajikistan.....	--	--	--	--	--	--	--	--	61	58
Turkmenistan.....	--	--	--	--	--	--	--	--	309	226
Ukraine.....	--	--	--	--	--	--	--	--	3,826	3,428
Uzbekistan.....	--	--	--	--	--	--	--	--	1,345	1,243
Other.....	10	10	14	16	25	25	9	5	156	80
Total.....	15,859	23,111	24,461	25,407	26,914	27,505	27,813	27,533	26,174	25,236

See footnotes at end of table.

Table 1.3. World Dry Natural Gas Consumption, 1980, 1985-1993 (Continued)
(Billion Cubic Feet)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Bahrain.....	97	164	180	217	182	186	205	233	188	204
Iran.....	232	600	536	565	706	784	837	811	883	954
Iraq.....	62	23	27	35	88	88	77	39	101	128
Israel.....	5	2	1	2	1	1	0	0	0	0
Kuwait.....	244	140	191	284	351	415	256	18	93	176
Oman.....	12	55	70	80	87	99	99	124	117	125
Qatar.....	184	191	193	198	228	215	276	328	401	410
Saudi Arabia.....	517	716	890	946	1,028	1,052	1,077	1,130	1,201	1,268
Syria.....	17	5	9	22	18	35	103	124	127	132
United Arab Emirates.....	105	377	431	580	621	702	663	790	902	917
Total.....	1,475	2,273	2,528	2,929	3,311	3,578	3,593	3,597	4,012	4,314
Africa										
Algeria.....	460	584	602	656	712	660	681	775	730	733
Angola.....	9	13	14	16	18	15	19	20	20	20
Congo.....	0	2	1	2	0	0	0	0	0	0
Egypt.....	30	175	200	222	244	273	286	321	349	398
Gabon.....	6	2	1	4	4	3	3	4	4	4
Libya.....	55	143	168	161	157	165	175	192	174	163
Morocco.....	2	3	3	2	2	2	2	1	1	1
Nigeria.....	38	108	116	131	133	166	131	168	173	189
Tunisia.....	13	42	39	45	39	55	54	41	31	28
Total.....	613	1,072	1,144	1,238	1,309	1,340	1,351	1,522	1,482	1,536
Far East & Oceania										
Afghanistan.....	2	0	0	22	70	68	67	11	11	11
Australia.....	325	463	516	532	555	570	625	584	603	628
Bangladesh.....	50	100	113	131	150	164	162	173	206	245
Brunei.....	60	53	33	57	48	57	46	15	35	35
Burma.....	11	28	38	40	37	38	38	35	36	40
China.....	504	457	484	494	503	505	508	526	533	557
India.....	51	135	180	227	297	315	399	449	477	470
Indonesia.....	195	513	441	542	492	546	547	557	673	713
Japan.....	903	1,468	1,494	1,543	1,618	1,731	1,851	1,976	2,023	2,034
Korea, South.....	0	0	5	18	94	94	116	133	162	202
Malaysia.....	56	225	279	265	289	297	315	383	388	427
New Zealand.....	47	131	158	152	166	172	170	183	197	190
Pakistan.....	286	365	392	419	445	475	482	534	551	584
Taiwan.....	43	50	40	43	24	50	80	105	110	108
Thailand.....	0	128	112	132	193	182	208	236	249	270
Total.....	2,533	4,115	4,285	4,617	4,981	5,266	5,614	5,900	6,254	6,515
World Total.....	52,930	62,061	63,006	66,140	69,399	72,313	73,052	74,545	74,285	75,511

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table 1.4. World Coal Consumption, 1980, 1985-1993
 (Million Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	44.37	49.96	56.99	55.02	60.36	50.58	57.14	55.97	57.58	52.39
Greenland.....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mexico.....	3.98	5.86	4.27	4.58	4.64	4.68	4.57	5.95	6.75	7.26
United States ²	702.73	818.05	804.23	836.94	883.64	889.70	895.48	887.62	892.42	925.94
Total	751.09	873.87	865.49	896.53	948.64	944.96	957.19	949.54	956.76	985.59
Central & South America										
Argentina.....	1.42	1.36	1.67	1.88	1.99	2.12	1.54	1.37	1.46	0.97
Brazil.....	13.91	17.71	18.94	20.04	18.50	19.21	17.50	20.14	18.49	18.64
Chile.....	2.48	2.08	2.14	2.07	3.07	3.86	4.02	4.15	2.94	2.88
Colombia.....	5.54	6.07	5.61	6.20	5.19	5.83	9.25	8.05	7.05	7.69
Costa Rica.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
Cuba.....	0.16	0.17	0.19	0.19	0.20	0.25	0.29	0.29	0.21	0.14
Dominican Republic.....	0.00	0.00	0.03	0.26	0.11	0.29	0.08	0.13	0.06	0.06
Jamaica.....	(s)	0.00	0.00	0.00	0.00	0.00	0.06	0.02	0.04	0.04
Panama.....	(s)	0.01	0.03	0.04	0.03	0.01	0.04	0.20	0.07	0.00
Peru.....	0.32	0.31	0.25	0.31	0.38	0.35	0.27	0.26	0.44	0.17
Puerto Rico.....	0.00	0.11	0.26	0.32	0.39	0.33	0.22	0.21	0.17	0.17
U.S. Virgin Islands.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.23	0.23
Uruguay.....	0.01	(s)	(s)	(s)	(s)	0.00	0.00	(s)	(s)	0.00
Venezuela.....	0.33	0.15	0.15	0.24	1.35	2.41	0.47	0.78	0.51	0.48
Other.....	(s)	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	0.00
Total	24.17	27.97	29.27	31.54	31.20	34.66	33.74	35.77	31.71	31.50
Western Europe										
Austria.....	7.71	9.06	7.48	7.59	7.14	6.90	7.76	8.76	6.17	5.35
Belgium.....	35.73	5.96	10.36	21.31	15.31	20.38	17.01	16.35	14.34	13.20
Denmark.....	10.83	13.42	12.91	13.19	12.41	10.09	10.45	14.72	12.23	13.47
Finland.....	8.05	7.09	6.28	7.54	7.28	7.23	6.42	6.02	5.96	6.04
France.....	58.33	40.44	34.85	30.73	25.41	35.59	36.18	37.10	31.66	23.26
Germany.....	--	--	--	--	--	--	--	407.96	359.49	333.22
Germany, East.....	297.20	351.51	351.62	349.83	348.39	340.03	276.37	--	--	--
Germany, West.....	238.72	233.68	224.98	216.52	214.36	213.11	208.27	--	--	--
Greece.....	25.59	41.89	44.19	49.04	53.55	58.68	59.56	59.25	63.21	58.32
Iceland.....	0.03	0.11	0.13	0.10	0.10	0.11	0.11	0.08	0.04	0.04
Ireland.....	1.23	1.76	2.54	3.50	3.70	3.64	3.48	3.58	3.32	2.49
Italy.....	20.19	26.79	24.20	24.74	24.00	23.64	24.94	22.89	20.93	17.11
Luxembourg.....	2.92	2.25	2.06	1.66	1.76	1.80	1.81	1.71	1.62	1.66
Malta.....	(s)	0.23	0.16	0.20	0.27	0.33	0.33	0.33	0.33	0.31
Netherlands.....	6.36	10.95	10.44	9.76	13.68	13.83	15.68	16.97	13.30	14.08
Norway.....	1.60	1.93	1.81	1.56	1.61	1.59	1.58	1.33	1.53	1.80
Portugal.....	0.79	2.65	2.25	3.41	3.72	4.58	4.92	5.05	5.46	5.41
Spain.....	41.81	58.38	55.99	48.49	45.67	58.81	59.59	51.53	69.36	47.11
Sweden.....	2.80	4.95	5.00	4.97	4.93	4.77	4.36	4.10	3.90	4.10
Switzerland.....	0.49	0.80	0.69	0.64	0.55	0.57	0.57	0.43	0.19	0.18
Turkey.....	19.64	46.23	55.22	54.21	46.44	60.59	58.63	65.85	63.49	62.95
United Kingdom.....	133.22	116.32	123.24	128.61	122.55	125.82	119.32	117.54	110.93	94.09
Former Yugoslavia.....	48.67	81.63	81.83	82.74	84.31	85.38	83.44	81.43	71.96	63.83
Total	961.91	1,058.04	1,058.25	1,060.34	1,037.12	1,077.46	1,000.80	923.01	859.46	768.00

See footnotes at end of table.

Table 1.4. World Coal Consumption, 1980, 1985-1993 (Continued)

(Million Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Far East & Oceania										
Afghanistan.....	0.11	0.17	0.18	0.18	0.15	0.18	0.17	0.16	0.09	0.09
Australia.....	62.58	72.80	89.65	112.98	69.34	106.89	102.04	101.94	112.71	103.65
Bangladesh.....	0.26	0.11	0.16	0.26	0.26	0.28	0.62	0.18	0.37	0.50
Bhutan.....	(s)	0.00	0.00	0.02	0.02	(s)	0.02	0.02	0.02	0.03
Brunei.....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Burma.....	0.05	0.10	0.06	0.05	0.04	0.04	0.08	0.04	0.05	0.03
China.....	678.55	955.08	979.61	1,013.08	1,063.67	1,145.84	1,124.75	1,164.88	1,206.11	1,272.64
Fiji.....	0.02	0.02	0.02	0.01	(s)	0.02	0.02	0.02	0.02	0.02
Hong Kong.....	0.03	6.23	6.88	8.85	10.82	11.58	10.00	9.80	11.28	13.01
India.....	129.56	176.62	188.39	206.27	208.78	234.72	259.00	248.76	284.54	298.31
Indonesia.....	0.52	1.11	3.28	4.32	5.08	7.70	7.14	7.98	8.20	11.00
Japan.....	93.96	119.87	114.77	111.93	122.39	121.33	129.76	125.00	126.07	127.84
Korea, North.....	47.81	56.31	57.91	59.01	62.82	70.02	67.46	68.00	67.61	68.37
Korea, South.....	29.02	46.34	49.22	49.47	52.80	49.81	46.19	49.12	42.64	43.61
Laos.....	0.00	0.00	0.00	(s)	0.00	0.00	0.00	(s)	(s)	(s)
Macau.....	(s)	0.00	0.00	0.00	0.00	0.00	(s)	0.00	0.00	0.00
Malaysia.....	0.08	0.57	0.45	0.61	0.51	1.84	2.12	2.55	2.54	1.85
Mongolia.....	5.06	6.94	7.46	7.90	8.99	8.01	7.99	7.91	7.75	8.10
Nepal.....	0.09	0.10	0.06	0.10	0.11	0.10	0.05	0.09	0.11	0.34
New Caledonia.....	0.13	0.20	0.19	0.17	0.19	0.23	0.18	0.19	0.19	0.17
New Zealand.....	2.26	2.55	2.47	2.52	2.40	2.66	3.19	2.54	2.77	0.83
Pakistan.....	2.00	3.12	3.33	3.38	3.91	3.95	4.07	5.04	4.53	4.70
Papua New Guinea.....	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00
Philippines.....	0.73	2.78	2.42	2.00	2.93	2.43	2.08	3.03	2.72	2.44
Singapore.....	0.00	(s)	(s)	(s)	(s)	0.04	0.04	0.11	0.09	0.02
Sri Lanka.....	(s)	(s)	(s)	0.00	0.00	(s)	(s)	(s)	(s)	0.00
Taiwan.....	6.55	12.09	14.93	2.29	18.58	19.65	19.66	21.06	25.10	26.11
Thailand.....	1.79	6.07	6.34	8.04	8.49	10.69	14.11	16.51	17.60	19.03
Vietnam.....	5.30	6.18	5.87	5.79	5.81	3.57	4.64	3.96	3.79	6.78
Total.....	1,066.49	1,475.37	1,533.63	1,599.23	1,648.10	1,801.57	1,805.38	1,838.89	1,926.89	2,009.46
World Total.....	4,152.22	4,883.31	4,977.68	5,102.19	5,192.60	5,318.21	5,252.73	4,987.89	4,967.26	4,911.95

¹ Preliminary.² Consumption data do not reflect net exports of coke.

-- Not applicable.

(s) = Value less than 5 thousand short tons.

Notes: Sum of components may not equal total due to independent rounding.

See Glossary for definition of apparent coal consumption.

Sources: See sources at the end of Section 5.

Table 1.5. World Net Hydroelectric Power Consumption, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	251.0	300.8	307.7	313.2	303.5	287.6	292.6	304.3	312.1	319.1
Mexico.....	16.7	26.0	19.8	18.2	21.0	24.4	23.5	21.9	21.0	20.0
United States.....	300.2	325.3	329.9	299.2	257.8	279.2	285.1	300.9	271.1	296.7
Total.....	567.9	652.0	657.4	630.6	582.3	591.3	601.2	627.2	604.3	635.8
Central & South America										
Argentina.....	15.1	20.4	20.8	21.8	15.6	13.2	18.0	16.3	19.4	19.5
Bolivia.....	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.4	1.3	1.3
Brazil.....	128.4	176.5	180.7	183.7	197.1	202.6	204.6	215.6	221.1	225.0
Chile.....	7.3	10.4	11.3	12.0	11.4	9.5	11.9	12.9	14.7	15.0
Colombia.....	14.3	21.6	25.0	21.3	24.3	26.4	27.2	27.2	22.2	20.0
Costa Rica.....	2.1	2.7	2.9	3.0	3.0	3.3	3.5	3.6	3.5	3.5
Cuba.....	0.1	0.1	0.1	(s)	0.1	0.1	0.1	0.1	0.1	0.1
Dominica.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Dominican Republic.....	0.6	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9
Ecuador.....	0.9	3.8	4.3	4.5	4.7	4.9	4.9	5.0	4.9	4.8
El Salvador.....	1.1	1.2	1.2	1.1	1.3	1.4	1.7	1.3	1.4	1.5
Guatemala.....	0.3	0.7	1.7	1.7	1.8	2.1	2.1	2.1	2.1	2.1
Guyana.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Haiti.....	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Honduras.....	0.8	0.9	1.3	1.1	1.7	1.8	2.1	2.1	2.1	2.1
Jamaica.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nicaragua.....	0.5	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3
Panama.....	1.0	1.9	2.1	2.0	2.2	2.2	2.2	2.0	1.9	1.7
Paraguay.....	0.7	4.0	11.9	18.4	19.9	24.2	26.9	29.1	26.8	26.5
Peru.....	7.0	9.4	10.1	10.8	10.3	10.3	10.4	11.4	9.7	8.0
Puerto Rico.....	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Saint Vincent/Grenadines.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Suriname.....	0.9	1.0	0.8	0.3	0.5	1.1	1.2	1.1	1.1	1.1
Uruguay.....	2.2	6.4	7.2	7.2	5.4	3.9	6.9	6.1	7.8	8.0
Venezuela.....	14.4	21.8	24.9	30.5	33.9	34.3	36.6	44.0	46.6	50.0
Total.....	199.3	285.7	309.1	322.8	336.4	344.6	363.5	383.0	388.7	392.1
Western Europe										
Austria.....	28.5	30.3	30.5	25.4	35.2	34.6	31.0	31.0	34.3	36.5
Belgium.....	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.3
Denmark.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Faroe Islands.....	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
Finland.....	10.1	12.2	12.3	13.7	13.2	12.9	10.8	13.1	15.0	13.5
France.....	68.3	60.2	61.0	68.6	74.0	45.7	52.7	56.2	67.0	63.4
Germany.....	--	--	--	--	--	--	--	14.5	17.2	17.5
Germany, East.....	1.7	1.8	1.8	1.7	1.7	1.6	1.4	--	--	--
Germany, West.....	17.1	15.4	16.5	18.4	18.1	16.5	15.8	--	--	--
Greece.....	3.4	2.8	3.2	2.8	2.4	1.9	1.8	3.1	2.2	2.1
Iceland.....	3.1	3.7	3.8	3.9	4.2	4.2	4.2	4.2	4.3	4.4
Ireland.....	0.8	0.8	0.9	0.7	0.9	0.7	0.7	0.7	0.8	0.8
Italy.....	45.0	40.6	40.6	39.1	40.2	33.6	31.2	41.7	41.7	41.2
Luxembourg.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands.....	0.0	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Norway.....	82.7	101.5	95.3	102.3	107.9	117.4	120.2	109.3	115.8	117.8
Portugal.....	7.9	10.5	8.4	9.0	12.0	5.7	9.0	8.9	4.6	8.4
Spain.....	29.2	30.9	26.1	27.0	34.8	19.0	25.1	26.9	18.7	24.2
Sweden.....	58.1	70.1	60.1	71.0	69.0	70.9	71.7	62.4	73.5	75.5
Switzerland.....	32.5	31.7	32.6	34.3	35.4	29.5	29.5	31.8	32.4	34.8
Turkey.....	11.2	11.8	11.6	18.3	28.4	17.6	22.7	22.3	26.2	33.6
United Kingdom.....	3.9	4.1	4.8	4.1	4.9	4.7	5.2	4.6	5.5	4.6
Former Yugoslavia.....	27.9	24.4	27.5	26.0	25.6	23.3	19.6	18.9	18.0	16.5
Total.....	431.7	453.2	437.5	466.8	508.5	440.4	452.9	450.0	477.7	495.4

See footnotes at end of table.

Table 1.5. World Net Hydroelectric Power Consumption, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	2.9	3.3	3.4	4.1	3.9	4.1	3.2	3.5	3.2	3.1
Bulgaria.....	3.7	2.2	2.3	2.5	2.6	2.7	1.9	2.4	2.0	2.1
Former Czechoslovakia.....	4.8	4.3	4.0	4.9	4.4	4.2	3.9	3.1	3.6	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	1.4
Slovakia.....	--	--	--	--	--	--	--	--	--	1.7
Hungary.....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Poland.....	3.2	3.9	3.7	4.0	4.2	3.7	3.3	3.4	3.5	3.7
Romania.....	12.5	11.8	10.7	11.1	13.5	12.5	10.9	14.1	11.6	12.6
Former U.S.S.R.....	184.0	205.0	213.5	217.5	228.5	221.0	230.7	232.7	--	--
Armenia.....	--	--	--	--	--	--	--	--	1.5	2.0
Azerbaijan.....	--	--	--	--	--	--	--	--	1.7	2.4
Belarus.....	--	--	--	--	--	--	--	--	(s)	(s)
Georgia.....	--	--	--	--	--	--	--	--	6.5	6.2
Kazakhstan.....	--	--	--	--	--	--	--	--	6.9	6.6
Kyrgyzstan.....	--	--	--	--	--	--	--	--	9.1	9.9
Latvia.....	--	--	--	--	--	--	--	--	2.5	3.4
Lithuania.....	--	--	--	--	--	--	--	--	0.3	0.2
Moldova.....	--	--	--	--	--	--	--	--	0.3	0.3
Russia.....	--	--	--	--	--	--	--	--	170.3	173.4
Tajikistan.....	--	--	--	--	--	--	--	--	16.2	15.5
Ukraine.....	--	--	--	--	--	--	--	--	8.0	7.6
Uzbekistan.....	--	--	--	--	--	--	--	--	6.3	7.1
Total.....	211.3	230.7	237.7	244.2	257.2	248.4	253.9	259.3	253.8	259.5
Middle East										
Iran.....	5.6	6.3	6.1	6.3	6.4	6.6	5.6	5.7	6.4	6.8
Iraq.....	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.3	0.7	0.7
Israel.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.8	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.4
Syria.....	2.5	2.0	1.6	2.0	4.8	4.7	5.6	6.2	7.3	7.5
Total.....	9.6	9.5	8.9	9.6	12.3	12.3	12.2	12.6	14.8	15.4
Africa										
Algeria.....	0.2	0.6	0.2	0.5	0.2	0.3	0.1	0.3	0.2	0.2
Angola.....	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4
Cameroon.....	1.4	2.3	2.3	2.3	2.5	2.6	2.6	2.6	2.6	2.6
Congo.....	0.1	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.4
Cote d'Ivoire (Ivory Coast).....	1.3	1.3	1.2	1.2	1.2	1.6	1.6	1.0	1.1	1.1
Egypt.....	9.7	8.0	7.9	8.2	7.8	7.9	9.9	9.8	9.6	9.5
Ethiopia.....	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1
Gabon.....	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Ghana.....	5.3	3.0	4.4	4.6	4.8	5.2	5.7	6.0	6.0	6.1
Kenya.....	1.0	1.7	1.7	1.8	2.3	2.4	2.5	2.8	2.8	3.0
Madagascar.....	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Malawi.....	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8
Morocco.....	1.5	0.5	0.6	0.8	0.9	1.1	1.2	1.3	1.0	0.9
Mozambique.....	13.4	0.1	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1
Nigeria.....	2.7	3.0	3.2	3.2	3.1	3.1	3.2	3.2	3.2	3.2
Reunion.....	0.3	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.7
South Africa.....	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Sudan.....	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Tanzania.....	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Uganda.....	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8
Zaire.....	4.2	5.0	5.2	5.2	5.2	5.9	5.9	5.9	6.0	6.0
Zambia.....	9.0	9.9	9.7	8.4	8.3	6.7	7.7	7.7	7.7	7.8
Zimbabwe.....	4.0	3.1	3.1	2.5	2.7	2.7	3.5	3.1	3.1	3.1
Other.....	1.0	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.4
Total.....	60.2	46.7	48.0	47.3	47.7	48.6	53.5	53.3	52.9	53.1

See footnotes at end of table.

Table 1.5. World Net Hydroelectric Power Consumption, 1980, 1985-1993 (Continued)

(Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Far East & Oceania										
Afghanistan.....	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.7	0.5	0.4
Australia.....	12.8	13.5	14.4	13.5	13.4	14.3	14.0	15.7	14.7	16.3
Bangladesh.....	0.6	0.7	0.5	0.5	0.7	0.9	0.9	0.8	0.8	0.7
Bhutan.....	(s)	(s)	0.3	1.2	1.5	1.5	1.5	1.6	1.6	1.7
Burma.....	0.8	1.0	1.0	1.0	0.9	1.1	1.2	1.3	1.3	1.3
Cambodia.....	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
China.....	58.2	92.4	94.5	100.2	108.0	117.1	125.5	123.8	131.1	143.1
Fiji.....	0.0	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
French Polynesia.....	0.0	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
India.....	46.5	50.5	53.3	47.0	57.3	61.5	70.9	72.3	69.2	68.0
Indonesia.....	3.0	6.1	7.0	7.6	8.3	8.5	8.9	8.5	8.7	8.8
Japan.....	87.8	82.1	80.0	74.0	89.9	90.8	88.4	96.5	81.7	90.4
Korea, North.....	22.3	27.7	28.7	28.8	31.2	31.4	31.4	31.4	30.0	30.0
Korea, South.....	2.0	3.6	4.0	5.3	3.5	4.5	6.3	5.0	4.8	5.9
Laos.....	0.9	0.9	0.8	0.5	0.5	0.7	0.8	0.9	0.9	0.8
Malaysia.....	1.4	3.8	4.0	4.9	5.6	5.2	4.0	4.4	5.0	5.5
Nepal.....	0.2	0.3	0.4	0.5	0.6	0.5	0.7	0.9	0.9	0.9
New Caledonia.....	0.3	0.5	0.4	0.3	0.5	0.5	0.5	0.3	0.3	0.3
New Zealand.....	19.5	19.5	21.9	22.1	23.1	21.9	23.1	22.9	20.4	21.1
Pakistan.....	8.6	12.1	13.7	15.1	16.5	16.8	16.8	18.1	20.4	22.0
Papua New Guinea.....	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Philippines.....	3.5	5.5	6.0	5.2	6.2	6.4	6.0	5.1	4.2	4.0
Samoa, Western.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	1.5	2.4	2.6	2.2	2.6	2.8	3.1	3.1	2.9	2.6
Taiwan.....	2.9	7.1	7.4	7.1	6.1	6.7	8.2	5.5	8.3	6.8
Thailand.....	1.3	3.7	5.5	4.0	3.7	5.5	4.9	4.5	4.2	3.8
U.S. Pacific Islands.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	1.2	1.5	1.6	1.7	1.8	3.8	5.3	5.6	5.8	6.0
Total.....	276.2	336.4	349.5	344.3	383.7	404.2	424.2	429.9	418.7	441.3
World Total.....	1,756.2	2,014.1	2,048.0	2,065.7	2,127.9	2,089.8	2,161.3	2,215.2	2,210.8	2,292.6

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Sources: See sources at the end of Section 6.

Table 1.6. World Net Nuclear Electric Power Consumption, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	35.9	57.1	67.2	72.9	78.2	75.4	68.8	80.1	76.0	88.6
Mexico.....	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	3.7	4.7
United States.....	251.1	383.7	414.0	455.3	527.0	529.4	576.9	612.6	618.8	610.3
Total.....	287.0	440.8	481.3	528.2	605.1	604.7	647.7	696.7	698.5	703.6
Central & South America										
Argentina.....	2.2	5.4	5.4	6.1	4.8	4.8	7.0	7.7	6.7	7.3
Brazil.....	0.0	2.9	0.1	0.9	0.3	1.5	1.9	1.4	1.7	0.4
Total.....	2.2	8.4	5.5	7.1	5.2	6.3	9.0	9.1	8.4	7.7
Western Europe										
Belgium.....	11.9	32.7	37.3	39.8	40.9	39.1	40.6	40.6	41.3	39.5
Finland.....	6.6	18.0	18.0	18.5	18.4	18.0	18.1	18.4	18.2	18.9
France.....	63.4	211.2	239.6	249.3	260.3	288.7	297.7	315.0	321.5	350.2
Germany.....	--	--	--	--	--	--	--	139.4	150.9	145.8
Germany, East.....	11.9	12.7	10.9	10.7	11.1	11.1	5.3	--	--	--
Germany, West.....	43.7	125.9	119.6	130.5	145.1	140.4	139.8	--	--	--
Italy.....	2.1	6.6	8.3	(s)	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands.....	3.9	3.7	4.0	3.4	3.5	3.8	3.3	3.1	3.6	3.8
Spain.....	5.2	28.0	37.5	41.3	48.3	53.7	51.9	53.2	53.0	53.7
Sweden.....	25.3	55.8	66.9	64.3	65.6	62.8	65.2	73.5	60.8	58.7
Switzerland.....	12.9	20.1	20.1	20.5	21.5	21.5	22.4	21.7	22.1	22.2
United Kingdom.....	32.3	53.8	51.8	48.2	55.6	63.6	58.7	62.8	69.1	81.0
Former Yugoslavia.....	0.0	4.0	4.0	4.2	3.9	4.5	4.4	4.2	3.8	3.8
Total.....	219.2	572.5	617.8	630.6	674.2	707.3	707.4	731.9	744.2	777.4
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	5.8	12.4	11.4	11.7	15.1	14.6	13.5	12.4	11.0	13.3
Former Czechoslovakia.....	4.5	11.9	17.9	20.9	21.9	23.2	23.4	22.5	23.3	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	12.5
Slovakia.....	--	--	--	--	--	--	--	--	--	11.0
Hungary.....	0.0	6.1	7.0	10.4	12.7	13.1	13.1	13.1	13.3	13.1
Former U.S.S.R.....	72.9	170.0	151.6	176.3	203.7	212.7	201.3	201.5	--	--
Kazakhstan.....	--	--	--	--	--	--	--	--	0.5	0.4
Lithuania.....	--	--	--	--	--	--	--	--	13.9	12.3
Russia.....	--	--	--	--	--	--	--	--	113.6	116.9
Ukraine.....	--	--	--	--	--	--	--	--	70.1	75.2
Total.....	83.2	200.3	187.8	219.3	253.4	263.5	251.4	249.5	245.6	254.6
Africa										
South Africa.....	0.0	5.5	8.9	6.3	10.5	11.1	8.5	9.2	9.4	7.3
Total.....	0.0	5.5	8.9	6.3	10.5	11.1	8.5	9.2	9.4	7.3
Far East & Oceania										
China.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.5
India.....	3.0	4.7	4.7	4.7	5.2	3.8	5.6	5.2	6.0	5.9
Japan.....	78.6	149.7	158.8	188.6	173.9	174.5	182.3	201.4	207.2	234.0
Korea, South.....	3.3	15.8	26.7	37.1	37.8	45.0	50.2	53.5	53.7	55.2
Pakistan.....	(s)	0.3	0.4	0.5	0.2	0.1	0.4	0.4	0.5	0.4
Taiwan.....	7.8	27.8	25.8	31.8	29.4	27.1	31.6	33.5	30.8	31.3
Total.....	92.7	198.2	216.4	262.7	246.5	250.5	270.1	294.0	298.8	329.3
World Total.....	684.4	1,425.7	1,517.7	1,654.1	1,794.9	1,843.4	1,894.0	1,990.4	2,004.9	2,080.0

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

No consumption is reported for Middle East.

Sources: See sources at the end of Section 6.

Table 1.7. World Net Geothermal, Solar, and Wind Electric Power Consumption, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mexico.....	0.9	1.6	3.4	4.3	4.7	4.7	5.1	5.4	5.2	5.0
United States.....	2.2	9.4	9.9	13.1	15.8	14.3	11.1	11.0	12.9	11.3
Total.....	3.0	11.1	13.3	17.4	20.5	19.0	16.2	16.5	18.1	16.3
Central & South America										
Brazil.....	4.9	4.7	8.1	7.2	6.6	6.6	6.0	6.5	7.0	7.5
El Salvador.....	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Nicaragua.....	0.0	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.5
Total.....	5.3	5.4	8.8	7.9	7.2	7.4	6.8	7.4	7.8	8.3
Western Europe										
Belgium.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.0
France.....	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Germany.....	--	--	--	--	--	--	--	(s)	(s)	0.1
Germany, West.....	0.0	0.0	0.0	0.0	(s)	(s)	(s)	--	--	--
Greece.....	0.0	0.0	0.0	(s)	(s)	0.0	(s)	0.0	(s)	(s)
Iceland.....	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Ireland.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)
Italy.....	2.6	2.5	2.6	2.8	2.9	3.0	3.1	3.0	3.3	3.5
Netherlands.....	0.0	0.0	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sweden.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Switzerland.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)
Turkey.....	0.0	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
United Kingdom.....	0.0	(s)	(s)	0.0	0.6	0.7	0.7	0.7	1.0	1.5
Total.....	3.1	3.4	3.6	3.9	4.8	5.0	5.3	5.5	6.2	7.2
Eastern Europe & Former U.S.S.R.										
Romania.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	0.0	0.0	0.0
Former U.S.S.R.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	--	--	--
Russia.....	--	--	--	--	--	--	--	--	(s)	(s)
Total.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Middle East										
Jordan.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Total.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Kenya.....	0.0	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total.....	(s)	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Far East & Oceania										
Australia.....	0.2	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0
India.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Indonesia.....	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Japan.....	1.1	1.4	1.3	1.3	1.3	1.3	1.6	1.7	1.7	1.6
New Zealand.....	1.2	1.1	1.1	1.1	1.2	1.8	2.1	2.1	2.1	2.0
Philippines.....	2.0	4.7	4.3	4.3	4.6	5.1	5.2	5.5	5.4	5.4
Vietnam.....	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total.....	4.4	8.2	7.9	7.8	8.3	9.1	10.0	10.3	10.4	10.3
World Total.....	15.9	28.4	34.0	37.5	41.1	40.9	38.7	40.1	42.9	42.4

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Sources: See sources at the end of Section 6.

Table 1.8. World Consumption of Primary Energy by Selected Country Groups (Btu), 1980, 1985-1993
 (Quadrillion (10¹⁵) Btu)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Petroleum										
World Total	130.92	123.14	126.84	129.11	133.11	135.20	135.39	136.55	136.25	136.17
OECD ²	80.22	69.87	72.02	73.07	75.66	76.40	76.16	76.74	78.19	78.33
Non OECD.....	50.70	53.27	54.81	56.04	57.44	58.80	59.23	59.81	58.06	57.84
Other Groups:.....										
OECD Europe.....	29.57	25.01	25.86	26.08	26.45	26.56	26.70	27.75	28.17	28.11
OPEC ³	5.91	7.67	7.94	8.11	8.41	8.93	9.36	9.40	9.24	9.48
EC ⁴	25.61	21.70	22.44	22.45	22.92	23.10	23.17	24.18	24.54	24.37
IEA ⁵	80.20	69.85	72.00	73.04	75.64	76.38	76.13	76.71	78.16	78.30
Natural Gas										
World Total	52.58	61.42	62.24	65.46	68.62	71.59	72.48	73.99	73.84	75.15
OECD ²	31.65	30.86	29.98	31.53	32.39	34.01	34.45	35.88	36.55	38.02
Non OECD.....	20.93	30.56	32.26	33.93	36.23	37.59	38.03	38.11	37.28	37.13
Other Groups:.....										
OECD Europe.....	7.99	8.65	8.82	9.29	9.03	9.53	9.94	10.93	10.86	11.37
OPEC ³	2.79	4.27	4.55	5.06	5.50	5.91	5.95	6.00	6.47	6.92
EC ⁴	7.70	8.30	8.40	8.84	8.57	8.97	9.33	10.22	10.10	10.54
IEA ⁵	31.65	30.86	29.98	31.53	32.39	34.01	34.45	35.88	36.55	38.02
Coal										
World Total	73.19	86.39	87.95	90.31	91.73	93.75	93.35	89.71	88.71	87.60
OECD ²	32.29	36.09	36.15	37.40	37.11	38.16	38.02	37.13	35.74	34.57
Non OECD.....	40.90	50.30	51.80	52.91	54.62	55.58	55.33	52.58	52.97	53.03
Other Groups:.....										
OECD Europe.....	12.97	13.91	13.74	13.86	13.28	13.94	13.33	12.94	11.20	9.76
OPEC ³	0.07	0.11	0.15	0.18	0.23	0.32	0.27	0.30	0.31	0.37
EC ⁴	12.08	12.40	12.08	12.21	11.82	12.18	11.62	11.08	10.12	8.70
IEA ⁵	32.29	36.09	36.15	37.39	37.11	38.16	38.02	37.12	35.74	34.57
Hydroelectric Power										
World Total	18.26	20.99	21.34	21.51	22.14	21.74	22.48	23.03	22.97	23.81
OECD ²	11.18	12.21	12.14	12.12	12.18	11.56	11.83	12.17	12.04	12.68
Non OECD.....	7.08	8.78	9.19	9.39	9.95	10.18	10.66	10.86	10.93	11.13
Other Groups:.....										
OECD Europe.....	4.20	4.48	4.28	4.61	5.05	4.36	4.53	4.48	4.78	4.98
OPEC ³	0.28	0.41	0.44	0.51	0.55	0.56	0.58	0.65	0.69	0.73
EC ⁴	1.85	1.77	1.72	1.81	2.00	1.38	1.51	1.63	1.64	1.69
IEA ⁵	11.15	12.17	12.10	12.08	12.14	11.52	11.78	12.13	11.99	12.63
Nuclear Electric Power										
World Total	7.58	15.37	16.34	17.80	19.30	19.82	20.30	21.27	21.30	22.10
OECD ²	6.45	12.37	13.37	14.29	15.42	15.76	16.23	17.20	17.39	18.07
Non OECD.....	1.12	3.00	2.97	3.50	3.88	4.06	4.07	4.07	3.91	4.03
Other Groups:.....										
OECD Europe.....	2.45	5.97	6.43	6.54	7.01	7.35	7.33	7.63	7.78	8.15
OPEC ³	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EC ⁴	1.99	5.01	5.36	5.49	5.93	6.31	6.26	6.48	6.75	7.13
IEA ⁵	6.45	12.37	13.37	14.29	15.42	15.76	16.23	17.20	17.39	18.07

See footnotes at end of table.

Table 1.8. World Consumption of Primary Energy by Selected Country Groups (Btu), 1980, 1985-1993 (Continued)
 (Quadrillion (10^{15}) Btu)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Geothermal, Solar, and Wind Electric Power										
World Total.....	0.37	0.59	0.71	0.76	0.79	0.78	0.76	0.78	0.82	0.80
OECD ²	0.19	0.32	0.34	0.39	0.42	0.41	0.39	0.38	0.41	0.40
Non OECD.....	0.18	0.27	0.37	0.37	0.37	0.37	0.37	0.40	0.40	0.41
Other Groups:.....										
OECD Europe.....	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.10	0.11
OPEC ³	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
EC. ⁴	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.10	0.11
IEA ⁵	0.19	0.32	0.34	0.38	0.42	0.40	0.38	0.38	0.41	0.39
Total Energy										
World Total.....	282.62	307.48	315.04	324.46	335.35	342.76	344.72	345.10	343.59	345.33
OECD ²	161.78	161.38	163.74	168.43	172.98	176.30	177.12	179.38	180.09	181.86
Non OECD.....	120.84	146.10	151.30	156.03	162.37	166.45	167.60	165.72	163.50	163.47
Other Groups:.....										
OECD Europe.....	57.31	58.17	59.29	60.54	61.00	61.93	61.98	63.92	62.96	62.56
OPEC ³	9.05	12.45	13.08	13.87	14.69	15.73	16.16	16.35	16.70	17.50
EC. ⁴	49.46	49.38	50.22	51.11	51.54	52.24	52.14	53.75	53.36	52.71
IEA ⁵	161.73	161.31	163.67	168.36	172.90	176.23	177.04	179.30	180.02	181.78

¹ Preliminary.

² The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands). Refer to Appendix A for a listing of OECD Europe.

³ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁴ European Community (EC) includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and United Kingdom.

⁵ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands).

(s) = Value less than 5 trillion Btu.

Notes: For consistency data reflect 1993 membership (as of December 31, 1993) for all years. The country groups OECD, OECD Europe, EC, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Primary energy consumption includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States also include net imports of coal coke and electricity generated from biomass.

Sources: See sources at end of Sections 3, 4, 5, and 6.

Section 2
World Energy Production,
1980, 1985-1993

Table 2.1. World Production of Primary Energy by Selected Country Groups, 1980, 1985-1993

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Petroleum (thousand barrels per day)²										
World Total.....	64,153	59,265	61,771	62,410	64,673	65,854	66,710	66,614	66,855	67,680
OECD. ³	15,865	18,023	17,857	17,796	17,714	16,989	17,031	17,455	17,794	17,840
Non OECD.....	48,289	41,242	43,914	44,614	46,959	48,865	49,679	49,158	49,061	49,840
Other Groups:.....										
OECD Europe.....	2,755	4,255	4,426	4,485	4,485	4,415	4,576	4,815	5,189	5,321
OPEC ⁴	27,595	17,324	19,477	19,745	21,625	23,532	24,807	24,939	26,117	27,261
EC. ⁵	2,103	3,348	3,420	3,322	3,164	2,693	2,684	2,702	2,743	2,845
IEA ⁶	15,865	18,023	17,857	17,796	17,714	16,989	17,031	17,455	17,794	17,840
Natural Gas (trillion cubic feet)										
World Total.....	53.19	62.17	63.45	66.41	69.65	72.09	73.71	74.83	74.53	76.01
OECD. ³	29.87	27.31	26.66	27.72	28.27	28.98	29.78	30.57	31.25	32.56
Non OECD.....	23.32	34.86	36.80	38.69	41.38	43.11	43.93	44.26	43.28	43.46
Other Groups:.....										
OECD Europe.....	7.26	7.14	6.99	7.24	6.80	7.06	7.10	7.74	7.79	8.22
OPEC ⁴	2.97	5.65	5.87	6.51	6.99	7.65	7.83	8.24	8.64	9.17
EC. ⁵	6.27	6.15	5.94	6.13	5.70	5.92	6.07	6.72	6.70	7.14
IEA ⁶	29.87	27.31	26.66	27.72	28.27	28.98	29.78	30.57	31.25	32.56
Coal (million short tons)										
World Total.....	4,196	4,869	4,986	5,108	5,210	5,322	5,336	5,020	4,996	4,885
OECD. ³	1,815	1,996	2,020	2,051	2,066	2,129	2,106	1,992	1,942	1,835
Non OECD.....	2,381	2,874	2,966	3,057	3,144	3,193	3,230	3,028	3,054	3,050
Other Groups:.....										
OECD Europe.....	800	851	861	839	825	839	762	669	612	556
OPEC ⁴	2	4	4	5	7	13	16	20	30	37
EC. ⁵	776	803	806	783	779	778	706	607	553	496
IEA ⁶	1,815	1,996	2,020	2,051	2,066	2,129	2,106	1,992	1,942	1,835
Hydroelectric Power (billion kilowatthours)										
World Total.....	1,735.2	1,973.1	2,012.2	2,019.4	2,096.2	2,078.7	2,159.3	2,193.0	2,182.4	2,264.1
OECD. ³	1,054.2	1,129.2	1,128.1	1,116.7	1,139.1	1,100.3	1,134.7	1,149.3	1,131.6	1,194.2
Non OECD.....	681.0	843.9	884.0	902.7	957.1	978.4	1,024.6	1,043.6	1,050.8	1,069.9
Other Groups:.....										
OECD Europe.....	403.8	428.7	410.0	440.8	482.8	417.1	433.2	431.0	459.6	478.8
OPEC ⁴	26.9	39.1	42.7	49.4	53.2	54.1	55.7	62.6	66.5	70.3
EC. ⁵	177.6	167.5	163.7	171.9	189.4	129.9	143.2	157.0	158.2	162.7
IEA ⁶	1,051.2	1,125.5	1,124.3	1,112.8	1,134.9	1,096.1	1,130.5	1,145.2	1,127.4	1,189.7
Nuclear Electric Power (billion kilowatthours)										
World Total.....	684.4	1,425.7	1,517.7	1,654.1	1,794.9	1,843.4	1,894.0	1,990.4	2,004.9	2,080.0
OECD. ³	584.9	1,158.9	1,253.8	1,343.2	1,449.3	1,482.0	1,531.0	1,621.8	1,642.4	1,706.6
Non OECD.....	99.5	266.8	263.9	310.9	345.6	361.4	363.0	368.6	362.5	373.4
Other Groups:.....										
OECD Europe.....	219.2	568.5	613.8	626.4	670.3	702.8	703.0	727.8	740.5	773.7
OPEC ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EC. ⁵	174.4	474.6	508.8	523.1	564.7	600.5	597.3	614.2	639.4	673.9
IEA ⁶	584.9	1,158.9	1,253.8	1,343.2	1,449.3	1,482.0	1,531.0	1,621.8	1,642.4	1,706.6
Geothermal, Solar, and Wind Electric Power (billion kilowatthours)										
World Total.....	19.2	29.8	35.6	36.7	37.3	37.9	38.3	39.2	40.2	40.7
OECD. ³	11.1	17.3	18.3	19.4	20.1	20.2	20.6	20.3	21.3	21.4
Non OECD.....	8.1	12.5	17.3	17.3	17.2	17.7	17.7	18.9	19.0	19.3
Other Groups:.....										
OECD Europe.....	3.1	3.4	3.6	3.9	4.8	5.0	5.3	5.5	6.2	7.2
OPEC ⁴	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
EC. ⁵	3.1	3.2	3.4	3.6	4.5	4.7	5.0	5.2	5.9	6.8
IEA ⁶	11.0	17.1	18.1	19.1	19.8	20.0	20.3	20.0	21.0	21.2

¹ Preliminary.

² Data include the production of crude oil, natural gas plant liquids, refinery gain, and other liquid fuels.

³ The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands). Refer to Appendix A for a listing of OECD Europe.

⁴ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁵ European Community (EC) includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and United Kingdom.

⁶ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands).

Notes: For consistency data reflect 1993 membership (as of December 31, 1993) for all years. The country groups OECD, OECD Europe, EC, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Sources: See sources at end of Sections 3, 4, 5, and 6.

Table 2.2. World Crude Oil Production, 1980, 1985-1993

(Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada ²	1,435	1,471	1,474	1,535	1,616	1,560	1,553	1,548	1,605	1,680
Mexico.....	1,936	2,745	2,435	2,548	2,512	2,520	2,553	2,680	2,669	2,671
United States.....	8,597	8,971	8,680	8,349	8,140	7,613	7,355	7,417	7,171	6,847
Total	11,968	13,187	12,589	12,432	12,268	11,693	11,461	11,644	11,446	11,198
Central & South America										
Argentina.....	491	460	434	428	449	460	483	485	553	575
Barbados.....	0	2	2	1	1	1	1	1	1	1
Bolivia.....	27	20	18	19	19	20	21	21	21	22
Brazil.....	182	564	572	566	554	596	631	630	626	643
Chile.....	33	36	31	30	24	22	20	17	15	14
Colombia.....	126	176	305	385	378	403	440	419	433	453
Cuba.....	5	17	18	18	15	15	14	14	16	22
Ecuador.....	204	281	293	174	302	279	285	299	321	346
Guatemala.....	5	3	5	4	3	4	4	4	5	7
Peru.....	195	190	178	164	141	130	129	115	116	127
Suriname.....	0	1	2	2	3	4	4	4	5	6
Trinidad and Tobago.....	211	175	168	157	157	154	150	151	137	122
Venezuela.....	2,168	1,677	1,787	1,752	1,903	1,907	2,137	2,375	2,371	2,450
Total	3,647	3,602	3,813	3,700	3,950	3,995	4,318	4,535	4,621	4,787
Western Europe										
Austria.....	28	22	22	21	23	23	22	26	23	22
Denmark.....	6	58	76	97	99	117	121	143	163	172
France.....	26	50	60	65	67	65	61	59	58	56
Germany.....	--	--	--	--	--	--	--	71	63	62
Germany, East.....	1	1	1	1	1	1	1	--	--	--
Germany, West.....	92	81	80	74	78	75	71	--	--	--
Greece.....	0	25	25	24	21	17	15	16	13	11
Italy.....	38	45	49	67	90	82	87	80	83	86
Netherlands.....	25	76	93	87	77	64	70	74	53	50
Norway.....	528	788	870	1,022	1,158	1,554	1,704	1,890	2,229	2,264
Spain.....	33	44	38	34	30	21	16	22	22	20
Sweden.....	0	0	(s)	(s)	(s)	0	0	0	0	0
Turkey.....	46	41	46	51	50	56	73	88	84	76
United Kingdom.....	1,622	2,530	2,539	2,406	2,232	1,802	1,820	1,797	1,825	1,915
Former Yugoslavia.....	86	86	84	79	75	70	64	60	59	58
Total	2,531	3,847	3,983	4,028	4,001	3,947	4,125	4,326	4,676	4,792
Eastern Europe & Former U.S.S.R.										
Albania.....	44	55	55	54	44	47	30	19	11	10
Bulgaria.....	3	6	6	6	4	5	4	1	1	1
Former Czechoslovakia.....	2	2	3	3	3	3	2	3	2	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	2
Slovakia.....	--	--	--	--	--	--	--	--	--	1
Hungary.....	38	37	37	35	39	36	40	34	33	31
Poland.....	7	4	4	3	3	3	2	3	3	5
Romania.....	238	220	221	215	193	180	163	140	136	137
Former U.S.S.R.....	11,706	11,585	11,895	12,050	12,053	11,715	10,975	9,992	--	--
Azerbaijan.....	--	--	--	--	--	--	--	--	213	200
Belarus.....	--	--	--	--	--	--	--	--	40	40
Georgia.....	--	--	--	--	--	--	--	--	3	2
Kazakhstan.....	--	--	--	--	--	--	--	--	444	389
Kyrgyzstan.....	--	--	--	--	--	--	--	--	2	2
Russia.....	--	--	--	--	--	--	--	--	7,632	6,890
Tajikistan.....	--	--	--	--	--	--	--	--	1	1
Turkmenistan.....	--	--	--	--	--	--	--	--	98	79
Ukraine.....	--	--	--	--	--	--	--	--	72	67
Uzbekistan.....	--	--	--	--	--	--	--	--	36	47
Total	12,038	11,909	12,221	12,366	12,339	11,989	11,216	10,191	8,727	7,905

See footnotes at end of table.

Table 2.2. World Crude Oil Production, 1980, 1985-1993 (Continued)

(Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Bahrain.....	48	42	44	42	43	43	42	38	37	41
Iran.....	1,662	2,250	2,035	2,298	2,240	2,810	3,088	3,312	3,429	3,650
Iraq.....	2,514	1,433	1,690	2,079	2,685	2,897	2,040	305	425	512
Israel.....	35	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0	0	1	1	1	(s)	(s)	(s)	(s)	(s)
Kuwait.....	1,656	1,023	1,419	1,585	1,492	1,783	1,175	190	1,058	1,872
Oman.....	282	498	560	582	617	641	685	700	740	776
Qatar.....	472	301	308	293	346	380	406	395	423	419
Saudi Arabia.....	9,900	3,388	4,870	4,265	5,086	5,064	6,410	8,115	8,332	8,198
Syria.....	164	178	194	230	265	340	388	492	481	570
United Arab Emirates.....	1,709	1,193	1,330	1,541	1,565	1,860	2,117	2,386	2,266	2,191
Yemen.....	0	0	10	20	173	194	193	197	182	216
Total.....	18,442	10,307	12,462	12,936	14,513	16,013	16,545	16,130	17,373	18,446
Africa										
Algeria.....	1,106	1,037	945	1,048	1,040	1,095	1,175	1,230	1,214	1,190
Angola.....	150	231	282	360	452	455	475	500	526	501
Benin.....	0	8	8	7	5	4	4	4	6	5
Cameroon.....	58	185	177	174	163	170	161	153	140	119
Congo.....	65	120	119	123	144	164	165	156	174	201
Cote d'Ivoire (Ivory Coast).....	1	28	20	18	12	2	2	2	2	1
Egypt.....	595	887	813	896	848	865	873	874	881	892
Equatorial Guinea.....	0	0	0	0	0	0	0	(s)	2	5
Gabon.....	175	172	166	155	159	208	270	294	298	312
Ghana.....	2	1	(s)	0	0	0	0	0	1	2
Libya.....	1,787	1,059	1,034	972	1,175	1,150	1,375	1,483	1,433	1,377
Morocco.....	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	2,055	1,495	1,467	1,341	1,450	1,716	1,810	1,892	1,943	2,050
Sudan.....	0	0	0	0	0	0	0	0	1	3
Tunisia.....	110	114	111	106	103	105	93	104	109	98
Zaire.....	20	33	32	32	30	28	29	28	26	25
Total.....	6,125	5,371	5,175	5,232	5,581	5,962	6,432	6,721	6,755	6,778
Far East & Oceania										
Australia.....	380	575	520	547	538	490	575	545	535	502
Bangladesh.....	0	(s)	(s)	1	1	1	1	1	1	1
Brunei.....	235	153	166	139	137	132	150	161	165	159
Burma.....	30	30	24	17	13	15	13	15	14	15
China.....	2,114	2,505	2,620	2,690	2,730	2,757	2,774	2,835	2,845	2,911
India.....	182	620	630	609	635	700	660	615	561	543
Indonesia.....	1,577	1,325	1,390	1,343	1,342	1,409	1,462	1,592	1,504	1,528
Japan.....	10	11	13	12	12	11	11	15	17	16
Malaysia.....	283	440	504	497	540	585	619	646	653	648
New Zealand.....	7	19	29	28	33	38	40	41	38	41
Pakistan.....	10	35	42	42	45	48	62	62	61	62
Papua New Guinea.....	0	0	0	0	0	0	0	(s)	53	126
Philippines.....	15	9	8	6	6	5	5	3	8	9
Taiwan.....	5	2	2	3	2	2	3	2	2	1
Thailand.....	(s)	34	35	33	36	40	44	46	51	53
Vietnam.....	0	0	1	5	15	32	50	80	106	123
Total.....	4,848	5,758	5,984	5,972	6,085	6,264	6,468	6,660	6,614	6,736
World Total.....	59,599	53,981	56,227	56,666	58,737	59,863	60,566	60,207	60,213	60,640

¹ Preliminary.

² Includes oil processed from Athabasca Tar Sands.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: Sum of components may not equal total due to independent rounding.

Crude oil includes lease condensate.

Sources: See sources at the end of Section 3.

Table 2.3. World Natural Gas Plant Liquids Production, 1980, 1985-1993
 (Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	331	337	328	367	381	410	426	431	460	503
Mexico.....	193	271	352	338	370	384	428	457	454	457
United States.....	1,573	1,609	1,551	1,595	1,625	1,546	1,559	1,659	1,697	1,736
Total.....	2,097	2,217	2,231	2,300	2,376	2,340	2,413	2,548	2,611	2,695
Central & South America										
Argentina.....	13	20	31	36	35	27	27	30	30	35
Bolivia.....	5	6	5	4	5	5	5	5	7	9
Brazil.....	6	17	20	25	25	22	20	22	25	25
Chile.....	12	11	10	10	10	10	8	7	8	8
Colombia.....	6	4	5	6	4	8	8	6	6	8
Cuba.....	1	2	2	2	2	2	2	2	2	2
Ecuador.....	2	2	2	2	2	2	2	2	3	3
Peru.....	3	1	1	1	1	(s)	1	1	1	1
Trinidad and Tobago.....	0	0	0	0	0	0	0	3	5	7
Venezuela.....	60	63	97	94	98	108	114	117	113	113
Total.....	108	126	173	180	182	184	187	195	200	211
Western Europe										
Austria.....	1	1	1	1	1	1	1	1	1	1
France.....	26	17	14	12	12	12	11	10	13	13
Greece.....	0	2	2	2	2	2	2	1	1	1
Italy.....	1	1	1	1	1	1	1	1	1	1
Netherlands.....	6	11	11	11	11	13	14	10	13	16
Norway.....	40	41	53	55	75	74	78	94	95	100
Spain.....	0	0	7	6	7	9	11	11	9	9
United Kingdom.....	45	145	152	162	159	140	108	141	160	169
Former Yugoslavia.....	2	4	4	11	11	8	10	8	6	6
Total.....	121	222	245	260	279	260	236	277	299	315
Eastern Europe & Former U.S.S.R.										
Former Czechoslovakia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	(s)
Hungary.....	20	25	25	22	23	15	15	13	13	14
Poland.....	1	1	1	1	1	1	1	1	1	1
Romania.....	14	15	15	15	13	13	8	8	7	7
Former U.S.S.R.....	285	350	440	430	450	425	425	420	--	--
Azerbaijan.....	--	--	--	--	--	--	--	--	9	8
Kazakhstan.....	--	--	--	--	--	--	--	--	86	82
Kyrgyzstan.....	--	--	--	--	--	--	--	--	(s)	(s)
Russia.....	--	--	--	--	--	--	--	--	230	220
Tajikistan.....	--	--	--	--	--	--	--	--	(s)	(s)
Turkmenistan.....	--	--	--	--	--	--	--	--	12	11
Ukraine.....	--	--	--	--	--	--	--	--	23	21
Uzbekistan.....	--	--	--	--	--	--	--	--	30	38
Total.....	320	391	481	468	487	454	449	442	411	402

See footnotes at end of table.

Table 2.3. World Natural Gas Plant Liquids Production, 1980, 1985-1993 (Continued)
 (Thousand Barrels per Day)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Bahrain.....	8	6	8	9	9	8	5	5	7	10
Iran.....	9	10	15	20	20	27	35	50	50	55
Iraq.....	8	10	10	10	20	54	30	0	(s)	55
Kuwait.....	95	54	75	95	100	105	65	0	34	53
Oman.....	2	4	4	6	6	10	10	8	6	10
Qatar.....	10	30	22	24	30	24	40	50	55	55
Saudi Arabia.....	369	375	385	418	499	503	620	680	713	704
Syria.....	0	0	1	1	1	2	2	2	2	2
United Arab Emirates.....	35	160	185	145	130	130	135	165	144	160
Total.....	536	649	705	728	815	863	942	960	1,011	1,104
Africa										
Algeria.....	36	120	120	140	120	130	130	140	140	145
Egypt.....	17	27	24	25	35	45	40	45	45	45
Libya.....	40	26	30	30	30	35	35	40	40	37
Tunisia.....	0	0	0	3	5	5	5	5	5	4
Total.....	93	173	174	198	190	215	210	230	230	231
Far East & Oceania²										
Australia.....	60	65	60	65	67	65	63	61	56	55
Bangladesh.....	0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Brunei.....	35	15	15	11	11	10	10	10	12	13
Burma.....	0	0	0	0	1	1	1	1	1	1
India.....	0	2	5	7	9	10	10	10	10	15
Indonesia.....	70	44	30	30	30	72	77	76	75	78
Japan.....	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malaysia.....	0	10	9	11	11	11	12	12	13	12
New Zealand.....	1	3	3	3	4	4	4	5	5	5
Pakistan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	2	3	2
Taiwan.....	2	2	2	2	2	2	1	1	1	1
Thailand.....	0	18	16	14	16	11	13	13	14	15
Total.....	169	160	141	144	152	187	192	192	191	198
World Total.....	3,444	3,938	4,150	4,279	4,481	4,503	4,629	4,843	4,953	5,157

¹ Preliminary.

² Does not include China for which data are unavailable.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table 2.4. World Dry Natural Gas Production, 1980, 1985-1993

(Trillion Cubic Feet)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	2.76	3.04	2.86	3.10	3.57	3.80	3.90	4.12	4.53	4.96
Mexico.....	1.01	0.95	0.92	0.86	0.92	0.93	0.94	0.94	0.92	0.92
United States.....	19.40	16.45	16.06	16.62	17.10	17.31	17.81	17.70	17.84	18.24
Total.....	23.17	20.45	19.84	20.59	21.60	22.03	22.66	22.75	23.29	24.13
Central & South America										
Argentina.....	0.28	0.50	0.55	0.53	0.63	0.72	0.63	0.64	0.54	0.55
Barbados.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Bolivia.....	0.08	0.09	0.09	0.09	0.10	0.11	0.11	0.10	0.11	0.11
Brazil.....	0.04	0.09	0.09	0.10	0.10	0.12	0.10	0.12	0.13	0.14
Chile.....	0.09	0.04	0.03	0.03	0.04	0.06	0.07	0.05	0.06	0.06
Colombia.....	0.10	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.15	0.16
Cuba.....	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ecuador.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Peru.....	0.04	0.05	0.05	0.05	0.04	0.04	0.02	0.02	0.02	0.02
Trinidad and Tobago.....	0.08	0.22	0.15	0.14	0.15	0.16	0.18	0.20	0.19	0.22
Venezuela.....	0.49	0.62	0.67	0.66	0.66	0.77	0.86	0.83	0.76	0.86
Total.....	1.20	1.76	1.78	1.74	1.87	2.13	2.12	2.12	1.97	2.12
Western Europe										
Austria.....	0.07	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	0.00	0.00	(s)	(s)
Denmark.....	0.00	0.04	0.07	0.09	0.09	0.11	0.11	0.14	0.14	0.16
France.....	0.28	0.20	0.16	0.13	0.11	0.11	0.10	0.11	0.11	0.11
Germany.....	--	--	--	--	--	--	--	0.67	0.68	0.64
Germany, East.....	0.25	0.33	0.30	0.29	0.31	0.28	0.14	--	--	--
Germany, West.....	0.55	0.44	0.41	0.50	0.43	0.43	0.53	--	--	--
Greece.....	0.00	(s)	(s)	(s)	(s)	(s)	0.01	(s)	(s)	(s)
Ireland.....	0.03	0.09	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.09
Italy.....	0.44	0.50	0.56	0.58	0.59	0.60	0.61	0.61	0.64	0.68
Netherlands.....	3.40	3.01	2.76	2.77	2.45	2.67	2.69	3.04	3.06	3.11
Norway.....	0.92	0.94	0.99	1.06	1.05	1.09	0.98	0.97	1.04	1.02
Spain.....	0.00	0.01	0.01	0.03	0.03	0.06	0.05	0.05	0.04	0.02
Switzerland.....	0.00	(s)	(s)	(s)	(s)	(s)	0.00	0.00	(s)	(s)
Turkey.....	0.00	(s)	0.02	0.01	(s)	0.01	0.01	0.01	0.01	0.01
United Kingdom.....	1.32	1.52	1.60	1.68	1.62	1.58	1.75	2.01	1.93	2.31
Former Yugoslavia.....	0.06	0.08	0.09	0.08	0.11	0.10	0.09	0.09	0.09	0.11
Total.....	7.32	7.22	7.07	7.32	6.91	7.16	7.19	7.83	7.89	8.33
Eastern Europe & Former U.S.S.R.										
Albania.....	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	(s)	(s)
Bulgaria.....	(s)	(s)	0.01	(s)	(s)	(s)	0.00	0.00	(s)	(s)
Former Czechoslovakia.....	0.02	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.01	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	0.00
Slovakia.....	--	--	--	--	--	--	--	--	--	0.01
Hungary.....	0.21	0.26	0.25	0.22	0.22	0.22	0.17	0.18	0.17	0.19
Poland.....	0.22	0.23	0.21	0.20	0.20	0.19	0.14	0.15	0.14	0.18
Romania.....	1.20	1.27	1.34	1.32	1.28	1.13	1.00	0.88	0.78	0.75
Former U.S.S.R.....	15.37	22.71	24.19	25.36	27.19	28.11	28.78	28.62	--	--
Azerbaijan.....	--	--	--	--	--	--	--	--	0.28	0.24
Belarus.....	--	--	--	--	--	--	--	--	0.01	0.01
Georgia.....	--	--	--	--	--	--	--	--	(s)	(s)
Kazakhstan.....	--	--	--	--	--	--	--	--	0.29	0.24
Kyrgyzstan.....	--	--	--	--	--	--	--	--	(s)	(s)
Russia.....	--	--	--	--	--	--	--	--	22.62	21.80
Tajikistan.....	--	--	--	--	--	--	--	--	(s)	(s)
Turkmenistan.....	--	--	--	--	--	--	--	--	1.97	2.13
Ukraine.....	--	--	--	--	--	--	--	--	0.64	0.59
Uzbekistan.....	--	--	--	--	--	--	--	--	1.50	1.58
Total.....	17.04	24.50	26.03	27.14	28.95	29.70	30.13	29.85	28.42	27.73

See footnotes at end of table.

Table 2.4. World Dry Natural Gas Production, 1980, 1985-1993 (Continued)
 (Trillion Cubic Feet)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Bahrain.....	0.10	0.16	0.18	0.22	0.18	0.19	0.21	0.23	0.19	0.20
Iran.....	0.25	0.60	0.54	0.56	0.71	0.78	0.84	0.92	0.88	1.04
Iraq.....	0.06	0.02	0.05	0.13	0.20	0.22	0.15	0.04	0.10	0.13
Israel.....	(s)	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00
Kuwait.....	0.14	0.14	0.17	0.19	0.23	0.29	0.19	0.02	0.09	0.18
Oman.....	0.00	0.06	0.07	0.08	0.07	0.10	0.10	0.12	0.12	0.13
Qatar.....	0.18	0.19	0.19	0.20	0.21	0.22	0.28	0.33	0.40	0.41
Saudi Arabia.....	0.37	0.72	0.89	0.95	1.03	1.05	1.08	1.13	1.20	1.27
Syria.....	0.02	0.01	0.01	0.02	0.02	0.04	0.10	0.12	0.13	0.13
United Arab Emirates.....	0.20	0.48	0.54	0.68	0.66	0.81	0.78	0.92	1.02	1.04
Total.....	1.33	2.38	2.63	3.03	3.31	3.69	3.71	3.83	4.13	4.52
Africa										
Algeria.....	0.41	1.36	1.33	1.52	1.63	1.71	1.79	1.93	1.97	1.98
Angola.....	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Congo.....	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Egypt.....	0.03	0.18	0.20	0.22	0.24	0.27	0.29	0.32	0.35	0.40
Gabon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Libya.....	0.18	0.18	0.20	0.19	0.19	0.21	0.22	0.24	0.24	0.22
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	0.04	0.11	0.12	0.13	0.13	0.17	0.13	0.17	0.17	0.19
Tunisia.....	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.69	1.86	1.88	2.10	2.24	2.39	2.46	2.69	2.77	2.83
Far East & Oceania										
Afghanistan.....	0.06	0.11	0.11	0.10	0.11	0.10	0.10	0.01	0.01	0.01
Australia.....	0.33	0.46	0.52	0.53	0.56	0.57	0.72	0.75	0.82	0.86
Bangladesh.....	0.05	0.10	0.11	0.13	0.15	0.16	0.16	0.17	0.21	0.25
Brunei.....	0.32	0.30	0.29	0.31	0.30	0.31	0.32	0.28	0.29	0.29
Burma.....	0.01	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
China.....	0.51	0.46	0.48	0.49	0.49	0.51	0.51	0.53	0.53	0.56
India.....	0.05	0.14	0.18	0.23	0.31	0.32	0.40	0.45	0.48	0.47
Indonesia.....	0.63	1.23	1.18	1.29	1.34	1.42	1.53	1.72	1.79	1.85
Japan.....	0.08	0.08	0.07	0.08	0.07	0.07	0.07	0.08	0.08	0.08
Malaysia.....	0.04	0.44	0.53	0.55	0.58	0.61	0.65	0.75	0.80	0.88
New Zealand.....	0.05	0.13	0.16	0.15	0.17	0.17	0.17	0.19	0.20	0.19
Pakistan.....	0.29	0.37	0.39	0.42	0.44	0.47	0.48	0.53	0.55	0.58
Taiwan.....	0.04	0.05	0.04	0.04	0.02	0.05	0.08	0.03	0.03	0.04
Thailand.....	0.00	0.13	0.11	0.13	0.19	0.18	0.21	0.24	0.25	0.27
Total.....	2.44	4.00	4.21	4.50	4.78	4.98	5.44	5.76	6.06	6.35
World Total.....	53.19	62.17	63.45	66.41	69.65	72.09	73.71	74.83	74.53	76.01

¹ Preliminary.

- = Not applicable.

(s) = Value less than 5 billion cubic feet.

Notes: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table 2.5. World Coal Production, 1980, 1985-1993

(Million Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	44.57	66.94	63.71	67.45	77.85	77.71	75.33	78.39	71.94	76.09
Mexico.....	3.10	5.20	4.05	4.69	4.64	4.68	4.56	5.28	6.10	6.45
United States.....	829.70	883.64	890.31	918.76	950.27	980.73	1,029.08	995.98	997.54	945.42
Total.....	877.37	955.77	958.08	990.90	1,032.76	1,063.11	1,108.97	1,079.65	1,075.59	1,027.97
Central & South America										
Argentina.....	0.43	0.44	0.40	0.41	0.56	0.64	0.33	0.35	0.24	0.24
Brazil.....	9.15	8.50	8.33	8.27	7.27	7.20	5.07	5.65	5.21	4.81
Chile.....	1.10	1.49	1.84	1.76	2.36	2.19	2.45	3.02	1.84	1.36
Colombia.....	5.80	10.70	11.80	16.09	16.64	20.91	22.56	25.90	25.69	26.23
Peru.....	0.13	0.14	0.13	0.13	0.16	0.16	0.17	0.15	0.16	0.17
Venezuela.....	0.05	0.05	0.06	0.26	1.18	2.35	2.41	2.97	2.67	4.34
Total.....	16.66	21.31	22.56	26.92	28.18	33.45	32.98	38.05	35.82	37.15
Western Europe										
Austria.....	3.16	3.40	3.27	3.07	2.35	2.28	2.70	2.29	1.95	1.86
Belgium.....	11.65	12.22	9.77	8.21	4.59	3.45	1.24	0.79	0.27	0.10
France.....	24.33	18.71	18.22	17.37	16.54	18.18	16.25	15.53	13.81	12.74
Germany.....	--	--	--	--	--	--	--	390.70	345.98	315.15
Germany, East.....	284.50	344.09	343.11	340.33	341.81	331.56	274.39	--	--	--
Germany, West.....	247.74	233.64	224.87	213.56	209.85	208.86	205.06	--	--	--
Greece.....	25.57	39.56	42.16	49.16	50.58	57.17	57.21	58.09	60.67	56.65
Ireland.....	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.02	0.01	(s)
Italy.....	2.13	2.19	1.73	1.08	1.80	1.77	1.12	1.06	1.45	1.32
Norway.....	0.32	0.63	0.64	0.43	0.29	0.40	0.39	0.43	0.50	0.54
Portugal.....	0.20	0.26	0.21	0.29	0.25	0.28	0.31	0.30	0.24	0.22
Spain.....	36.87	48.39	46.45	37.70	38.45	45.30	46.15	36.09	36.73	34.80
Sweden.....	0.02	0.01	0.01	0.03	0.03	0.02	0.01	0.03	0.04	0.04
Turkey.....	19.84	44.54	51.66	52.31	43.89	57.98	52.70	59.11	57.07	57.17
United Kingdom.....	143.41	103.62	119.16	115.08	114.75	111.44	104.06	104.61	93.56	75.27
Former Yugoslavia.....	45.53	77.01	77.01	78.79	80.02	82.27	83.61	78.52	70.92	63.64
Total.....	845.33	928.34	938.34	917.45	905.25	921.03	845.24	747.58	683.20	619.51
Eastern Europe & Former U.S.S.R.										
Albania.....	1.56	2.31	2.39	2.35	2.41	2.42	2.28	1.43	0.49	0.33
Bulgaria.....	33.25	34.04	38.83	40.59	37.64	37.81	34.92	31.76	33.43	31.99
Former Czechoslovakia.....	137.24	141.54	141.08	140.84	138.31	131.86	117.49	109.27	99.28	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	88.05
Slovakia.....	--	--	--	--	--	--	--	--	--	9.76
Hungary.....	28.33	26.50	25.50	25.18	23.01	18.18	17.29	18.71	17.45	15.56
Poland.....	253.52	274.90	285.87	293.44	293.77	274.96	237.35	231.19	218.61	213.60
Romania.....	38.76	51.35	52.38	56.80	64.77	67.62	42.09	32.85	41.67	43.74
Former U.S.S.R.....	789.70	800.72	827.95	837.54	850.87	816.04	885.71	693.91	--	--
Georgia.....	--	--	--	--	--	--	--	--	0.55	0.38
Kazakhstan.....	--	--	--	--	--	--	--	--	139.95	123.37
Kyrgyzstan.....	--	--	--	--	--	--	--	--	2.31	1.87
Russia.....	--	--	--	--	--	--	--	--	375.31	336.22
Tajikistan.....	--	--	--	--	--	--	--	--	0.22	0.22
Ukraine.....	--	--	--	--	--	--	--	--	147.23	127.50
Uzbekistan.....	--	--	--	--	--	--	--	--	6.30	5.89
Total.....	1,282.36	1,331.37	1,373.99	1,396.73	1,410.78	1,348.89	1,337.12	1,119.12	1,082.81	998.50

See footnotes at end of table.

Table 2.5. World Coal Production, 1980, 1985-1993 (Continued)

(Million Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Iran.....	0.99	1.38	1.39	1.37	1.39	1.32	1.43	1.54	1.65	1.82
Total.....	0.99	1.38	1.39	1.37	1.39	1.32	1.43	1.54	1.65	1.82
Africa										
Algeria.....	(s)	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.02
Botswana.....	0.20	0.50	0.68	0.88	0.68	0.69	0.70	0.88	0.99	0.98
Cameroon.....	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malawi.....	(s)	(s)	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.06
Morocco.....	0.75	0.85	0.85	0.84	0.71	0.60	0.58	0.61	0.63	0.80
Mozambique.....	0.23	0.04	0.06	0.05	0.05	0.05	0.04	0.05	0.01	0.02
Niger.....	0.02	0.17	0.14	0.18	0.17	0.19	0.19	0.17	0.19	0.17
Nigeria.....	0.19	0.15	0.16	0.13	0.09	0.09	0.10	0.10	0.10	0.11
South Africa.....	131.81	191.27	194.73	194.59	199.90	194.35	192.75	196.65	195.86	200.71
Swaziland.....	0.38	0.35	0.36	0.33	0.35	0.35	0.33	0.26	0.19	0.12
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Zaire.....	0.15	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15
Zambia.....	0.64	0.56	0.61	0.51	0.69	0.44	0.42	0.42	0.44	0.46
Zimbabwe.....	3.53	3.44	4.46	5.07	5.59	5.62	6.07	6.20	6.61	6.94
Total.....	137.91	197.48	202.22	202.75	208.40	202.57	201.37	205.56	205.25	210.54
Far East & Oceania										
Afghanistan.....	0.11	0.17	0.18	0.18	0.15	0.18	0.17	0.16	0.09	0.09
Australia.....	116.06	171.83	186.80	208.91	196.44	216.13	225.78	235.93	248.24	246.31
Bhutan.....	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Burma.....	0.01	0.05	0.04	0.04	0.03	0.02	0.03	0.03	0.03	0.03
China.....	683.59	961.53	985.51	1,022.90	1,080.13	1,162.01	1,190.36	1,198.66	1,230.25	1,292.91
India.....	125.28	173.10	188.16	207.45	207.51	229.90	250.22	248.95	281.12	291.15
Indonesia.....	0.63	2.32	2.84	3.55	4.64	9.25	11.87	15.52	25.39	30.40
Japan.....	22.48	19.03	15.27	14.53	13.78	12.55	11.33	9.59	8.63	8.68
Korea, North.....	47.04	53.33	54.93	56.03	59.84	67.05	64.95	65.35	65.02	68.37
Korea, South.....	20.53	24.85	26.73	26.76	26.78	22.91	18.98	16.60	13.19	10.40
Laos.....	0.00	0.00	0.00	(s)	0.00	0.00	0.00	(s)	(s)	(s)
Malaysia.....	0.00	0.00	0.02	0.10	0.10	0.12	0.11	0.20	0.21	0.29
Mongolia.....	4.82	7.19	7.79	8.56	9.48	8.86	8.70	8.57	8.29	8.10
Nepal.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
New Zealand.....	2.54	2.99	2.80	2.85	2.84	3.21	3.06	3.17	3.48	2.54
Pakistan.....	1.73	2.39	2.33	2.38	3.01	2.89	3.03	3.18	3.39	3.39
Philippines.....	0.36	1.39	1.36	1.32	1.48	1.36	1.37	1.39	1.83	1.69
Taiwan.....	2.84	2.05	1.90	1.65	1.35	0.86	0.52	0.44	0.37	0.31
Thailand.....	1.65	5.64	6.04	7.62	8.02	9.82	13.71	16.22	16.92	18.33
Vietnam.....	5.84	5.87	7.11	7.52	7.67	4.22	5.10	4.77	5.28	6.78
Total.....	1,035.51	1,433.75	1,489.82	1,572.37	1,623.26	1,751.34	1,809.32	1,828.75	1,911.75	1,989.80
World Total.....	4,196.13	4,869.40	4,986.39	5,108.48	5,210.01	5,321.71	5,336.44	5,020.25	4,996.07	4,885.27

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 thousand short tons.

Notes: Sum of components may not equal total due to independent rounding.

Coal includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.

Sources: See sources at the end of Section 5.

Table 2.6. World Net Hydroelectric Power Generation, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	251.0	300.8	307.7	313.2	303.5	287.6	292.6	304.3	312.1	319.1
Mexico.....	16.7	26.0	19.8	18.2	21.0	24.4	23.5	21.9	21.0	20.0
United States.....	279.2	284.3	294.0	252.9	226.1	268.2	283.1	278.7	242.7	268.2
Total.....	546.9	611.1	621.5	584.3	550.5	580.3	599.2	604.9	575.9	607.3
Central & South America										
Argentina.....	15.1	20.4	20.8	21.8	15.6	13.2	18.0	16.3	19.4	19.5
Bolivia.....	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.4	1.3	1.3
Brazil.....	128.4	176.5	180.7	183.7	197.1	202.6	204.6	215.6	221.1	225.0
Chile.....	7.3	10.4	11.3	12.0	11.4	9.5	11.9	12.9	14.7	15.0
Colombia.....	14.3	21.6	25.0	21.3	24.3	26.4	27.2	27.2	22.2	20.0
Costa Rica.....	2.1	2.7	2.9	3.0	3.0	3.3	3.5	3.6	3.5	3.5
Cuba.....	0.1	0.1	0.1	(s)	0.1	0.1	0.1	0.1	0.1	0.1
Dominica.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Dominican Republic.....	0.6	1.0	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9
Ecuador.....	0.9	3.8	4.3	4.5	4.7	4.9	4.9	5.0	4.9	4.8
El Salvador.....	1.1	1.2	1.2	1.1	1.3	1.4	1.7	1.3	1.4	1.5
Guatemala.....	0.3	0.7	1.7	1.7	1.8	2.1	2.1	2.1	2.1	2.1
Guyana.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Haiti.....	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Honduras.....	0.8	0.9	1.3	1.1	1.7	1.8	2.1	2.1	2.1	2.1
Jamaica.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nicaragua.....	0.5	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3
Panama.....	1.0	1.9	2.1	2.0	2.2	2.2	2.2	2.0	1.9	1.7
Paraguay.....	0.7	4.0	11.9	18.4	19.9	24.2	26.9	29.1	26.8	26.5
Peru.....	7.0	9.4	10.1	10.8	10.3	10.3	10.4	11.4	9.7	8.0
Puerto Rico.....	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Saint Vincent/Grenadines.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Suriname.....	0.9	1.0	0.8	0.3	0.5	1.1	1.2	1.1	1.1	1.1
Uruguay.....	2.2	6.4	7.2	7.2	5.4	3.9	6.9	6.1	7.8	8.0
Venezuela.....	14.4	21.8	24.9	30.5	33.9	34.3	36.6	44.0	46.6	50.0
Total.....	199.3	285.7	309.1	322.8	336.4	344.6	363.5	383.0	388.7	392.1
Western Europe										
Austria.....	28.5	30.3	30.5	25.4	35.2	34.6	31.0	31.0	34.3	36.5
Belgium.....	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.3
Denmark.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Faroe Islands.....	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
Finland.....	10.1	12.2	12.3	13.7	13.2	12.9	10.8	13.1	15.0	13.5
France.....	68.3	60.2	61.0	68.6	74.0	45.7	52.7	56.2	67.0	63.4
Germany.....	--	--	--	--	--	--	--	14.5	17.2	17.5
Germany, East.....	1.7	1.8	1.8	1.7	1.7	1.6	1.4	--	--	--
Germany, West.....	17.1	15.4	16.5	18.4	18.1	16.5	15.8	--	--	--
Greece.....	3.4	2.8	3.2	2.8	2.4	1.9	1.8	3.1	2.2	2.1
Iceland.....	3.1	3.7	3.8	3.9	4.2	4.2	4.2	4.2	4.3	4.4
Ireland.....	0.8	0.8	0.9	0.7	0.9	0.7	0.7	0.7	0.8	0.8
Italy.....	45.0	40.6	40.6	39.1	40.2	33.6	31.2	41.7	41.7	41.2
Luxembourg.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands.....	0.0	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Norway.....	82.7	101.5	95.3	102.3	107.9	117.4	120.2	109.3	115.8	117.8
Portugal.....	7.9	10.5	8.4	9.0	12.0	5.7	9.0	8.9	4.6	8.4
Spain.....	29.2	30.9	26.1	27.0	34.8	19.0	25.1	26.9	18.7	24.2
Sweden.....	58.1	70.1	60.1	71.0	69.0	70.9	71.7	62.4	73.5	75.5
Switzerland.....	32.5	31.7	32.6	34.3	35.4	29.5	29.5	31.8	32.4	34.8
Turkey.....	11.2	11.8	11.6	18.3	28.4	17.6	22.7	22.3	26.2	33.6
United Kingdom.....	3.9	4.1	4.8	4.1	4.9	4.7	5.2	4.6	5.5	4.6
Former Yugoslavia.....	27.9	24.4	27.5	26.0	25.6	23.3	19.6	18.9	18.0	16.5
Total.....	431.7	453.2	437.5	466.8	508.5	440.4	452.9	450.0	477.7	495.4

See footnotes at end of table.

Table 2.6. World Net Hydroelectric Power Generation, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	2.9	3.3	3.4	4.1	3.9	4.1	3.2	3.5	3.2	3.1
Bulgaria.....	3.7	2.2	2.3	2.5	2.6	2.7	1.9	2.4	2.0	2.1
Former Czechoslovakia.....	4.8	4.3	4.0	4.9	4.4	4.2	3.9	3.1	3.6	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	1.4
Slovakia.....	--	--	--	--	--	--	--	--	--	1.7
Hungary.....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Poland.....	3.2	3.9	3.7	4.0	4.2	3.7	3.3	3.4	3.5	3.7
Romania.....	12.5	11.8	10.7	11.1	13.5	12.5	10.9	14.1	11.6	12.6
Former U.S.S.R.....	184.0	205.0	213.5	217.5	228.5	221.0	230.7	232.7	--	--
Armenia.....	--	--	--	--	--	--	--	--	1.5	2.0
Azerbaijan.....	--	--	--	--	--	--	--	--	1.7	2.4
Belarus.....	--	--	--	--	--	--	--	--	(s)	(s)
Georgia.....	--	--	--	--	--	--	--	--	6.5	6.2
Kazakhstan.....	--	--	--	--	--	--	--	--	6.9	6.6
Kyrgyzstan.....	--	--	--	--	--	--	--	--	9.1	9.9
Latvia.....	--	--	--	--	--	--	--	--	2.5	3.4
Lithuania.....	--	--	--	--	--	--	--	--	0.3	0.2
Moldova.....	--	--	--	--	--	--	--	--	0.3	0.3
Russia.....	--	--	--	--	--	--	--	--	170.3	173.4
Tajikistan.....	--	--	--	--	--	--	--	--	16.2	15.5
Ukraine.....	--	--	--	--	--	--	--	--	8.0	7.6
Uzbekistan.....	--	--	--	--	--	--	--	--	6.3	7.1
Total.....	211.3	230.7	237.7	244.2	257.2	248.4	253.9	259.3	253.8	259.5
Middle East										
Iran.....	5.6	6.3	6.1	6.3	6.4	6.6	5.6	5.7	6.4	6.8
Iraq.....	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.3	0.7	0.7
Israel.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.8	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.3	0.4
Syria.....	2.5	2.0	1.6	2.0	4.8	4.7	5.6	6.2	7.3	7.5
Total.....	9.6	9.5	8.9	9.6	12.3	12.3	12.2	12.6	14.8	15.4
Africa										
Algeria.....	0.2	0.6	0.2	0.5	0.2	0.3	0.1	0.3	0.2	0.2
Angola.....	1.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4
Cameroon.....	1.4	2.3	2.3	2.3	2.5	2.6	2.6	2.6	2.6	2.6
Congo.....	0.1	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.4
Cote d'Ivoire (Ivory Coast).....	1.3	1.3	1.2	1.2	1.2	1.6	1.6	1.0	1.1	1.1
Egypt.....	9.7	8.0	7.9	8.2	7.8	7.9	9.9	9.8	9.6	9.5
Ethiopia.....	0.5	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1
Gabon.....	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Ghana.....	5.3	3.0	4.4	4.6	4.8	5.2	5.7	6.0	6.0	6.1
Kenya.....	1.0	1.7	1.7	1.8	2.3	2.4	2.5	2.8	2.8	3.0
Madagascar.....	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Malawi.....	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8
Morocco.....	1.5	0.5	0.6	0.8	0.9	1.1	1.2	1.3	1.0	0.9
Mozambique.....	13.4	0.1	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1
Nigeria.....	2.7	3.0	3.2	3.2	3.1	3.1	3.2	3.2	3.2	3.2
Reunion.....	0.3	0.5	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.7
South Africa.....	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Sudan.....	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Tanzania.....	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Uganda.....	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8
Zaire.....	4.2	5.0	5.2	5.2	5.2	5.9	5.9	5.9	6.0	6.0
Zambia.....	9.0	9.9	9.7	8.4	8.3	6.7	7.7	7.7	7.7	7.8
Zimbabwe.....	4.0	3.1	3.1	2.5	2.7	2.7	3.5	3.1	3.1	3.1
Other.....	1.0	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.4
Total.....	60.2	46.7	48.0	47.3	47.7	48.6	53.5	53.3	52.9	53.1

See footnotes at end of table.

Table 2.6. World Net Hydroelectric Power Generation, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Far East & Oceania										
Afghanistan.....	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.7	0.5	0.4
Australia.....	12.8	13.5	14.4	13.5	13.4	14.3	14.0	15.7	14.7	16.3
Bangladesh.....	0.6	0.7	0.5	0.5	0.7	0.9	0.9	0.8	0.8	0.7
Bhutan.....	(s)	(s)	0.3	1.2	1.5	1.5	1.5	1.6	1.6	1.7
Burma.....	0.8	1.0	1.0	1.0	0.9	1.1	1.2	1.3	1.3	1.3
Cambodia.....	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
China.....	58.2	92.4	94.5	100.2	108.0	117.1	125.5	123.8	131.1	143.1
Fiji.....	0.0	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
French Polynesia.....	0.0	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
India.....	46.5	50.5	53.3	47.0	57.3	61.5	70.9	72.3	69.2	68.0
Indonesia.....	3.0	6.1	7.0	7.6	8.3	8.5	8.9	8.5	8.7	8.8
Japan.....	87.8	82.1	80.0	74.0	89.9	90.8	88.4	96.5	81.7	90.4
Korea, North.....	22.3	27.7	28.7	28.8	31.2	31.4	31.4	31.4	30.0	30.0
Korea, South.....	2.0	3.6	4.0	5.3	3.5	4.5	6.3	5.0	4.8	5.9
Laos.....	0.9	0.9	0.8	0.5	0.5	0.7	0.8	0.9	0.9	0.8
Malaysia.....	1.4	3.8	4.0	4.9	5.6	5.2	4.0	4.4	5.0	5.5
Nepal.....	0.2	0.3	0.4	0.5	0.6	0.5	0.7	0.9	0.9	0.9
New Caledonia.....	0.3	0.5	0.4	0.3	0.5	0.5	0.5	0.3	0.3	0.3
New Zealand.....	19.5	19.5	21.9	22.1	23.1	21.9	23.1	22.9	20.4	21.1
Pakistan.....	8.6	12.1	13.7	15.1	16.5	16.8	16.8	18.1	20.4	22.0
Papua New Guinea.....	0.3	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
Philippines.....	3.5	5.5	6.0	5.2	6.2	6.4	6.0	5.1	4.2	4.0
Samoa, Western.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	1.5	2.4	2.6	2.2	2.6	2.8	3.1	3.1	2.9	2.6
Taiwan.....	2.9	7.1	7.4	7.1	6.1	6.7	8.2	5.5	8.3	6.8
Thailand.....	1.3	3.7	5.5	4.0	3.7	5.5	4.9	4.5	4.2	3.8
U.S. Pacific Islands.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	1.2	1.5	1.6	1.7	1.8	3.8	5.3	5.6	5.8	6.0
Total.....	276.2	336.4	349.5	344.3	383.7	404.2	424.2	429.9	418.7	441.3
World Total.....	1,735.2	1,973.1	2,012.2	2,019.4	2,096.2	2,078.7	2,159.3	2,193.0	2,182.4	2,264.1

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit and excludes generation from pumped storage.

Sources: See sources at the end of Section 6.

Table 2.7. World Net Nuclear Electric Power Generation, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	35.9	57.1	67.2	72.9	78.2	75.4	68.8	80.1	76.0	88.6
Mexico.....	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.0	3.7	4.7
United States.....	251.1	383.7	414.0	455.3	527.0	529.4	576.9	612.6	618.8	610.3
Total.....	287.0	440.8	481.3	528.2	605.1	604.7	647.7	696.7	698.5	703.6
Central & South America										
Argentina.....	2.2	5.4	5.4	6.1	4.8	4.8	7.0	7.7	6.7	7.3
Brazil.....	0.0	2.9	0.1	0.9	0.3	1.5	1.9	1.4	1.7	0.4
Total.....	2.2	8.4	5.5	7.1	5.2	6.3	9.0	9.1	8.4	7.7
Western Europe										
Belgium.....	11.9	32.7	37.3	39.8	40.9	39.1	40.6	40.6	41.3	39.5
Finland.....	6.6	18.0	18.0	18.5	18.4	18.0	18.1	18.4	18.2	18.9
France.....	63.4	211.2	239.6	249.3	260.3	288.7	297.7	315.0	321.5	350.2
Germany.....	--	--	--	--	--	--	--	139.4	150.9	145.8
Germany, East.....	11.9	12.7	10.9	10.7	11.1	11.1	5.3	--	--	--
Germany, West.....	43.7	125.9	119.6	130.5	145.1	140.4	139.8	--	--	--
Italy.....	2.1	6.6	8.3	(s)	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands.....	3.9	3.7	4.0	3.4	3.5	3.8	3.3	3.1	3.6	3.8
Spain.....	5.2	28.0	37.5	41.3	48.3	53.7	51.9	53.2	53.0	53.7
Sweden.....	25.3	55.8	66.9	64.3	65.6	62.8	65.2	73.5	60.8	58.7
Switzerland.....	12.9	20.1	20.1	20.5	21.5	21.5	22.4	21.7	22.1	22.2
United Kingdom.....	32.3	53.8	51.8	48.2	55.6	63.6	58.7	62.8	69.1	81.0
Former Yugoslavia.....	0.0	4.0	4.0	4.2	3.9	4.5	4.4	4.2	3.8	3.8
Total.....	219.2	572.5	617.8	630.6	674.2	707.3	707.4	731.9	744.2	777.4
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	5.8	12.4	11.4	11.7	15.1	14.6	13.5	12.4	11.0	13.3
Former Czechoslovakia.....	4.5	11.9	17.9	20.9	21.9	23.2	23.4	22.5	23.3	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	12.5
Slovakia.....	--	--	--	--	--	--	--	--	--	11.0
Hungary.....	0.0	6.1	7.0	10.4	12.7	13.1	13.1	13.1	13.3	13.1
Former U.S.S.R.....	72.9	170.0	151.6	176.3	203.7	212.7	201.3	201.5	--	--
Kazakhstan.....	--	--	--	--	--	--	--	--	0.5	0.4
Lithuania.....	--	--	--	--	--	--	--	--	13.9	12.3
Russia.....	--	--	--	--	--	--	--	--	113.6	116.9
Ukraine.....	--	--	--	--	--	--	--	--	70.1	75.2
Total.....	83.2	200.3	187.8	219.3	253.4	263.5	251.4	249.5	245.6	254.6
Africa										
South Africa.....	0.0	5.5	8.9	6.3	10.5	11.1	8.5	9.2	9.4	7.3
Total.....	0.0	5.5	8.9	6.3	10.5	11.1	8.5	9.2	9.4	7.3
Far East & Oceania										
China.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	2.5
India.....	3.0	4.7	4.7	4.7	5.2	3.8	5.6	5.2	6.0	5.9
Japan.....	78.6	149.7	158.8	188.6	173.9	174.5	182.3	201.4	207.2	234.0
Korea, South.....	3.3	15.8	26.7	37.1	37.8	45.0	50.2	53.5	53.7	55.2
Pakistan.....	(s)	0.3	0.4	0.5	0.2	0.1	0.4	0.4	0.5	0.4
Taiwan.....	7.8	27.8	25.8	31.8	29.4	27.1	31.6	33.5	30.8	31.3
Total.....	92.7	198.2	216.4	262.7	246.5	250.5	270.1	294.0	298.8	329.3
World Total.....	684.4	1,425.7	1,517.7	1,654.1	1,794.9	1,843.4	1,894.0	1,990.4	2,004.9	2,080.0

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

No generation is reported for Middle East.

Sources: See sources at the end of Section 6.

Table 2.8. World Net Geothermal, Solar, and Wind Electric Power Generation, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mexico.....	0.9	1.6	3.4	4.3	4.7	4.7	5.1	5.4	5.2	5.0
United States.....	5.5	10.7	11.5	12.3	12.0	11.3	10.7	10.1	10.2	9.6
Total.....	6.4	12.4	14.9	16.6	16.7	16.0	15.8	15.6	15.4	14.6
Central & South America										
Brazil.....	4.9	4.7	8.1	7.2	6.6	6.6	6.0	6.5	7.0	7.5
El Salvador.....	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Nicaragua.....	0.0	0.3	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.5
Total.....	5.3	5.4	8.8	7.9	7.2	7.4	6.8	7.4	7.8	8.3
Western Europe										
Belgium.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	0.0	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.0
France.....	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Germany.....	--	--	--	--	--	--	--	(s)	(s)	0.1
Germany, West.....	0.0	0.0	0.0	0.0	(s)	(s)	(s)	--	--	--
Greece.....	0.0	0.0	0.0	(s)	(s)	0.0	(s)	0.0	(s)	(s)
Iceland.....	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
Ireland.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)
Italy.....	2.6	2.5	2.6	2.8	2.9	3.0	3.1	3.0	3.3	3.5
Netherlands.....	0.0	0.0	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sweden.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Switzerland.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)
Turkey.....	0.0	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
United Kingdom.....	0.0	(s)	(s)	0.0	0.6	0.7	0.7	0.7	1.0	1.5
Total.....	3.1	3.4	3.6	3.9	4.8	5.0	5.3	5.5	6.2	7.2
Eastern Europe & Former U.S.S.R.										
Romania.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	0.0	0.0	0.0
Former U.S.S.R.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	--	--	--
Russia.....	--	--	--	--	--	--	--	--	(s)	(s)
Total.....	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Middle East										
Jordan.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Total.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Kenya.....	0.0	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total.....	(s)	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Far East & Oceania										
Australia.....	0.2	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0
India.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Indonesia.....	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Japan.....	1.1	1.4	1.3	1.3	1.3	1.3	1.6	1.7	1.7	1.6
New Zealand.....	1.2	1.1	1.1	1.1	1.2	1.8	2.1	2.1	2.1	2.0
Philippines.....	2.0	4.7	4.3	4.3	4.6	5.1	5.2	5.5	5.4	5.4
Vietnam.....	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Total.....	4.4	8.2	7.9	7.8	8.3	9.1	10.0	10.3	10.4	10.3
World Total.....	19.2	29.8	35.6	36.7	37.3	37.9	38.3	39.2	40.2	40.7

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

Sources: See sources at the end of Section 6.

Table 2.9. World Production of Primary Energy by Selected Country Groups (Btu), 1980, 1985-1993
 (Quadrillion (10¹⁵) Btu)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Petroleum²										
World Total.....	133.22	121.21	126.36	127.48	132.57	134.66	136.35	135.93	136.46	137.35
OECD. ³	30.35	34.47	33.99	33.71	33.56	31.92	31.91	32.61	33.12	32.82
Non OECD.....	102.87	86.74	92.38	93.77	99.01	102.73	104.43	103.32	103.34	104.53
Other Groups:.....										
OECD Europe.....	5.40	8.29	8.62	8.73	8.72	8.54	8.88	9.37	10.15	10.39
OPEC ⁴	58.90	36.43	41.06	41.59	45.70	49.59	52.29	52.62	55.28	57.55
EC. ⁵	4.09	6.47	6.60	6.38	6.06	5.06	5.05	5.09	5.18	5.38
IEA ⁶	30.35	34.47	33.99	33.71	33.56	31.92	31.91	32.61	33.12	32.82
Natural Gas										
World Total.....	52.65	61.38	62.60	65.61	68.78	71.20	72.91	73.99	73.80	75.34
OECD. ³	30.02	27.50	26.86	27.98	28.56	29.29	30.21	30.95	31.65	32.91
Non OECD.....	22.63	33.88	35.74	37.63	40.22	41.91	42.70	43.04	42.15	42.42
Other Groups:.....										
OECD Europe.....	6.85	6.73	6.64	6.91	6.51	6.77	6.88	7.48	7.54	7.96
OPEC ⁴	3.16	6.00	6.23	6.90	7.41	8.11	8.31	8.74	9.15	9.71
EC. ⁵	5.79	5.67	5.51	5.71	5.31	5.53	5.77	6.37	6.35	6.79
IEA ⁶	30.02	27.50	26.86	27.98	28.56	29.29	30.21	30.95	31.65	32.91
Coal										
World Total.....	74.48	85.77	88.06	90.27	91.92	93.92	94.97	90.43	88.62	86.67
OECD. ³	32.69	34.92	35.62	36.30	36.48	37.63	38.06	36.64	35.17	33.08
Non OECD.....	41.79	50.85	52.44	53.98	55.43	56.29	56.91	53.78	53.45	53.59
Other Groups:.....										
OECD Europe.....	10.66	10.66	10.98	10.60	10.26	10.46	9.63	8.87	7.35	6.55
OPEC ⁴	0.05	0.10	0.11	0.13	0.18	0.32	0.39	0.49	0.73	0.90
EC. ⁵	10.15	9.63	9.81	9.42	9.28	9.19	8.46	7.57	6.70	5.90
IEA ⁶	32.69	34.92	35.62	36.30	36.48	37.63	38.06	36.64	35.17	33.08
Hydroelectric Power										
World Total.....	18.05	20.56	20.96	21.03	21.81	21.62	22.46	22.80	22.67	23.51
OECD. ³	10.96	11.78	11.77	11.64	11.86	11.45	11.81	11.94	11.75	12.39
Non OECD.....	7.08	8.78	9.19	9.39	9.95	10.18	10.66	10.86	10.93	11.13
Other Groups:.....										
OECD Europe.....	4.20	4.48	4.28	4.61	5.05	4.36	4.53	4.48	4.78	4.98
OPEC ⁴	0.28	0.41	0.44	0.51	0.55	0.56	0.58	0.65	0.69	0.73
EC. ⁵	1.85	1.77	1.72	1.81	2.00	1.38	1.51	1.63	1.64	1.69
IEA ⁶	10.93	11.74	11.73	11.60	11.81	11.40	11.76	11.90	11.70	12.34
Nuclear Electric Power										
World Total.....	7.58	15.37	16.34	17.80	19.30	19.82	20.30	21.27	21.30	22.10
OECD. ³	6.45	12.37	13.37	14.29	15.42	15.76	16.23	17.20	17.39	18.07
Non OECD.....	1.12	3.00	2.97	3.50	3.88	4.06	4.07	4.07	3.91	4.03
Other Groups:.....										
OECD Europe.....	2.45	5.97	6.43	6.54	7.01	7.35	7.33	7.63	7.78	8.15
OPEC ⁴	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EC. ⁵	1.99	5.01	5.36	5.49	5.93	6.31	6.26	6.48	6.75	7.13
IEA ⁶	6.45	12.37	13.37	14.29	15.42	15.76	16.23	17.20	17.39	18.07

See footnotes at end of table.

Table 2.9. World Production of Primary Energy by Selected Country Groups (Btu), 1980, 1985-1993 (Continued)
 (Quadrillion (10^{15}) Btu)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Geothermal, Solar, and Wind Electric Power										
World Total.....	0.40	0.60	0.73	0.75	0.75	0.75	0.75	0.77	0.79	0.79
OECD ³	0.23	0.34	0.36	0.38	0.38	0.38	0.38	0.37	0.39	0.38
Non OECD.....	0.18	0.27	0.37	0.37	0.37	0.37	0.37	0.40	0.40	0.41
Other Groups:.....										
OECD Europe.....	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.10	0.11
OPEC ⁴	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
EC. ⁵	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.10	0.11
IEA ⁶	0.23	0.33	0.36	0.37	0.38	0.37	0.38	0.37	0.38	0.38
Total Energy										
World Total.....	286.38	304.89	315.05	322.94	335.12	341.96	347.74	345.19	343.64	345.76
OECD ³	110.71	121.37	121.96	124.30	126.26	126.42	128.61	129.72	129.46	129.66
Non OECD.....	175.67	183.52	193.09	198.64	208.86	215.54	219.13	215.47	214.18	216.10
Other Groups:.....										
OECD Europe.....	29.62	36.19	37.02	37.45	37.63	37.57	37.35	37.93	37.71	38.16
OPEC ⁴	62.39	42.93	47.86	49.14	53.85	58.59	61.58	62.51	65.86	68.91
EC. ⁵	23.93	28.60	29.07	28.89	28.66	27.56	27.13	27.23	26.71	27.00
IEA ⁶	110.68	121.33	121.92	124.25	126.22	126.37	128.56	129.67	129.41	129.61

¹ Preliminary.

² Data include the production of crude oil and natural gas plant liquids.

³ The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands). Refer to Appendix A for a listing of OECD Europe.

⁴ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁵ European Community (EC) includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, and United Kingdom.

⁶ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Puerto Rico, and U.S. Virgin Islands).

Notes: For consistency data reflect 1993 membership (as of December 31, 1993) for all years. The country groups OECD, OECD Europe, EC, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Primary energy production includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States also include electricity generated from biomass.

Sources: See sources at end of Sections 3, 4, 5, and 6.

Section 3

Petroleum

Table 3.1. World Petroleum Supply and Disposition, 1992

(Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
North America								
Canada.....	2,125	517	147	709	513	1,643	9	2
Mexico.....	3,151	0	170	1,367	98	1,825	1	1
United States.....	9,768	6,083	1,805	89	861	17,033	441	141
Other.....	0	0	8	0	(s)	8	0	1
Total.....	15,045	6,600	2,129	2,165	1,472	20,509	451	145
Central & South America								
Argentina.....	588	0	20	59	99	445	4	5
Bahamas, The.....	0	0	81	0	66	15	3	1
Bolivia.....	28	0	(s)	0	(s)	27	0	0
Brazil.....	809	526	107	0	93	1,369	14	2
Chile.....	24	107	17	0	1	151	1	0
Colombia.....	441	3	32	177	62	230	(s)	2
Costa Rica.....	0	11	16	0	2	25	1	(s)
Cuba.....	18	94	76	0	7	180	1	(s)
Dominican Republic.....	1	38	26	0	0	64	0	0
Ecuador.....	325	0	9	191	20	119	2	2
El Salvador.....	0	16	6	0	(s)	22	0	0
Guatemala.....	5	16	16	5	0	31	0	(s)
Honduras.....	0	8	10	0	0	18	0	0
Jamaica.....	0	24	30	0	3	51	0	0
Netherlands Antilles.....	6	232	30	0	204	63	27	5
Nicaragua.....	0	13	2	0	(s)	15	0	0
Panama.....	1	37	7	0	3	41	12	1
Paraguay.....	0	6	10	0	1	16	0	0
Peru.....	119	32	20	1	49	119	(s)	1
Puerto Rico.....	0	135	50	0	33	152	2	1
Trinidad and Tobago.....	145	49	3	76	96	22	(s)	1
U.S. Virgin Islands.....	(s)	304	4	0	257	51	1	2
Uruguay.....	0	27	5	0	(s)	32	2	2
Venezuela.....	2,501	0	12	1,388	652	414	11	3
Other.....	6	21	57	5	11	69	(s)	2
Total.....	5,019	1,700	643	1,903	1,659	3,741	82	31
Western Europe								
Austria.....	26	155	64	0	10	228	0	0
Belgium.....	12	591	339	0	420	511	64	15
Denmark.....	167	109	92	93	77	193	9	8
Finland.....	0	198	89	(s)	79	222	10	3
France.....	110	1,427	649	0	311	1,926	41	7
Germany.....	123	2,008	980	0	272	2,843	24	9
Greece.....	17	280	153	9	101	331	37	13
Iceland.....	0	0	11	0	0	12	(s)	(s)
Ireland.....	1	43	74	0	16	104	(s)	(s)
Italy.....	124	1,581	682	4	434	1,937	34	12
Luxembourg.....	0	0	40	0	0	39	0	0
Netherlands.....	101	1,064	779	18	1,126	766	170	44
Norway.....	2,327	20	56	1,952	226	183	5	4
Portugal.....	2	225	113	0	61	277	7	4
Spain.....	45	1,071	213	0	242	1,109	49	26
Sweden.....	4	345	166	(s)	187	342	14	4
Switzerland.....	1	85	199	0	8	287	0	(s)
Turkey.....	88	387	55	0	35	492	1	1
United Kingdom.....	2,041	958	427	1,114	509	1,803	24	25
Former Yugoslavia.....	65	78	40	0	8	178	0	0
Other.....	0	0	30	0	(s)	30	14	3
Total.....	5,254	10,623	5,249	3,191	4,124	13,813	504	179

See footnotes at end of table.

Table 3.1. World Petroleum Supply and Disposition, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
Eastern Europe & Former U.S.S.R.								
Albania.....	11	11	1	0	1	21	0	0
Bulgaria.....	1	88	36	0	17	103	4	1
Former Czechoslovakia.....	2	213	9	1	12	213	0	0
Hungary.....	46	123	23	0	22	171	0	0
Poland.....	4	252	65	(s)	18	297	4	2
Romania.....	143	132	19	0	43	250	0	0
Armenia.....	0	0	32	0	0	32	0	0
Azerbaijan.....	222	37	1	0	63	193	0	0
Belarus.....	40	387	28	6	79	375	0	0
Estonia.....	0	0	15	0	0	15	1	1
Georgia.....	3	13	11	0	0	27	0	0
Kazakhstan.....	530	226	88	400	45	404	0	0
Kyrgyzstan.....	2	0	33	2	0	33	0	2
Latvia.....	0	0	66	0	14	52	0	0
Lithuania.....	0	89	18	0	23	84	0	0
Moldova.....	0	0	57	0	0	57	0	0
Russia.....	7,862	213	48	2,803	872	4,423	277	0
Tajikistan.....	1	0	20	1	0	20	0	2
Turkmenistan.....	110	22	(s)	2	59	76	0	0
Ukraine.....	95	858	95	150	92	813	0	0
Uzbekistan.....	66	82	50	(s)	4	190	0	0
Total.....	9,138	2,746	714	3,365	1,365	7,847	286	7
Middle East								
Bahrain.....	45	217	0	0	235	28	2	2
Cyprus.....	0	15	23	0	0	38	1	(s)
Iran.....	3,491	0	158	2,517	64	1,083	7	2
Iraq.....	426	0	0	50	31	341	0	0
Israel.....	(s)	211	19	0	26	201	0	0
Jordan.....	(s)	60	16	0	0	73	0	0
Kuwait.....	1,096	0	(s)	741	284	79	5	(s)
Lebanon.....	0	9	46	0	0	55	(s)	0
Oman.....	746	0	5	689	26	40	2	0
Qatar.....	479	0	(s)	359	75	42	0	0
Saudi Arabia.....	9,060	0	9	6,907	1,136	983	95	79
Syria.....	483	0	14	232	62	185	0	6
United Arab Emirates.....	2,413	0	(s)	2,060	177	167	7	2
Yemen.....	182	76	7	125	56	83	2	1
Total.....	18,421	589	297	13,680	2,172	3,397	121	93

See footnotes at end of table.

Table 3.1. World Petroleum Supply and Disposition, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
Africa								
Algeria.....	1,355	0	9	671	470	214	1	2
Angola.....	526	0	(s)	498	3	26	8	5
Cameroon.....	140	0	3	117	1	25	0	0
Congo.....	174	0	(s)	159	5	6	(s)	(s)
Cote d'Ivoire (Ivory Coast)...	3	34	7	0	5	40	0	(s)
Egypt.....	927	0	13	420	65	444	20	9
Ethiopia.....	0	15	8	0	1	23	2	(s)
Gabon.....	299	0	2	271	4	16	1	1
Ghana.....	1	18	5	0	1	22	0	0
Kenya.....	1	45	3	0	9	41	2	1
Libya.....	1,473	0	1	1,169	152	145	1	0
Morocco.....	1	129	17	0	13	130	1	1
Nigeria.....	1,948	16	51	1,659	34	272	4	1
Senegal.....	0	13	8	0	1	19	1	1
South Africa.....	102	331	16	0	20	412	30	8
Sudan.....	1	21	14	0	1	33	1	(s)
Tunisia.....	114	5	42	77	10	71	0	2
Zaire.....	26	2	18	22	(s)	24	1	0
Zimbabwe.....	0	0	22	0	(s)	21	0	0
Other.....	7	53	141	7	4	192	7	6
Total.....	7,098	683	382	5,070	800	2,176	80	39
Far East & Oceania								
Australia.....	604	174	144	151	91	712	9	2
Bangladesh.....	1	20	18	0	(s)	37	0	0
Brunei.....	177	0	(s)	170	(s)	7	0	0
Burma.....	15	3	12	(s)	(s)	29	0	0
China.....	2,845	230	146	430	137	2,662	45	0
Guam.....	0	0	15	0	0	15	1	1
Hong Kong.....	0	0	219	0	67	152	20	7
India.....	575	511	234	0	68	1,275	3	1
Indonesia.....	1,576	129	78	806	286	707	5	11
Japan.....	50	4,201	1,331	0	120	5,446	100	7
Korea, North.....	0	50	22	0	(s)	74	0	0
Korea, South.....	3	1,393	383	0	252	1,456	49	9
Malaysia.....	667	23	139	459	49	302	1	1
Mongolia.....	0	0	13	0	0	13	0	0
New Zealand.....	56	63	12	19	6	111	3	2
Pakistan.....	65	81	92	9	4	227	(s)	(s)
Papua New Guinea.....	53	0	16	51	(s)	15	0	(s)
Philippines.....	9	243	43	7	27	260	1	(s)
Singapore.....	4	924	362	(s)	906	396	146	33
Sri Lanka.....	0	26	13	0	3	37	4	1
Taiwan.....	5	456	170	0	64	557	25	3
Thailand.....	66	276	168	17	4	476	8	31
Vietnam.....	106	0	60	105	0	61	0	0
Other.....	0	0	69	0	3	66	(s)	3
Total.....	6,879	8,803	3,759	2,225	2,088	15,091	420	113
World Total.....	66,855	31,743	13,174	31,599	13,680	66,574	1,943	608

¹ Oil production includes crude oil, natural gas plant liquids, other liquids, and refinery processing gains.

² Apparent consumption includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.2. World Output of Refined Petroleum Products, 1992
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
North America									
Canada.....	590	79	44	431	127	77	331	1,679	114
Mexico.....	445	62	18	284	443	52	78	1,381	53
United States.....	7,058	1,399	40	2,974	892	607	2,428	15,398	937
Total.....	8,093	1,539	102	3,688	1,462	736	2,837	18,458	1,104
Central & South America									
Argentina.....	111	15	8	187	81	27	62	491	19
Bahamas, The.....	0	0	0	0	0	0	0	0	0
Bolivia.....	11	2	1	1	7	1	1	23	(s)
Brazil.....	214	50	4	418	229	119	168	1,201	46
Chile.....	37	6	5	43	28	8	7	134	5
Colombia.....	87	13	6	64	70	13	14	266	10
Costa Rica.....	2	1	(s)	3	5	(s)	1	11	(s)
Cuba.....	16	2	11	16	44	3	15	106	4
Dominican Republic.....	6	(s)	4	9	18	1	1	39	1
Ecuador.....	31	4	5	29	45	7	8	130	5
El Salvador.....	4	1	(s)	6	5	1	1	17	1
Guatemala.....	3	1	(s)	6	5	(s)	(s)	15	1
Honduras.....	2	(s)	1	2	3	(s)	(s)	8	(s)
Jamaica.....	4	1	1	5	11	1	1	24	1
Netherlands Antilles.....	38	17	1	43	89	2	47	237	9
Nicaragua.....	3	(s)	(s)	4	5	1	1	14	1
Panama.....	5	1	(s)	10	20	(s)	2	38	2
Paraguay.....	1	(s)	(s)	3	2	(s)	(s)	6	(s)
Peru.....	25	5	15	30	69	5	4	152	6
Puerto Rico.....	43	10	1	14	30	2	35	136	11
Trinidad and Tobago.....	16	3	6	19	63	4	5	116	4
U.S. Virgin Islands.....	46	35	8	62	64	6	81	302	21
Uruguay.....	5	1	1	7	7	3	2	27	2
Venezuela.....	335	79	6	293	260	9	60	1,042	40
Other.....	4	2	2	5	7	1	2	24	1
Total.....	1,047	249	86	1,276	1,166	213	519	4,557	192
Western Europe									
Austria.....	58	8	(s)	66	33	1	32	199	11
Belgium.....	144	37	2	220	123	12	128	665	28
Denmark.....	36	3	(s)	82	40	4	9	174	7
Finland.....	81	9	0	82	22	9	23	226	8
France.....	411	101	2	598	227	81	261	1,681	100
Germany.....	590	48	1	928	259	84	445	2,355	118
Greece.....	83	32	(s)	77	96	13	39	342	15
Iceland.....	0	0	0	0	0	0	0	0	0
Ireland.....	8	0	0	16	13	1	2	40	1
Italy.....	448	54	40	622	429	82	273	1,949	116
Luxembourg.....	0	0	0	0	0	0	0	0	0
Netherlands.....	298	108	5	373	268	86	393	1,530	72
Norway.....	76	19	3	128	28	8	37	299	14
Portugal.....	43	19	1	61	79	12	27	240	12
Spain.....	223	79	4	334	307	59	177	1,181	72
Sweden.....	102	4	1	133	104	9	14	366	11
Switzerland.....	23	5	0	35	16	5	6	90	3
Turkey.....	74	15	3	134	162	21	60	470	24
United Kingdom.....	652	166	52	523	267	59	230	1,948	131
Former Yugoslavia.....	26	3	2	33	42	7	25	138	5
Total.....	3,376	711	115	4,444	2,512	552	2,182	13,892	750

See footnotes at end of table.

Table 3.2. World Output of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
Eastern Europe & Former U.S.S.R.									
Albania.....	2	0	1	7	6	(s)	5	20	1
Bulgaria.....	16	2	2	21	28	4	16	88	3
Former Czechoslovakia.....	36	6	5	50	54	3	61	216	8
Hungary.....	33	5	1	59	33	4	32	167	6
Poland.....	60	3	(s)	86	57	5	39	250	8
Romania.....	68	8	1	76	90	8	24	275	11
Armenia.....	0	0	0	0	0	0	0	0	0
Azerbaijan.....	23	9	25	86	61	13	38	256	10
Belarus.....	84	26	34	92	98	20	72	426	16
Estonia.....	0	0	0	(s)	1	(s)	(s)	1	(s)
Georgia.....	2	1	(s)	2	4	1	6	15	1
Kazakhstan.....	79	21	15	92	110	13	30	361	14
Kyrgyzstan.....	0	0	0	0	0	0	0	0	0
Latvia.....	0	0	0	0	0	0	0	0	0
Lithuania.....	21	6	5	17	29	4	7	88	7
Moldova.....	0	0	0	0	0	0	0	0	0
Russia.....	827	296	22	1,329	1,691	245	858	5,269	203
Tajikistan.....	0	0	0	0	0	0	0	0	0
Turkmenistan.....	21	2	5	35	30	7	35	135	5
Ukraine.....	125	32	26	153	327	28	119	810	31
Uzbekistan.....	35	4	8	41	33	3	20	144	6
Total.....	1,433	420	150	2,144	2,651	358	1,363	8,520	329
Middle East									
Bahrain.....	19	36	10	81	64	2	47	259	10
Cyprus.....	2	(s)	(s)	5	5	1	1	15	1
Iran.....	138	22	84	277	265	52	98	936	36
Iraq.....	60	10	17	114	124	13	34	373	14
Israel.....	42	10	7	52	67	9	20	207	8
Jordan.....	10	4	6	15	15	4	6	61	3
Kuwait.....	26	20	14	58	173	39	34	362	14
Lebanon.....	2	1	(s)	2	3	(s)	1	9	(s)
Oman.....	9	4	4	11	29	1	1	60	2
Qatar.....	9	9	(s)	17	20	37	2	94	4
Saudi Arabia.....	243	58	97	449	492	37	178	1,554	60
Syria.....	30	6	4	75	95	5	17	233	8
United Arab Emirates.....	31	24	2	56	56	9	32	208	9
Yemen.....	26	9	5	38	43	2	4	128	5
Total.....	647	213	249	1,252	1,450	212	475	4,499	174
Africa									
Algeria.....	53	10	2	162	112	162	118	619	24
Angola.....	3	3	1	7	12	1	1	28	1
Cameroon.....	5	1	2	5	5	1	3	23	1
Congo.....	1	(s)	1	2	5	(s)	1	10	(s)
Cote d'Ivoire (Ivory Coast).....	6	1	7	11	11	1	2	39	1
Egypt.....	46	6	49	88	218	11	79	496	24
Ethiopia.....	3	1	(s)	4	5	(s)	1	14	1
Gabon.....	2	1	2	5	6	(s)	1	17	1
Ghana.....	5	1	2	4	4	(s)	1	17	1
Kenya.....	8	7	3	12	13	1	2	46	2
Libya.....	42	33	5	84	91	6	34	296	11
Morocco.....	9	4	1	42	41	8	21	126	5
Nigeria.....	91	7	33	60	51	8	17	267	23
Senegal.....	2	2	(s)	4	4	(s)	(s)	13	1
South Africa.....	149	18	11	93	48	5	22	344	13
Sudan.....	2	2	(s)	7	6	(s)	3	21	1
Tunisia.....	7	2	3	10	8	5	2	37	1
Zaire.....	1	(s)	1	1	2	(s)	(s)	7	(s)
Zimbabwe.....	0	0	0	0	0	0	0	0	0
Other.....	14	2	4	15	14	2	4	55	2
Total.....	449	103	128	616	656	211	312	2,475	114

See footnotes at end of table.

Table 3.2. World Output of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
Far East & Oceania									
Australia.....	292	67	5	175	47	15	70	672	33
Bangladesh.....	2	1	6	3	6	(s)	2	20	1
Brunei.....	3	1	(s)	2	(s)	(s)	(s)	7	1
Burma.....	4	1	(s)	7	3	(s)	2	17	1
China.....	635	64	23	647	645	116	544	2,675	173
Guam.....	0	0	0	0	0	0	0	0	0
Hong Kong.....	0	0	0	0	0	0	0	0	0
India.....	80	36	114	373	207	81	236	1,128	43
Indonesia.....	119	17	134	224	228	20	84	827	32
Japan.....	793	102	448	1,147	816	150	596	4,051	199
Korea, North.....	18	0	4	19	7	(s)	1	50	2
Korea, South.....	88	57	37	412	502	42	239	1,378	53
Malaysia.....	38	9	11	81	54	8	18	219	7
Mongolia.....	0	0	0	0	0	0	0	0	0
New Zealand.....	34	15	0	29	8	0	9	95	5
Pakistan.....	23	10	10	29	39	2	23	136	6
Papua New Guinea.....	0	0	0	0	0	0	0	0	0
Philippines.....	37	11	12	73	78	8	21	240	9
Singapore.....	80	147	47	275	249	17	132	946	36
Sri Lanka.....	3	1	3	7	9	(s)	3	27	1
Taiwan.....	56	24	6	85	194	16	65	446	11
Thailand.....	64	36	2	102	77	10	15	305	5
Vietnam.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	1	(s)
Total.....	2,370	599	863	3,692	3,169	486	2,061	13,240	618
World Total.....	17,415	3,835	1,693	17,113	13,066	2,769	9,749	65,640	3,281

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

³ Refinery fuel and loss reported in this column as a memo item has been included in the output of the individual petroleum products and should not be added to "Total Output of Refined Petroleum Products".

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.3. World Imports of Refined Petroleum Products, 1992
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
North America								
Canada.....	11	10	2	7	48	2	67	147
Mexico.....	82	0	0	0	58	30	0	170
United States.....	294	82	9	216	375	156	672	1,805
Other.....	1	1	(s)	6	(s)	(s)	(s)	8
Total.....	389	93	11	228	481	187	739	2,129
Central & South America								
Argentina.....	0	1	0	5	11	2	1	20
Bahamas, The.....	4	2	(s)	6	68	1	(s)	81
Bolivia.....	0	0	0	(s)	0	0	0	(s)
Brazil.....	0	2	2	35	8	47	13	107
Chile.....	2	1	0	8	0	6	0	17
Colombia.....	30	(s)	(s)	(s)	(s)	0	(s)	32
Costa Rica.....	5	1	0	9	0	1	1	16
Cuba.....	3	2	1	22	45	(s)	2	76
Dominican Republic.....	7	0	2	8	6	3	(s)	26
Ecuador.....	1	(s)	0	2	0	6	(s)	9
El Salvador.....	1	(s)	0	3	(s)	1	(s)	6
Guatemala.....	5	0	1	5	0	3	1	16
Honduras.....	2	1	2	5	(s)	(s)	1	10
Jamaica.....	2	2	(s)	3	22	1	1	30
Netherlands Antilles.....	7	1	0	6	11	1	4	30
Nicaragua.....	(s)	0	0	(s)	1	(s)	(s)	2
Panama.....	1	(s)	(s)	1	3	2	(s)	7
Paraguay.....	2	(s)	0	6	1	1	(s)	10
Peru.....	0	(s)	(s)	16	0	2	(s)	20
Puerto Rico.....	13	3	(s)	10	21	(s)	4	50
Trinidad and Tobago.....	0	0	0	1	0	(s)	1	3
U.S. Virgin Islands.....	0	0	(s)	3	1	0	(s)	4
Uruguay.....	(s)	(s)	0	0	3	(s)	1	5
Venezuela.....	0	0	0	2	2	0	8	12
Other.....	11	8	2	18	13	2	2	57
Total.....	97	23	10	175	216	81	40	643
Western Europe								
Austria.....	11	(s)	(s)	13	9	5	26	64
Belgium.....	41	8	1	93	55	19	122	339
Denmark.....	19	13	(s)	34	10	(s)	15	92
Finland.....	8	(s)	1	25	15	(s)	39	89
France.....	81	26	(s)	242	14	58	227	649
Germany.....	233	71	1	394	72	32	178	980
Greece.....	8	8	0	42	37	(s)	58	153
Iceland.....	3	1	0	5	2	0	(s)	11
Ireland.....	14	6	3	25	16	3	6	74
Italy.....	26	0	0	70	261	37	287	682
Luxembourg.....	12	3	0	20	4	1	(s)	40
Netherlands.....	83	9	13	157	121	173	225	779
Norway.....	9	3	(s)	13	12	7	13	56
Portugal.....	2	1	0	5	57	17	31	113
Spain.....	15	0	0	53	29	24	92	213
Sweden.....	41	15	1	33	18	25	32	166
Switzerland.....	68	21	(s)	98	1	1	10	199
Turkey.....	5	(s)	0	7	1	38	5	55
United Kingdom.....	18	11	1	10	93	30	263	427
Former Yugoslavia.....	9	6	4	5	8	4	5	40
Other.....	2	1	(s)	8	18	(s)	1	30
Total.....	708	203	26	1,350	854	475	1,634	5,249

See footnotes at end of table.

Table 3.3. World Imports of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
Eastern Europe & Former U.S.S.R.								
Albania.....	1	0	0	0	0	0	(s)	1
Bulgaria.....	8	5	1	9	11	(s)	1	36
Former Czechoslovakia.....	4	(s)	1	1	1	(s)	1	9
Hungary.....	10	0	0	5	4	1	3	23
Poland.....	36	0	0	14	14	0	(s)	65
Romania.....	1	0	2	5	11	0	0	19
Armenia.....	4	0	0	4	24	0	0	32
Azerbaijan.....	(s)	0	0	(s)	(s)	0	(s)	1
Belarus.....	1	0	0	6	21	0	(s)	28
Estonia.....	3	(s)	(s)	3	8	0	1	15
Georgia.....	3	0	0	1	7	0	0	11
Kazakhstan.....	24	0	0	44	20	0	0	88
Kyrgyzstan.....	9	1	0	8	10	3	2	33
Latvia.....	12	0	(s)	24	23	2	4	66
Lithuania.....	2	0	(s)	2	13	(s)	(s)	18
Moldova.....	9	1	(s)	12	22	0	12	57
Russia.....	15	9	0	15	7	0	1	48
Tajikistan.....	8	0	0	6	6	0	0	20
Turkmenistan.....	(s)	0	0	(s)	(s)	0	0	(s)
Ukraine.....	5	0	0	43	32	0	15	95
Uzbekistan.....	14	0	0	17	19	0	0	50
Total.....	171	17	5	221	254	6	41	714
Middle East								
Bahrain.....	0	0	0	0	0	0	0	0
Cyprus.....	2	5	(s)	4	9	1	2	23
Iran.....	10	2	17	118	10	0	0	158
Iraq.....	0	0	0	0	0	0	0	0
Israel.....	2	1	0	(s)	14	0	2	19
Jordan.....	0	0	(s)	3	12	1	0	16
Kuwait.....	0	0	0	0	0	0	(s)	(s)
Lebanon.....	21	1	1	7	13	3	0	46
Oman.....	1	(s)	0	0	0	1	3	5
Qatar.....	0	0	0	0	0	0	(s)	(s)
Saudi Arabia.....	0	0	0	0	0	0	9	9
Syria.....	0	0	1	8	0	4	1	14
United Arab Emirates.....	0	0	0	0	0	0	(s)	(s)
Yemen.....	3	0	(s)	0	0	3	1	7
Total.....	39	9	20	140	58	13	18	297

See footnotes at end of table.

Table 3.3. World Imports of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
Africa								
Algeria.....	0	3	2	0	0	0	3	9
Angola.....	(s)	0	0	(s)	0	(s)	0	(s)
Cameroon.....	2	(s)	(s)	(s)	0	0	(s)	3
Congo.....	(s)	0	0	0	(s)	0	(s)	(s)
Cote d'Ivoire (Ivory Coast)..	3	(s)	(s)	2	0	(s)	1	7
Egypt.....	0	5	0	5	0	2	(s)	13
Ethiopia.....	(s)	2	0	5	0	0	1	8
Gabon.....	(s)	0	(s)	1	0	(s)	1	2
Ghana.....	2	0	(s)	2	1	(s)	(s)	5
Kenya.....	(s)	(s)	(s)	1	0	0	1	3
Libya.....	0	0	0	0	0	0	1	1
Morocco.....	(s)	0	0	2	0	13	2	17
Nigeria.....	35	12	0	1	0	0	3	51
Senegal.....	(s)	1	0	3	2	1	(s)	8
South Africa.....	7	0	1	5	1	1	1	16
Sudan.....	2	1	1	9	1	(s)	(s)	14
Tunisia.....	(s)	4	0	13	19	4	2	42
Zaire.....	4	3	1	5	4	(s)	1	18
Zimbabwe.....	8	1	1	10	0	(s)	2	22
Other.....	31	14	9	50	21	3	13	141
Total.....	98	49	16	114	48	25	32	382
Far East & Oceania								
Australia.....	3	1	(s)	9	0	1	129	144
Bangladesh.....	(s)	(s)	3	12	2	0	1	18
Brunei.....	0	0	0	0	0	0	(s)	(s)
Burma.....	0	0	0	12	0	0	(s)	12
China.....	8	2	1	102	31	1	1	146
Guam.....	4	6	0	6	(s)	(s)	(s)	15
Hong Kong.....	10	40	2	85	59	8	16	219
India.....	(s)	1	89	126	0	8	10	234
Indonesia.....	0	20	(s)	39	16	(s)	2	78
Japan.....	19	67	40	53	121	616	416	1,331
Korea, North.....	7	0	1	7	6	0	(s)	22
Korea, South.....	0	0	25	16	94	108	140	383
Malaysia.....	37	8	(s)	37	41	8	8	139
Mongolia.....	6	0	1	6	1	0	(s)	13
New Zealand.....	5	1	0	1	1	0	5	12
Pakistan.....	3	0	1	67	21	0	(s)	92
Papua New Guinea.....	2	1	1	7	5	(s)	(s)	16
Philippines.....	0	(s)	0	18	18	7	(s)	43
Singapore.....	22	7	4	47	257	1	24	362
Sri Lanka.....	1	1	1	6	1	1	1	13
Taiwan.....	52	0	0	1	48	29	40	170
Thailand.....	18	12	0	74	55	(s)	9	168
Vietnam.....	16	3	4	25	11	0	1	60
Other.....	10	15	6	23	12	2	2	69
Total.....	223	185	178	777	798	791	807	3,759
World Total.....	1,724	579	266	3,005	2,708	1,578	3,313	13,174

¹ Jet fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.4. World Exports of Refined Petroleum Products, 1992
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
North America								
Canada.....	71	9	1	85	33	220	93	513
Mexico.....	0	15	0	24	11	32	17	98
United States.....	96	43	8	219	193	50	254	861
Other.....	0	(s)	0	(s)	0	0	0	(s)
Total.....	166	67	9	328	236	302	364	1,472
Central & South America								
Argentina.....	38	2	0	27	12	9	12	99
Bahamas, The.....	(s)	(s)	0	1	65	0	(s)	66
Bolivia.....	0	0	0	0	0	(s)	0	(s)
Brazil.....	35	10	0	5	42	(s)	1	93
Chile.....	(s)	0	0	0	0	0	(s)	1
Colombia.....	0	0	0	8	53	0	1	62
Costa Rica.....	0	(s)	0	(s)	1	0	(s)	2
Cuba.....	0	0	0	0	0	0	7	7
Dominican Republic.....	0	0	0	0	0	0	0	0
Ecuador.....	0	0	0	(s)	19	0	(s)	20
El Salvador.....	0	0	0	0	(s)	0	(s)	(s)
Guatemala.....	0	0	0	0	0	0	0	0
Honduras.....	0	0	0	0	0	0	0	0
Jamaica.....	0	0	0	1	2	(s)	1	3
Netherlands Antilles.....	42	17	0	39	62	1	44	204
Nicaragua.....	0	0	0	(s)	0	0	(s)	(s)
Panama.....	0	(s)	0	1	2	0	0	3
Paraguay.....	0	0	0	0	1	0	0	1
Peru.....	0	0	0	1	47	0	(s)	49
Puerto Rico.....	3	5	0	2	1	0	22	33
Trinidad and Tobago.....	10	2	3	13	59	3	6	96
U.S. Virgin Islands.....	43	25	7	59	48	(s)	76	257
Uruguay.....	0	0	(s)	0	0	0	(s)	(s)
Venezuela.....	141	61	0	160	241	30	20	652
Other.....	1	2	1	2	3	(s)	2	11
Total.....	313	124	11	320	659	43	190	1,659
Western Europe								
Austria.....	5	(s)	(s)	2	1	(s)	2	10
Belgium.....	119	23	(s)	111	59	9	99	420
Denmark.....	13	2	0	27	28	2	5	77
Finland.....	43	2	0	28	3	1	3	79
France.....	81	20	1	60	56	29	65	311
Germany.....	61	2	0	71	80	18	40	272
Greece.....	29	17	0	10	31	4	11	101
Iceland.....	0	0	0	0	0	0	0	0
Ireland.....	(s)	0	0	3	11	(s)	1	16
Italy.....	84	8	25	149	86	8	75	434
Luxembourg.....	0	0	0	0	0	0	0	0
Netherlands.....	212	71	7	362	180	36	259	1,126
Norway.....	43	7	0	78	26	51	20	226
Portugal.....	6	6	0	6	38	1	4	61
Spain.....	24	19	0	29	105	3	62	242
Sweden.....	40	1	(s)	64	58	3	22	187
Switzerland.....	0	0	0	(s)	7	1	(s)	8
Turkey.....	(s)	3	0	(s)	30	(s)	2	35
United Kingdom.....	132	22	6	115	92	83	58	509
Former Yugoslavia.....	1	2	(s)	1	1	1	2	8
Other.....	0	0	0	0	0	0	(s)	(s)
Total.....	893	206	39	1,117	891	248	729	4,124

See footnotes at end of table.

Table 3.4. World Exports of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
Eastern Europe & Former U.S.S.R.								
Albania.....	0	0	0	0	0	0	1	1
Bulgaria.....	5	1	0	8	1	1	1	17
Former Czechoslovakia...	(s)	0	(s)	4	4	(s)	3	12
Hungary.....	(s)	2	0	5	2	1	11	22
Poland.....	(s)	0	0	1	16	0	2	18
Romania.....	23	0	0	12	7	1	1	43
Armenia.....	0	0	0	0	0	0	0	0
Azerbaijan.....	2	0	0	43	6	0	13	63
Belarus.....	33	0	0	39	4	0	3	79
Estonia.....	0	0	0	0	0	0	0	0
Georgia.....	0	0	0	0	0	0	0	0
Kazakhstan.....	12	0	0	20	13	0	0	45
Kyrgyzstan.....	0	0	0	0	0	0	0	0
Latvia.....	1	0	0	9	4	(s)	0	14
Lithuania.....	7	0	4	7	3	1	(s)	23
Moldova.....	0	0	0	0	0	0	0	0
Russia.....	78	3	4	303	421	23	41	872
Tajikistan.....	0	0	0	0	0	0	0	0
Turkmenistan.....	10	0	0	20	14	0	15	59
Ukraine.....	0	0	0	26	57	(s)	9	92
Uzbekistan.....	1	0	0	1	1	0	0	4
Total.....	172	7	8	498	554	27	100	1,365
Middle East								
Bahrain.....	13	24	9	77	61	7	45	235
Cyprus.....	0	0	0	0	0	0	0	0
Iran.....	26	0	0	0	23	12	4	64
Iraq.....	2	2	(s)	10	15	2	0	31
Israel.....	4	0	1	20	(s)	2	0	26
Jordan.....	0	0	0	0	0	0	0	0
Kuwait.....	0	17	13	45	145	36	27	284
Lebanon.....	0	0	0	0	0	0	0	0
Oman.....	(s)	0	0	2	19	5	(s)	26
Qatar.....	2	7	0	10	18	35	3	75
Saudi Arabia.....	54	16	91	35	261	441	238	1,136
Syria.....	6	0	0	4	52	0	(s)	62
United Arab Emirates.....	10	12	(s)	10	4	82	58	177
Yemen.....	0	7	3	19	27	0	0	56
Total.....	117	85	117	232	625	621	375	2,172

See footnotes at end of table.

Table 3.4. World Exports of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
Africa								
Algeria.....	5	5	(s)	75	100	117	168	470
Angola.....	1	0	0	(s)	2	0	0	3
Cameroon.....	(s)	0	(s)	0	(s)	0	(s)	1
Congo.....	(s)	(s)	0	(s)	5	0	0	5
Cote d'Ivoire (Ivory Coast)	1	(s)	(s)	3	1	(s)	0	5
Egypt.....	0	0	0	0	23	1	42	65
Ethiopia.....	0	0	0	1	0	0	0	1
Gabon.....	1	1	(s)	2	(s)	(s)	(s)	4
Ghana.....	0	0	0	0	1	0	0	1
Kenya.....	1	1	(s)	2	4	(s)	(s)	9
Libya.....	7	9	1	47	50	6	32	152
Morocco.....	(s)	0	0	0	(s)	0	13	13
Nigeria.....	(s)	2	(s)	11	17	3	(s)	34
Senegal.....	1	(s)	(s)	(s)	0	(s)	(s)	1
South Africa.....	5	1	1	8	2	1	4	20
Sudan.....	(s)	0	0	0	1	0	0	1
Tunisia.....	0	2	0	0	7	1	(s)	10
Zaire.....	0	0	0	0	(s)	0	0	(s)
Zimbabwe.....	(s)	0	0	(s)	0	0	0	(s)
Other.....	1	(s)	(s)	1	1	0	(s)	4
Total.....	23	22	4	149	214	129	259	800
Far East & Oceania								
Australia.....	10	5	2	13	17	24	19	91
Bangladesh.....	0	0	0	(s)	0	0	(s)	(s)
Brunei.....	0	(s)	0	0	0	0	0	(s)
Burma.....	0	0	0	0	0	(s)	(s)	(s)
China.....	62	(s)	4	30	11	(s)	28	137
Guam.....	0	0	0	0	0	0	0	0
Hong Kong.....	2	1	(s)	32	27	2	4	67
India.....	0	0	1	1	17	0	48	68
Indonesia.....	0	3	0	0	156	77	51	286
Japan.....	0	3	9	40	47	0	22	120
Korea, North.....	0	0	0	0	(s)	0	0	(s)
Korea, South.....	(s)	21	(s)	74	139	2	17	252
Malaysia.....	(s)	(s)	9	6	21	5	7	49
Mongolia.....	0	0	0	0	0	0	0	0
New Zealand.....	2	1	0	2	1	1	0	6
Pakistan.....	0	0	0	0	0	0	4	4
Papua New Guinea.....	0	0	0	(s)	0	0	0	(s)
Philippines.....	(s)	(s)	0	(s)	1	12	13	27
Singapore.....	111	112	15	246	304	10	109	906
Sri Lanka.....	0	0	0	0	1	0	2	3
Taiwan.....	(s)	17	0	3	40	0	5	64
Thailand.....	2	(s)	0	(s)	0	1	(s)	4
Vietnam.....	0	0	0	0	0	0	0	0
Other.....	1	(s)	1	1	0	0	(s)	3
Total.....	190	164	40	449	782	134	329	2,088
World Total.....	1,875	674	228	3,093	3,962	1,503	2,347	13,680

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

³ Exports of refined products do not include bunker fuels where identifiable.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1992
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
North America								
Canada.....	538	79	50	358	147	196	275	1,643
Mexico.....	528	46	15	254	466	287	229	1,825
United States.....	7,268	1,454	41	2,979	1,094	1,946	2,250	17,033
Other.....	1	(s)	(s)	6	(s)	(s)	(s)	8
Total.....	8,334	1,580	107	3,597	1,708	2,430	2,754	20,509
Central & South America								
Argentina.....	109	13	10	149	49	50	65	445
Bahamas, The.....	4	1	(s)	5	4	1	(s)	15
Bolivia.....	9	2	1	1	8	6	1	27
Brazil.....	363	41	3	452	186	165	158	1,369
Chile.....	39	7	5	48	24	21	7	151
Colombia.....	120	14	6	43	19	16	11	230
Costa Rica.....	6	1	(s)	12	3	1	1	25
Cuba.....	20	4	12	40	90	3	12	180
Dominican Republic.....	13	(s)	5	17	24	4	1	64
Ecuador.....	34	4	2	31	27	14	6	119
El Salvador.....	5	1	(s)	8	5	2	1	22
Guatemala.....	8	1	1	11	5	4	1	31
Honduras.....	4	1	2	7	3	(s)	1	18
Jamaica.....	6	3	1	6	32	1	1	51
Netherlands Antilles.....	3	1	1	10	38	2	8	63
Nicaragua.....	3	(s)	(s)	5	6	1	1	15
Panama.....	6	1	(s)	11	19	2	2	41
Paraguay.....	3	(s)	(s)	9	1	2	(s)	16
Peru.....	26	6	7	47	22	6	5	119
Puerto Rico.....	53	7	1	22	50	2	16	152
Trinidad and Tobago.....	6	1	3	6	4	2	1	22
U.S. Virgin Islands.....	2	8	(s)	6	18	6	11	51
Uruguay.....	6	1	1	12	7	2	3	32
Venezuela.....	178	15	6	66	60	45	44	414
Other.....	14	9	3	22	17	3	2	69
Total.....	1,040	142	72	1,044	722	361	360	3,741
Western Europe								
Austria.....	62	9	(s)	79	36	5	38	228
Belgium.....	68	20	4	202	119	21	78	511
Denmark.....	42	14	(s)	93	27	3	13	193
Finland.....	46	8	0	84	39	3	42	222
France.....	374	89	1	806	166	134	357	1,926
Germany.....	733	112	(s)	1,257	211	94	436	2,843
Greece.....	60	30	(s)	116	92	11	22	331
Iceland.....	3	1	0	5	2	0	1	12
Ireland.....	23	9	3	38	22	4	6	104
Italy.....	378	53	18	543	584	104	259	1,937
Luxembourg.....	12	3	0	19	4	1	(s)	39
Netherlands.....	84	42	2	167	193	81	199	766
Norway.....	40	11	3	64	11	26	29	183
Portugal.....	40	13	(s)	57	96	28	43	277
Spain.....	213	58	2	316	237	100	183	1,109
Sweden.....	101	19	(s)	107	57	30	28	342
Switzerland.....	93	24	(s)	144	8	6	11	287
Turkey.....	79	12	3	142	134	59	63	492
United Kingdom.....	557	144	52	424	265	135	225	1,803
Former Yugoslavia.....	41	6	6	36	50	12	28	178
Other.....	2	1	(s)	8	18	(s)	1	30
Total.....	3,050	676	96	4,706	2,368	855	2,062	13,813

See footnotes at end of table.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
Eastern Europe & Former U.S.S.R.								
Albania.....	3	0	1	7	6	(s)	5	21
Bulgaria.....	18	6	1	22	37	3	15	103
Former Czechoslovakia....	40	6	6	47	51	4	59	213
Hungary.....	40	3	1	60	36	10	20	171
Poland.....	95	3	(s)	101	55	5	38	297
Romania.....	47	8	3	68	94	7	23	250
Armenia.....	4	0	0	4	24	0	0	32
Azerbaijan.....	22	9	25	43	56	13	25	193
Belarus.....	52	26	34	59	115	20	69	375
Estonia.....	3	(s)	(s)	3	8	(s)	1	15
Georgia.....	5	1	(s)	3	11	1	6	27
Kazakhstan.....	91	21	15	116	117	13	30	404
Kyrgyzstan.....	9	1	0	8	10	3	2	33
Latvia.....	12	0	(s)	16	19	2	4	52
Lithuania.....	16	6	1	12	39	3	8	84
Moldova.....	9	1	(s)	12	22	0	12	57
Russia.....	765	302	19	1,042	1,255	222	819	4,423
Tajikistan.....	8	0	0	6	6	0	0	20
Turkmenistan.....	11	2	5	14	16	7	20	76
Ukraine.....	130	32	26	162	311	28	124	813
Uzbekistan.....	48	4	8	57	50	3	20	190
Total.....	1,428	431	147	1,861	2,337	343	1,300	7,847
Middle East								
Bahrain.....	5	9	1	4	3	1	5	28
Cyprus.....	4	6	(s)	9	14	2	3	38
Iran.....	167	24	128	358	271	45	91	1,083
Iraq.....	57	8	16	104	110	12	34	341
Israel.....	41	12	7	33	73	7	29	201
Jordan.....	10	4	6	17	26	5	5	73
Kuwait.....	26	2	1	13	28	3	7	79
Lebanon.....	23	2	1	9	16	3	1	55
Oman.....	12	5	(s)	10	9	1	2	40
Qatar.....	7	2	(s)	6	2	23	2	42
Saudi Arabia.....	182	41	5	320	230	127	77	983
Syria.....	29	6	5	79	42	9	13	185
United Arab Emirates.....	33	26	1	57	39	3	8	167
Yemen.....	22	3	3	24	22	6	5	83
Total.....	618	150	174	1,043	885	247	281	3,397

See footnotes at end of table.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1992 (Continued)
 (Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
Africa								
Algeria.....	48	8	4	74	11	44	25	214
Angola.....	2	3	1	7	10	1	2	26
Cameroon.....	7	1	2	5	5	1	3	25
Congo.....	1	(s)	1	2	1	(s)	1	6
Cote d'Ivoire (Ivory Coast).....	8	1	7	10	10	1	3	40
Egypt.....	46	10	42	100	179	32	36	444
Ethiopia.....	4	4	(s)	8	6	(s)	1	23
Gabon.....	2	1	2	4	5	(s)	2	16
Ghana.....	7	1	2	6	4	(s)	1	22
Kenya.....	8	7	3	12	8	1	2	41
Libya.....	35	24	4	37	41	(s)	3	145
Morocco.....	9	4	1	45	41	20	10	130
Nigeria.....	120	7	32	58	30	5	20	272
Senegal.....	2	3	(s)	7	6	1	(s)	19
South Africa.....	158	17	13	111	74	8	30	412
Sudan.....	4	3	1	15	6	(s)	3	33
Tunisia.....	7	4	3	24	23	9	2	71
Zaire.....	5	3	2	7	5	(s)	2	24
Zimbabwe.....	7	1	1	10	0	(s)	2	21
Other.....	44	16	13	63	35	5	17	192
Total.....	523	120	135	604	502	129	164	2,176
Far East & Oceania								
Australia.....	293	61	4	173	32	43	106	712
Bangladesh.....	2	1	9	15	8	(s)	2	37
Brunei.....	3	1	(s)	2	(s)	(s)	(s)	7
Burma.....	4	1	(s)	16	6	(s)	1	29
China.....	570	65	22	647	680	117	561	2,662
Guam.....	4	6	0	5	(s)	(s)	(s)	15
Hong Kong.....	7	40	2	55	28	7	13	152
India.....	80	36	198	494	181	89	196	1,275
Indonesia.....	124	22	145	276	99	15	25	707
Japan.....	807	165	474	1,183	873	718	1,227	5,446
Korea, North.....	25	0	5	27	13	(s)	4	74
Korea, South.....	96	44	94	348	412	149	312	1,456
Malaysia.....	74	15	3	104	61	22	23	302
Mongolia.....	6	0	1	6	1	0	(s)	13
New Zealand.....	42	15	(s)	26	8	7	13	111
Pakistan.....	26	9	13	91	62	4	22	227
Papua New Guinea.....	2	1	1	6	5	(s)	(s)	15
Philippines.....	34	11	11	80	99	15	10	260
Singapore.....	13	42	1	78	211	4	47	396
Sri Lanka.....	4	3	4	13	9	1	2	37
Taiwan.....	113	8	3	85	210	43	95	557
Thailand.....	74	47	2	178	127	35	12	476
Vietnam.....	16	3	4	26	11	(s)	1	61
Other.....	9	15	5	22	12	2	2	66
Total.....	2,428	609	1,001	3,957	3,148	1,273	2,675	15,091
World Total.....	17,420	3,708	1,731	16,812	11,671	5,637	9,597	66,574

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

Apparent consumption includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.6. World Crude Oil Refining Capacity, January 1, 1994

Region Country	Number of Refineries	Thousand Barrels per Day ¹			
		Crude Oil Distillation	Catalytic Cracking	Thermal Cracking	Reforming
North America					
Canada	25	1,880	391	167	359
Mexico	7	1,524	243	63	171
United States ²	179	15,034	5,488	2,001	3,681
Total	211	18,438	6,122	2,231	4,211
Central & South America					
Argentina	12	709	180	169	41
Barbados	1	3	--	--	--
Bolivia	3	45	--	--	15
Brazil	13	1,253	333	58	--
Chile	3	165	38	19	10
Colombia	5	249	90	52	--
Costa Rica	1	15	--	7	1
Cuba	4	280	--	--	--
Dominican Republic	2	48	--	--	10
Ecuador	4	148	16	25	2
El Salvador	1	18	--	--	3
Guatemala	2	20	--	--	3
Honduras	1	14	--	--	2
Jamaica	1	36	--	--	4
Martinique	1	16	--	--	3
Netherlands Antilles	2	477	49	113	20
Nicaragua	1	16	--	--	3
Panama	1	100	--	20	8
Paraguay	1	8	--	--	--
Peru	5	184	23	--	0
Puerto Rico	2	127	14	--	27
Trinidad and Tobago	2	305	28	18	31
Uruguay	1	35	5	--	3
U.S. Virgin Islands	1	545	75	80	125
Venezuela	6	1,167	234	134	9
Total	76	5,982	1,086	694	319
Western Europe					
Austria	1	210	25	18	34
Belgium	4	607	110	63	96
Denmark	3	184	--	72	32
Finland	2	200	45	35	43
France	14	1,861	340	169	265
Germany	21	2,265	282	374	410
Greece	4	396	64	44	51
Ireland	1	53	--	--	12
Italy	17	2,262	295	458	270
Netherlands	6	1,184	136	155	185
Norway	3	287	41	68	47
Portugal	3	294	10	--	51
Spain	10	1,283	178	177	198
Sweden	5	428	28	65	74
Switzerland	2	132	--	20	26
Turkey	5	713	39	24	66
United Kingdom	15	1,867	475	152	392
Former Yugoslavia	8	641	53	28	90
Total	124	14,865	2,120	1,920	2,340
Eastern Europe & Former U.S.S.R.					
Albania	3	40	--	--	--
Bulgaria	3	300	--	--	--
Czech Republic	6	307	--	--	9
Hungary	3	242	24	14	30
Poland	9	333	32	--	35
Romania	10	681	113	110	90
Slovakia	1	193	--	--	22
Azerbaijan	2	406	34	41	--
Belarus	2	832	--	--	--
Georgia	1	106	--	--	--
Kazakhstan	3	390	40	59	--
Lithuania	1	263	44	30	51
Russia	29	6,463	315	537	--
Turkmenistan	2	238	16	31	--
Ukraine	6	1,237	28	42	54
Uzbekistan	2	173	--	29	--
Total	83	12,205	647	892	291

See footnotes at end of table.

Table 3.6. World Crude Oil Refining Capacity, January 1, 1994

Region Country	Number of Refineries	Thousand Barrels per Day ¹			
		Crude Oil Distillation	Catalytic Cracking	Thermal Cracking	Reforming
Middle East					
Bahrain	1	250	39	20	18
Cyprus	1	22	--	--	5
Iran	8	1,162	40	93	105
Iraq	8	348	--	--	44
Israel	2	208	50	64	26
Jordan	1	100	4	--	9
Kuwait	3	624	28	54	47
Lebanon	2	38	7	--	7
Oman	1	76	--	--	15
Qatar	1	58	--	--	12
Saudi Arabia	8	1,614	88	77	185
Syria	2	242	--	43	29
United Arab Emirates	2	193	--	--	30
Yemen	2	120	--	--	9
Total	42	5,053	256	351	540
Africa					
Algeria	6	530	--	--	74
Angola	1	32	--	--	2
Cameroon	1	42	--	--	7
Congo	1	21	--	--	2
Cote d'Ivoire (Ivory Coast)	2	63	--	--	10
Egypt	8	532	--	16	34
Ethiopia	1	18	--	--	2
Gabon	1	17	--	7	1
Ghana	1	27	--	--	5
Kenya	1	90	--	--	10
Liberia	1	15	--	--	2
Libya	3	348	--	--	14
Madagascar	1	16	--	7	3
Morocco	2	155	6	--	27
Nigeria	4	433	83	--	70
Senegal	1	23	--	--	3
Sierra Leone	1	10	--	--	--
Somalia	1	10	--	--	--
South Africa	4	364	85	55	61
Sudan	1	22	--	--	2
Tanzania	1	17	--	--	3
Tunisia	1	34	--	--	3
Zaire	1	17	--	--	4
Zambia	1	24	--	--	5
Total	46	2,860	173	85	343
Far East & Oceania					
Australia	9	705	215	--	171
Bangladesh	1	31	--	--	2
Brunei	1	9	--	--	6
Burma	2	32	--	5	--
China	23	2,200	--	--	--
India	12	1,086	131	114	29
Indonesia	6	860	13	70	64
Japan	41	4,810	708	75	670
Korea, North	1	42	--	--	--
Korea, South	6	1,147	--	19	123
Malaysia	4	270	--	--	30
New Zealand	1	93	--	--	22
Pakistan	3	133	--	--	5
Philippines	4	279	23	--	29
Singapore	5	1,055	28	186	63
Sri Lanka	1	50	--	13	4
Taiwan	2	543	45	14	57
Thailand	3	314	10	18	45
Total	125	13,658	1,172	513	1,318
World Total	707	73,061	11,576	6,687	9,362

¹ Calendar day basis.

² Refinery cracking and reforming data for the United States are available only on a stream day basis. These figures have been converted to calendar days by reducing the stream day data by 5 percent. Thus, the United States cracking and reforming data are estimated.

--=Not applicable.

Note: Sum of components may not equal total due to rounding.

Sources: See sources at the end of this Section.

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Section 4

Natural Gas

Table 4.1. World Natural Gas Production, 1992

(Billion Cubic Feet)

Region Country	Gross Production	Vented, Flared	Reinjected	Marketed Production	Dry Gas Production
North America					
Canada.....	5,627	86	462	5,079	4,530
Mexico.....	1,312	49	0	1,263	924
United States.....	22,132	168	2,973	18,712	17,840
Total.....	29,071	303	3,435	25,054	23,294
Central & South America					
Argentina.....	735	84	27	624	542
Barbados.....	1	0	0	1	1
Bolivia.....	206	22	66	118	110
Brazil.....	280	51	57	172	130
Chile.....	167	24	85	58	55
Colombia.....	187	16	13	158	151
Ecuador.....	33	21	3	9	4
Peru.....	32	8	4	21	18
Trinidad and Tobago.....	263	69	0	194	194
Venezuela.....	1,500	123	480	897	763
Total.....	3,405	418	735	2,252	1,968
Western Europe					
Austria.....	53	0	0	53	51
Belgium.....	(s)	0	0	(s)	(s)
Denmark.....	224	9	70	145	145
France.....	143	0	0	143	111
Germany.....	694	0	0	694	677
Greece.....	4	(s)	0	4	4
Ireland.....	83	0	0	83	83
Italy.....	641	0	0	641	641
Netherlands.....	3,063	4	0	3,058	3,058
Norway.....	1,506	17	450	1,039	1,039
Spain.....	44	2	0	42	42
Switzerland.....	(s)	0	0	(s)	(s)
Turkey.....	7	(s)	0	7	7
United Kingdom.....	1,935	0	0	1,935	1,935
Former Yugoslavia.....	95	0	0	95	95
Total.....	8,492	32	520	7,939	7,889
Eastern Europe & Former U.S.S.R.					
Albania.....	4	0	0	4	4
Bulgaria.....	(s)	0	0	(s)	(s)
Former Czechoslovakia....	10	0	0	10	10
Hungary.....	174	0	0	174	174
Poland.....	142	0	0	142	142
Romania.....	782	0	0	782	782
Azerbaijan.....	310	35	0	275	275
Belarus.....	11	0	0	11	11
Georgia.....	1	0	0	1	1
Kazakhstan.....	322	0	0	322	286
Kyrgyzstan.....	3	0	0	3	2
Russia.....	23,006	390	0	22,616	22,616
Tajikistan.....	2	0	0	2	2
Turkmenistan.....	1,967	0	0	1,967	1,967
Ukraine.....	643	0	0	643	643
Uzbekistan.....	1,504	0	0	1,504	1,504
Total.....	28,881	425	0	28,456	28,420

See footnotes at end of table.

Table 4.1. World Natural Gas Production, 1992 (Continued)
 (Billion Cubic Feet)

Region Country	Gross Production	Vented, Flared	Reinjected	Marketed Production	Dry Gas Production
Middle East					
Bahrain.....	296	0	94	202	188
Iran.....	2,055	399	692	964	883
Iraq.....	110	4	0	106	101
Kuwait.....	127	18	0	109	93
Oman.....	215	22	62	131	117
Qatar.....	457	0	0	457	401
Saudi Arabia.....	2,334	413	177	1,745	1,201
Syria.....	177	34	11	132	127
United Arab Emirates.....	1,295	30	127	1,138	1,023
Total.....	7,067	919	1,163	4,985	4,133
Africa					
Algeria.....	4,486	141	2,148	2,197	1,971
Angola.....	65	45	0	20	20
Egypt.....	479	80	35	364	349
Gabon.....	95	67	21	7	4
Libya.....	503	76	166	260	239
Morocco.....	1	0	0	1	1
Nigeria.....	1,155	879	102	173	173
Tunisia.....	15	0	0	15	14
Total.....	6,798	1,289	2,473	3,037	2,771
Far East & Oceania					
Afghanistan.....	11	(s)	0	11	11
Australia.....	828	0	0	828	817
Bangladesh.....	216	0	0	216	206
Brunei.....	313	0	11	302	286
Burma.....	40	(s)	0	40	36
China.....	533	0	0	533	533
India.....	658	172	4	482	477
Indonesia.....	2,583	217	526	1,840	1,792
Japan.....	76	0	0	76	76
Malaysia.....	860	52	0	808	796
New Zealand.....	234	0	35	199	197
Pakistan.....	551	0	0	551	551
Taiwan.....	32	0	0	32	31
Thailand.....	272	0	0	272	249
Total.....	7,207	442	575	6,189	6,059
World Total.....	90,919	3,828	8,900	77,912	74,533

(s) = Value less than 500 million cubic feet.

Note: Sum of components may not be equal due to independent rounding.

Sources: See sources at the end of this Section.

Table 4.2. World Dry Natural Gas Supply and Disposition, 1992
 (Billion Cubic Feet)

Region Country	Dry Gas Production	Imports ¹	Exports ¹	Apparent Consumption ²
North America				
Canada.....	4,530	40	2,045	2,574
Mexico.....	924	92	0	1,015
United States.....	17,840	2,138	216	19,544
Total.....	23,294	2,269	2,261	23,133
Central & South America				
Argentina.....	542	78	0	620
Bolivia.....	110	0	78	32
Brazil.....	130	0	0	130
Chile.....	55	0	0	54
Colombia.....	151	0	0	151
Trinidad and Tobago.....	194	0	0	194
Venezuela.....	763	0	0	763
Other.....	22	0	0	22
Total.....	1,968	78	78	1,967
Western Europe				
Austria.....	51	181	0	224
Belgium.....	(s)	378	0	374
Denmark.....	145	0	55	86
Finland.....	0	104	0	104
France.....	111	1,117	37	1,139
Germany.....	677	2,246	55	2,858
Ireland.....	83	0	0	83
Italy.....	641	1,199	1	1,757
Netherlands.....	3,058	104	1,516	1,669
Norway.....	1,039	0	908	131
Spain.....	42	187	0	228
Switzerland.....	(s)	78	0	78
Turkey.....	7	157	0	159
United Kingdom.....	1,935	199	2	2,127
Former Yugoslavia.....	95	104	0	196
Other.....	4	45	0	49
Total.....	7,889	6,101	2,576	11,262
Eastern Europe & Former U.S.S.R.				
Bulgaria.....	(s)	186	0	186
Former Czechoslovakia....	10	402	0	411
Hungary.....	174	169	0	342
Poland.....	142	221	0	362
Romania.....	782	136	0	917
Armenia.....	0	66	0	66
Azerbaijan.....	275	246	0	521
Belarus.....	11	635	0	645
Estonia.....	0	30	0	30
Georgia.....	1	171	0	173
Kazakhstan.....	286	504	138	652
Kyrgyzstan.....	2	63	0	65
Latvia.....	0	56	0	56
Lithuania.....	0	114	0	114
Moldova.....	0	121	0	121
Russia.....	22,616	248	6,897	15,967
Tajikistan.....	2	59	0	61
Turkmenistan.....	1,967	0	1,658	309
Ukraine.....	643	3,132	12	3,826
Uzbekistan.....	1,504	63	222	1,345
Other.....	4	0	0	4
Total.....	28,420	6,622	8,927	26,174

See footnotes at end of table.

Table 4.2. World Dry Natural Gas Supply and Disposition, 1992 (Continued)
(Billion Cubic Feet)

Region Country	Dry Gas Production	Imports ¹	Exports ¹	Apparent Consumption ²
Middle East				
Bahrain.....	188	0	0	188
Iran.....	883	0	0	883
Iraq.....	101	0	0	101
Kuwait.....	93	0	0	93
Oman.....	117	0	0	117
Qatar.....	401	0	0	401
Saudi Arabia.....	1,201	0	0	1,201
Syria.....	127	0	0	127
United Arab Emirates.....	1,023	0	121	902
Total.....	4,133	0	121	4,012
Africa				
Algeria.....	1,971	0	1,241	730
Angola.....	20	0	0	20
Egypt.....	349	0	0	349
Gabon.....	4	0	0	4
Libya.....	239	0	65	174
Morocco.....	1	0	0	1
Nigeria.....	173	0	0	173
Tunisia.....	14	17	0	31
Total.....	2,771	17	1,306	1,482
Far East & Oceania				
Afghanistan.....	11	0	0	11
Australia.....	817	0	213	603
Bangladesh.....	206	0	0	206
Brunei.....	286	0	251	35
Burma.....	36	0	0	36
China.....	533	0	0	533
India.....	477	0	0	477
Indonesia.....	1,792	0	1,117	673
Japan.....	76	1,930	0	2,023
Korea, South.....	0	162	0	162
Malaysia.....	796	0	408	388
New Zealand.....	197	0	0	197
Pakistan.....	551	0	0	551
Taiwan.....	31	79	0	110
Thailand.....	249	0	0	249
Total.....	6,059	2,171	1,989	6,254
World Total.....	74,533	17,258	17,256	74,285

¹ Includes liquefied natural gas.

² Includes stock changes.

(s) = Value less than 500 million cubic feet.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 5 Coal

Table 5.1. World Coal Production, 1992
 (Thousand Short Tons)

Region Country	Primary ¹			Secondary ²		
	Anthracite	Bituminous	Lignite	Metallurgical Coke	Anthracite and Bituminous Briquets	Lignite Briquets
North America						
Canada.....	0	60,892	11,052	4,082	0	0
Mexico.....	0	6,104	0	2,321	0	0
United States.....	3,483	904,000	90,062	23,410	0	0
Total.....	3,483	970,996	101,114	29,813	0	0
Central & South America						
Argentina.....	0	237	0	770	0	0
Brazil.....	0	5,214	0	8,976	0	0
Chile.....	0	1,792	46	495	0	0
Colombia.....	0	25,693 ³	0	587	0	0
Cuba.....	0	0	0	17	0	0
Peru.....	99	62	0	33	0	0
Venezuela.....	0	2,675	0	0	0	0
Total.....	99	35,672	46	10,878	0	0
Western Europe						
Austria.....	0	1,952	0	1,616	0	0
Belgium.....	28	240	0	5,033	10	0
Finland.....	0	0	0	548	0	0
France.....	1,445	10,445	1,919	7,475	579	0
Germany.....	7,546	71,966	266,469	16,202	745	18,630
Greece.....	0	0	60,666	0	0	68
Ireland.....	0	7	0	0	0	0
Italy.....	0	122	1,331	5,954	0	0
Netherlands.....	0	0	0	3,214	0	0
Norway.....	0	495	0	0	0	0
Portugal.....	0	243	0	295	0	0
Spain.....	6,807	13,636	16,286	3,247	6	0
Sweden.....	0	41	0	1,261	0	0
Turkey.....	392	3,119	53,558	3,524	0	34
United Kingdom.....	1,737	91,823	0	7,555	611	0
Former Yugoslavia.....	0	10,627	60,294	1,650	0	0
Total.....	17,955	204,716	460,525	57,573	1,949	18,732
Eastern Europe & Former U.S.S.R.						
Albania.....	0	0	493	26	0	0
Bulgaria.....	84	4,091	29,260	803	0	1,553
Former Czechoslovakia.....	0	96,227	3,054	8,516	0	645
Hungary.....	0	7,219	10,232	791	35	751
Poland.....	0	218,609	0	12,203	0	105
Romania.....	0	5,768	35,904	3,193	166	0
Georgia.....	0	441	110	0	0	0
Kazakhstan.....	0	136,428	3,526	3,630	0	0
Kyrgyzstan.....	0	1,102	1,212	0	0	0
Russia.....	28,321	213,204	133,783	35,200	330	2,286
Tajikistan.....	0	0	220	0	0	0
Ukraine.....	31,517	109,318	6,392	30,030	0	0
Uzbekistan.....	0	198	6,098	0	0	0
Total.....	59,923	792,605	230,285	94,393	531	5,339

See footnotes at end of table.

Table 5.1. World Coal Production, 1992 (Continued)

(Thousand Short Tons)

Region Country	Primary ¹			Secondary ²		
	Anthracite	Bituminous	Lignite	Metallurgical Coke	Anthracite and Bituminous Briquets	Lignite Briquets
Middle East						
Iran.....	0	1,653	0	506	0	0
Total.....	0	1,653	0	506	0	0
Africa						
Algeria.....	0	17	0	0	0	0
Botswana.....	0	993	0	0	0	0
Cameroon.....	0	1	0	0	0	0
Egypt.....	0	0	0	1,357	0	0
Malawi.....	0	54	0	0	0	0
Morocco.....	635	0	0	0	0	0
Mozambique.....	0	14	0	0	0	0
Niger.....	0	187	0	0	0	0
Nigeria.....	0	105	0	0	0	0
South Africa.....	3,686	192,170	0	2,024	0	0
Swaziland.....	83	110	0	0	0	0
Tanzania.....	0	4	0	0	0	0
Zaire.....	0	141	0	0	0	0
Zambia.....	0	435	0	40	0	0
Zimbabwe.....	0	6,612	0	605	0	0
Total.....	4,403	200,844	0	4,026	0	0
Far East & Oceania						
Afghanistan.....	0	88	0	0	39	0
Australia.....	0	192,415	55,825	4,843	0	793
Bhutan.....	0	2	0	0	0	0
Burma.....	0	33	0	0	0	0
China.....	243,498	934,661	52,092	87,823	0	0
India.....	0	262,827	18,293	11,880	0	237
Indonesia.....	0	25,391	0	0	0	0
Japan.....	239	8,376	17	48,957	123	0
Korea, North.....	38,570	0	26,448	3,960	0	0
Korea, South.....	13,191	0	0	10,397	12,176	0
Laos.....	0	1	0	0	0	0
Malaysia.....	0	209	0	0	0	0
Mongolia.....	0	689	7,604	0	0	0
Nepal.....	0	0	11	0	0	0
New Zealand.....	193	3,064	224	1	0	0
Pakistan.....	0	3,387	0	811	0	0
Philippines.....	0	1,830	3	0	0	0
Taiwan.....	0	369	0	3,166	0	0
Thailand.....	24	0	16,899	0	0	0
Vietnam.....	5,281	0	0	0	0	0
Total.....	300,996	1,433,342	177,415	171,837	12,338	1,030
World Total.....	386,859	3,639,828	969,386	369,026	14,818	25,101

¹ Primary coal includes all coal mined and, when necessary, washed and sorted.

² Secondary coal (e.g. coke, briquets), is derived from primary coal.

³ Includes anthracite.

-- = Not applicable.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 5.2. World Anthracite Coal Production, 1980, 1985-1993

(Thousand Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
United States.....	6,056	4,708	4,292	3,560	3,555	3,348	3,506	3,445	3,483	4,306
Total.....	6,056	4,708	4,292	3,560	3,555	3,348	3,506	3,445	3,483	4,306
Central & South America										
Peru.....	89	93	90	90	110	107	112	90	99	104
Total.....	89	93	90	90	110	107	112	90	99	104
Western Europe										
Belgium.....	5,087	4,555	3,903	2,575	799	714	95	88	28	17
France.....	1,489	2,350	2,300	2,189	2,083	1,598	1,387	1,339	1,445	1,588
Germany.....	--	--	--	--	--	--	--	7,773	7,546	7,375
Germany, West.....	8,209	8,691	8,591	8,254	7,941	7,315	7,447	--	--	--
Spain.....	4,490	6,403	6,182	5,908	5,814	6,082	6,388	6,214	6,807	6,672
Turkey.....	223	455	499	512	657	429	420	419	392	403
United Kingdom.....	3,395	1,870	2,382	2,302	2,248	2,201	1,931	1,942	1,737	1,397
Total.....	22,893	24,323	23,858	21,740	19,542	18,339	17,669	17,776	17,955	17,451
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	107	91	88	78	72	69	47	42	84	79
Former U.S.S.R.....	80,579	78,595	78,705	78,815	79,697	74,957	69,005	61,399	--	--
Russia.....	--	--	--	--	--	--	--	--	28,321	26,007
Ukraine.....	--	--	--	--	--	--	--	--	31,517	27,219
Total.....	80,686	78,686	78,793	78,894	79,769	75,027	69,052	61,441	59,923	53,306
Africa										
Morocco.....	750	853	854	838	705	602	580	612	635	800
South Africa.....	3,895	5,411	5,498	5,788	5,456	4,637	4,036	2,964	3,686	3,577
Swaziland.....	184	166	172	150	165	165	153	123	83	85
Total.....	4,830	6,430	6,524	6,775	6,326	5,404	4,769	3,699	4,403	4,462
Far East & Oceania										
China.....	142,165	200,929	203,652	212,019	223,339	240,282	234,627	239,753	243,498	248,368
Japan.....	491	665	636	481	387	313	246	238	239	269
Korea, North.....	36,015	39,000	39,500	39,500	40,000	45,000	40,700	40,000	38,570	40,774
Korea, South.....	20,529	24,849	26,734	26,758	26,781	22,912	18,978	16,599	13,191	10,397
New Zealand.....	325	368	269	197	139	100	98	143	193	195
Thailand.....	1	2	3	8	15	9	21	24	24	35
Vietnam.....	5,842	5,872	7,109	7,521	7,667	4,220	5,100	4,772	5,281	6,775
Total.....	205,368	271,685	277,903	286,483	298,328	312,835	299,770	301,529	300,996	306,814
World Total.....	319,922	385,925	391,460	397,542	407,629	415,060	394,877	387,980	386,859	386,442

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

No production is reported for Middle East.

Sources: See sources at end of this Section.

Table 5.3. World Bituminous Coal Production, 1980, 1985-1993

(Thousand Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	37,314	56,275	54,582	56,408	64,463	65,785	64,963	68,487	60,892	65,025
Mexico.....	3,100	5,200	4,054	4,687	4,642	4,678	4,558	5,280	6,104	6,448
United States.....	776,484	806,508	809,669	836,775	861,610	890,942	937,479	906,025	904,000	851,569
Total.....	816,898	867,983	868,305	897,870	930,715	961,405	1,007,000	979,792	970,996	923,041
Central & South America										
Argentina.....	430	441	402	411	563	638	328	355	237	238
Brazil.....	9,150	8,500	8,326	8,265	7,273	7,205	5,065	5,648	5,214	4,814
Chile.....	1,053	1,450	1,800	1,721	2,314	2,148	2,406	2,977	1,792	1,310
Colombia.....	5,798	10,699	11,795	16,089	16,640	20,910	22,562	25,904	25,693	26,228
Peru.....	44	46	40	40	50	52	54	55	62	64
Venezuela.....	49	45	63	262	1,182	2,347	2,413	2,972	2,675	4,342
Total.....	16,523	21,181	22,426	26,788	28,022	33,299	32,829	37,912	35,672	36,995
Western Europe										
Austria.....	3,158	3,396	3,273	3,071	2,347	2,277	2,698	2,294	1,952	1,863
Belgium.....	6,558	7,670	5,862	5,638	3,791	2,739	1,143	701	240	83
France.....	19,991	14,310	13,566	12,908	12,254	14,192	12,336	12,026	10,445	9,451
Germany.....	--	--	--	--	--	--	--	--	74,936	71,966
Germany, West.....	96,386	91,877	90,219	85,313	82,176	80,429	79,019	--	--	--
Ireland.....	66	63	60	50	49	47	50	23	7	3
Italy.....	4	19	14	23	40	83	64	23	122	119
Norway.....	317	627	639	430	291	397	395	430	495	544
Portugal.....	196	262	214	287	253	284	310	298	243	217
Spain.....	16,833	18,255	17,842	14,995	15,001	14,997	15,128	13,589	13,636	13,425
Sweden.....	20	13	13	28	33	22	12	31	41	39
Turkey.....	4,112	3,974	3,887	3,815	3,589	3,349	3,026	5,742	3,119	2,582
United Kingdom.....	140,016	101,748	116,778	112,780	112,503	109,242	102,127	102,667	91,823	73,869
Former Yugoslavia.....	8,383	14,181	14,899	13,809	13,507	13,630	12,957	11,790	10,627	9,233
Total.....	296,041	256,396	267,265	253,146	245,834	241,690	229,265	224,552	204,716	174,774
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	6,518	6,090	5,783	5,894	5,394	5,210	4,194	3,813	4,091	3,913
Former Czechoslovakia.....	133,082	137,630	137,555	136,778	134,332	127,852	113,848	105,867	96,227	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	87,202
Slovakia.....	--	--	--	--	--	--	--	--	--	3,324
Hungary.....	18,983	18,359	17,798	17,219	16,800	8,830	7,942	7,740	7,219	6,437
Poland.....	253,517	274,903	285,872	293,443	293,770	274,965	237,350	231,193	218,609	213,600
Romania.....	9,599	10,407	10,479	10,962	11,026	10,078	5,606	4,827	5,768	5,417
Former U.S.S.R.....	528,999	548,951	569,123	576,950	581,579	560,856	640,222	472,671	--	--
Georgia.....	--	--	--	--	--	--	--	--	441	331
Kazakhstan.....	--	--	--	--	--	--	--	--	136,428	120,338
Kyrgyzstan.....	--	--	--	--	--	--	--	--	1,102	771
Russia.....	--	--	--	--	--	--	--	--	213,204	192,519
Ukraine.....	--	--	--	--	--	--	--	--	109,318	94,221
Uzbekistan.....	--	--	--	--	--	--	--	--	198	177
Total.....	950,698	996,341	1,026,610	1,041,247	1,042,902	987,790	1,009,162	826,112	792,605	728,251

See footnotes at end of table.

Table 5.3. World Bituminous Coal Production, 1980, 1985-1993 (Continued)
 (Thousand Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Iran.....	992	1,380	1,391	1,367	1,389	1,323	1,433	1,543	1,653	1,818
Total.....	992	1,380	1,391	1,367	1,389	1,323	1,433	1,543	1,653	1,818
Africa										
Algeria.....	4	9	10	9	11	18	12	18	17	17
Botswana.....	200	500	676	882	676	694	700	882	993	981
Cameroon.....	0	1	1	1	1	1	1	1	1	1
Malawi.....	(s)	4	18	18	25	32	40	54	54	55
Mozambique.....	228	39	55	47	50	46	44	46	46	16
Niger.....	22	166	137	181	171	188	190	173	187	172
Nigeria.....	194	153	159	127	90	89	99	99	105	112
South Africa.....	127,913	185,857	189,236	188,806	194,449	189,709	188,717	193,682	192,170	197,134
Swaziland.....	194	183	190	182	182	187	176	136	110	33
Tanzania.....	1	4	4	3	3	3	4	4	4	5
Zaire.....	152	133	131	134	136	138	139	141	141	148
Zambia.....	638	562	614	510	692	438	416	419	435	457
Zimbabwe.....	3,531	3,440	4,461	5,069	5,587	5,622	6,068	6,201	6,612	6,943
Total.....	133,078	191,053	195,692	195,970	202,073	197,166	196,606	201,857	200,844	206,073
Far East & Oceania										
Afghanistan.....	110	166	176	184	152	176	174	164	88	89
Australia.....	79,795	129,526	147,030	162,831	148,599	162,897	175,085	181,489	192,415	193,802
Bhutan.....	0	0	0	2	2	2	2	2	2	2
Burma.....	12	47	41	43	33	23	25	30	33	35
China.....	514,628	725,082	746,566	774,286	816,332	874,567	905,582	909,539	934,661	981,394
India.....	120,263	164,530	179,454	198,085	198,140	218,984	234,792	233,392	262,827	270,431
Indonesia.....	627	2,324	2,835	3,550	4,643	9,246	11,870	15,517	25,391	30,399
Japan.....	21,962	18,351	14,624	14,037	13,382	12,220	11,068	9,335	8,376	8,399
Laos.....	0	0	0	1	0	0	0	1	1	1
Malaysia.....	0	0	24	96	98	120	109	198	209	290
Mongolia.....	432	529	548	722	761	763	761	744	689	709
New Zealand.....	1,954	2,317	2,292	2,551	2,488	2,908	2,764	2,808	3,064	2,120
Pakistan.....	1,728	2,390	2,331	2,377	3,006	2,887	3,033	3,183	3,387	3,388
Philippines.....	363	1,391	1,362	1,316	1,472	1,360	1,370	1,391	1,830	1,688
Taiwan.....	2,837	2,048	1,901	1,652	1,350	864	520	444	369	315
Thailand.....	1	0	0	0	0	0	0	0	0	0
Total.....	744,714	1,048,702	1,099,184	1,161,733	1,190,460	1,287,018	1,347,155	1,358,239	1,433,342	1,493,064
World Total.....	2,958,945	3,383,035	3,480,873	3,578,121	3,641,394	3,709,691	3,823,450	3,630,007	3,639,828	3,564,016

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 short tons.

Notes: Sum of components may not equal total due to independent rounding.

Sources: See sources at end of this Section.

Table 5.4. World Lignite Coal Production, 1980, 1985-1993

(Thousand Short Tons)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	7,255	10,662	9,128	11,045	13,391	11,923	10,369	9,900	11,052	11,070
United States.....	47,160	72,422	76,354	78,427	85,101	86,439	88,090	86,514	90,062	89,549
Total.....	54,415	83,084	85,482	89,472	98,492	98,362	98,460	96,414	101,114	100,619
Central & South America										
Chile.....	44	39	40	40	44	42	44	44	46	51
Total.....	44	39	40	40	44	42	44	44	46	51
Western Europe										
France.....	2,851	2,053	2,355	2,270	2,204	2,390	2,522	2,167	1,919	1,700
Germany.....	--	--	--	--	--	--	--	307,989	266,469	244,426
Germany, East.....	284,503	344,093	343,109	340,333	341,808	331,564	274,392	--	--	--
Germany, West.....	143,148	133,069	126,060	119,989	119,735	121,118	118,597	--	--	--
Greece.....	25,571	39,560	42,163	49,160	50,582	57,172	57,206	58,086	60,666	56,653
Italy.....	2,130	2,172	1,713	1,058	1,763	1,691	1,054	1,036	1,331	1,198
Spain.....	15,547	23,728	22,426	16,796	17,635	24,224	24,629	16,291	16,286	14,708
Turkey.....	15,504	40,115	47,279	47,980	39,641	54,202	49,255	52,953	53,558	54,185
Former Yugoslavia.....	37,143	62,831	62,114	64,977	66,509	68,637	70,652	66,727	60,294	54,410
Total.....	526,398	647,621	647,219	642,563	639,877	660,998	598,305	505,250	460,525	427,281
Eastern Europe & Former U.S.S.R.										
Albania.....	1,563	2,315	2,388	2,352	2,407	2,417	2,282	1,433	493	331
Bulgaria.....	26,624	27,858	32,955	34,616	32,175	32,528	30,675	27,900	29,260	28,002
Former Czechoslovakia.....	4,162	3,914	3,524	4,059	3,976	4,011	3,643	3,403	3,054	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	847
Slovakia.....	--	--	--	--	--	--	--	--	--	6,436
Hungary.....	9,346	8,143	7,697	7,962	6,210	9,346	9,346	10,971	10,232	9,124
Romania.....	29,162	40,940	41,901	45,833	53,739	57,541	36,483	28,027	35,904	38,328
Former U.S.S.R.....	180,118	173,173	180,118	181,771	189,598	180,228	176,480	159,835	--	--
Georgia.....	--	--	--	--	--	--	--	--	110	50
Kazakhstan.....	--	--	--	--	--	--	--	--	3,526	3,031
Kyrgyzstan.....	--	--	--	--	--	--	--	--	1,212	1,102
Russia.....	--	--	--	--	--	--	--	--	133,783	117,694
Tajikistan.....	--	--	--	--	--	--	--	--	220	220
Ukraine.....	--	--	--	--	--	--	--	--	6,392	6,061
Uzbekistan.....	--	--	--	--	--	--	--	--	6,098	5,716
Total.....	250,975	256,343	268,583	276,593	288,106	286,072	258,909	231,569	230,285	216,941
Far East & Oceania										
Australia.....	36,261	42,307	39,766	46,081	47,839	53,230	50,694	54,439	55,825	52,508
China.....	26,797	35,516	35,296	36,597	40,455	47,157	50,155	49,373	52,092	63,149
India.....	5,013	8,570	8,705	9,367	9,367	10,913	15,432	15,554	18,293	20,718
Japan.....	28	17	14	13	14	15	17	17	17	17
Korea, North.....	11,023	14,330	15,432	16,535	19,842	22,046	24,251	25,353	26,448	27,598
Mongolia.....	4,393	6,661	7,239	7,837	8,724	8,099	7,937	7,826	7,604	7,390
Nepal.....	8	8	5	6	9	11	11	12	11	12
New Zealand.....	259	308	243	107	217	198	201	216	224	228
Philippines.....	0	0	0	3	3	3	3	3	3	3
Thailand.....	1,651	5,642	6,036	7,607	8,002	9,812	13,692	16,192	16,899	18,300
Total.....	85,433	113,358	112,736	124,153	134,472	151,484	162,393	168,984	177,415	189,922
World Total.....	917,265	1,100,444	1,114,060	1,132,821	1,160,991	1,196,957	1,118,110	1,002,262	969,386	934,813

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

No production is reported for Middle East.

No production is reported for Africa.

Sources: See sources at end of this Section.

Table 5.5. World Coal Supply and Disposition, 1992
 (Trillion (10^{12}) Btu)

Region Country	Production	Imports ¹	Exports ¹	Apparent Consumption ²
North America				
Canada.....	1,612	379	725	1,302
Mexico.....	118	7	1	132
United States ³	21,593	140	2,698	18,868
Total.....	23,323	526	3,424	20,302
Central & South America				
Argentina.....	5	30	2	32
Brazil.....	83	292	0	388
Chile.....	54	21	0	78
Colombia.....	601	0	407	166
Peru.....	4	7	0	11
Venezuela.....	67	10	64	13
Other.....	0	21	0	21
Total.....	815	380	473	710
Western Europe				
Austria.....	47	91	(s)	126
Belgium.....	5	352	37	306
Denmark.....	0	293	1	270
Finland.....	0	97	0	107
France.....	311	542	24	699
Germany.....	3,648	491	76	3,924
Greece.....	272	42	0	314
Ireland.....	(s)	78	1	75
Italy.....	15	452	5	455
Netherlands.....	0	384	91	294
Norway.....	12	25	4	33
Portugal.....	4	109	1	116
Spain.....	490	799	2	1,278
Sweden.....	1	70	1	76
Turkey.....	594	137	0	738
United Kingdom.....	1,952	513	29	2,348
Former Yugoslavia.....	744	18	(s)	762
Other.....	0	50	(s)	50
Total.....	8,093	4,542	274	11,972
Eastern Europe & Former U.S.S.R.				
Albania.....	5	6	1	9
Bulgaria.....	277	68	2	340
Former Czechoslovakia.....	2,052	65	163	1,946
Hungary.....	176	54	2	236
Poland.....	4,485	4	596	3,874
Romania.....	288	148	0	400
Armenia.....	0	4	0	4
Azerbaijan.....	0	1	(s)	1
Belarus.....	0	46	0	46
Estonia.....	0	66	1	62
Georgia.....	8	7	0	15
Kazakhstan.....	2,327	122	808	1,641
Kyrgyzstan.....	29	38	19	48
Latvia.....	0	23	3	20
Lithuania.....	0	26	0	21
Moldova.....	0	72	4	68
Russia.....	5,303	1,138	699	5,743
Tajikistan.....	2	14	0	16
Turkmenistan.....	0	17	0	17
Ukraine.....	2,558	170	140	2,588
Uzbekistan.....	54	42	4	92
Total.....	17,563	2,132	2,441	17,189

See footnotes at end of table.

Table 5.5. World Coal Supply and Disposition, 1992 (Continued)

(Trillion (10^{12}) Btu)

Region Country	Production	Imports ¹	Exports ¹	Apparent Consumption ²
Middle East				
Iran.....	43	13	0	56
Israel.....	0	122	0	122
Other.....	0	(s)	0	(s)
Total.....	43	136	0	179
Africa				
Algeria.....	(s)	38	0	38
Botswana.....	22	0	0	22
Egypt.....	0	30	1	30
Kenya.....	0	3	0	3
Malawi.....	1	(s)	0	1
Mauritius.....	0	2	0	2
Morocco.....	19	26	0	45
Mozambique.....	(s)	1	0	1
Niger.....	5	0	0	5
Nigeria.....	3	(s)	1	2
South Africa.....	4,184	13	1,043	3,146
Swaziland.....	5	0	0	5
Tunisia.....	0	4	0	4
Zaire.....	3	4	0	7
Zambia.....	9	0	(s)	9
Zimbabwe.....	161	2	6	157
Other.....	(s)	1	0	1
Total.....	4,413	124	1,051	3,478
Far East & Oceania				
Afghanistan.....	2	0	0	2
Australia.....	4,353	(s)	2,774	1,601
Bangladesh.....	0	9	0	9
Bhutan.....	(s)	1	(s)	1
Burma.....	1	(s)	0	1
China.....	22,268	42	431	21,834
Hong Kong.....	0	229	(s)	229
India.....	4,839	160	2	4,925
Indonesia.....	620	11	425	198
Japan.....	182	2,591	78	2,695
Korea, North.....	1,341	74	12	1,403
Korea, South.....	214	683	(s)	852
Malaysia.....	5	57	2	59
Mongolia.....	77	(s)	5	72
Nepal.....	(s)	2	0	3
New Caledonia.....	0	4	0	4
New Zealand.....	78	1	21	59
Pakistan.....	58	24	0	81
Philippines.....	31	20	0	51
Singapore.....	0	2	(s)	2
Taiwan.....	9	536	0	535
Thailand.....	159	12	0	173
Vietnam.....	129	(s)	42	92
Other.....	(s)	1	0	1
Total.....	34,366	4,459	3,793	34,883
World Total.....	88,617	12,299	11,456	88,713

¹ Includes coke.

² Sum of production plus imports minus exports (from this Table) minus stock change.

³ United States apparent consumption is calculated differently than described in footnote 2. United States apparent coal consumption does not include coke imports, exports, and stock change.

(s) = Value less than 0.5 trillion btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 6

Electricity

Table 6.1. World Net Conventional Thermal Electricity Generation, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	79.8	88.6	80.9	96.0	107.3	119.2	104.4	105.4	113.4	103.6
Mexico.....	46.0	65.5	73.7	82.0	84.2	88.7	90.8	95.2	91.5	92.0
United States ²	1,754.8	1,820.3	1,810.9	1,904.9	2,010.4	2,068.6	2,056.7	2,065.8	2,094.7	2,190.6
Other.....	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8
Total.....	1,881.1	1,975.0	1,966.2	2,083.6	2,202.6	2,277.1	2,252.7	2,267.1	2,300.3	2,386.9
Central & South America										
Argentina.....	22.2	17.7	20.9	22.4	29.6	30.5	24.0	28.1	27.8	28.0
Bahamas, The.....	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Barbados.....	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Bolivia.....	0.5	0.3	0.4	0.4	0.6	0.7	0.8	0.8	1.0	1.0
Brazil.....	5.7	5.6	9.5	8.5	7.7	7.7	7.0	7.7	8.1	8.5
Chile.....	4.4	3.5	3.3	3.3	5.1	7.7	6.0	6.6	7.1	7.1
Colombia.....	5.1	7.8	7.6	9.1	8.2	7.5	7.4	8.7	12.8	13.0
Costa Rica.....	(s)	0.1	(s)	0.1	0.1	(s)	(s)	0.2	0.6	0.6
Cuba.....	9.3	11.4	12.3	12.7	13.6	14.2	13.7	12.4	11.7	12.0
Dominican Republic.....	2.6	3.2	3.7	4.3	4.4	4.5	4.5	4.5	4.5	4.5
Ecuador.....	2.3	0.9	0.9	0.8	0.8	0.8	1.3	1.8	2.1	2.1
El Salvador.....	0.1	0.2	0.1	0.4	0.3	0.2	0.2	0.6	0.6	0.6
Guatemala.....	1.3	0.9	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Jamaica.....	1.9	2.1	2.1	2.3	2.3	2.4	2.4	2.4	2.4	2.5
Martinique.....	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7
Netherlands Antilles.....	1.0	1.1	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Nicaragua.....	0.5	0.5	0.5	0.6	0.6	0.4	0.6	0.6	0.8	0.9
Panama.....	0.8	0.5	0.5	0.7	0.4	0.4	0.5	0.8	1.1	1.1
Peru.....	3.0	2.6	2.9	3.0	2.9	2.8	3.1	2.8	3.2	3.2
Puerto Rico.....	13.1	11.4	11.9	12.7	13.3	13.2	14.1	14.5	15.2	15.3
Trinidad and Tobago.....	1.9	2.8	3.1	3.3	3.3	3.2	3.4	3.5	3.7	3.9
U.S. Virgin Islands.....	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
Uruguay.....	1.0	0.1	0.1	0.3	1.5	1.7	0.4	0.9	0.9	1.0
Venezuela.....	17.6	24.4	23.5	21.9	22.6	21.6	21.2	14.9	21.0	22.0
Other.....	2.0	2.0	2.6	2.7	2.9	2.8	2.9	3.0	3.1	3.1
Total.....	98.5	101.5	109.2	112.8	123.8	126.2	117.5	118.7	131.6	134.6
Western Europe										
Austria.....	11.9	12.2	12.1	12.9	11.7	13.1	16.8	17.6	14.1	13.7
Belgium.....	38.3	20.2	16.8	18.8	19.9	23.9	25.7	26.5	26.1	26.2
Denmark.....	25.1	25.6	28.6	27.4	25.5	20.8	23.4	33.4	27.9	31.0
Finland.....	22.0	17.1	16.7	18.7	12.3	20.3	22.7	23.6	21.5	25.6
France.....	118.0	52.3	40.5	37.4	35.7	48.5	45.1	57.8	48.1	32.8
Germany.....	--	--	--	--	--	--	--	342.7	327.3	329.5
Germany, East.....	85.3	99.3	102.6	101.2	104.9	105.1	97.3	--	--	--
Germany, West.....	305.1	262.4	267.6	265.0	263.2	251.3	261.6	--	--	--
Greece.....	17.9	22.9	22.8	24.9	27.4	29.5	30.2	29.7	32.0	33.6
Ireland.....	8.9	9.9	10.1	11.1	11.1	12.0	12.7	13.3	14.0	14.1
Italy.....	125.5	123.0	127.3	145.9	130.8	159.8	167.6	162.4	166.0	164.2
Luxembourg.....	0.8	0.4	0.5	0.4	0.5	0.5	0.5	0.6	0.5	0.5
Malta.....	0.5	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.1	1.1
Netherlands.....	58.0	56.9	60.6	62.8	53.0	66.8	65.9	68.4	70.7	68.4
Norway.....	0.1	0.3	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.5
Portugal.....	6.8	7.6	11.0	10.3	8.3	18.6	18.1	19.6	23.7	21.1
Spain.....	74.5	66.0	63.8	59.5	46.6	66.9	66.5	67.2	76.7	70.1
Sweden.....	10.1	6.7	6.9	6.5	6.1	5.3	5.0	6.7	7.5	6.5
Switzerland.....	0.9	0.8	0.9	1.0	0.4	1.1	1.1	1.3	1.5	1.0
Turkey.....	12.0	22.5	24.7	21.6	17.8	28.2	31.4	34.2	36.9	37.3
United Kingdom.....	228.9	217.4	223.3	229.7	227.2	225.5	233.7	233.2	227.6	216.4
Former Yugoslavia.....	29.3	43.7	43.6	47.0	50.4	51.2	54.7	52.1	42.5	40.0
Other.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total.....	1,180.1	1,068.1	1,081.9	1,103.7	1,054.2	1,150.2	1,181.9	1,192.0	1,166.2	1,134.0

See footnotes at end of table.

Table 6.1. World Net Conventional Thermal Electricity Generation, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.7	0.5	0.4	0.3	0.2	0.2	0.3	0.2	0.1	0.1
Bulgaria.....	23.4	24.6	25.7	26.7	24.7	25.4	24.1	21.9	20.7	20.5
Former Czechoslovakia.....	63.4	60.6	59.1	55.2	56.1	56.7	54.6	52.9	51.2	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	42.4
Slovakia.....	--	--	--	--	--	--	--	--	--	8.2
Hungary.....	22.3	19.0	19.3	17.5	14.7	14.6	13.6	15.1	16.4	17.8
Poland.....	111.1	125.8	128.3	133.3	131.8	133.2	125.0	123.4	121.4	120.0
Romania.....	51.4	56.3	60.8	59.1	58.0	59.4	50.1	40.1	39.9	38.2
Former U.S.S.R.....	1,037.1	1,170.0	1,144.6	1,178.1	1,178.0	1,209.2	1,204.1	1,173.0	--	--
Armenia.....	--	--	--	--	--	--	--	--	5.5	4.5
Azerbaijan.....	--	--	--	--	--	--	--	--	18.6	17.4
Belarus.....	--	--	--	--	--	--	--	--	35.2	32.2
Estonia.....	--	--	--	--	--	--	--	--	11.1	11.3
Georgia.....	--	--	--	--	--	--	--	--	7.2	2.9
Kazakhstan.....	--	--	--	--	--	--	--	--	70.6	65.9
Kyrgyzstan.....	--	--	--	--	--	--	--	--	2.5	1.0
Latvia.....	--	--	--	--	--	--	--	--	1.2	2.1
Lithuania.....	--	--	--	--	--	--	--	--	3.4	6.4
Moldova.....	--	--	--	--	--	--	--	--	10.2	7.5
Russia.....	--	--	--	--	--	--	--	--	673.9	628.0
Tajikistan.....	--	--	--	--	--	--	--	--	1.6	1.9
Turkmenistan.....	--	--	--	--	--	--	--	--	13.3	11.9
Ukraine.....	--	--	--	--	--	--	--	--	159.5	134.3
Uzbekistan.....	--	--	--	--	--	--	--	--	43.2	39.4
Total.....	1,309.3	1,456.8	1,438.2	1,470.1	1,463.5	1,498.8	1,471.9	1,426.6	1,306.8	1,213.8
Middle East										
Bahrain.....	1.6	2.8	3.0	3.1	3.3	3.3	3.3	3.3	3.3	3.3
Cyprus.....	1.0	1.2	1.3	1.4	1.6	1.7	1.9	2.0	2.3	2.3
Iran.....	15.7	29.0	28.8	29.6	30.4	33.5	42.4	43.5	43.9	44.0
Iraq.....	10.1	19.2	20.4	22.2	25.1	26.6	26.8	19.3	23.1	25.0
Israel.....	11.7	14.4	15.0	16.5	18.1	19.1	19.5	19.6	23.0	23.0
Jordan.....	1.0	2.3	2.8	2.3	2.5	3.2	3.5	3.5	4.1	4.2
Kuwait.....	8.8	14.7	16.2	17.3	18.8	20.2	17.8	10.2	10.5	11.0
Lebanon.....	1.8	3.1	3.4	3.8	3.4	2.0	1.1	1.9	2.0	2.1
Oman.....	0.9	2.7	3.4	3.7	4.1	4.4	5.0	5.2	5.9	6.0
Qatar.....	2.3	3.7	4.0	4.2	4.2	4.2	4.3	4.4	4.5	4.5
Saudi Arabia.....	17.7	31.6	34.8	38.2	39.7	44.6	43.9	44.8	45.7	46.0
Syria.....	1.2	5.6	5.9	5.6	4.5	5.3	5.5	5.6	5.7	5.7
United Arab Emirates.....	5.9	11.5	12.0	12.8	14.0	14.7	16.1	16.2	16.4	16.5
Yemen.....	0.5	0.9	1.1	1.2	1.6	1.6	1.6	1.6	1.7	1.8
Total.....	80.0	142.8	152.2	161.8	171.1	184.4	192.6	181.2	192.1	195.4
Africa										
Algeria.....	6.4	10.9	12.0	12.5	13.9	14.2	15.0	16.0	17.0	18.1
Angola.....	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Botswana.....	0.4	0.5	0.5	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Cote d'Ivoire (Ivory Coast).....	0.4	0.6	0.8	1.2	1.0	0.7	0.7	0.7	0.7	0.7
Egypt.....	8.6	24.3	25.6	28.6	27.6	23.9	27.7	32.2	33.2	35.0
Kenya.....	0.4	0.4	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1
Libya.....	4.5	11.1	12.5	14.7	15.0	15.1	15.8	15.9	15.9	16.1
Mauritius.....	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8
Morocco.....	3.4	6.1	6.6	6.9	7.5	7.4	8.2	8.1	8.8	9.0
Nigeria.....	4.1	7.0	7.8	7.8	8.1	8.1	8.1	8.1	8.1	8.1
Senegal.....	0.6	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7
South Africa.....	83.0	110.0	133.5	137.3	143.1	148.3	151.1	153.7	153.2	155.0
Tunisia.....	2.6	3.9	3.9	4.2	4.6	4.8	5.2	5.3	5.3	5.4
Zimbabwe.....	0.5	1.9	2.8	5.2	5.4	5.4	6.0	5.9	5.9	5.9
Other.....	4.2	4.2	4.2	4.4	4.7	4.8	4.7	4.7	4.7	4.8
Total.....	119.9	182.4	212.0	225.4	233.4	235.3	245.2	253.4	255.8	261.1

See footnotes at end of table.

Table 6.1. World Net Conventional Thermal Electricity Generation, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Far East & Oceania										
Afghanistan.....	0.2	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.2	0.2
American Samoa.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Australia.....	74.5	97.1	101.9	108.5	117.1	124.2	131.4	132.0	134.8	138.0
Bangladesh.....	2.0	3.9	4.4	5.1	5.8	6.1	6.7	7.6	8.2	8.5
Bhutan.....	(s)	(s)	(s)	(s)	0.0	0.0	(s)	(s)	(s)	(s)
Brunei.....	0.4	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.2	1.2
Burma.....	0.6	1.0	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Cambodia.....	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China.....	242.4	318.3	355.1	397.1	409.9	438.4	464.8	519.3	584.2	600.0
Cook Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Fiji.....	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
French Polynesia.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Guam.....	1.1	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Hong Kong.....	11.8	18.1	20.1	22.3	24.0	25.7	27.2	29.9	32.8	33.0
India.....	69.7	119.7	133.9	156.5	166.9	189.8	198.9	220.4	236.2	240.0
Indonesia.....	10.5	22.2	24.5	27.0	29.3	31.0	33.0	33.7	34.6	35.0
Japan.....	381.6	395.3	393.1	419.7	449.1	483.8	521.0	530.1	542.7	513.8
Kiribati.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Korea, North.....	11.7	18.8	19.7	19.8	20.2	20.4	20.4	20.4	20.0	20.0
Korea, South.....	29.8	35.2	30.3	27.5	39.3	40.0	45.5	53.8	65.4	75.5
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Macau.....	0.2	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0
Malaysia.....	8.8	11.2	11.3	11.6	12.8	15.3	17.9	22.5	25.4	25.5
Maldives.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mongolia.....	1.5	2.5	2.8	3.0	3.1	3.4	3.3	3.2	3.1	3.1
Nauru.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nepal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Caledonia.....	1.0	0.6	0.7	0.7	0.6	0.6	0.6	0.8	0.8	0.8
New Zealand.....	2.1	6.2	4.9	5.3	4.9	6.4	5.7	7.0	6.5	7.4
Niue.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Pakistan.....	5.9	14.0	15.0	16.7	20.4	21.9	25.1	26.9	29.1	30.0
Papua New Guinea.....	0.9	1.1	1.1	1.3	1.2	1.2	1.3	1.3	1.3	1.3
Philippines.....	11.6	11.6	10.9	11.2	11.9	13.2	13.9	11.1	11.1	11.0
Samoa, Western.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Singapore.....	6.5	9.3	9.9	11.1	12.2	13.2	14.7	15.6	16.5	17.0
Solomon Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	0.2	0.1	(s)	0.5	0.2	0.1	(s)	0.2	0.6	0.6
Taiwan.....	31.3	17.7	25.8	26.6	36.1	46.5	46.4	55.2	59.7	70.1
Thailand.....	12.3	19.3	19.2	24.4	28.4	31.5	38.7	45.0	52.1	53.0
Tonga.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
U.S. Pacific Islands.....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Vanuatu.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	2.3	3.7	3.8	3.9	4.5	3.7	3.2	3.4	3.7	3.7
Total.....	922.2	1,130.0	1,192.9	1,304.4	1,402.7	1,521.5	1,624.8	1,744.9	1,874.0	1,892.5
World Total.....	5,591.1	6,056.5	6,152.7	6,461.7	6,651.2	6,993.4	7,086.5	7,183.9	7,226.8	7,218.2

¹ Preliminary.

² U.S. data include purchases from nonutilities.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Thermal generation consist of electricity generated from coal, oil, and gas.

Generation data consist of both utility and nonutility sources.

Sources: See sources at end of this Section.

Table 6.2. World Total Net Electricity Consumption, 1980, 1985-1993
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Canada.....	314.9	374.4	389.4	404.0	424.8	438.8	432.5	434.8	439.1	448.2
Mexico.....	59.7	86.6	88.8	95.3	100.3	108.1	111.7	116.2	111.9	112.0
United States.....	2,094.4	2,324.0	2,368.8	2,457.3	2,578.1	2,646.8	2,712.6	2,762.0	2,763.4	2,861.5
Other.....	0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Total.....	2,469.5	2,785.4	2,847.5	2,957.2	3,103.8	3,194.4	3,257.4	3,313.7	3,315.1	3,422.4
Central & South America										
Argentina.....	36.8	40.5	43.8	47.0	46.9	45.7	46.4	49.5	53.2	54.0
Bahamas, The.....	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9
Bolivia.....	1.4	1.4	1.4	1.4	1.7	1.8	1.9	2.1	2.2	2.2
Brazil.....	129.3	178.9	197.2	203.8	214.9	225.1	228.6	242.1	245.8	249.1
Chile.....	10.9	12.9	13.6	14.2	15.3	16.0	16.6	18.1	20.2	20.6
Colombia.....	18.1	27.3	30.3	28.2	30.2	31.7	32.4	33.5	32.9	31.1
Costa Rica.....	2.0	2.5	2.7	3.0	3.1	3.2	3.4	3.5	3.7	3.7
Cuba.....	8.7	10.7	11.5	11.9	12.7	13.3	12.8	11.6	10.9	11.2
Dominican Republic.....	2.9	3.9	4.3	4.9	4.9	4.9	5.0	5.0	5.0	5.0
Ecuador.....	3.0	4.4	4.8	4.9	5.1	5.2	5.8	6.3	6.5	6.4
El Salvador.....	1.4	1.6	1.7	1.8	1.9	1.9	2.1	2.1	2.3	2.3
Guatemala.....	1.5	1.5	1.7	1.8	2.0	2.1	2.1	2.1	2.1	2.2
Honduras.....	0.8	1.1	1.5	1.4	1.9	2.0	2.3	2.3	2.3	2.3
Jamaica.....	1.9	2.0	2.1	2.2	2.2	2.4	2.4	2.4	2.4	2.4
Netherlands Antilles.....	0.9	1.0	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8
Nicaragua.....	0.9	1.1	1.1	1.3	1.3	1.4	1.4	1.4	1.5	1.5
Panama.....	1.6	2.3	2.5	2.6	2.5	2.5	2.6	2.8	2.9	2.7
Paraguay.....	0.7	3.7	1.1	2.0	1.7	0.4	0.3	0.3	0.4	0.1
Peru.....	9.3	11.1	12.0	12.8	12.3	12.2	12.6	13.2	11.9	10.4
Puerto Rico.....	12.4	10.8	11.3	12.0	12.6	12.5	13.4	13.8	14.4	14.5
Suriname.....	1.4	1.1	1.1	0.6	0.8	1.2	1.4	1.3	1.3	1.3
Trinidad and Tobago.....	1.8	2.6	2.9	3.1	3.1	3.0	3.1	3.3	3.4	3.6
U.S. Virgin Islands.....	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Uruguay.....	3.1	3.4	3.7	4.0	4.3	4.1	5.6	4.6	4.8	5.0
Venezuela.....	29.7	43.0	45.0	48.8	52.5	52.0	53.7	54.5	62.5	66.6
Other.....	1.9	2.5	2.9	3.1	3.4	3.5	3.6	3.8	3.9	3.9
Total.....	284.0	372.9	402.3	419.1	439.4	450.5	462.0	481.9	499.0	504.7
Western Europe										
Austria.....	33.6	37.8	38.2	30.0	40.8	42.1	44.0	45.9	45.6	46.1
Belgium.....	44.3	49.4	50.4	52.7	54.7	56.3	58.2	60.8	63.1	63.6
Denmark.....	22.2	24.4	26.9	28.1	28.2	29.2	29.2	29.8	30.6	31.2
Finland.....	37.2	48.7	49.4	52.9	48.3	56.5	59.1	58.5	59.3	61.5
France.....	235.9	278.4	292.5	301.5	307.9	314.8	322.9	346.6	352.6	354.1
Germany.....	--	--	--	--	--	--	--	461.4	455.3	459.0
Germany, East.....	93.4	106.0	108.2	109.5	111.1	110.4	97.7	--	--	--
Germany, West.....	346.0	377.7	380.6	388.5	398.0	379.7	386.9	--	--	--
Greece.....	20.4	24.7	25.5	26.4	28.0	29.6	30.4	31.1	32.4	34.1
Iceland.....	2.9	3.6	3.8	3.9	4.1	4.2	4.1	4.1	4.2	4.3
Ireland.....	9.1	10.0	10.3	11.0	11.1	11.8	12.4	13.0	13.8	13.9
Italy.....	169.0	184.4	188.4	197.9	193.0	216.4	222.1	227.7	231.5	233.7
Luxembourg.....	3.6	4.0	4.0	4.1	4.3	4.4	4.5	4.7	4.5	4.7
Malta.....	0.5	0.7	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.0
Netherlands.....	57.3	61.4	62.2	65.1	58.4	70.6	72.7	75.8	78.0	78.0
Norway.....	76.6	94.1	91.1	95.3	95.2	94.7	96.2	99.2	99.3	102.3
Portugal.....	15.5	19.1	19.9	21.0	21.3	23.8	25.3	26.6	27.6	27.7
Spain.....	99.8	115.1	117.2	117.3	119.3	128.1	133.0	136.4	138.7	139.0
Sweden.....	87.6	121.8	119.9	127.7	128.2	128.8	129.9	131.4	129.7	130.3
Switzerland.....	34.8	40.2	41.2	42.5	43.7	45.9	47.0	48.1	47.8	46.8
Turkey.....	22.9	34.1	34.6	37.7	43.4	43.2	49.7	52.9	58.6	65.7
United Kingdom.....	246.6	256.0	264.5	273.9	281.1	286.6	289.1	296.6	298.7	298.8
Former Yugoslavia.....	52.7	67.7	70.3	72.2	72.9	73.0	72.8	65.5	60.5	59.0
Other.....	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total.....	1,712.1	1,959.4	2,000.0	2,060.0	2,094.1	2,151.3	2,188.6	2,217.4	2,232.8	2,255.0

See footnotes at end of table.

Table 6.2. World Total Net Electricity Consumption, 1980, 1985-1993 (Continued)
(Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	2.9	2.9	2.9	3.5	3.3	3.4	3.4	2.7	2.6	3.1
Bulgaria.....	34.4	40.9	40.6	42.4	43.8	44.4	40.5	36.3	33.2	33.8
Former Czechoslovakia.....	69.3	75.0	76.8	78.7	79.7	81.1	80.7	76.4	74.6	--
Czech Republic.....	--	--	--	--	--	--	--	--	--	50.3
Slovakia.....	--	--	--	--	--	--	--	--	--	19.4
Hungary.....	28.2	34.3	35.1	36.7	36.9	37.0	36.3	33.8	31.2	31.2
Poland.....	106.1	118.5	122.9	129.4	130.9	129.1	118.3	115.3	112.2	111.6
Romania.....	59.1	66.6	70.9	70.4	73.5	74.7	66.2	55.5	49.8	48.1
Former U.S.S.R.....	1,184.9	1,408.1	1,375.1	1,427.9	1,459.9	1,491.0	1,488.4	1,475.3	--	--
Armenia.....	--	--	--	--	--	--	--	--	6.5	6.1
Azerbaijan.....	--	--	--	--	--	--	--	--	18.9	18.4
Belarus.....	--	--	--	--	--	--	--	--	32.5	29.8
Estonia.....	--	--	--	--	--	--	--	--	10.3	10.5
Georgia.....	--	--	--	--	--	--	--	--	12.8	8.6
Kazakhstan.....	--	--	--	--	--	--	--	--	72.6	67.8
Kyrgyzstan.....	--	--	--	--	--	--	--	--	10.8	10.1
Latvia.....	--	--	--	--	--	--	--	--	3.4	5.1
Lithuania.....	--	--	--	--	--	--	--	--	16.3	17.5
Moldova.....	--	--	--	--	--	--	--	--	9.4	7.0
Russia.....	--	--	--	--	--	--	--	--	886.3	850.6
Tajikistan.....	--	--	--	--	--	--	--	--	16.6	16.2
Turkmenistan.....	--	--	--	--	--	--	--	--	12.3	11.0
Ukraine.....	--	--	--	--	--	--	--	--	215.0	197.5
Uzbekistan.....	--	--	--	--	--	--	--	--	46.1	43.3
Total.....	1,484.8	1,746.2	1,724.3	1,789.1	1,828.0	1,860.7	1,833.8	1,795.4	1,673.6	1,597.0
Middle East										
Bahrain.....	1.4	2.6	2.8	2.9	3.0	3.1	3.1	3.1	3.1	3.1
Cyprus.....	0.9	1.2	1.2	1.3	1.5	1.6	1.7	1.8	2.1	2.1
Iran.....	19.8	32.8	32.5	33.4	34.2	37.3	44.7	45.8	46.8	47.2
Iraq.....	10.0	18.4	19.5	21.2	24.0	25.3	25.5	18.2	22.1	23.9
Israel.....	10.7	13.2	13.6	15.0	16.4	17.4	17.7	17.9	21.0	21.1
Jordan.....	0.9	2.2	2.4	1.8	2.3	3.0	3.2	3.4	4.0	4.1
Kuwait.....	8.2	13.7	15.1	16.1	17.5	18.8	16.5	9.5	9.8	10.2
Lebanon.....	2.7	3.7	4.2	4.8	3.9	2.6	1.7	2.2	2.3	2.4
Oman.....	0.8	2.5	3.2	3.4	3.9	4.1	4.7	4.8	5.5	5.6
Qatar.....	2.1	3.5	3.8	3.9	3.9	3.9	4.0	4.1	4.1	4.2
Saudi Arabia.....	16.5	29.4	32.4	35.5	36.9	41.5	40.8	41.7	42.5	42.8
Syria.....	3.4	7.0	7.0	7.1	8.6	9.2	10.3	11.0	12.2	12.4
United Arab Emirates.....	5.5	10.7	11.2	11.9	13.0	13.6	14.9	15.1	15.3	15.3
Yemen.....	0.4	0.8	1.0	1.1	1.5	1.5	1.5	1.5	1.6	1.6
Total.....	83.4	141.6	149.8	159.4	170.6	182.9	190.4	180.2	192.4	196.0
Africa										
Algeria.....	6.2	10.7	11.3	12.1	13.1	13.4	14.0	14.5	15.1	16.0
Angola.....	1.4	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8
Cameroon.....	1.3	2.2	2.2	2.2	2.4	2.5	2.5	2.5	2.5	2.5
Cote d'Ivoire (Ivory Coast).....	1.6	1.8	1.9	2.2	2.1	2.1	2.1	1.6	1.7	1.7
Egypt.....	17.0	30.0	31.1	34.2	32.9	29.6	34.9	39.1	39.8	41.4
Ghana.....	4.5	2.6	3.9	4.1	4.2	4.6	5.1	5.4	5.4	5.4
Kenya.....	1.7	2.5	2.3	2.4	2.7	2.8	3.0	3.1	3.1	3.2
Libya.....	4.2	10.3	11.6	13.6	14.0	14.1	14.7	14.8	14.8	15.0
Morocco.....	4.6	6.1	6.8	7.2	7.9	8.0	8.8	9.3	10.0	10.1
Nigeria.....	6.3	9.1	10.1	10.1	10.3	10.3	10.4	10.4	10.4	10.4
South Africa.....	78.1	107.9	132.9	134.1	143.4	148.9	147.4	150.2	150.0	148.9
Tunisia.....	2.4	3.7	3.7	4.0	4.3	4.4	4.8	5.0	5.0	5.0
Zaire.....	4.0	4.6	4.8	4.8	4.9	5.5	5.5	5.5	5.5	5.5
Zambia.....	5.7	6.1	6.0	6.3	6.3	4.8	5.8	5.4	5.8	5.8
Zimbabwe.....	7.0	7.3	7.9	8.1	8.3	8.4	9.8	10.1	9.9	9.9
Other.....	21.5	11.7	12.3	12.9	13.2	13.8	14.1	15.6	15.7	16.7
Total.....	167.5	218.4	250.4	259.8	271.5	274.7	284.5	294.1	296.1	299.3

See footnotes at end of table.

Table 6.2. World Total Net Electricity Consumption, 1980, 1985-1993 (Continued)
 (Billion Kilowatthours)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Far East & Oceania										
Australia.....	81.4	103.4	108.8	114.1	122.1	129.5	136.1	138.2	140.0	144.4
Bangladesh.....	2.5	4.3	4.5	5.2	6.0	6.5	7.1	7.8	8.4	8.6
Bhutan.....	(s)	(s)	(s)	0.0	0.1	(s)	(s)	0.1	0.1	0.1
Brunei.....	0.4	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.1	1.1
Burma.....	1.3	1.9	2.0	2.1	2.0	2.2	2.4	2.4	2.4	2.4
Cambodia.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China.....	279.9	383.0	419.3	463.7	483.1	518.2	550.8	601.0	670.4	698.1
Fiji.....	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
French Polynesia.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Guam.....	1.0	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Hong Kong.....	10.7	15.8	17.5	19.4	20.9	22.1	23.5	24.7	25.6	25.7
India.....	110.9	162.6	178.6	194.5	214.4	238.1	257.1	278.4	291.0	293.4
Indonesia.....	12.5	26.5	29.5	32.4	35.2	36.9	39.1	39.4	40.4	40.9
Japan.....	510.7	584.4	588.9	635.8	664.2	697.9	737.8	771.6	774.9	781.0
Korea, North.....	31.6	43.3	45.0	45.2	47.8	48.2	48.2	48.2	46.5	46.5
Korea, South.....	32.5	50.8	56.7	64.9	75.0	83.2	94.9	104.5	115.2	127.1
Laos.....	0.1	0.1	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2
Macau.....	0.2	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.0
Malaysia.....	9.6	14.0	14.1	15.3	17.1	18.9	20.3	25.0	28.3	28.8
Mongolia.....	1.7	2.5	2.7	2.8	3.0	3.3	3.2	3.1	3.0	3.0
Nepal.....	0.2	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8
New Caledonia.....	1.2	1.0	1.0	0.9	1.1	1.1	1.0	1.0	1.0	1.1
New Zealand.....	21.2	24.9	26.0	26.5	27.2	28.1	28.7	29.7	27.0	28.3
Pakistan.....	13.5	24.6	27.0	30.0	34.5	36.0	39.2	42.3	46.5	48.7
Papua New Guinea.....	1.1	1.4	1.5	1.6	1.5	1.6	1.6	1.6	1.6	1.6
Philippines.....	15.9	20.3	19.8	19.3	21.1	22.9	23.3	20.2	19.3	19.0
Singapore.....	6.0	8.6	9.2	10.3	11.4	12.3	13.7	14.5	15.3	15.8
Sri Lanka.....	1.5	2.3	2.4	2.5	2.6	2.6	2.9	3.1	3.2	3.0
Taiwan.....	39.1	48.9	54.9	60.9	66.6	74.6	80.1	87.7	92.0	100.7
Thailand.....	13.4	22.0	23.7	26.8	30.3	35.1	41.2	46.8	52.9	53.4
U.S. Pacific Islands.....	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Vietnam.....	3.3	5.0	5.1	5.4	6.0	7.0	7.9	8.4	8.8	9.0
Other.....	1.1	1.2	1.3	1.4	1.3	1.3	1.3	1.3	1.0	0.9
Total.....	1,205.2	1,556.0	1,643.0	1,784.7	1,898.1	2,031.9	2,166.0	2,305.5	2,419.8	2,486.3
World Total.....	7,406.5	8,779.9	9,017.3	9,429.3	9,805.4	10,146.4	10,382.6	10,588.2	10,628.7	10,760.8

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption equals generation plus imports minus exports minus distribution losses.

Sources: See sources at end of this Section.

Table 6.3. World Electricity Installed Capacity by Type, January 1, 1993
 (Million Kilowatts)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
North America					
Canada.....	32	62	14	(s)	108
Mexico.....	19	8	1	1	29
United States.....	501	93	99	2	695
Other.....	(s)	0	0	0	(s)
Total.....	553	163	114	2	832
Central & South America					
Argentina.....	10	6	1	0	17
Brazil.....	2	48	1	5	55
Chile.....	2	3	0	0	5
Colombia.....	2	8	0	0	10
Cuba.....	4	(s)	0	0	4
Paraguay.....	(s)	6	0	0	7
Peru.....	2	2	0	0	4
Puerto Rico.....	4	(s)	0	0	4
Venezuela.....	8	11	0	0	19
Other.....	9	6	0	(s)	15
Total.....	43	91	2	5	140
Western Europe					
Austria.....	6	11	0	0	17
Belgium.....	7	1	5	(s)	14
Denmark.....	10	(s)	0	(s)	10
Finland.....	8	3	2	0	13
France.....	22	25	58	(s)	105
Germany.....	84	9	23	(s)	115
Greece.....	6	3	0	(s)	9
Italy.....	42	19	0	(s)	62
Netherlands.....	17	(s)	1	(s)	18
Norway.....	(s)	27	0	0	27
Portugal.....	5	4	0	(s)	8
Spain.....	20	16	7	0	44
Sweden.....	8	16	10	(s)	35
Switzerland.....	1	12	3	(s)	15
Turkey.....	10	8	0	(s)	19
United Kingdom.....	50	4	11	(s)	65
Former Yugoslavia.....	8	5	1	0	14
Other.....	4	3	0	(s)	7
Total.....	309	166	121	2	597
Eastern Europe & Former U.S.S.R.					
Czech Republic.....	11	1	2	0	14
Poland.....	29	2	0	0	31
Romania.....	16	6	0	0	22
Slovakia.....	3	2	2	0	6
Armenia.....	4	(s)	0	0	5
Azerbaijan.....	4	1	0	0	5
Belarus.....	7	(s)	0	0	7
Estonia.....	3	0	0	0	3
Georgia.....	2	3	0	0	4
Kazakhstan.....	15	2	(s)	0	17
Kyrgyzstan.....	1	3	0	0	4
Latvia.....	1	1	0	0	2
Lithuania.....	3	1	3	0	6
Moldova.....	3	(s)	0	0	3
Russia.....	150	43	20	(s)	213
Tajikistan.....	1	3	0	0	4
Turkmenistan.....	2	0	0	0	2
Ukraine.....	37	5	13	0	54
Uzbekistan.....	10	2	0	0	12
Other.....	12	3	4	0	19
Total.....	313	77	45	(s)	435

See footnotes at end of table.

Table 6.3. World Electricity Installed Capacity by Type, January 1, 1993 (Continued)
 (Million Kilowatts)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
Middle East					
Bahrain.....	1	0	0	0	1
Cyprus.....	1	0	0	0	1
Iran.....	17	2	0	0	19
Iraq.....	6	1	0	0	7
Israel.....	4	(s)	0	0	4
Jordan.....	1	(s)	0	(s)	1
Kuwait.....	7	0	0	0	7
Lebanon.....	1	(s)	0	0	1
Oman.....	2	0	0	0	2
Qatar.....	2	0	0	0	2
Saudi Arabia.....	18	0	0	0	18
Syria.....	3	1	0	0	4
United Arab Emirates.....	5	0	0	0	5
Yemen.....	1	0	0	0	1
Total.....	68	4	0	(s)	72
Africa					
Algeria.....	5	(s)	0	0	5
Angola.....	(s)	(s)	0	0	1
Cameroon.....	(s)	1	0	0	1
Cote d'Ivoire (Ivory Coast).....	(s)	1	0	0	1
Egypt.....	9	3	0	0	12
Ghana.....	(s)	1	0	0	1
Kenya.....	(s)	1	0	(s)	1
Libya.....	5	0	0	0	5
Morocco.....	2	1	0	0	3
Mozambique.....	(s)	2	0	0	2
Nigeria.....	3	1	0	0	5
South Africa.....	24	1	2	0	26
Sudan.....	(s)	(s)	0	0	1
Tanzania.....	(s)	(s)	0	0	(s)
Tunisia.....	1	(s)	0	0	1
Zaire.....	(s)	3	0	0	3
Zambia.....	(s)	2	0	0	2
Zimbabwe.....	1	1	0	0	2
Other.....	2	2	0	(s)	4
Total.....	55	19	2	(s)	76
Far East & Oceania					
Australia.....	27	7	0	(s)	35
Bangladesh.....	3	(s)	0	0	3
Burma.....	1	(s)	0	0	1
China.....	120	42	(s)	0	162
Hong Kong.....	9	0	0	0	9
India.....	60	20	2	(s)	81
Indonesia.....	10	2	0	(s)	12
Japan.....	131	40	35	(s)	205
Korea, North.....	5	5	0	0	10
Korea, South.....	17	2	8	0	27
Malaysia.....	5	2	0	0	7
New Zealand.....	2	5	0	(s)	8
Pakistan.....	7	3	(s)	0	10
Philippines.....	4	2	0	1	7
Singapore.....	4	0	0	0	4
Sri Lanka.....	(s)	1	0	0	1
Taiwan.....	14	3	5	0	21
Thailand.....	10	2	0	0	13
Vietnam.....	2	1	0	(s)	2
Other.....	3	1	0	0	4
Total.....	432	138	50	2	621
World Total.....	1,773	658	332	10	2,774

¹ Thermal capacity consists of coal, oil, and gas.

² Geothermal and Other Capacity consists of geothermal, solar, biomass, and wind sources.

(s)=Value less than 500 thousand kilowatts.

Note: Capacity data consist of both utility and nonutility sources. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 7 Prices

Table 7.1. Selected Crude Oil Prices, 1980, 1985-1994
(U.S. Dollars per Barrel)

Region Country Crude Type (API Gravity)	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
North America											
Canada											
Lloydminster (22)	26.60	24.32	21.41	14.03	15.25	9.97	14.98	19.27	13.00	15.95	11.58
Mexico											
Isthmus (33)	32.00	29.00	26.21	17.00	14.83	14.53	19.90	24.80	15.80	17.25	11.86
United States											
West Texas Int (40)	NA	28.38	28.00	17.85	16.55	16.95	21.38	23.48	17.61	17.77	14.20
Ref Acq Cost of US Imp Crude ¹ ..	30.75	27.49	24.93	16.45	15.45	16.04	20.51	22.30	16.10	16.78	12.93
Central & South America											
Colombia											
Cano Limon (30)	(s)	(s)	(s)	17.50	15.85	15.20	20.15	24.95	15.73	16.58	11.72
Ecuador											
Oriente (30)	33.50	27.50	26.15	15.86	15.46	13.56	18.81	22.87	13.94	15.62	11.60
Venezuela											
Tia Juana Light (31)	25.20	27.88	27.10	15.10	17.62	12.27	24.69	28.62	19.67	17.97	12.97
Western Europe											
Norway											
Ekofisk Blend (42)	32.50	28.50	26.61	16.86	17.60	15.85	20.75	27.25	18.00	18.15	13.20
United Kingdom											
Brent Blend (38)	26.02	28.65	26.00	18.25	18.00	15.80	21.00	27.20	17.75	17.90	13.15
Middle East											
Iran											
Iranian Light (34)	30.37	28.00	28.05	16.14	15.55	12.75	18.20	23.65	15.50	16.70	12.40
Iraq											
Kirkuk Blend (36)	29.29	29.83	28.18	17.60	16.20	14.40	19.45	NA	NA	NA	NA
Kuwait											
Kuwait Blend (31)	27.50	27.55	27.10	16.70	16.67	12.30	17.35	NA	NA	15.30	11.10
Saudi Arabia											
Arabian Light (34)	26.00	29.00	28.00	16.15	17.52	13.15	18.40	24.00	15.90	16.80	12.40
United Arab Emirates											
Murban (39)	29.56	29.56	28.15	15.55	17.92	13.70	19.05	24.65	16.80	18.15	14.09
Africa											
Algeria											
Saharan Blend (44)	30.00	30.50	29.50	17.30	18.87	16.10	21.15	28.85	18.80	18.60	13.80
Angola											
Cabinda (32)	NA	NA	NA	16.85	16.40	14.40	19.65	25.35	16.65	17.35	12.28
Libya											
Es Sider (37)	34.50	30.15	30.15	16.95	18.52	15.40	20.40	26.90	17.20	17.55	12.55
Nigeria											
Bonny Light (37)	29.97	28.00	28.65	17.13	18.92	15.05	21.20	27.80	18.20	18.50	13.50
Far East & Oceania											
China											
Daqing (33)	NA	28.45	25.95	12.80	17.70	15.30	18.15	26.10	18.50	19.00	13.20
Indonesia											
Minas (34)	27.50	29.53	28.53	16.28	17.56	15.50	18.55	26.50	18.65	19.10	14.15

¹ The United States refiner acquisition cost for imported crude oil.

(s)=No significant volume of exports.

NA=Not available.

Note: Foreign crude oil prices are as of January 1 of the year; U.S. domestic prices are averages for the month of January. The foreign crude oils are free on board (f.o.b.) at the port of lading. The United States refiner acquisition cost for imported crude oil includes all charges associated with the acquisition, transportation, and storage of imported crude up to the time the oil is booked into the U.S. refineries.

Sources: McGraw-Hill, Inc, *Platt's Oilgram Price Report*; Energy Information Administration, *Weekly Petroleum Status Report*; DOE/EIA-0208, various issues; Petroleum Intelligence Group, *Petroleum Market Intelligence*, Estimated Posted Price for January.

Table 7.2. World Survey of Selected Petroleum Product Prices (Including Taxes), January 1, 1994

Region Country	Exchange Rate	Automotive Fuels		Light Fuel Oil	Kerosene	LPG ¹	Light Fuel Oil	Heavy Fuel Oil		
		Premium Gasoline	Diesel Fuel	Residential			Industrial			
	Foreign Currency per U.S. Dollar	U.S. Dollars per Gallon					U.S. Dollars per Barrel			
North America										
Canada ²	1.32	1.57	1.47	1.09	NA	NA	24.14	17.74		
Mexico ²	3.11	1.60	1.02	NA	NA	NA	43.03	9.25		
United States ²	1.00	1.24	0.96	0.90	0.80	0.55	25.87	13.65		
Central & South America										
Argentina	1.00	2.65	NA	1.02	1.02	NA	NA	NA		
Bolivia	4.48	2.28	1.30	1.22	0.80	0.53	51.41	NA		
Brazil	358.00	1.88	1.09	NA	1.49	0.62	19.29	10.07		
Chile	430.65	1.46	1.16	NA	1.01	NA	NA	20.38		
Colombia	921.20	0.93	0.75	NA	0.75	0.53	40.13	NA		
Costa Rica	151.88	1.12	0.93	NA	0.96	NA	NA	20.06		
Cuba	1.00	1.21	0.53	0.25	0.32	NA	NA	9.52		
Dominican Republic	12.84	1.87	1.07	1.07	1.40	0.63	44.82	24.86		
Ecuador	2,045.00	1.31	0.71	0.71	0.03	NA	29.99	14.08		
El Salvador	8.72	1.75	0.88	NA	0.92	0.62	38.53	19.27		
Jamaica	32.32	0.86	0.75	NA	0.19	NA	NA	5.46		
Nicaragua	6.00	2.51	1.23	NA	1.23	NA	NA	21.20		
Panama	1.00	1.43	0.99	NA	0.97	0.83	NA	29.93		
Paraguay	1,861.30	1.71	NA	1.32	1.08	NA	55.53	22.33		
Peru	2.18	2.03	1.18	NA	1.18	NA	42.30	19.69		
Suriname	1.79	3.07	1.82	NA	2.27	NA	NA	NA		
Trinidad and Tobago	5.86	1.21	0.68	NA	0.66	NA	NA	22.50		
Uruguay	4.47	3.05	1.34	1.35	1.35	NA	NA	27.74		
Venezuela	106.86	0.18	0.16	NA	0.12	NA	NA	5.06		
Western Europe										
Austria	12.26	3.13	2.03	1.30	NA	NA	32.74	14.24		
Belgium ²	36.24	3.15	2.14	0.78	NA	NA	27.31	15.99		
Denmark ²	6.77	3.00	1.74	2.25	NA	NA	38.77	18.52		
Finland ²	5.69	3.12	2.15	1.11	NA	NA	38.25	20.14		
France ²	5.92	3.31	2.10	1.34	NA	NA	38.51	19.34		
Germany ²	1.74	3.34	2.16	0.93	NA	NA	34.15	16.10		
Greece ²	250.28	2.78	1.66	1.35	NA	NA	48.20	21.80		
Ireland ²	0.70	2.96	2.89	1.31	NA	NA	42.08	18.44		
Italy ²	1,700.20	3.46	2.31	2.76	NA	NA	97.59	20.63		
Luxembourg ²	36.24	2.36	1.81	0.84	NA	NA	31.66	15.43		
Netherlands ²	1.95	3.66	2.61	1.06	NA	NA	NA	22.91		
Norway ²	7.48	3.79	2.68	1.52	NA	NA	52.29	45.90		
Portugal ²	176.16	3.12	2.15	2.26	NA	NA	90.26	21.62		
Spain ²	143.04	2.75	1.91	1.18	NA	NA	43.19	17.11		
Sweden ²	8.13	3.44	2.44	1.78	NA	NA	33.21	21.61		
Switzerland ²	1.47	2.93	3.17	0.71	NA	NA	26.17	20.75		
Turkey ²	14,425.20	2.39	1.58	1.69	NA	NA	NA	19.93		
United Kingdom ²	0.67	2.86	2.46	0.71	NA	NA	26.65	14.67		
Eastern Europe & Former U.S.S.R.										
Czech Republic ²	30.12	2.38	1.08	0.57	NA	NA	NA	NA		
Hungary ²	101.86	2.81	2.37	0.97	NA	NA	78.26	13.26		
Poland ²	21,080.00	1.80	1.47	1.27	NA	NA	44.04	13.05		
Slovakia ²	32.90	2.23	1.84	0.55	NA	NA	23.20	10.42		
Russia ²	1,247.00	0.41	0.45	NA	NA	NA	NA	5.10		
Middle East										
Lebanon	1,708.40	1.19	NA	0.85	0.90	0.90	30.10	17.15		
Africa										
Ethiopia	5.00	1.40	1.07	NA	0.68	0.82	NA	30.02		
Kenya	67.93	1.13	0.88	NA	0.66	0.63	26.21	25.01		

See footnotes at end of table.

**Table 7.2. World Survey of Selected Petroleum Product Prices (Including Taxes), January 1, 1994
(Continued)**

Region Country	Exchange Rate	Automotive Fuels		Light Fuel Oil	Kerosene	LPG ¹	Light Fuel Oil	Heavy Fuel Oil		
		Premium Gasoline	Diesel Fuel	Residential			Industrial			
	Foreign Currency per U.S. Dollar	U.S. Dollars per Gallon					U.S. Dollars per Barrel			
Far East & Oceania										
Australia ²	1.49	1.74	1.70	NA	NA	NA	NA	NA		
Burma	6.20	1.79	1.17	NA	1.51	0.95	59.20	47.93		
India	31.37	2.28	0.74	NA	0.31	0.66	28.08	25.29		
Indonesia	2,116.90	1.26	0.68	0.43	0.72	NA	18.06	18.06		
Japan ²	111.51	4.14	2.48	1.71	1.83	NA	45.53	29.69		
Korea, South ²	810.48	2.90	0.99	NA	NA	NA	NA	15.37		
New Zealand ²	1.78	1.88	0.97	NA	NA	NA	35.09	29.51		
Pakistan	30.21	1.79	0.77	0.61	0.75	1.10	25.47	14.13		
Philippines	27.73	1.37	0.96	NA	0.96	0.72	NA	15.21		
Taiwan ²	26.44	2.23	1.59	NA	NA	NA	32.26	20.90		

¹ Liquefied petroleum gas (LPG) prices refer to residential propane or a mixture of propane and butane.

² Average for January 1994.

NA=Not available.

Sources: International Energy Agency, *Energy Prices and Taxes, First Quarter 1994*. Arpel, (April 4, 1994). International Monetary Fund, *International Financial Statistics*, (June 1994). Energy Information Administration, *Monthly Energy Review*, DOE/EIA-0035(94/09) (September 1994).

Section 8 Reserves

Table 8.1. World Crude Oil and Natural Gas Reserves, January 1, 1994

Region Country	Crude Oil (Billion Barrels)		Natural Gas (Trillion Cubic Feet)	
	<i>Oil & Gas Journal</i>	<i>World Oil</i>	<i>Oil & Gas Journal</i>	<i>World Oil</i>
North America				
Canada	5.1	4.7	94.8	93.2
Mexico	50.9	44.4	71.0	70.0
United States ¹	23.0	23.0	162.4	162.4
Total	79.0	72.1	328.2	325.7
Central & South America				
Argentina	1.6	1.9	26.5	26.5
Barbados	(s)	(s)	(s)	(s)
Bolivia	0.1	0.1	3.9	4.5
Brazil	3.6	3.8	4.8	4.9
Chile	0.3	0.1	3.9	3.8
Colombia	1.9	3.0	10.0	7.2
Cuba	0.1	0.2	0.1	(s)
Ecuador	2.0	2.3	3.8	3.9
Guatemala	0.2	0.4	(s)	0.0
Peru	0.4	0.8	7.0	7.0
Suriname	0.1	0.1	0.0	0.0
Trinidad and Tobago	0.5	0.5	8.5	8.5
Venezuela	63.3	64.4	128.9	138.0
Total	74.1	77.7	197.5	204.1
Western Europe				
Austria	0.1	0.1	0.7	0.7
Denmark	0.8	0.7	4.3	4.6
France	0.2	0.1	1.2	1.3
Germany	0.4	0.2	12.1	7.9
Greece	(s)	0.3	0.3	(s)
Ireland	0.0	0.0	0.6	0.0
Italy	0.6	0.6	10.7	10.3
Netherlands	0.1	0.1	68.2	66.2
Norway	9.3	18.9	70.5	113.2
Spain	(s)	(s)	0.7	0.2
Turkey	0.5	0.3	0.4	0.3
United Kingdom	4.6	16.9	21.5	54.7
Former Yugoslavia	0.2	0.3	2.8	2.1
Total	16.9	38.5	194.0	261.6
Eastern Europe & Former U.S.S.R.				
Albania	0.2	0.1	0.4	0.1
Bulgaria	(s)	(s)	0.3	(s)
Former Czechoslovakia ²	(s)	NA	0.5	NA
Czech Republic ²	NA	0.1	NA	0.1
Slovakia ²	NA	(s)	NA	0.7
Hungary	0.1	0.1	3.4	3.3
Poland	(s)	(s)	5.5	5.5
Romania	1.6	1.0	8.0	4.7
Former U.S.S.R. ³	57.0	181.7	1,997.0	1,877.0
Total	58.9	183.0	2,014.9	1,891.4
Middle East				
Bahrain	0.1	0.1	5.9	5.6
Iran	92.9	60.0	730.0	612.0
Iraq	100.0	99.6	109.5	109.2
Israel	(s)	0.5	(s)	(s)
Jordan	(s)	0.0	0.2	0.2
Kuwait ⁴	96.5	94.2	52.9	51.4
Oman	4.7	5.0	20.0	20.0
Qatar	3.7	4.2	250.0	165.0
Saudi Arabia ⁴	261.2	262.4	185.9	186.1
Syria	1.7	3.0	7.0	8.0
United Arab Emirates	98.1	64.5	204.6	198.4
Yemen	4.0	2.0	15.0	15.0
Total	662.9	595.4	1,581.0	1,370.8

See footnotes at end of table.

Table 8.1. World Crude Oil and Natural Gas Reserves, January 1, 1994

Region Country	Crude Oil (Billion Barrels)		Natural Gas (Trillion Cubic Feet)	
	<i>Oil & Gas Journal</i>	<i>World Oil</i>	<i>Oil & Gas Journal</i>	<i>World Oil</i>
Africa				
Algeria	9.2	10.1	128.0	130.7
Angola	1.5	1.9	1.8	2.0
Benin	(s)	(s)	0.0	0.1
Cameroon	0.4	0.3	3.9	3.9
Chad	0.0	0.2	0.0	0.0
Congo	0.8	0.7	2.7	2.7
Cote d'Ivoire (Ivory Coast)	0.1	0.2	0.5	0.5
Egypt	6.3	3.4	15.4	20.5
Equatorial Guinea	(s)	(s)	1.3	1.3
Ethiopia	0.0	0.0	0.8	2.5
Gabon	0.7	0.7	0.5	0.5
Ghana	(s)	0.1	0.8	0.1
Libya	22.8	37.9	45.8	45.5
Madagascar	0.0	0.0	0.1	0.1
Morocco	(s)	(s)	(s)	(s)
Mozambique	0.0	0.0	2.3	2.4
Namibia	0.0	0.0	5.2	5.0
Niger	0.0	0.3	0.0	0.0
Nigeria	17.9	17.5	120.0	121.9
Rwanda	0.0	0.0	2.0	2.0
Senegal	0.0	0.0	0.0	0.2
Somalia	0.0	0.0	0.2	0.0
South Africa	(s)	(s)	0.9	1.0
Sudan	0.3	0.3	3.0	3.0
Tanzania	0.0	0.0	4.1	1.0
Tunisia	1.7	0.4	3.2	0.9
Zaire	0.2	(s)	1.0	(s)
Total	62.0	73.9	343.5	347.8
Far East & Oceania				
Afghanistan	0.0	0.0	3.5	0.1
Australia	1.6	3.1	19.6	18.2
Bangladesh	(s)	0.1	25.2	10.5
Brunei	1.4	1.3	14.0	13.3
Burma	0.1	0.1	9.8	11.5
Cambodia	0.0	0.1	0.0	2.0
China	24.0	29.5	59.0	45.0
India	5.9	5.9	25.4	22.8
Indonesia	5.8	6.2	64.4	67.5
Japan	0.1	0.1	1.0	1.0
Malaysia	4.3	5.1	76.7	80.8
Mongolia	0.0	0.1	0.0	0.1
New Zealand	0.2	0.1	3.2	3.0
Pakistan	0.2	0.2	22.9	23.0
Papua New Guinea	0.3	0.2	15.0	0.1
Philippines	0.3	0.2	3.0	3.0
Taiwan	(s)	(s)	2.4	1.1
Thailand	0.2	0.2	5.7	6.2
Vietnam	0.5	0.8	3.7	0.4
Total	44.6	53.3	354.5	309.7
World Total	998.3	1,093.8	5,013.6	4,711.2

¹ Data for the United States are from the Energy Information Administration.

² *World Oil* has data for the Czech Republic and Slovakia. The *Oil and Gas Journal* only presents data for Former Czechoslovakia.

³ The *Oil and Gas Journal* and *World Oil* did not present disaggregated data for the republics of the Former U.S.S.R.

⁴ Includes one-half of the reserves in the Neutral Zone.

NA=Not available.

(s) Denotes less than 50 million barrels of crude oil or less than 50 billion cubic feet of natural gas.

Note: Sum of components may not equal total due to independent rounding. All reserve data except those for the Former U.S.S.R. and natural gas reserves in Canada are proved reserves. Former U.S.S.R. data are "explored reserves," which include proved, probable, and partially possible reserves.

Sources: PennWell Publishing Co., *Oil and Gas Journal*, Vol. 91, No. 52, (December 1993). Gulf Publishing Co., *World Oil*, Vol. 215, No. 8, (August 1994). Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1993 Annual Report* DOE/EIA-0216(93) (October 1994).

Table 8.2. World Estimated Recoverable Coal
(Million Short Tons)

Region Country	Recoverable Anthracite and Bituminous ¹	Recoverable Lignite and Subbituminous ¹	Total Recoverable Coal ¹
North America			
Canada	4,970	4,535	9,505
Greenland	--	202	202
Mexico	1,380	516	1,896
United States ²	117,391	147,291	264,682
Total	123,741	152,544	276,285
Central & South America			
Argentina	--	143	143
Brazil	--	2,600	2,600
Chile	34	1,268	1,302
Colombia	4,674	330	5,003
Ecuador	--	26	26
Peru	1,058	110	1,168
Venezuela	460	--	460
Total	6,226	4,478	10,703
Western Europe			
Austria	--	65	65
Belgium	452	--	452
France	196	35	231
Germany	26,366	61,895	88,261
Greece	--	3,307	3,307
Ireland	15	--	15
Italy	--	37	37
Netherlands	548	--	548
Norway	--	14	14
Portugal	3	36	40
Spain	937	661	1,598
Sweden	--	1	1
Turkey	179	7,701	7,879
United Kingdom	3,638	551	4,189
Former Yugoslavia	77	18,188	18,265
Total	32,411	92,493	124,904
Eastern Europe & Former U.S.S.R.			
Bulgaria	33	4,079	4,112
Former Czechoslovakia	2,061	3,858	5,919
Hungary	657	4,260	4,917
Poland	32,628	12,787	45,415
Romania	1	3,436	3,437
Former U.S.S.R.	114,640	151,017	265,657
Total	150,021	179,436	329,457
Middle East			
Iran	213	--	213
Total	213	--	213
Africa			
Algeria	47	--	47
Botswana	3,858	--	3,858
Central African Republic	--	4	4
Egypt	14	44	58
Malawi	13	--	13
Morocco	50	--	50
Mozambique	265	--	265
Niger	77	--	77
Nigeria	23	186	209
South Africa	60,994	--	60,994
Swaziland	--	1,101	1,101
Tanzania	220	--	220
Zaire	661	--	661
Zambia	--	61	61
Zimbabwe	809	--	809
Total	67,033	1,397	68,429

See footnotes at end of table.

Table 8.2. World Estimated Recoverable Coal (Continued)
 (Million Short Tons)

Region Country	Recoverable Anthracite and Bituminous ¹	Recoverable Lignite and Subbituminous ¹	Total Recoverable Coal ¹
Far East & Oceania			
Afghanistan	73	--	73
Australia	49,979	50,265	100,244
Burma	3	--	3
China	68,564	57,651	126,215
India	66,853	2,094	68,947
Indonesia	1,060	34,283	35,343
Japan	912	19	930
Korea, North	331	331	661
Korea, South	224	--	224
Malaysia	4	--	4
New Caledonia	2	--	2
New Zealand	30	99	129
Pakistan	--	578	578
Philippines	(s)	289	289
Taiwan ³	110	--	110
Thailand	--	1,101	1,101
Vietnam	165	--	165
Total	188,310	146,710	335,020
World Total	567,954	577,057	1,145,011

¹ World Energy Council definition of "Proved Recoverable Reserves": Proved Recoverable Reserves are the tonnage of Proved Amount in Place that can be recovered (extracted from the earth in raw form) under present and expected local economic conditions with existing available technology.

² Data represent both measured and indicated tonnage, as of January 1, 1992 (equated to December 31, 1991). The U.S. term "measured" approximates the term "proved" used by the World Energy Council. The U.S. "measured and indicated" data have been combined prior to depletion adjustments and cannot be recaptured as "measured alone."

³ Data given under bituminous coal includes subbituminous coal.

--=Not applicable.

(s)=Value less than 500,000 short tons

Notes: Formerly entitled "World Estimated Recoverable Reserves of Coal." The estimates in this table are dependent on the judgment of each reporting country to interpret local economic conditions and its own mineral assessment criteria in terms of specified standards of the World Energy Council. Consequently, the data may not all meet the same standards of reliability and some data, including the EIA's, may not represent reserves of coal that are known to be recoverable under current economic conditions and regulations. Some data, including the EIA's, represent estimated recovery rates for highly reliable estimates of coal quantities in the ground that have physical characteristics like coals currently being profitably mined. Further, data in this table may represent different base years. Data for the U.S. represent recoverable coal estimates as of December 31, 1991. Data for other countries are as of December 31, 1990, the most recent period for which they are available. The Energy Information Administration does not certify the international reserves data but reproduces the information as a matter of convenience for the reader. Sum of components may not equal total due to independent rounding.

Sources: World Energy Council, 1992 Survey of Energy Resources; World Energy Conference (1992). United States: Energy Information Administration, *U.S. Coal Reserves: An Update by Heat and Sulfur Content*, DOE/EIA-0529(92) (February 1993).

Appendix A

Geographical and Organizational Definitions

Appendix A. Geographical and Organizational Definitions

North America

Bermuda	Mexico	St. Pierre/Miquelon
Canada		United States

Central and South America

Antarctic Fisheries	Dominica	Montserrat
Antigua & Barbuda	Dominican Republic	Netherlands Antilles
Argentina	Ecuador	Nicaragua
Aruba	El Salvador	Panama Republic
Bahama Islands	Falkland Islands	Paraguay
Barbados	French Guiana	Peru
Belize	Grenada	Puerto Rico
Bolivia	Guadeloupe	St. Kitts-Nevis
Brazil	Guatemala	St. Lucia
British Virgin Islands	Guyana	St. Vincent/Grenadines
Cayman Islands	Haiti	Suriname
Chile	Honduras	Trinidad and Tobago
Colombia	Jamaica	U.S. Virgin Islands
Costa Rica	Martinique	Uruguay
Cuba		Venezuela

Western Europe

Austria	Gibraltar	Norway
Belgium	Greece	Portugal
Denmark	Iceland	Spain
Faeroe Islands	Ireland	Sweden
Finland	Italy	Switzerland
France	Luxembourg	Turkey
Germany ¹	Malta	United Kingdom
Germany, East	Netherlands	Former Yugoslavia
Germany, West		

Eastern Europe and Former U.S.S.R.

Albania	Former U.S.S.R.	Lithuania
Bulgaria	Armenia ⁴	Moldova
Former Czechoslovakia ²	Azerbaijan	Russia
Czech Republic ³	Belarus	Tajikstan
Slovakia	Estonia	Turkmenistan
Hungary	Georgia	Ukraine
Poland	Kazakhstan	Uzbekistan
Romania	Kyrgyzstan	
	Latvia	

Middle East

Bahrain	Jordan	Qatar
Cyprus	Kuwait	Saudi Arabia
Iran	Lebanon	Syria
Iraq	Oman	United Arab Emirates
Israel		Yemen

Africa

Algeria	Ghana	Rwanda
Angola	Guinea	Sao Tome & Principe
Benin	Guinea-Bissau	Senegal
Botswana	Kenya	Seychelles
Burkina Faso (Upper Volta)	Lesotho	Sierra Leone
Burundi	Liberia	Somalia
Cameroon	Libya	South Africa
Cape Verde	Madagascar	St. Helena
Central African Republic	Malawi	Sudan
Chad	Mali	Swaziland
Comoros	Mauritania	Tanzania
Congo	Mauritius	Togo
Cote d'Ivoire (Ivory Coast)	Morocco	Tunisia
Djibouti (Afars)	Mozambique	Uganda
Egypt	Namibia	Western Sahara
Equatorial Guinea	Niger	Zaire
Ethiopia	Nigeria	Zambia
Gabon	Reunion	Zimbabwe (Rhodesia)
Gambia		

Far East and Oceania

Afghanistan	Japan	Niue
American Samoa	Kiribatia (Gilbert Islands)	Pakistan
Australia	Korea, North	Papua New Guinea
Bangladesh	Korea, South	Philippines
Bhutan	Laos	Samoa, Western
Brunei	Macau	Singapore
Cambodia (Kampuchea)	Malaysia	Solomon Islands
China	Maldives	Sri Lanka
Cook Islands	Mongolia	Taiwan
Fiji	Myanmar (Burma)	Thailand
French Polynesia	Nauru	Tonga
Guam	Nepal	U.S. Pacific Islands
Hong Kong	New Caledonia	Vanuatu (New Hebrides)
India	New Zealand	Vietnam
Indonesia		Wake Island

Organization for Economic Cooperation and Development (OECD)

Australia	Greece	Portugal
Austria	Guam	Puerto Rico
Belgium	Iceland	Spain
Canada	Ireland	Sweden
Denmark	Italy	Switzerland
Finland	Japan	Turkey
France	Luxembourg	U.S. Virgin Islands
Germany	Netherlands	United Kingdom
Germany, East	New Zealand	United States
Germany, West	Norway	

OECD Europe

Austria	Greece	Portugal
Belgium	Iceland	Spain
Denmark	Ireland	Sweden
Finland	Italy	Switzerland
France	Luxembourg	Turkey
Germany	Netherlands	United Kingdom
Germany, East		
Germany, West	Norway	

International Energy Agency (IEA)

Australia	Greece	Portugal
Austria	Guam	Puerto Rico
Belgium	Ireland	Spain
Canada	Italy	Sweden
Denmark	Japan	Switzerland
Finland ⁵	Luxembourg	Turkey
France ⁶	Netherlands	U.S. Virgin Islands
Germany	New Zealand	United Kingdom
Germany, East	Norway	United States
Germany, West		

European Economic Community (EEC)

Belgium	Greece	Netherlands
Denmark	Ireland	Portugal
France	Italy	Spain
Germany	Luxembourg	United Kingdom
Germany, East		
Germany, West		

Former U.S.S.R.

Armenia	Kazakhstan	Russia
Azerbaijan	Kyrgyzstan	Tajikistan
Belarus	Latvia	Turkmenistan
Estonia	Lithuania	Ukraine
Georgia	Moldova	Uzbekistan

North Atlantic Treaty Organization (NATO)

Belgium	Guam	Puerto Rico
Canada	Iceland	Spain
Denmark	Italy	Turkey
France	Luxembourg	U.S. Virgin Islands
Germany	Netherlands	United Kingdom
Germany, East	Norway	United States
Germany, West	Portugal	
Greece		

North Sea

Denmark	Netherlands	Norway
Germany		United Kingdom

Organization of Petroleum Exporting Countries⁷ (OPEC)

Algeria	Iraq	Qatar
Gabon	Kuwait	Saudi Arabia
Indonesia	Libya	United Arab Emirates
Iran	Nigeria	Venezuela

Arab OPEC

Algeria
Iraq

Kuwait
Libya
Qatar

Saudi Arabia
United Arab Emirates

Organization of Arab Petroleum Exporting Countries (OAPEC)

Algeria
Bahrain
Egypt
Iraq

Kuwait
Libya
Qatar

Saudi Arabia
Syria
Tunisia
United Arab Emirates

Persian Gulf

Bahrain
Iran

Iraq
Kuwait
Qatar

Saudi Arabia
United Arab Emirates

1.1990 was the last year for the separate existence of East and West Germany. In the time-series tables, there will be three lines for "Germany," "Germany, East," and "Germany, West." Data for "Germany, East" and "Germany, West" will end in 1990 and data for "Germany" will begin in 1991. "Germany, East" will be part of the Western Europe region, and it will be included in the Organization for Economic Cooperation and Development (OECD) in Tables 1.8, 2.7, 3.9, and 4.8 (for all years for which there is separate data for East Germany, that is, for all years through 1990).

2.In this edition of the *International Energy Annual*, data for the "Former Czechoslovakia" are shown as a whole through 1992. Beginning in 1993, data for the "Former Czechoslovakia" will be discontinued, and the data will be associated with the 2 successor countries, "Czech Republic", and "Slovakia."

3.One of the two successor countries that together previously constituted Czechoslovakia. Data for the Former Czechoslovakia as a whole are shown through 1992; data for the two individual successor countries are shown beginning in 1993.

4.One of the 15 individual republics that together constituted the Union of Soviet Socialist Republics (U.S.S.R.) Data for the Former U.S.S.R. as a whole are shown through 1991; data for the 15 individual republics are shown beginning in 1992.

5.As of January 1, 1992, Finland joined the IEA. For consistency, Finland is included in the historical series of IEA totals.

6.As of August 7, 1992, France joined the IEA. For consistency, France is included in the historical series of IEA totals.

7.As of December 31, 1992, Ecuador withdrew its membership from OPEC. For consistency, Ecuador is excluded in the historical series of OPEC totals.

Appendix B
World Population
and Gross Domestic Product

Table B1. World Population, 1980, 1985-1993
(Millions)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Bermuda	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Canada	24.0	25.2	25.4	25.6	25.9	26.2	26.6	27.5	28.4	28.8
Greenland	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Mexico	69.7	77.9	79.6	81.2	82.8	84.5	86.2	87.8	89.5	91.2
Saint Pierre and Miquelon	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
United States	227.7	238.5	240.7	242.8	245.0	247.3	249.9	252.7	255.5	257.6
Total	321.5	341.7	345.7	349.7	353.9	358.2	362.8	368.1	373.6	377.7
Central & South America										
Antarctic Fisheries	--	--	--	--	--	--	--	--	--	--
Antigua and Barbuda	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Argentina	28.2	30.3	30.8	31.2	31.7	32.1	32.6	33.0	33.4	33.8
Aruba	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Bahamas, The	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Barbados	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Belize	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Bolivia	5.4	5.9	6.0	6.2	6.3	6.4	6.6	6.7	6.9	7.1
Brazil	121.3	132.0	134.6	137.2	139.7	142.1	144.5	146.9	149.2	151.5
British Virgin Islands	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cayman Islands	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Chile	11.1	12.1	12.3	12.5	12.8	13.0	13.2	13.4	13.6	13.8
Colombia	25.9	28.6	29.2	29.7	30.2	31.7	32.3	32.8	33.4	34.0
Costa Rica	2.3	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.1	3.2
Cuba	9.7	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9
Dominica	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dominican Republic	5.4	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.4	7.6
Ecuador	8.1	9.1	9.3	9.6	9.8	10.0	10.3	10.5	10.7	11.0
El Salvador	4.5	4.9	5.0	5.1	5.1	5.2	5.3	5.4	5.4	5.5
Falkland Islands	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
French Guiana	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Grenada	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Guadeloupe	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Guatemala	6.9	8.0	8.2	8.4	8.7	8.9	9.2	9.5	9.7	10.0
Guyana	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Haiti	5.0	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.8	6.9
Honduras	3.7	4.4	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6
Jamaica	2.1	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.5
Martinique	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Montserrat	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Netherlands Antilles	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nicaragua	2.7	3.3	3.4	3.5	3.6	3.7	3.9	4.0	4.1	4.3
Panama	2.0	2.2	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.5
Paraguay	3.2	3.7	3.8	3.9	4.0	4.2	4.3	4.4	4.5	4.6
Peru	17.3	19.4	19.8	20.3	20.7	21.1	21.6	22.0	22.5	23.2
Puerto Rico	3.2	3.4	3.4	3.4	3.5	3.5	3.5	3.6	3.6	3.6
Saint Kitts and Nevis	(s)	(s)	(s)	(s)	(s)	0.1	(s)	(s)	(s)	(s)
Saint Lucia	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Saint Vincent/Grenadines	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Suriname	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
Trinidad and Tobago	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3
U.S. Virgin Islands	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0
Uruguay	2.9	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.2
Venezuela	15.0	17.3	17.5	18.0	18.4	18.9	19.3	19.8	20.3	20.7
Total	291.7	320.8	327.0	333.3	339.5	346.8	353.0	359.1	365.2	371.8

See footnotes at end of table.

Table B1. World Population, 1980, 1985-1993 (Continued)
(Millions)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Western Europe										
Austria	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.8	7.9	8.0
Belgium	9.9	9.9	9.9	9.9	9.9	9.9	10.0	10.0	10.0	10.0
Denmark	5.1	5.1	5.1	5.1	5.1	5.1	5.2	5.2	5.2	5.2
Faroe Islands	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Finland	4.8	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0	5.1
France	53.9	55.2	55.4	55.6	55.9	56.2	56.7	57.1	57.4	57.7
Germany	--	--	--	--	--	--	--	--	80.6	81.2
Germany, East	16.7	16.6	16.6	16.6	16.7	16.6	16.3	15.9	--	--
Germany, West	61.5	61.0	61.0	61.1	61.4	62.0	63.2	64.1	--	--
Gibraltar	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Greece	9.6	9.9	10.0	10.0	10.0	10.0	10.1	10.2	10.3	10.4
Iceland	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Ireland	3.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.6
Italy	56.4	57.1	57.3	57.3	57.4	57.5	57.7	57.8	57.9	58.1
Luxembourg	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Malta	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
Netherlands	14.1	14.5	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3
Norway	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.3
Portugal	9.8	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
Spain	37.5	38.5	38.6	38.7	38.8	38.9	39.0	39.0	39.1	39.1
Sweden	8.3	8.4	8.4	8.4	8.5	8.5	8.6	8.6	8.7	8.8
Switzerland	6.3	6.5	6.5	6.6	6.6	6.7	6.7	6.8	6.9	6.9
Turkey	44.5	50.2	51.3	52.3	53.5	54.7	56.1	57.4	58.8	60.2
United Kingdom	56.3	56.7	56.9	57.0	57.2	57.4	57.6	57.8	58.0	57.8
Former Yugoslavia	22.3	23.1	23.3	23.4	23.6	23.7	23.8	23.9	24.1	24.2
Total	433.2	443.7	445.8	448.0	450.5	453.3	457.2	460.4	463.7	466.7
Eastern Europe & Former U.S.S.R.										
Albania	2.7	3.0	3.0	3.1	3.1	3.2	3.3	3.3	3.4	3.3
Bulgaria	8.9	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Former Czechoslovakia	15.3	15.5	15.5	15.6	15.6	15.6	15.7	15.7	15.7	15.8
Czech Republic	--	--	--	--	--	--	--	--	--	--
Slovakia	--	--	--	--	--	--	--	--	--	--
Hungary	10.7	10.6	10.5	10.5	10.4	10.4	10.4	10.4	10.3	10.3
Poland	35.6	37.2	37.5	37.7	37.9	38.0	38.1	38.2	38.4	38.5
Romania	22.2	22.7	22.8	22.9	23.1	23.2	23.2	23.2	22.8	22.8
Former U.S.S.R.	265.5	--	--	--	--	--	--	--	--	--
Armenia	--	3.3	3.4	3.4	3.5	3.5	3.5	3.6	3.7	3.8
Azerbaijan	--	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.6
Belarus	--	10.0	10.1	10.1	10.2	10.2	10.3	10.3	10.3	10.4
Estonia	--	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.5
Georgia	--	5.2	5.3	5.3	5.4	5.5	5.5	5.5	5.6	5.6
Kazakhstan	--	15.9	16.1	16.2	16.4	16.6	16.7	16.8	16.9	17.0
Kyrgyzstan	--	4.0	4.1	4.2	4.3	4.3	4.4	4.5	4.5	4.5
Latvia	--	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.6	2.6
Lithuania	--	3.5	3.6	3.6	3.7	3.7	3.7	3.7	3.7	3.7
Moldova	--	4.2	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.5
Russia	--	143.0	144.2	145.4	146.5	147.3	147.9	148.2	148.7	149.3
Tajikistan	--	4.6	4.7	4.9	5.0	5.2	5.3	5.5	5.7	5.8
Turkmenistan	--	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.8	3.9
Ukraine	--	50.9	51.1	51.3	51.5	51.8	51.8	51.9	52.2	52.2
Uzbekistan	--	18.2	18.8	19.3	19.7	20.1	20.5	21.1	21.7	22.1
Total	360.9	374.9	378.1	381.1	384.1	386.8	388.6	390.5	392.2	394.1

See footnotes at end of table.

Table B1. World Population, 1980, 1985-1993 (Continued)
(Millions)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Middle East										
Bahrain	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Cyprus	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Iran	39.3	47.8	49.4	50.7	51.9	53.2	54.5	55.8	57.0	63.2
Iraq	13.2	15.6	16.1	16.3	17.3	17.5	18.1	18.7	19.3	19.9
Israel	3.9	4.2	4.3	4.4	4.4	4.5	4.7	5.0	5.1	5.3
Jordan	2.9	3.4	3.5	3.6	3.8	3.9	4.0	4.2	4.3	4.4
Kuwait	1.4	1.7	1.8	1.9	2.0	2.0	2.1	2.1	1.4	1.4
Lebanon	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.9
Oman	1.0	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.6	1.7
Qatar	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.6
Saudi Arabia	9.4	12.4	12.9	13.6	14.0	14.4	14.9	15.4	15.9	16.5
Syria	8.7	10.3	10.6	11.0	11.3	11.7	12.1	12.5	13.0	13.3
United Arab Emirates	1.0	1.4	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7
Yemen	7.9	9.8	10.1	10.5	10.6	11.0	11.2	11.6	12.0	12.3
Total	92.5	111.9	115.7	119.0	122.5	125.6	129.2	132.9	135.7	144.4
Africa										
Algeria	18.7	21.9	22.5	23.0	23.7	24.3	25.0	25.6	26.4	27.1
Angola	7.7	8.8	9.0	9.2	9.5	9.8	10.0	10.3	10.6	10.3
Benin	3.5	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.1	5.2
Botswana	0.9	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.4
Burkina	6.9	7.9	8.1	8.3	8.5	8.8	9.0	9.2	9.4	9.7
Burundi	4.1	4.7	4.9	5.0	5.2	5.3	5.5	5.6	5.8	6.0
Cameroon	8.5	10.2	10.5	10.8	10.9	11.5	11.5	11.9	12.2	12.6
Cape Verde	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Central African Republic	2.3	2.6	2.7	2.8	2.9	3.0	3.0	3.1	3.2	3.3
Chad	4.5	5.0	5.1	5.2	5.3	5.6	5.7	5.8	6.0	6.1
Comoros	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Congo	1.5	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4	2.4
Cote d'Ivoire (Ivory Coast)	8.3	9.9	10.3	10.7	11.1	11.5	12.0	12.4	12.9	13.4
Djibouti	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Egypt	40.6	46.5	47.8	49.1	50.3	51.5	52.7	53.9	55.2	56.5
Equatorial Guinea	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Ethiopia	38.8	44.3	45.7	47.2	48.6	50.2	51.7	53.4	55.1	56.9
Gabon	0.8	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.1
Gambia, The	0.6	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9
Ghana	10.7	12.7	13.1	13.4	14.1	14.6	15.0	15.5	16.0	16.5
Guinea	5.4	4.7	4.8	4.9	5.1	5.6	5.8	5.9	6.1	6.3
Guinea-Bissau	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
Kenya	16.7	20.3	21.2	22.9	23.9	24.2	24.6	25.9	27.0	28.1
Lesotho	1.3	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9
Liberia	1.9	2.2	2.2	2.3	2.3	2.4	2.5	2.5	2.6	2.6
Libya	2.8	3.4	3.5	3.7	3.8	4.0	4.2	4.3	4.5	4.7
Madagascar	8.8	10.0	10.6	10.9	11.3	11.6	12.2	12.5	12.8	13.3
Malawi	6.1	7.1	7.3	7.6	7.8	8.0	8.3	8.6	8.8	9.1
Mali	7.1	8.2	7.6	7.7	7.8	8.0	8.2	9.5	9.8	10.1
Mauritania	1.6	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.2
Mauritius	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1
Morocco	20.1	21.8	22.4	22.9	23.4	24.0	24.5	25.0	25.6	26.1
Mozambique	12.1	13.8	14.2	14.6	14.9	15.3	14.2	14.5	14.9	15.3
Namibia	1.4	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
Niger	5.3	6.6	6.8	7.0	7.3	7.5	7.7	8.0	8.3	8.4
Nigeria	80.6	95.7	98.2	101.4	105.0	105.1	108.5	112.1	115.7	119.3
Reunion	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Rwanda	5.2	6.0	6.2	6.4	6.6	6.8	7.2	7.3	7.5	7.8
Saint Helena	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sao Tome and Principe	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Senegal	5.7	6.6	6.7	6.9	7.1	7.2	7.3	7.5	7.7	8.5
Seychelles	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sierra Leone	3.3	3.7	3.8	3.9	3.9	4.1	4.2	4.3	4.4	4.5
Somalia	5.4	7.9	8.0	8.2	8.3	8.5	8.7	8.9	9.2	9.5
South Africa	28.3	33.6	34.4	35.3	36.2	37.1	38.0	38.9	39.8	40.8
Sudan	18.7	22.1	22.8	23.5	24.2	25.0	25.8	26.5	27.3	28.1

See footnotes at end of table.

Table B1. World Population, 1980, 1985-1993 (Continued)
(Millions)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
Africa (Continued)										
Swaziland	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Tanzania	18.6	21.7	22.5	23.2	24.0	24.8	25.6	26.9	27.8	28.8
Togo	2.6	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.8	3.9
Tunisia	6.4	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	8.6
Uganda	13.1	15.0	15.5	16.0	16.5	17.0	17.6	18.1	18.7	19.3
Western Sahara	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Zaire	26.4	31.0	31.5	32.5	33.5	34.5	35.6	36.7	39.9	41.2
Zambia	5.7	6.7	7.1	7.4	7.5	7.8	8.1	8.4	8.6	8.9
Zimbabwe	7.1	8.4	8.4	8.6	8.9	9.1	9.4	10.3	10.6	10.9
Total	480.0	559.3	574.7	592.6	610.2	625.2	641.6	662.8	684.7	704.9
Far East & Oceania										
Afghanistan	16.0	18.1	18.6	15.2	15.5	15.8	16.1	16.4	19.1	20.6
American Samoa	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	(s)
Australia	14.7	15.8	16.0	16.3	16.5	16.8	17.1	17.3	17.5	17.7
Bangladesh	88.7	99.4	101.7	102.6	104.5	106.5	113.7	116.4	119.3	122.2
Bhutan	1.2	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7
Brunei	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Burma	33.6	38.5	39.4	39.2	40.1	40.9	41.8	42.7	43.7	44.6
Cambodia	6.4	7.3	7.5	7.7	7.9	8.1	8.6	8.8	9.1	9.3
China	996.1	1,070.6	1,086.6	1,102.9	1,119.5	1,136.4	1,153.5	1,170.7	1,188.0	1,205.1
Cook Islands	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Fiji	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8
French Polynesia	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Guam	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hong Kong	5.1	5.5	5.5	5.6	5.6	5.7	5.7	5.8	5.8	5.9
India	675.0	750.9	766.1	781.4	796.6	811.8	827.1	849.6	870.0	896.6
Indonesia	147.5	164.6	168.4	172.0	175.6	179.1	179.8	182.9	186.0	189.1
Japan	116.8	120.8	121.5	122.1	122.6	123.1	123.5	123.9	124.3	125.0
Kiribati	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Korea, North	18.0	19.9	20.2	20.6	21.0	21.4	21.8	22.2	22.9	23.1
Korea, South	38.1	40.8	41.2	41.6	42.0	42.5	42.9	43.3	43.7	44.1
Laos	3.2	3.6	3.7	3.8	3.9	4.1	4.2	4.3	4.5	4.6
Macau	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Malaysia	13.7	15.7	16.1	16.5	16.9	17.4	17.8	18.2	18.6	19.2
Maldives	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Mongolia	1.7	1.9	1.9	2.0	2.0	2.1	2.2	2.2	2.3	2.4
Nauru	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nepal	14.0	16.7	17.1	17.6	18.0	18.4	18.9	19.6	20.6	21.1
New Caledonia	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
New Zealand	3.1	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.5
Niue	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Pakistan	82.6	96.2	99.2	102.2	105.4	108.7	112.0	115.5	119.1	122.8
Papua New Guinea	3.0	3.3	3.4	3.5	3.6	3.6	3.7	3.8	3.9	3.9
Philippines	48.3	54.7	56.0	57.4	58.7	60.1	61.5	62.9	64.3	65.7
Samoa, Western	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Singapore	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.8	2.9
Solomon Islands	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Sri Lanka	14.8	15.8	16.1	16.4	16.6	16.8	17.0	17.3	17.4	17.6
Taiwan	17.6	19.6	19.7	19.8	19.9	20.2	20.5	20.7	20.9	21.1
Thailand	46.7	51.6	52.5	53.4	54.3	55.2	56.1	56.9	57.8	58.6
Tonga	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tuvalu	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
U.S. Pacific Islands	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vanuatu	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Vietnam	53.7	59.9	61.1	62.5	63.7	64.8	66.2	68.1	69.4	70.9
Wake Island .....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total	2,464.5	2,701.0	2,749.6	2,792.2	2,840.8	2,889.9	2,942.2	3,000.3	3,058.9	3,122.1
World Total	4,444.3	4,853.4	4,936.4	5,015.8	5,101.5	5,185.7	5,274.5	5,374.1	5,473.9	5,581.7

¹ Preliminary.

--Not available.

(s)=Value less than 50,000.

Note: Sum of components may not equal total due to independent rounding.

Source: The United Nations, *Monthly Bulletin of Statistics*, (September, 1994).

Table B2. World Gross Domestic Product at Market Exchange Rates, 1980, 1985-1993
 (Millions of 1987 U.S. Dollars)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993 ¹
North America										
Bermuda	1,218	1,186	1,248	1,281	1,317	1,328	1,320	1,300	1,319	1,323
Canada	332,359	383,406	395,963	412,355	432,936	442,905	440,393	432,405	438,337	453,811
Greenland	--	--	--	--	--	--	--	--	--	--
Mexico	129,542	142,889	137,366	139,896	141,624	146,372	152,933	158,370	163,308	163,963
Saint Pierre and Miquelon	--	--	--	--	--	--	--	--	--	--
United States	3,776,300	4,279,800	4,404,500	4,539,900	4,718,600	4,838,000	4,897,300	4,861,400	4,986,300	5,134,500
Central & South America										
Antarctic Fisheries	--	--	--	--	--	--	--	--	--	--
Antigua and Barbuda	182	236	267	288	311	322	332	337	344	369
Argentina	110,030	98,934	106,118	108,811	106,860	100,179	100,342	109,232	118,603	125,719
Aruba	--	--	--	--	--	--	--	--	--	--
Bahamas, The	2,156	2,589	2,635	2,714	2,681	2,688	2,712	2,652	2,620	2,673
Barbados	1,367	1,304	1,440	1,449	1,549	1,632	1,543	1,499	1,443	1,443
Belize	232	236	247	276	301	340	369	389	408	430
Bolivia	4,691	4,338	4,200	4,310	4,474	4,604	4,714	4,937	5,125	5,238
Brazil	249,380	263,433	284,575	294,086	293,402	303,045	290,230	293,713	287,618	301,999
British Virgin Islands	--	--	--	--	--	--	--	--	--	--
Cayman Islands	--	--	--	--	--	--	--	--	--	--
Chile	17,606	18,383	19,413	20,682	22,202	24,454	25,164	26,692	29,428	31,183
Colombia	29,022	32,529	34,518	36,372	37,860	39,162	40,710	41,578	43,120	45,320
Costa Rica	4,027	4,094	4,319	4,525	4,682	4,945	5,126	5,231	5,634	5,975
Cuba	--	--	--	--	--	--	--	--	--	--
Dominica	84	110	118	127	136	132	143	150	152	155
Dominican Republic	4,241	4,589	4,726	5,081	5,116	5,322	5,044	5,006	5,375	5,536
Ecuador	9,757	10,910	11,259	10,527	11,678	11,671	11,929	12,442	13,031	13,295
El Salvador	4,674	4,270	4,317	4,433	4,516	4,563	4,699	4,883	5,090	5,348
Falkland Islands	--	--	--	--	--	--	--	--	--	--
French Guiana	--	--	--	--	--	--	--	--	--	--
Grenada	--	135	139	150	160	168	178	182	180	180
Guadeloupe	--	--	--	--	--	--	--	--	--	--
Guatemala	7,231	6,832	6,841	7,084	7,360	7,650	7,887	8,178	8,567	8,910
Guyana	425	346	358	344	328	323	315	334	358	387
Haiti	2,269	2,158	2,172	2,162	2,129	2,117	2,055	1,994	1,894	1,648
Honduras	3,566	3,885	3,920	4,153	4,358	4,522	4,523	4,644	4,879	5,057
Jamaica	2,768	2,747	2,802	2,982	3,038	3,226	3,359	3,383	3,451	3,492
Martinique	--	--	--	--	--	--	--	--	--	--
Montserrat	--	--	--	--	--	--	--	--	--	--
Netherlands Antilles	--	--	--	--	--	--	--	--	--	--
Nicaragua	3,778	3,881	3,797	3,851	3,414	3,384	3,383	3,351	3,393	3,362
Panama	4,393	5,065	5,234	5,363	4,532	4,515	4,723	5,171	5,612	5,944
Paraguay	3,285	3,581	3,576	3,733	3,975	4,207	4,335	4,439	4,517	4,675
Peru	23,063	23,303	25,460	27,583	25,317	22,326	21,353	21,921	21,313	22,677
Puerto Rico	19,428	20,990	22,854	23,878	25,428	26,765	27,724	28,304	29,000	29,563
Saint Kitts and Nevis	78	94	98	107	114	121	121	123	124	129
Saint Lucia	--	238	277	287	328	354	367	374	401	425
Saint Vincent/Grenadines	92	125	134	142	155	165	174	178	189	202
Suriname	1,468	1,346	1,304	1,106	1,213	1,242	1,229	1,194	1,029	1,029
Trinidad and Tobago	5,638	5,198	5,027	4,798	4,610	4,572	4,641	4,785	4,792	4,744
U.S. Virgin Islands	997	1,048	1,068	1,148	1,166	1,249	1,285	1,300	1,340	1,372
Uruguay	7,548	6,257	6,788	7,330	7,328	7,431	7,499	7,680	8,246	8,369
Venezuela	45,604	43,534	46,368	48,029	50,825	46,290	49,475	54,606	58,606	58,042

See footnotes at end of table.

Western Europe

Austria	106,827	113,917	115,264	117,175	121,940	126,585	132,379	136,319	137,781	137,422
Belgium	129,670	134,836	136,825	139,635	146,535	152,038	157,233	160,200	161,512	159,412
Denmark	86,492	98,432	101,980	102,321	103,508	104,363	106,195	107,514	108,888	110,141
Faroe Islands	--	--	--	--	--	--	--	--	--	--
Finland	72,799	83,913	85,671	89,089	93,908	98,939	99,295	92,835	87,120	85,395
France	787,279	848,571	869,015	887,857	925,715	960,757	982,335	993,379	1,004,873	995,625
Germany	1,012,160	1,068,598	1,092,097	1,107,428	1,148,356	1,187,571	1,248,007	1,294,366	1,335,214	1,307,529
Germany, East	--	--	--	--	--	--	--	--	--	--
Germany, West	--	--	--	--	--	--	--	--	--	--
Gibraltar	--	--	--	--	--	--	--	--	--	--
Greece	42,867	45,696	46,441	45,999	47,937	49,559	49,422	50,006	51,098	51,099
Iceland	4,089	4,601	4,892	5,335	5,316	5,310	5,331	5,406	5,251	5,286
Ireland	25,414	28,822	28,699	30,137	31,620	33,667	36,455	37,380	39,226	40,286
Italy	667,460	715,058	736,033	759,066	789,934	813,184	831,688	843,645	849,028	843,085
Luxembourg	4,986	5,644	5,917	6,095	6,437	6,866	7,087	7,304	7,441	7,515
Malta	1,351	1,470	1,527	1,590	1,723	1,864	1,974	2,085	2,208	2,307
Netherlands	201,140	211,414	215,716	217,495	223,182	233,628	242,701	248,141	251,819	252,662
Norway	66,910	78,834	82,266	83,337	82,368	81,360	82,789	84,330	86,123	88,115
Portugal	31,900	33,718	35,157	36,697	38,330	40,240	41,988	42,926	43,110	42,937
Spain	250,763	268,466	277,083	292,716	307,838	322,499	334,144	342,053	344,231	340,712
Sweden	139,796	153,002	156,373	160,801	164,462	168,358	169,601	166,501	160,919	161,639
Switzerland	151,892	162,732	167,396	170,793	175,747	182,533	186,729	186,528	186,562	185,492
Turkey	46,300	58,435	63,283	68,013	70,544	71,691	77,944	78,917	83,292	89,372
United Kingdom	572,367	632,126	658,334	690,092	719,847	735,009	738,830	722,208	722,211	736,558
Former Yugoslavia	64,515	65,667	68,017	66,683	65,626	66,126	63,812	55,646	47,300	40,223

Eastern Europe & Former U.S.S.R.

Albania	--	--	--	--	--	--	--	--	--	--
Bulgaria	20,768	25,658	26,615	28,429	31,523	30,728	27,690	23,944	22,475	21,576
Former Czechoslovakia	49,586	53,337	54,299	54,700	56,111	56,841	55,150	46,612	44,188	43,307
Czech Republic	--	--	--	--	--	--	--	--	--	--
Slovakia	--	--	--	--	--	--	--	--	--	--
Hungary	22,510	24,611	24,983	26,110	25,992	26,024	24,992	22,378	21,245	21,033
Poland	59,754	60,061	62,587	63,905	66,486	66,675	58,598	54,158	55,120	57,379
Romania	31,732	37,085	37,885	38,068	37,961	35,731	33,204	28,744	24,466	24,711
Former U.S.S.R.	--	--	--	--	--	--	--	--	--	--
Armenia	--	6,241	6,369	6,397	6,321	6,828	6,334	5,777	2,761	2,488
Azerbaijan	--	8,137	8,482	8,850	9,284	8,699	7,681	7,627	4,943	4,300
Belarus	--	25,271	26,468	27,396	28,170	30,148	29,295	29,002	26,101	23,752
Estonia	604	596	608	626	642	664	608	543	403	383
Georgia	--	12,593	11,502	11,508	12,205	12,009	11,052	8,775	4,774	3,103
Kazakhstan	--	--	31,661	33,474	33,378	31,944	29,771	25,603	22,275	
Kyrgyzstan	--	3,758	3,891	3,912	4,416	4,585	4,738	4,558	3,419	2,974
Latvia	7,080	8,281	8,663	8,918	9,399	9,937	9,907	9,054	4,998	4,748
Lithuania	6,829	7,222	7,734	8,241	9,273	9,604	9,381	8,123	4,931	4,438
Moldova	--	6,858	7,348	7,457	7,635	8,203	8,061	6,761	5,321	5,108
Russia	--	453,720	480,097	486,667	506,860	514,396	495,652	432,367	350,242	308,213
Tajikistan	--	3,348	3,505	3,506	3,845	3,777	3,640	3,324	2,493	1,969
Turkmenistan	--	--	--	--	--	--	--	10,038	9,094	9,803
Ukraine	--	100,710	102,762	107,577	110,339	114,680	110,339	99,763	85,793	72,066
Uzbekistan	--	14,254	14,664	14,590	15,886	16,601	17,701	17,613	15,922	15,365

Middle East

Bahrain	3,351	3,169	3,179	3,170	3,391	3,486	3,522	3,617	3,726	3,801
Cyprus	2,544	3,330	3,457	3,698	4,015	4,346	4,626	4,671	5,115	5,498
Iran	116,596	154,256	139,767	137,665	129,913	134,885	148,735	163,602	174,001	179,225
Iraq	85,840	54,933	44,358	43,702	39,332	42,282	29,301	14,475	16,694	18,384
Israel	29,571	34,204	35,842	38,419	39,196	39,537	41,965	44,952	49,782	51,278
Jordan	4,626	5,783	6,230	6,390	6,360	5,499	5,595	5,694	6,338	6,699
Kuwait	27,528	20,666	22,065	22,086	24,042	26,557	18,829	11,425	19,422	21,365
Lebanon	--	--	--	--	--	--	--	--	--	--
Oman	3,949	8,009	8,115	7,811	8,268	8,557	9,165	9,919	10,683	11,335
Qatar	--	--	--	--	--	--	--	--	--	--
Saudi Arabia	86,019	71,109	74,871	73,552	79,030	79,028	85,866	94,023	96,749	97,718
Syria	10,153	11,756	11,275	11,368	13,007	11,617	12,598	13,585	14,536	15,553
United Arab Emirates	32,744	30,091	22,872	23,563	22,776	25,444	31,011	31,054	31,190	31,346
Yemen	4,723	6,534	6,728	7,376	8,540	9,446	9,037	8,731	9,048	9,275

See footnotes at end of table.

Africa

Algeria	52,025	67,561	67,145	67,248	66,074	69,937	69,053	69,998	71,813	72,531
Angola	--	--	--	--	--	--	--	--	--	--
Benin	1,240	1,552	1,595	1,564	1,621	1,581	1,628	1,708	1,670	1,720
Botswana	813	1,318	1,418	1,543	1,786	2,017	2,137	2,327	2,479	2,554
Burkina	1,522	1,892	2,003	2,023	2,143	2,211	2,205	2,343	2,355	2,379
Burundi	804	1,037	1,069	1,129	1,184	1,202	1,245	1,318	1,371	1,381
Cameroon	8,052	11,458	12,378	12,057	10,970	11,063	10,265	9,644	9,090	9,091
Cape Verde	120	168	172	183	195	207	212	220	225	232
Central African Republic	954	1,063	1,075	1,046	1,072	1,100	1,108	1,087	1,067	1,067
Chad	574	884	842	819	952	1,001	1,008	1,077	1,080	1,134
Comoros	153	189	193	196	202	198	200	204	208	218
Congo	1,504	2,461	2,293	2,298	2,339	2,374	2,397	2,404	2,254	2,254
Cote d'Ivoire (Ivory Coast)	9,965	10,196	10,542	10,374	10,166	10,065	9,904	9,864	9,834	9,834
Djibouti	--	--	--	--	--	--	--	--	--	--
Egypt	24,099	33,778	34,672	35,545	36,939	38,037	39,004	39,890	40,022	40,142
Equatorial Guinea	--	117	115	120	123	122	126	124	140	140
Ethiopia	4,748	4,727	5,035	5,507	5,615	5,705	5,615	5,584	5,165	5,598
Gabon	3,785	4,137	4,100	3,397	3,503	4,102	4,247	4,111	4,202	4,223
Gambia, The	185	234	239	242	257	272	275	287	307	319
Ghana	4,655	4,614	4,850	5,075	5,355	5,620	5,792	6,092	6,314	6,560
Guinea	2,048	1,970	2,071	2,127	2,254	2,325	2,424	2,485	2,565	2,647
Guinea-Bissau	116	154	152	161	171	180	185	181	187	192
Kenya	6,159	7,028	7,529	7,972	8,462	8,859	9,230	9,365	9,406	9,387
Lesotho	322	349	350	370	421	473	492	498	505	517
Liberia	1,117	1,040	1,023	1,013	1,013	1,033	1,054	1,075	1,097	1,113
Libya	35,724	23,286	21,260	20,580	20,724	20,857	22,671	23,174	23,221	22,615
Madagascar	2,707	2,485	2,535	2,566	2,653	2,761	2,848	2,655	2,682	2,737
Malawi	1,052	1,170	1,163	1,183	1,217	1,281	1,338	1,427	1,313	1,454
Mali	1,661	1,707	1,942	1,965	1,927	2,155	2,170	2,125	2,209	2,253
Mauritania	811	842	890	910	926	965	945	972	989	1,022
Mauritius	1,205	1,513	1,666	1,831	1,947	2,210	2,192	2,280	2,412	2,542
Morocco	15,157	17,785	19,178	18,746	20,665	21,137	21,990	23,052	22,367	22,814
Mozambique	1,630	1,371	1,384	1,456	1,540	1,618	1,626	1,655	1,581	1,875
Namibia	1,750	1,681	1,726	1,769	1,885	1,893	2,005	2,052	2,132	2,103
Niger	2,544	2,149	2,296	2,233	2,345	2,261	2,378	2,438	2,286	2,330
Nigeria	30,336	26,704	27,167	27,111	29,762	31,745	33,510	35,206	36,662	37,618
Reunion	--	--	--	--	--	--	--	--	--	--
Rwanda	1,784	2,059	2,166	2,158	2,144	2,177	2,190	2,141	2,194	2,227
Saint Helena	--	--	--	--	--	--	--	--	--	--
Sao Tome and Principe	67	56	56	55	57	57	59	60	61	--
Senegal	3,673	4,230	4,423	4,599	4,832	4,815	5,030	5,091	5,238	5,227
Seychelles	221	237	238	249	260	295	317	308	314	314
Sierra Leone	513	536	525	554	565	581	609	625	600	609
Somalia	819	929	961	1,010	1,003	1,002	986	986	986	1,001
South Africa	74,138	79,236	79,245	80,806	84,279	86,215	85,805	85,465	83,668	84,640
Sudan	14,653	15,315	15,331	15,536	15,125	15,797	15,648	15,711	17,120	17,930
Swaziland	416	510	581	592	655	680	709	740	725	733
Tanzania	3,061	3,187	3,362	3,524	3,780	4,094	4,135	4,453	4,620	4,768
Togo	1,234	1,224	1,243	1,249	1,327	1,378	1,386	1,386	1,251	1,245
Tunisia	7,483	9,180	9,055	9,652	9,675	10,032	10,783	11,186	12,080	12,389
Uganda	3,545	4,147	4,090	4,314	4,607	4,949	5,237	5,406	5,516	5,847
Western Sahara	--	--	--	--	--	--	--	--	--	--
Zaire	6,519	7,124	7,460	7,660	7,703	7,550	7,376	6,845	6,120	5,936
Zambia	1,976	2,014	2,015	2,078	2,193	2,174	2,182	2,128	2,129	2,065
Zimbabwe	4,356	5,398	5,428	5,380	5,793	6,051	6,168	6,470	5,956	6,076

See footnotes at end of table.

Far East & Oceania

Afghanistan	--	--	--	--	--	--	--	--	--	--	--
American Samoa	--	--	--	--	--	--	--	--	--	--	--
Australia	167,495	195,179	200,108	208,861	217,512	223,665	222,914	223,443	232,023	241,486	
Bangladesh	12,519	16,200	16,907	17,601	18,100	18,546	19,779	20,447	21,299	22,218	
Bhutan	153	212	233	278	287	295	306	315	324	340	
Brunei	3,360	2,799	2,754	2,822	2,917	--	--	--	--	--	
Burma	8,789	11,087	10,994	10,543	9,334	9,683	9,942	9,822	10,925	11,156	
Cambodia	--	--	--	2,536	3,013	3,069	3,065	3,459	3,476	3,718	
China	176,509	285,516	308,543	340,583	375,718	393,117	408,969	438,431	491,054	554,891	
Cook Islands	--	--	--	--	--	--	--	--	--	--	
Fiji	1,182	1,183	1,276	1,187	1,195	1,359	1,426	1,440	1,484	1,567	
French Polynesia	--	--	--	--	--	--	--	--	--	--	
Guam	--	--	--	--	--	--	--	--	--	--	
Hong Kong	28,219	37,050	41,159	47,139	51,045	52,493	54,093	56,216	59,294	62,377	
India	180,297	234,052	245,377	256,871	283,238	298,638	315,363	319,102	333,211	345,875	
Indonesia	53,591	68,426	72,395	75,932	80,340	86,282	92,361	98,513	104,741	111,505	
Japan	1,877,143	2,254,381	2,314,150	2,408,961	2,558,794	2,679,318	2,808,359	2,922,629	2,960,610	2,963,952	
Kiribati	26	26	27	26	29	28	27	27	28	28	
Korea, North	15,964	17,198	17,456	17,718	17,983	18,253	18,527	18,156	16,068	17,193	
Korea, South	69,916	104,980	117,862	131,817	146,906	155,923	170,015	184,290	193,220	203,905	
Laos	831	1,048	1,099	1,087	1,067	1,212	1,292	1,344	1,444	1,530	
Macau	--	1,869	1,997	2,245	2,416	2,555	2,759	2,845	2,987	3,321	
Malaysia	23,096	29,645	29,986	31,602	34,427	37,595	41,243	44,811	48,376	51,275	
Maldives	--	57	62	66	73	80	92	99	105	111	
Mongolia	2,112	2,959	3,204	3,348	3,520	3,803	3,727	3,357	3,101	3,050	
Nauru	--	--	--	--	--	--	--	--	--	--	
Nepal	1,993	2,531	2,639	2,743	2,947	3,079	3,323	3,475	3,546	3,635	
New Caledonia	--	--	--	--	--	--	--	--	--	--	
New Zealand	30,584	35,462	36,376	36,499	36,106	36,192	36,131	35,731	36,997	38,107	
Niue	--	--	--	--	--	--	--	--	--	--	
Pakistan	21,400	29,701	31,333	33,352	35,951	37,679	39,300	41,466	44,738	45,915	
Papua New Guinea	2,718	2,920	3,063	3,143	3,237	3,177	3,081	3,395	3,714	3,757	
Philippines	32,796	30,733	31,785	33,307	35,411	37,542	38,514	38,194	38,200	38,954	
Samoa, Western	102	97	102	103	101	105	100	100	97	99	
Singapore	13,479	18,158	18,481	20,232	22,496	24,571	26,626	28,416	30,052	33,041	
Solomon Islands	99	134	160	164	170	184	187	193	209	213	
Sri Lanka	4,916	6,447	6,720	6,800	6,984	7,132	7,582	7,921	8,243	8,655	
Taiwan	47,573	65,815	73,479	82,510	88,584	95,294	99,937	107,261	114,236	121,090	
Thailand	32,236	42,303	44,450	48,719	55,263	62,193	69,562	75,335	80,986	87,303	
Tonga	--	44	45	46	44	45	45	47	48	49	
Tuvalu	--	--	--	--	--	--	--	--	--	--	
U.S. Pacific Islands	--	--	--	--	--	--	--	--	--	--	
Vanuatu	94	124	122	122	123	128	135	137	139	142	
Vietnam	33,940	37,331	38,241	39,847	41,880	45,148	47,439	49,100	52,733	56,425	
Wake Island	--	--	--	--	--	--	--	--	--	--	

¹ Preliminary.

--Not available

Note: The data presented in this table are obtained by converting the gross domestic product (GDP) for each country measured in 1987 foreign currency units to U.S. dollars using 1987 annual average foreign currency market exchange rates. GDP figures theoretically should be converted by using purchasing power parity (PPP) rates to avoid the problem that the market exchange rate for a foreign currency is not a precise reflection of the purchasing power of that currency. In practice, it is often difficult to find generally agreeable PPP rates for some countries. EIA will continue to examine the PPP subject and it is planned that constant U.S. dollar GDP data converted using PPP rates will be available in the future.

Sources: World Bank, *World Tables 1994*. International Monetary Fund, *International Financial Statistics*-various issues. U.S. Department of Commerce, *Survey of Current Business*, various issues.

Appendix C
Conversion Factors and
Heat Contents

Table C1. General Conversion Factors

Product Unit	Equivalent
Refined Petroleum Products	
Barrels per Metric Ton	
Asphalt	6.06
Distillate Fuel Oil	7.46
Gasoline, Aviation	8.90
Gasoline, Motor	8.53
Greases	6.30
Jet Fuel, Kerosene-type	7.93
Jet Fuel, Naptha-type	8.27
Kerosene	7.73
Liquefied Petroleum Gas (LPG)	11.60
Lubricants	7.00
Miscellaneous Products	8.04
Naphthas	8.22
Natural Gas Liquids (NGL)	10.40
Natural Gasoline	10.00
Paraffin Oil	7.14
Paraffin Wax	7.87
Petrolatum	7.87
Petroleum Coke	5.51
Residual Fuel Oil	6.66
White Spirits	8.50
Crude Oil	
Barrels per Metric Ton	See Table C2. on next page.
Liquid Fuels	
42 U.S. gallons	1 barrel
1 cubic meter	6.289 barrels
159 liters	1 barrel
.....
Gaseous Fuels	
35.315 cubic feet	1 cubic meter
Solid Fuels	
1 Long ton	1.120 short tons
1 Metric ton	1.102 short tons
Heat	
1 Exa (10^{18}) Joule .....	.9478 Quadrillion (10^{15}) Btu
1 Quadrillion (10^{15}) Btu	1.055056 Exa (10^{18}) Joules

Table C2. Barrels of Crude Oil Per Metric Ton, 1980, 1985-1993

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Mexico	7.108	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965
United States	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333
Central & South America										
Argentina	7.124	7.149	7.149	7.149	7.149	7.149	7.149	7.149	7.149	7.149
Barbados	--	7.286	7.286	7.286	7.286	7.286	7.286	7.286	7.286	7.286
Bolivia	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881
Brazil	7.453	7.268	7.268	7.268	7.268	7.268	7.268	7.268	7.268	7.268
Chile	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Colombia	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Cuba	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449
Ecuador	7.312	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130
Guatemala	7.210	7.210	7.210	7.210	7.210	7.210	7.210	7.210	7.210	7.210
Peru	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407
Suriname	--	6.199	6.199	6.199	6.199	6.199	6.199	6.199	6.199	6.199
Trinidad and Tobago	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Venezuela	6.896	6.880	6.880	6.880	6.880	6.880	6.880	6.880	6.880	6.880
Western Europe										
Austria	7.006	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082
Denmark	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
France	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Germany	7.295	7.295	7.295	7.295	7.295	7.295	7.295	7.295	7.295	7.295
Germany, East	7.340	7.340	7.340	7.340	7.340	7.340	7.340	--	--	--
Germany, West	7.247	7.247	7.247	7.247	7.247	7.247	7.247	--	--	--
Greece	--	7.178	7.178	7.178	7.178	7.178	7.178	7.178	7.178	7.178
Italy	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853
Netherlands	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853	6.853
Norway	7.462	7.810	7.810	7.810	7.810	7.810	7.810	7.810	7.810	7.810
Spain	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Sweden	--	--	7.247	7.247	7.247	--	--	--	--	--
Turkey	7.150	7.150	7.150	7.150	7.150	7.150	7.150	7.150	7.150	7.150
United Kingdom	7.332	7.466	7.466	7.466	7.466	7.466	7.466	7.466	7.466	7.466
Former Yugoslavia	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Eastern Europe & Former U.S.S.R.										
Albania	6.810	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594
Bulgaria	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Former Czechoslovakia	6.780	6.780	6.780	6.780	6.780	6.780	6.780	6.780	6.780	--
Czech Republic	--	--	--	--	--	--	--	--	--	6.780
Slovakia	--	--	--	--	--	--	--	--	--	6.780
Hungary	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690
Poland	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Romania	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Former U.S.S.R.	7.270	7.270	7.270	7.270	7.270	7.270	7.270	7.270	--	--
Azerbaijan	--	--	--	--	--	--	--	--	7.270	7.270
Belarus	--	--	--	--	--	--	--	--	7.270	7.270
Georgia	--	--	--	--	--	--	--	--	7.270	7.270
Kazakhstan	--	--	--	--	--	--	--	--	7.270	7.270
Kyrgyzstan	--	--	--	--	--	--	--	--	7.270	7.270
Russia	--	--	--	--	--	--	--	--	7.270	7.270
Tajikistan	--	--	--	--	--	--	--	--	7.270	7.270
Turkmenistan	--	--	--	--	--	--	--	--	7.270	7.270
Ukraine	--	--	--	--	--	--	--	--	7.270	7.270
Uzbekistan	--	--	--	--	--	--	--	--	7.270	7.270

Table C2. Barrels of Crude Oil Per Metric Ton, 1980, 1985-1993 (Continued)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Middle East										
Bahrain	7.349	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Iran	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Iraq	7.407	7.426	7.426	7.426	7.426	7.426	7.426	7.426	7.426	7.426
Israel	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Jordan	--	--	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190
Kuwait	7.245	7.245	7.245	7.245	7.245	7.245	7.245	7.245	7.245	7.245
Oman	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Qatar	7.545	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Saudi Arabia	7.380	7.268	7.268	7.268	7.268	7.268	7.268	7.268	7.268	7.268
Syria	6.959	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836
United Arab Emirates	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480
Yemen	--	--	7.627	7.636	7.632	7.632	7.631	7.631	7.631	7.631
Africa										
Algeria	7.753	7.936	7.936	7.936	7.936	7.936	7.936	7.936	7.936	7.936
Angola	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409
Benin	--	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870
Cameroon	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205
Congo	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Cote d'Ivoire (Ivory Coast)	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Egypt	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256
Equatorial Guinea	--	--	--	--	--	--	--	8.077	8.077	8.077
Gabon	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Ghana	7.285	7.285	7.285	--	--	--	--	--	7.285	7.285
Libya	7.588	7.515	7.515	7.515	7.515	7.515	7.515	7.515	7.515	7.515
Morocco	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Nigeria	7.418	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315
Tunisia	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
Zaire	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Far East & Oceania										
Australia	7.720	7.855	7.855	7.855	7.855	7.855	7.855	7.855	7.855	7.855
Bangladesh	--	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Brunei	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340
Burma	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
China	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
India	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Indonesia	7.573	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558
Japan	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Malaysia	7.689	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641
New Zealand	8.033	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127
Pakistan	7.320	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Papua New Guinea	--	--	--	--	--	--	--	7.809	7.809	7.809
Philippines	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Taiwan	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568
Thailand	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758
Vietnam	--	--	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082

--=No production of this form of energy.

Sources: See sources at the end of Section 3.

Table C3. Gross Heat Content of Crude Oil, 1980, 1985-1993
 (Thousand Btu per Barrel)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810
Mexico	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010
United States	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Central & South America										
Argentina	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993
Barbados	--	5,863	5,863	5,862	5,867	5,867	5,867	5,867	5,867	5,867
Bolivia	5,574	5,574	5,574	5,575	5,574	5,574	5,574	5,574	5,574	5,574
Brazil	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910
Chile	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Colombia	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023
Cuba	6,393	6,393	6,394	6,394	6,393	6,393	6,393	6,393	6,393	6,393
Ecuador	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986
Guatemala	5,945	5,945	5,945	5,945	5,947	5,947	5,947	5,947	5,947	5,947
Peru	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831
Suriname	--	6,329	6,315	6,315	6,321	6,321	6,321	6,321	6,321	6,321
Trinidad and Tobago	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023
Venezuela	6,184	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135
Western Europe										
Austria	6,065	6,021	6,021	6,021	6,020	6,020	6,020	6,020	6,020	6,020
Denmark	5,679	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677
France	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869
Germany	5,926	5,926	5,926	5,926	5,926	5,926	5,926	5,926	5,926	5,926
Germany, East	5,874	5,863	5,863	5,863	5,874	5,874	5,874	--	--	--
Germany, West	5,927	5,927	5,927	5,927	5,927	5,927	5,927	--	--	--
Greece	--	5,927	5,927	5,927	5,926	5,926	5,926	5,926	5,926	5,926
Italy	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
Netherlands	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
Norway	5,574	5,620	5,620	5,620	5,620	5,620	5,620	5,620	5,620	5,620
Spain	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Sweden	--	--	5,936	5,936	6,148	--	--	--	--	--
Turkey	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976
United Kingdom	5,869	5,803	5,803	5,803	5,803	5,803	5,803	5,803	5,803	5,803
Former Yugoslavia	5,823	5,823	5,823	5,823	5,823	5,823	5,823	5,823	5,823	5,823
Eastern Europe & Former U.S.S.R.										
Albania	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305
Bulgaria	5,883	5,881	5,881	5,881	5,879	5,879	5,879	5,879	5,879	5,879
Former Czechoslovakia	6,216	6,205	6,210	6,210	6,211	6,211	6,211	6,211	6,211	--
Czech Republic	--	--	--	--	--	--	--	--	--	6,211
Slovakia	--	--	--	--	--	--	--	--	--	6,211
Hungary	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249
Poland	5,824	5,822	5,822	5,826	5,820	5,820	5,820	5,820	5,820	5,820
Romania	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Former U.S.S.R.	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880	--	--
Georgia	--	--	--	--	--	--	--	--	5,880	5,880
Kazakhstan	--	--	--	--	--	--	--	--	5,880	5,880
Kyrgyzstan	--	--	--	--	--	--	--	--	5,880	5,880
Russia	--	--	--	--	--	--	--	--	5,880	5,880
Tajikistan	--	--	--	--	--	--	--	--	5,880	5,880
Turkmenistan	--	--	--	--	--	--	--	--	5,880	5,880
Ukraine	--	--	--	--	--	--	--	--	5,880	5,880
Uzbekistan	--	--	--	--	--	--	--	--	5,880	5,880

Table C3. Gross Heat Content of Crude Oil, 1980, 1985-1993 (Continued)
 (Thousand Btu per Barrel)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Middle East										
Bahrain	5,861	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
Iran	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888
Iraq	5,831	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820
Israel	5,927	5,918	5,918	5,952	5,920	5,920	5,920	5,920	5,920	5,920
Jordan	--	--	5,973	5,973	5,956	5,956	5,956	5,956	5,956	5,956
Kuwait	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921
Oman	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869
Qatar	5,748	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777
Saudi Arabia	5,936	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910
Syria	6,135	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
United Arab Emirates	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788
Yemen	--	--	5,712	5,744	5,728	5,729	5,725	5,725	5,725	5,725
Africa										
Algeria	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555
Angola	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828
Benin	--	6,140	6,140	6,141	6,142	6,142	6,142	6,142	6,142	6,142
Cameroon	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948
Congo	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Cote d'Ivoire (Ivory Coast)	5,902	5,900	5,900	5,900	5,899	5,899	5,899	5,899	5,899	5,899
Egypt	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922
Equatorial Guinea	--	--	--	--	--	--	--	--	5,464	5,464
Gabon	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888
Ghana	5,902	5,890	5,936	--	--	--	--	--	5,936	5,936
Libya	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775
Morocco	5,738	5,726	5,720	5,753	5,738	5,738	5,738	5,738	5,738	5,738
Nigeria	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880
Tunisia	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677
Zaire	5,878	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
Far East & Oceania										
Australia	5,657	5,578	5,578	5,578	5,578	5,578	5,578	5,578	5,578	5,578
Bangladesh	--	5,784	5,829	5,808	5,792	5,792	5,792	5,792	5,792	5,792
Brunei	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865
Burma	6,020	6,020	6,021	6,019	6,020	6,020	6,020	6,020	6,020	6,020
China	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
India	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729
Indonesia	5,831	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740
Japan	5,899	5,900	5,901	5,900	5,899	5,899	5,899	5,899	5,899	5,899
Malaysia	5,677	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
New Zealand	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441
Pakistan	5,776	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777
Papua New Guinea	--	--	--	--	--	--	--	--	5,607	5,607
Philippines	5,900	5,900	5,901	5,900	5,902	5,902	5,902	5,902	5,902	5,902
Taiwan	6,317	6,315	6,315	6,320	6,321	6,321	6,321	6,321	6,321	6,321
Thailand	6,193	6,317	6,317	6,317	6,317	6,317	6,317	6,317	6,317	6,317
Vietnam	--	--	6,027	6,022	6,022	6,022	6,022	6,022	6,022	6,022

--=No production of this form of energy.

Sources: See sources at the end of Section 3.

Table C4. Gross Heat Content of Natural Gas Plant Liquids, 1980, 1985-1993
 (Thousand Btu per Barrel)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980
Mexico	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620
United States	3,914	3,815	3,797	3,804	3,800	3,826	3,822	3,807	3,804	3,801
Central & South America										
Argentina	3,820	3,821	3,820	3,820	3,820	3,820	3,820	3,820	3,820	3,820
Bolivia	4,128	4,128	4,132	4,130	4,130	4,130	4,130	4,130	4,130	4,130
Brazil	4,250	4,250	4,251	4,250	4,250	4,250	4,250	4,250	4,250	4,250
Chile	4,151	4,149	4,151	4,151	4,150	4,150	4,150	4,150	4,150	4,150
Colombia	3,283	3,288	3,288	3,283	3,286	3,286	3,286	3,286	3,286	3,286
Cuba	4,356	4,342	4,342	4,342	4,344	4,344	4,344	4,344	4,344	4,344
Ecuador	4,233	4,233	4,233	4,233	4,235	4,235	4,235	4,235	4,235	4,235
Peru	4,623	4,630	4,630	4,630	4,617	4,617	4,617	4,617	4,617	4,617
Trinidad and Tobago	--	--	--	--	--	--	--	4,344	4,344	4,344
Venezuela	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195
Western Europe										
Austria	4,274	4,274	4,274	4,247	4,262	4,262	4,262	4,262	4,262	4,262
France	4,385	4,385	4,386	4,386	4,385	4,385	4,385	4,385	4,385	4,385
Greece	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050
Italy	4,247	4,247	4,247	4,258	4,259	4,259	4,259	4,259	4,259	4,259
Netherlands	4,348	4,349	4,349	4,349	4,347	4,347	4,347	4,347	4,347	4,347
Norway	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Spain	--	--	4,348	4,347	4,348	4,348	4,348	4,348	4,348	4,348
United Kingdom	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490
Former Yugoslavia	4,342	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349
Eastern Europe & Former U.S.S.R.										
Former Czechoslovakia	4,658	4,658	4,658	4,658	4,645	4,645	4,645	4,645	4,645	--
Czech Republic	--	--	--	--	--	--	--	--	--	4,645
Slovakia	--	--	--	--	--	--	--	--	--	4,645
Hungary	4,387	4,387	4,387	4,387	4,386	4,386	4,386	4,386	4,386	4,386
Poland	4,438	4,438	4,438	4,438	4,454	4,454	4,454	4,454	4,454	4,454
Romania	4,620	4,619	4,619	4,619	4,619	4,619	4,619	4,619	4,619	4,619
Former U.S.S.R.	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	--	--
Azerbaijan	--	--	--	--	--	--	--	--	4,150	4,150
Kazakhstan	--	--	--	--	--	--	--	--	4,150	4,150
Kyrgyzstan	--	--	--	--	--	--	--	--	4,150	4,150
Russia	--	--	--	--	--	--	--	--	4,150	4,150
Tajikistan	--	--	--	--	--	--	--	--	4,150	4,150
Turkmenistan	--	--	--	--	--	--	--	--	4,150	4,150
Ukraine	--	--	--	--	--	--	--	--	4,150	4,150
Uzbekistan	--	--	--	--	--	--	--	--	4,150	4,150
Middle East										
Bahrain	4,288	4,288	4,288	4,286	4,287	4,287	4,287	4,287	4,287	4,287
Iran	4,347	4,348	4,349	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Iraq	4,351	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Kuwait	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190
Oman	4,575	4,582	4,582	4,580	4,581	4,581	4,581	4,581	4,581	4,581
Qatar	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790
Saudi Arabia	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265
Syria	--	--	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
United Arab Emirates	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532

See footnotes at end of table.

Table C4. Gross Heat Content of Natural Gas Plant Liquids, 1980, 1985-1993
 (Thousand Btu per Barrel)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Africa										
Algeria	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080
Egypt	4,940	4,940	4,939	4,940	4,940	4,940	4,940	4,940	4,940	4,940
Libya	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350
Tunisia	--	--	--	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Far East & Oceania										
Australia	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290
Bangladesh	--	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050
Brunei	4,505	4,504	4,504	4,506	4,506	4,506	4,506	4,506	4,506	4,506
Burma	--	--	--	--	4,348	4,348	4,348	4,348	4,348	4,348
India	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Indonesia	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060
Japan	4,356	4,384	4,326	4,326	4,327	4,327	4,327	4,327	4,327	4,327
Malaysia	--	4,411	4,411	4,411	4,410	4,410	4,410	4,410	4,410	4,410
New Zealand	4,082	4,073	4,073	4,073	4,075	4,075	4,075	4,075	4,075	4,075
Pakistan	4,384	4,384	4,384	4,384	4,372	4,372	4,372	4,372	4,372	4,372
Taiwan	3,826	3,836	3,836	3,836	3,825	3,825	3,825	3,825	3,825	3,825
Thailand	4,351	4,350	4,349	4,350	4,349	4,349	4,349	4,349	4,349	4,349

--=No production of this form of energy.

Sources: See sources at the end of Section 3.

Table C5. Gross Heat Content of Dry Natural Gas, 1980, 1985-1993
(Btu per Cubic Foot)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	1,014	1,014	1,014	1,014	1,017	1,014	1,014	1,015	1,015	1,015
Mexico	963	963	963	963	963	963	963	963	963	963
United States	1,026	1,032	1,030	1,031	1,029	1,031	1,031	1,030	1,030	1,027
Central & South America										
Argentina	932	932	932	932	932	932	932	932	932	932
Barbados	1,057	1,050	1,050	1,033	1,050	1,050	1,050	1,047	1,047	1,047
Bolivia	932	932	932	932	932	932	932	932	932	932
Brazil	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033
Chile	999	999	999	999	999	999	999	999	999	999
Colombia	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145	1,145
Cuba	1,042	1,045	1,045	--	--	--	--	--	--	--
Ecuador	1,299	1,300	1,300	1,300	1,300	1,300	1,300	1,299	1,299	1,299
Peru	999	999	999	999	999	999	999	999	999	999
Trinidad and Tobago	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Venezuela	1,139	1,139	1,139	1,139	1,139	1,139	1,139	1,139	1,139	1,139
Western Europe										
Austria	1,080	1,080	1,080	1,080	1,080	967	967	1,074	1,074	1,074
Belgium	1,057	1,057	1,057	1,057	1,057	944	--	--	1,065	1,065
Denmark	--	1,101	1,101	1,101	1,101	1,100	1,089	1,092	1,092	1,092
Finland	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052
France	1,006	1,006	1,006	1,006	1,040	1,092	1,099	1,123	1,123	1,123
Germany	893	893	893	893	893	893	893	893	893	893
Germany, East	385	385	385	385	385	385	385	--	--	--
Germany, West	943	943	943	943	943	943	943	--	--	--
Greece	--	1,439	1,439	1,439	1,439	1,443	1,398	1,406	1,406	1,406
Ireland	1,008	1,008	1,008	1,008	1,008	1,008	1,010	1,009	1,009	1,009
Italy	1,012	1,012	1,012	1,012	1,014	1,013	1,013	1,013	1,013	1,013
Luxembourg	1,079	1,079	1,079	1,079	1,079	1,079	1,088	1,093	1,093	1,093
Netherlands	895	895	895	895	895	895	895	894	894	894
Norway	1,079	1,079	1,079	1,079	1,086	1,085	1,091	1,089	1,089	1,089
Spain	1,147	1,147	1,147	1,147	1,144	1,141	1,141	1,140	1,140	1,140
Switzerland	1,058	1,058	1,058	1,058	1,054	1,074	--	--	1,082	1,082
Turkey	--	1,029	1,029	1,029	1,029	1,030	1,028	1,028	1,028	1,028
United Kingdom	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,002	1,002	1,002
Former Yugoslavia	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,047	1,047	1,047
Eastern Europe & Former U.S.S.R.										
Albania	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Bulgaria	1,038	1,038	1,038	1,039	1,038	1,038	--	--	1,038	1,038
Former Czechoslovakia	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	--
Czech Republic	--	--	--	--	--	--	--	--	--	1,047
Slovakia	--	--	--	--	--	--	--	--	--	1,047
Hungary	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114
Poland	1,023	1,023	1,023	1,023	1,023	1,023	1,023	1,023	1,023	1,023
Romania	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123	1,123
Former U.S.S.R.	929	930	930	932	932	932	932	932	932	--
Armenia	--	--	--	--	--	--	--	--	932	932
Azerbaijan	--	--	--	--	--	--	--	--	932	932
Belarus	--	--	--	--	--	--	--	--	932	932
Estonia	--	--	--	--	--	--	--	--	932	932
Georgia	--	--	--	--	--	--	--	--	932	932
Kazakhstan	--	--	--	--	--	--	--	--	932	932
Kyrgyzstan	--	--	--	--	--	--	--	--	932	932
Latvia	--	--	--	--	--	--	--	--	932	932
Lithuania	--	--	--	--	--	--	--	--	932	932
Moldova	--	--	--	--	--	--	--	--	932	932
Russia	--	--	--	--	--	--	--	--	932	932
Tajikistan	--	--	--	--	--	--	--	--	932	932
Turkmenistan	--	--	--	--	--	--	--	--	932	932
Ukraine	--	--	--	--	--	--	--	--	932	932
Uzbekistan	--	--	--	--	--	--	--	--	932	932

See footnotes at the end of table.

Table C5. Gross Heat Content of Dry Natural Gas, 1980, 1985-1993 (Continued)
(Btu per Cubic Foot)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Middle East										
Bahrain	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Iran	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056	1,056
Iraq	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Israel	1,000	1,040	1,036	1,038	1,039	1,039	--	--	--	--
Kuwait	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Oman	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Qatar	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Saudi Arabia	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Syria	1,047	1,048	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
United Arab Emirates	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Africa										
Algeria	1,061	1,061	1,061	1,061	1,061	1,061	1,061	1,061	1,061	1,061
Angola	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Congo	1,040	1,045	1,050	1,045	--	--	--	--	--	--
Egypt	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Gabon	1,049	1,045	1,050	1,046	1,048	1,048	1,048	1,047	1,047	1,047
Libya	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Morocco	1,049	1,047	1,047	1,048	1,045	1,045	1,045	1,047	1,047	1,047
Nigeria	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Tunisia	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235	1,235
Far East & Oceania										
Afghanistan	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Australia	1,050	1,050	1,050	1,050	1,052	1,041	1,047	1,050	1,050	1,050
Bangladesh	974	974	974	974	974	974	974	974	974	974
Brunei	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114	1,114
Burma	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
China	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
India	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034
Indonesia	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Japan	1,068	1,068	1,068	1,068	1,044	1,044	1,044	1,043	1,043	1,043
Korea, South	--	--	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Malaysia	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034	1,034
New Zealand	988	988	988	988	985	921	1,019	1,009	1,009	1,009
Pakistan	974	974	974	974	974	974	974	974	974	974
Taiwan	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Thailand	--	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050

--=No production of this form of energy.

Sources: See sources at the end of Section 4.

Table C6. Gross Heat Content of Coal, 1980, 1985-1993
 (Thousand Btu per Short Ton)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	22,262	22,301	22,480	22,251	22,159	22,367	22,543	22,670	22,406	22,486
Mexico	19,352	19,352	19,352	19,352	19,352	19,352	19,352	19,352	19,352	19,352
United States	22,415	21,870	21,913	21,922	21,823	21,765	21,822	21,681	21,646	21,388
Central & South America										
Argentina	19,438	19,438	19,438	19,438	19,438	19,438	19,438	19,438	21,244	21,244
Brazil	17,459	17,459	17,459	17,459	17,459	17,459	17,459	17,459	16,000	16,000
Chile	24,441	24,584	24,626	24,616	24,657	24,652	24,664	24,698	29,126	28,948
Colombia	23,405	23,405	23,405	23,405	23,405	23,405	23,405	23,405	23,405	23,405
Peru	26,747	26,742	26,817	26,817	26,802	26,756	26,756	26,592	26,580	26,586
Venezuela	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,190	25,190
Western Europe										
Austria	24,082	24,082	24,082	24,082	24,082	24,082	24,082	24,082	24,082	24,082
Belgium	19,224	18,905	19,040	18,612	17,919	18,082	17,434	17,609	17,565	17,882
France	22,776	22,942	22,676	22,656	22,621	22,607	22,279	22,495	22,487	22,572
Germany	--	--	--	--	--	--	--	10,282	10,544	10,470
Germany, East	7,640	7,640	7,640	7,640	7,640	7,640	7,640	--	--	--
Germany, West	13,237	13,355	13,483	13,464	13,341	13,208	13,230	--	--	--
Greece	5,444	5,444	5,444	5,444	5,444	5,444	5,444	5,444	4,479	4,479
Ireland	24,768	24,768	24,768	24,768	24,768	24,768	24,768	24,768	24,768	24,768
Italy	9,027	9,118	9,109	9,291	9,302	9,631	9,774	9,297	10,138	10,222
Norway	24,172	24,172	24,172	24,172	24,172	24,172	24,172	24,172	24,168	24,168
Portugal	14,763	14,763	14,763	14,763	14,763	14,763	14,763	14,763	14,763	14,763
Spain	13,664	12,979	13,059	13,496	13,348	12,526	12,545	13,470	13,338	13,578
Sweden	20,642	20,642	20,642	20,642	20,642	20,642	20,642	20,642	23,404	23,404
Turkey	21,127	20,863	20,830	20,826	20,857	20,787	20,787	20,873	10,410	10,332
United Kingdom	22,694	22,687	22,689	22,689	22,689	22,689	22,687	22,687	20,861	20,861
Former Yugoslavia	10,969	10,969	11,099	10,846	10,756	10,713	10,564	10,497	10,493	10,427
Eastern Europe & Former U.S.S.R.										
Albania	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325
Bulgaria	10,002	9,707	9,198	9,130	9,097	9,004	8,700	8,699	8,280	8,278
Former Czechoslovakia	20,670	20,698	20,726	20,686	20,687	20,669	20,663	20,662	20,666	--
Czech Republic	--	--	--	--	--	--	--	--	--	20,886
Slovakia	--	--	--	--	--	--	--	--	--	14,123
Hungary	10,262	10,319	10,332	10,296	10,413	9,797	9,731	9,615	10,113	10,113
Poland	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,516	20,516
Romania	8,997	8,610	8,587	8,527	8,331	8,148	8,012	8,130	6,905	6,827
Former U.S.S.R.	15,333	15,417	15,393	15,393	15,342	15,351	15,476	15,257	--	--
Georgia	--	--	--	--	--	--	--	--	15,141	15,732
Kazakhstan	--	--	--	--	--	--	--	--	16,626	16,631
Kyrgyzstan	--	--	--	--	--	--	--	--	12,389	11,842
Russia	--	--	--	--	--	--	--	--	14,130	14,192
Tajikistan	--	--	--	--	--	--	--	--	8,343	8,343
Ukraine	--	--	--	--	--	--	--	--	17,375	17,338
Uzbekistan	--	--	--	--	--	--	--	--	8,611	8,599

See footnotes at end of table.

Table C6. Gross Heat Content of Coal, 1980, 1985-1993 (Continued)
 (Thousand Btu per Short Ton)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Middle East										
Iran	26,232	26,232	26,232	26,232	26,232	26,232	26,232	26,232	26,232	26,232
Africa										
Algeria	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Botswana	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Cameroon	--	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Malawi	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	--	--
Morocco	30,103	30,103	30,103	30,103	30,103	30,103	30,103	30,103	30,103	30,103
Mozambique	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Niger	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200
Nigeria	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
South Africa	25,860	25,858	25,858	25,861	25,856	25,849	25,843	25,832	21,363	21,357
Swaziland	23,502	23,490	23,490	23,465	23,490	23,482	23,479	23,491	23,441	23,741
Tanzania	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Zaire	23,927	23,927	23,927	23,927	23,927	23,927	23,927	23,927	23,927	23,927
Zambia	23,411	23,411	23,411	23,411	23,411	23,411	23,411	23,411	21,244	21,244
Zimbabwe	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Far East & Oceania										
Afghanistan	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Australia	16,505	17,310	17,716	17,622	17,343	17,309	17,574	17,498	17,537	17,680
Bhutan	--	--	--	17,500	17,500	17,500	17,500	17,500	17,500	17,500
Burma	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
China	18,130	18,144	18,147	18,148	18,138	18,121	18,101	18,109	18,100	18,057
India	17,079	16,966	17,004	17,018	17,018	16,990	16,821	16,812	17,215	17,157
Indonesia	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Japan	21,088	21,104	21,111	21,102	21,096	21,091	21,086	21,088	21,090	21,093
Korea, North	22,590	22,324	22,229	22,120	21,838	21,859	21,514	21,402	20,628	20,657
Korea, South	16,203	16,203	16,203	16,203	16,203	16,203	16,203	16,203	16,200	16,200
Laos	--	--	--	22,500	--	--	--	22,500	22,500	22,500
Malaysia	--	--	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403
Mongolia	10,271	10,111	10,079	10,219	10,177	10,236	10,250	10,243	9,236	9,287
Nepal	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
New Zealand	22,356	22,341	22,455	22,888	22,477	22,589	22,555	22,550	22,552	22,319
Pakistan	19,443	19,443	19,443	19,443	19,443	19,443	19,443	19,443	16,988	16,988
Philippines	20,212	20,212	20,212	20,203	20,204	20,204	20,204	20,204	17,002	17,002
Taiwan	24,602	24,602	24,602	24,602	24,602	24,602	24,602	24,602	24,602	24,602
Thailand	9,903	9,893	9,894	9,905	9,918	9,901	9,911	9,911	9,415	9,421
Vietnam	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403

--=No production of this form of energy.

Note: Heat contents are calculated based on individual heat contents for production of anthracite, bituminous and lignite.

Sources: See sources at the end of Section 5.

Table C7. Gross Heat Content of Hydroelectric Power, 1980, 1985-1993
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Mexico	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United States	10,388	10,447	10,446	10,419	10,324	10,317	10,335	10,352	10,302	10,280
Central & South America										
Argentina	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bolivia	10,402	10,401	10,397	10,403	10,403	10,403	10,403	10,403	10,403	10,403
Brazil	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Chile	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Colombia	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Costa Rica	10,398	10,402	10,401	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Dominican Republic	10,398	10,396	10,400	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Ecuador	10,397	10,401	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
El Salvador	10,395	10,400	10,397	10,402	10,402	10,402	10,402	10,402	10,402	10,402
Guatemala	10,385	10,402	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Guyana	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Haiti	10,413	10,389	10,413	10,410	10,410	10,410	10,410	10,410	10,410	10,410
Honduras	10,396	10,404	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402
Jamaica	10,420	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403
Nicaragua	10,391	10,383	10,415	10,415	10,415	10,415	10,415	10,415	10,415	10,415
Panama	10,399	10,398	10,400	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Paraguay	10,404	10,402	10,400	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Peru	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Puerto Rico	10,435	10,403	10,404	10,389	10,389	10,389	10,389	10,389	10,389	10,389
Suriname	10,399	10,395	10,402	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Uruguay	10,400	10,400	10,399	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Venezuela	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Western Europe										
Austria	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Belgium	10,402	10,398	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Denmark	10,333	10,370	10,345	10,345	10,345	10,345	10,345	10,345	10,345	10,345
Finland	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
France	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Germany	--	--	--	--	--	--	--	--	--	--
Germany, East	10,402	10,402	10,400	10,400	10,400	10,400	10,400	--	--	--
Germany, West	10,400	10,400	10,400	10,400	10,400	10,400	10,400	--	--	--
Greece	10,400	10,401	10,399	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Iceland	10,400	10,400	10,400	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Ireland	10,402	10,398	10,404	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Italy	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Luxembourg	10,383	10,390	10,408	10,409	10,409	10,409	10,409	10,409	10,409	10,409
Netherlands	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Norway	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Portugal	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Spain	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Sweden	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Switzerland	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Turkey	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United Kingdom	10,401	10,399	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Former Yugoslavia	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400

See footnotes at end of table.

Table C7. Gross Heat Content of Hydroelectric Power, 1980, 1985-1993
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Eastern Europe & Former U.S.S.R										
Albania	10,399	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Bulgaria	10,400	10,402	10,399	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Former Czechoslovakia	10,401	10,399	10,400	10,400	10,400	10,400	10,400	10,400	10,400	--
Czech Republic	--	--	--	--	--	--	--	--	--	10,400
Slovakia	--	--	--	--	--	--	--	--	--	10,400
Hungary	10,360	10,392	10,395	10,419	10,419	10,419	10,419	10,419	10,419	10,419
Poland	10,400	10,399	10,401	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Romania	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Former U.S.S.R.	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	--	--
Armenia	--	--	--	--	--	--	--	--	10,400	10,400
Azerbaijan	--	--	--	--	--	--	--	--	10,400	10,400
Georgia	--	--	--	--	--	--	--	--	10,400	10,400
Kazakhstan	--	--	--	--	--	--	--	--	10,400	10,400
Kyrgyzstan	--	--	--	--	--	--	--	--	10,400	10,400
Latvia	--	--	--	--	--	--	--	--	10,400	10,400
Lithuania	--	--	--	--	--	--	--	--	10,400	10,400
Moldova	--	--	--	--	--	--	--	--	10,400	10,400
Russia	--	--	--	--	--	--	--	--	10,400	10,400
Tajikistan	--	--	--	--	--	--	--	--	10,400	10,400
Ukraine	--	--	--	--	--	--	--	--	10,400	10,400
Uzbekistan	--	--	--	--	--	--	--	--	10,400	10,400
Middle East										
Iran	10,399	10,399	10,399	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Iraq	10,395	10,397	10,404	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Israel	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Jordan	--	--	10,000	10,526	10,526	10,526	10,526	10,526	10,526	10,526
Lebanon	10,404	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Syria	10,398	10,399	10,402	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Africa										
Algeria	10,403	10,406	10,400	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Angola	10,404	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Cameroon	10,404	10,401	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Central African Republic	10,339	10,333	10,395	10,411	10,411	10,411	10,411	10,411	10,411	10,411
Congo	10,380	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390
Cote d'Ivoire (Ivory Coast)	10,404	10,402	10,402	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Egypt	10,400	10,400	10,400	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Equatorial Guinea	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Ethiopia	10,402	10,394	10,406	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Gabon	10,389	10,394	10,406	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Ghana	10,400	10,401	10,401	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Guinea	10,380	10,392	10,387	10,424	10,424	10,424	10,424	10,424	10,424	10,424
Kenya	10,400	10,403	10,403	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Liberia	10,404	10,386	10,413	10,411	10,411	10,411	10,411	10,411	10,411	10,411
Madagascar	10,420	10,392	10,415	10,412	10,412	10,412	10,412	10,412	10,412	10,412
Malawi	10,400	10,404	10,392	10,394	10,394	10,394	10,394	10,394	10,394	10,394
Mali	10,400	10,376	10,380	10,375	10,375	10,375	10,375	10,375	10,375	10,375
Mauritius	10,366	10,439	10,367	10,432	10,432	10,432	10,432	10,432	10,432	10,432
Morocco	10,400	10,400	10,392	10,407	10,407	10,407	10,407	10,407	10,407	10,407
Mozambique	10,400	10,404	10,400	10,339	10,339	10,339	10,339	10,339	10,339	10,339
Nigeria	10,401	10,398	10,399	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Rwanda	10,392	10,370	10,427	10,417	10,417	10,417	10,417	10,417	10,417	10,417
South Africa	10,401	10,395	10,399	10,394	10,394	10,394	10,394	10,394	10,394	10,394
Sudan	10,404	10,392	10,391	10,391	10,391	10,391	10,391	10,391	10,391	10,391
Swaziland	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Tanzania	10,400	10,393	10,407	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Togo	10,000	10,333	10,333	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Tunisia	10,435	10,370	10,392	10,357	10,357	10,357	10,357	10,357	10,357	10,357
Uganda	10,394	10,408	10,406	10,392	10,392	10,392	10,392	10,392	10,392	10,392
Zaire	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Zambia	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Zimbabwe	10,399	10,401	10,400	10,401	10,401	10,401	10,401	10,401	10,401	10,401

See footnotes at end of table.

Table C7. Gross Heat Content of Hydroelectric Power, 1980, 1985-1993 (Continued)
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Far East & Oceania										
Afghanistan	10,407	10,403	10,407	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Australia	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bangladesh	10,399	10,396	10,404	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bhutan	10,556	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Burma	10,405	10,403	10,396	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Cambodia	10,408	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333
China	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Fiji	--	10,414	10,395	10,405	10,405	10,405	10,405	10,405	10,405	10,405
India	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Japan	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Korea, North	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Korea, South	10,402	10,400	10,400	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Laos	10,402	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Malaysia	10,403	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Nepal	10,387	10,393	10,405	10,394	10,394	10,394	10,394	10,394	10,394	10,394
New Caledonia	10,403	10,397	10,402	10,394	10,394	10,394	10,394	10,394	10,394	10,394
New Zealand	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Pakistan	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Papua New Guinea	10,404	10,409	10,404	10,393	10,393	10,393	10,393	10,393	10,393	10,393
Philippines	10,401	10,399	10,399	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Sri Lanka	10,403	10,401	10,401	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Taiwan	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Thailand	10,401	10,399	10,400	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Vietnam	10,404	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399

--=No production of this form of energy.

Note: There is no generally accepted practice for evaluating the thermal conversion rates for power plants that generate electricity from hydroelectric sources. Therefore, estimates of the prevailing annual average heat content for fossil-fueled, steam-electric power plants are used to evaluate the heat content for hydroelectric power. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption such as droughts.

Sources: See sources at the end of Section 6.

Table C8. Gross Heat Content of Nuclear Electric Power, 1980, 1985-1993
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	11,592	11,550	11,550	11,550	11,550	11,550	11,550	11,550	11,550	11,376
Mexico	--	--	--	--	--	--	10,295	10,065	10,065	10,065
United States	10,908	10,813	10,799	10,776	10,743	10,724	10,680	10,740	10,678	10,682
Central & South America										
Argentina	11,646	11,810	11,810	11,809	11,809	11,809	11,809	11,809	11,809	11,809
Brazil	--	10,246	10,219	10,251	10,258	10,258	10,258	10,246	10,246	10,246
Western Europe										
Belgium	10,392	10,378	10,378	10,378	10,378	10,378	10,378	10,373	10,373	10,373
Finland	10,468	10,365	10,365	10,365	10,365	10,365	10,365	10,278	10,278	10,278
France	11,344	10,161	10,161	10,161	10,161	10,161	10,161	10,399	10,399	10,396
Germany	10,662	10,485	10,478	10,471	10,467	10,469	10,437	10,205	10,205	10,205
Germany, East	11,278	11,278	11,278	11,278	11,278	11,278	11,278	--	--	--
Germany, West	10,662	10,485	10,478	10,471	10,467	10,469	10,437	--	--	--
Italy	12,131	12,131	12,131	12,041	--	--	--	--	--	--
Netherlands	10,549	10,548	10,549	10,548	10,548	10,548	10,548	10,485	10,485	10,485
Spain	11,307	10,775	10,775	10,775	10,775	10,775	10,775	10,151	10,151	10,151
Sweden	10,270	10,001	10,001	10,001	10,001	10,001	10,001	10,090	10,090	10,090
Switzerland	10,556	10,632	10,632	10,632	10,632	10,632	10,632	10,540	10,540	10,540
United Kingdom	12,912	11,892	11,892	11,892	11,892	11,892	11,892	12,461	12,461	12,461
Former Yugoslavia	--	11,372	11,372	11,374	11,373	11,373	11,373	10,035	10,035	10,035
Eastern Europe & Former U.S.S.R.										
Bulgaria	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006
Former Czechoslovakia	12,318	12,274	12,274	12,274	12,274	12,274	12,274	12,274	12,274	--
Czech Republic	--	--	--	--	--	--	--	--	--	12,099
Slovakia	--	--	--	--	--	--	--	--	--	12,318
Hungary	11,374	11,372	11,374	11,373	11,373	11,373	11,373	10,065	10,065	10,065
Former U.S.S.R.	11,425	11,470	11,513	11,524	11,433	11,443	11,463	11,469	--	--
Kazakhstan	--	--	--	--	--	--	--	10,500	10,500	10,500
Lithuania	--	--	--	--	--	--	--	10,663	10,663	10,663
Russia	--	--	--	--	--	--	--	11,038	11,030	11,030
Ukraine	--	--	--	--	--	--	--	10,911	10,911	10,911
Africa										
South Africa	--	10,308	10,308	10,308	10,308	10,308	10,308	10,035	10,035	10,035
Far East & Oceania										
China	--	--	--	--	--	--	--	--	10,207	10,207
India	11,386	11,672	11,670	11,670	11,671	11,671	11,671	11,844	11,906	11,957
Japan	10,767	10,646	10,646	10,646	10,646	10,646	10,646	10,250	10,250	10,234
Korea, South	9,918	10,422	10,422	10,422	10,422	10,422	10,422	10,077	10,077	10,077
Pakistan	11,750	11,807	11,796	11,809	11,784	11,784	11,784	11,798	11,798	11,798
Taiwan	10,035	10,227	10,227	10,227	10,227	10,227	10,227	9,876	9,876	9,876

--=No production of this form of energy.

Note: The average heat content of electricity generated by nuclear electric power plants is calculated by dividing the heat content of electricity consumed in nuclear generating units (3,412 Btu per kilowatthour) by the estimated efficiency factor (the ratio of output to input) for each nuclear power plant.

Sources: See sources at the end of Section 6.

Table C9. Gross Heat Content of Geothermal Electric Power, 1980, 1985-1993
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Mexico	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
United States	21,639	21,263	21,263	21,263	21,096	21,096	21,096	20,997	20,914	20,914
Central & South America										
Brazil	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
El Salvador	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Nicaragua	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Western Europe										
Greece	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Iceland	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Italy	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Portugal	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Turkey	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Eastern Europe & Former U.S.S.R.										
Former U.S.S.R.	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	--	--
Russia	--	--	--	--	--	--	--	--	21,020	21,020
Africa										
Ethiopia	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Kenya	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Far East & Oceania										
India	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Indonesia	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Japan	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
New Zealand	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Philippines	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020
Vietnam	21,624	21,273	21,273	21,273	21,273	21,020	21,020	21,020	21,020	21,020

--=No production of this form of energy.

Note: The average heat content of electricity generated by geothermal electric power plants is calculated by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities.

Sources: See sources at end of Section 6.

Table C10. Gross Heat Content of Solar and Wind Electric Power, 1980, 1985-1993
(Btu per Kilowatthour)

Region Country	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
North America										
Canada	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United States	10,388	10,447	10,446	10,419	10,324	10,317	10,335	10,352	10,302	10,280
Western Europe										
Belgium	10,402	10,398	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Denmark	10,333	10,370	10,345	10,345	10,345	10,345	10,345	10,345	10,345	10,345
France	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Germany	--	--	--	--	--	--	--	10,400	10,400	10,400
Germany, East	10,402	10,402	10,400	10,400	10,400	10,400	10,400	--	--	--
Germany, West	10,400	10,400	10,400	10,400	10,400	10,400	10,400	--	--	--
Greece	10,400	10,401	10,399	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Italy	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Netherlands	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Portugal	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Sweden	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United Kingdom	10,401	10,399	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Eastern Europe & Former U.S.S.R.										
Romania	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Far East & Oceania										
Japan	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400

--No production of this form of energy.

Note: There is no generally accepted practice for evaluating the thermal conversion rates for power plants that generate electricity from wind and solar thermal sources. Therefore, estimates of the prevailing annual average heat content for fossil-fueled, steam-electric power plants are used to evaluate the heat content for wind and solar thermal power.

Sources: See sources at the end of Section 6.

Appendix D
Energy Chronology: 1993

Energy Chronology: 1993

The following chronology lists international events occurring in 1993 that had direct or indirect significance for world energy markets. Sources include: Dow Jones (DJ); Financial Times (FT); Global Securities Information, Inc. (GSI); Herold's Oil Headliner (HOH); New York Times (NYT); Oil Market Listener (OML); Wall Street Journal (WSJ); and Washington Post (WP).

- January 4** Hundreds of thousands of Polish coal miners return to work following signature of an agreement December 31, 1992, ending their 18-day strike. (DJ)
- January 11** Norwegian North Sea oil production is sharply reduced due to intense storms and nearly full storage tanks. In particular, production from Norway's largest oil field (Statfjord) and another large field (Gullfaks) has been reduced by as much as 90 percent. The two fields normally account for nearly 1.3 million barrels per day (MMBD) of production. (HOH)
- January 12** Angolan UNITA rebels reportedly destroy five oil wells in northwestern Angola owned by Belgian oil company Petrofina. UNITA leader Jonas Savimbi threatens to continue striking oil facilities as long as fighting with government forces continues. (DJ)
- January 12** Russian President Boris Yeltsin appoints Yuri Shafranik, the governor of the oil-rich Tyumen region, as Russian Fuel and Energy Minister. The post had been vacant since Vladimir Lopukhin was fired in June 1992. (FT)
- January 14** The second fire in two days breaks out at the Chernobyl nuclear power plant, site of the world's worst nuclear accident six years ago. (WP)
- January 20** Angolan UNITA rebels seize the town of Soyo – local headquarters of five foreign-owned oil companies – in oil-rich Zaire province. (DJ)
- January 21** The Danish-owned oil supertanker Maersk Navigator, carrying 78 million gallons of crude oil, collides with an empty tanker near the northern entrance to the Strait of Malacca off the northwestern Indonesian coastline. (WP)
- January 21** The U.S. Senate confirms Hazel O'Leary as Secretary of Energy. (DJ)
- January 24** Crude oil production at the Statfjord field in the Norwegian North Sea returns to normal as weather improves. This follows two weeks of bad weather which disrupted tanker loadings and production by up to 90 percent. (HOH)

- February 2** The Piper B production platform in the United Kingdom sector of the North Sea begins oil and gas production. Piper B replaces Piper Alpha, which exploded in 1988, killing 167 people and shutting down production. (*DJ*)
- February 4** Crude oil production at Norway's Statfjord and Gullfaks fields (normal combined output: 1.3 MMBD) is nearly shut down as a result of weeks of gale-force winds, which have disrupted tanker loadings and resulted in full storage tanks throughout the North Sea. (*DJ*)
- February 16** The Organization of Petroleum Exporting Countries (OPEC) concludes its Ministerial Monitoring Committee meeting in Vienna after four days of deliberations, during which ministers hammer out production allocations for the second quarter of 1993. OPEC's oil output ceiling is 23.58 million barrels per day. (*OML*)
- February 17** Faced with the prospect of becoming a net oil importer in the next few years, China announces that foreign oil companies now will be allowed to bid for exploration and development rights to 12 regions in northern and western China (including the potentially oil rich Tarim Basin). (*WSJ*)
- February 20** Russia threatens to cut off natural gas exports to Ukraine within a week unless Ukraine pays nearly \$300 million owed for prior deliveries. Russia supplies the vast majority of Ukraine's natural gas needs. (*DJ*)
- February 23** Russian Fuel and Energy Minister Yuri Shafranik says that Russian oil production will fall 12 percent in 1993, compared to a 14 percent decline in 1992. Such a decline would result in Russian production of around 6.5 MMBD in 1993 (compared to 7.3 MMBD in 1992, and 8.6 MMBD in 1991). (*DJ*)
- February 25** Ukraine makes payment to Russia for prior natural gas deliveries and averts a cutoff.
- March 3** The United Mine Workers Union agrees to a new contract with the Bituminous Coal Operators Association, ending a one-month strike against Peabody Holding Co. (*WSJ*)
- March 9** Norway announces its biggest oil discovery in 8 years - an estimated 440 million barrel field in the northern Norwegian Sea. (*FT*)
- March 9** Turkey and Azerbaijan agree to build a \$1.4 billion, 0.8 MMBD capacity, oil pipeline from Baku to the Turkish Mediterranean port of Ceyhan. The pipeline would be used to export oil from Azerbaijan, and possibly Kazakhstan to western markets. (*FT*)
- March 9** China opens its first oil exchange, the Nanjing Petroleum Exchange, as part of plans to begin gasoline and fuel oil futures trading in the next 2-3 months. (*HOH*)
- March 14** Angolan government forces recapture the strategic oil town of Soyo in northern Angola from UNITA rebels. The rebel forces had seized the town on January 20. (*DJ*)

- March 16** Ecuador's national oil company (Petroecuador) announces discovery of a 500 million barrel heavy crude discovery in the Amazon. Ecuador's proved crude reserves as of January 1, 1993 were estimated at 1.6 billion barrels. (*DJ*)
- March 21** Russia and Poland announce agreement on plans to construct a 2500-mile natural gas pipeline from the Yamal Peninsula on Russia's Arctic coast through Belarus and Poland to markets in Germany. The pipeline is expected to be completed in 2010 and to have a capacity of greater than 1 trillion cubic feet per year. (*GSI*)
- March 30** U.S. Secretary of State Warren Christopher calls for tightening sanctions against Libya, possibly to include a global oil embargo. (*WP*)
- April 4** U.S. President Bill Clinton and Russian President Boris Yeltsin conclude a two-day summit meeting in Vancouver, during which they agree on a \$1.6 billion U.S. aid package (including \$38 million to repair oil pipelines). (*WP*)
- April 6** Chevron and Kazakhstan sign a 40-year agreement creating the Tengizchevroil joint venture, which aims to develop the Tengiz and Korolyov oilfields located on the northeastern shore of the Caspian Sea. The fields are estimated to contain 6-9 billion barrels of recoverable crude oil reserves. (*HOH*)
- April 8** Italian Treasury Minister Peiro Barucci announces the government's decision to shed its majority control of the "entire energy sector." (*DJ*)
- April 12** The Sultanate of Oman and Kazakhstan sign a \$2.7 billion, 40-year agreement to develop oil reserves in the western Atryau region of the former Soviet Republic. (*HOH*)
- April 13** The International Finance Corporation (IFC), the private investment branch of the World Bank, announces Russia's membership in the organization. Plans are for the IFC to work closely with the European Bank for Reconstruction and Development, and to focus on Russia's energy, tourism, and financial sectors. (*DJ*)
- April 21** President Clinton, in a speech marking Earth Day, pledges that the United States will develop a plan aimed at reducing its greenhouse gas emissions "to their 1990 levels by the year 2000." The plan is scheduled to be completed by August. (*NYT*)
- April 23** The World Bank announces agreement, along with the European Bank for Reconstruction and Development, on a \$1 billion aid project to help reopen 1,200 closed Russian oil wells and to help boost Russian oil production by up to 240,000 barrels per day. (*NYT*)
- May 23** Russian President Yeltsin lifts state price controls on gasoline sold to consumers. Yeltsin imposed the controls in April, prior to Russia's nationwide referendum. (*DJ*)
- May 24** Iranian warplanes attack Mujahadeen Khalq rebel bases deep inside Iraqi territory, in the first such action in more than a year. Iran has accused the rebels of committing acts of sabotage in southwestern Iran recently, including dynamiting oil pipelines. (*DJ*)

- May 24** The U.S. Overseas Private Investment Corporation releases a \$50 million loan to the Polar Lights oil joint venture between Conoco Inc. and a Russian company. Polar Lights plans to develop the far-northern Ardalın Field, with estimated reserves of 100 million barrels. (*DJ*)
- May 27** Texaco reports that it has shut down 7,000 barrels per day in offshore oil production from its offshore Soyo field in Angola, following the recapture of onshore oil installations by UNITA rebel forces. UNITA captured Soyo in January, but then lost it to government forces on March 14. Texaco continues to produce around 60,000 barrels per day from offshore fields in the Soyo area. (*HOH*)
- May 31** Texaco reports that it has shut down the remainder of its offshore Soyo production in Angola. (*HOH*)
- June 8** Gabon's oil minister Jean Ping is appointed president of OPEC, succeeding Venezuelan Energy Minister Alirio Parra. (*HOH*)
- June 8** A consortium of Amoco (36%), Marubeni (10%), Royal Dutch/Shell (18%), Shell Oil's Pecten International (18%), and TOTAL (18%) agree to participate in jointly developing over 700 million barrels of oil in China's Tarim Basin. (*HOH*)
- June 9** Seven western energy companies (Mobil, British Gas, British Petroleum, Royal Dutch/Shell, Total, Agip, and Statoil) sign an agreement with Kazakhstan to explore and develop potentially huge offshore oil reserves (possibly more than 35 billion barrels) in the Caspian Sea. (*NYT*)
- June 10** OPEC concludes a contentious ministerial conference by agreeing to roll over its 23.582 MMBD quota for the third quarter of 1993. Kuwait and Iraq reject the agreement. (*OML*)
- June 14** Saudi Arabia's cabinet agrees to merge the state company responsible for downstream oil operations, Saudi Arabian Marketing and Refining Company, (SAMAREC), with the state company for upstream operations, Saudi Aramco, creating one of the world's largest oil companies. (*DJ*)
- June 15** Oman and India sign an agreement on hydrocarbon projects, including a \$4.5 billion plan to build a natural gas pipeline from Oman to India under the Arabian Sea, and the construction of two, 120,000-barrels-per-day oil refineries in India. (*DJ*)
- June 16** The U.N. Security Council votes unanimously to impose an oil embargo on Haiti beginning June 23, unless Haiti's military rulers are deemed to be negotiating seriously to return ousted President Jean-Bertrand Aristide. (*WP*)
- June 18** Faced with a growing anti-government rebellion, Azerbaijan's President Abulfaz Elcibey steps down and is replaced by Geydar Aliyev, the former Communist Party leader. Fearing full-scale civil war, several western oil companies (including Amoco, Pennzoil, and McDermott) evacuate much of their personnel from the country. (*DJ*)
- June 18** The World Bank approves a 17-year, \$610 million loan to finance rehabilitation of Russian oilfields in western Siberia. The credit comes as part of the \$43 billion Russian multi-year aid package agreed to by the G-7 major industrialized nations in April. The World Bank has estimated that Russia will require more than \$50 billion by the end of the decade in order to stabilize oil output at current levels. (*DJ*)

- June 19** Striking Ukrainian coal miners begin returning to work after the government promises various concessions. Miners warn, however, that the strike will resume unless President Kravchuk and Parliament ratify the preliminary agreement. Since it began June 8, the strike had grown to include 500,000 miners from 228 of the country's 256 coal mines. (GS)
- June 28** As part of its ongoing privatization program, the Argentine government sells \$3 billion worth of stock in the state oil company, YPF. (NYT)
- July 7** The U.S. Export-Import Bank extends \$2 billion in credits to Russia to purchase U.S. equipment for bolstering oil and gas production. (DJ)
- July 16** Norway's oil union accepts a new contract under strong pressure from the government, averting a strike that had threatened oil production. (DJ)
- July 19** OPEC announces an emergency meeting for July 28. Light sweet crude oil for August delivery rebounds from \$16.75 per barrel earlier in the day, a 3-year low for near-term deliveries on the New York Mercantile Exchange (NYMEX). (NYT)
- July 23** OPEC announces the delay of an emergency meeting called to discuss low oil prices and Iraq's possible return to world oil markets. Reports suggest the meeting may be cancelled altogether due to serious differences among members. (DJ)
- July 26** Texaco agrees to sell Aramco Overseas Company a 34% stake in a Rotterdam storage facility, giving Saudi Arabia 6 million barrels in European storage capacity. (DJ)
- July 27** Flood waters force the shutdown of a nuclear power plant on the Missouri River near Brownville, Nebraska, after area roads designated for emergency evacuation became impassable. (WSJ)
- July 29** Colombia suspends oil exports after rebels blow up a section of the Cano-Limon pipeline. The incident follows two other attacks earlier in the month. (DJ)
- August 5** The European Bank for Reconstruction and Development announces two loans for Russia's oil industry: \$174.3 million to a Western Siberian conglomerate for modernization aimed at tripling output; and \$80 million to the KomiArticOil joint venture for continued development of the Upper Vozey Silurian oilfield. (DJ)
- August 6** The U.S. Export-Import Bank and Petroleos Mexicanos (Pemex) sign loan guarantee agreements totalling \$348.4 million for oilfield equipment and services for offshore projects in Mexico's Campeche Sound. (DJ)
- August 10** President Clinton signs into law a budget bill enacting a 4.3¢ per gallon increase in the federal transportation fuel tax, effective October 1. (NYT)

- August 10** Venezuela's Congress approves the Cristobal Colon natural gas project, the first to allow foreign company investment in Venezuela's oil industry since it was nationalized in 1976. (DJ)
- August 12** Russia receives a \$610 million loan from the World Bank for restoration of 1,300 wells and replacement of 800 miles of pipeline in Western Siberia. (DJ)
- August 15** Cleanup at the Three Mile Island nuclear plant concludes 14 years after the March 28, 1979, accident, the worst such event in U.S. history. (DJ)
- August 18** Russia launches the first official privatization of oil companies, offering to sell 8.3 percent of Komineft and two subsidiaries. (FT)
- August 25** Iran announces the discovery of a new oil field in southwestern Khuzestan province with estimated reserves of 7 billion barrels of high-quality light crude. (DJ)
- August 26** Nigeria's military ruler, General Ibrahim Babangida, resigns and installs an interim government headed by Ernest Shonekan. Don Etiebet becomes the new petroleum and mineral resources minister. Oil workers go on strike the next day, temporarily shutting down Nigeria's largest oil export terminal. A general strike follows. (HOH)
- August 27** The U.N. Security Council votes unanimously to suspend the oil embargo against Haiti. (DJ)
- September 2** The United States and Russia sign agreements to assist the Russian economy, improve nuclear safety, and internationalize the U.S. space station project. Included are: 1) an agreement to cooperate in the development of Russia's oil and gas industry, 2) an Overseas Private Investment Corporation commitment of \$28 million in insurance and loan guarantees for Texaco's \$80 million Sutormin project to restore oil wells in western Siberia, and 3) creation of working groups on business development and bilateral energy deals. (WP)
- September 13** President Clinton relaxes the ban on trade with Vietnam to allow U.S. firms to bid on development projects financed by the World Bank and other international agencies. (WP)
- September 15** The European Bank for Reconstruction and Development announces the signing of a financing deal for the Northern Lights joint venture between Conoco and Arkhangelskgeologia, a company owned by the Russian government. (DJ)
- September 29** OPEC concludes a 4-day meeting in Geneva by agreeing to an overall 24.5 MMBD quota for the fourth quarter of 1993 and the first quarter of 1994. (DJ)
- October 1** Federal regulations take effect requiring removal of sulfur from diesel fuel for on-highway use under the U.S. Clean Air Act. (DJ)
- October 12** Chevron and Azerbaijan's state oil company sign a joint study agreement for oil development in the south Caspian Sea region. (DJ)

- October 15** The World Bank signs loan agreements totalling \$218 million with Kazakhstan. The loans will, among other things, help finance import of oil-production equipment. (*DJ*)
- October 19** Vietnam and China agree to settle territorial disputes peacefully, and to work towards a "final and full solution" of their dispute over the potentially oil-rich Spratly Islands. (*DJ*)
- October 19** President Clinton announces his plan to reduce greenhouse gas emissions and fight global warming. (*DJ*)
- October 19** The UN Security Council reinstates an oil embargo on Haiti for ignoring an October 18 deadline to allow elected President Jean-Bertrand Aristide to return to office. (*GS*)
- October 21** In the face of energy shortages, Ukraine's legislature votes to keep the Chernobyl nuclear power plant open. Ukraine had planned to shut the plant down by the end of 1993. (*DJ*)
- November 1** IAEA director Hans Blix says Iraq has still not cooperated fully with weapons inspectors, reducing the chances of near-term resumption of Iraqi oil exports. (*DJ*)
- November 4** Citing low demand for solar energy, Mobil Corp. announces the shutdown of its 19-year-old solar energy program. (*DJ*)
- November 15** Widespread strikes shut down much of Nigeria in protest of the government's recent decision to raise fuel prices 600 percent. Oil production is not affected. (*DJ*)
- November 16** The World Bank releases a \$610 million dollar loan (the largest in World Bank history) to three Western Siberian oil-producing companies. The loan aims to halt the decline in Russian oil output by rehabilitating existing wells and equipment. (*DJ*)
- November 17** Amidst widespread political unrest in the country, Nigerian President Shonekan resigns and is replaced by General Sani Abacha. (*WP*)
- November 20** Israel's Energy Minister says that Egypt and Israel will link their electricity grids, and will build a natural gas pipeline to supply Israel with 2 million cubic feet per day of Egyptian gas. (*DJ*)
- November 24** OPEC ends its end-of-year meetings with a decision to roll over its 24.52 MMBD oil output ceiling. Oil prices fall sharply on the news. OPEC also elects a new President, Qatar's Abdullah bin Hamad al-Attiyah, to replace Gabon's Jean Ping. (*DJ*)
- November 26** Iraq formally accepts long-term U.N. weapons monitoring, removing a significant obstacle to resumption of Iraqi oil exports. U.N. Special Commissioner Rolf Ekeus calls Iraq's decision a "major breakthrough," but cautions that significant problems still remain. (*DJ*)
- November 29** In the wake of OPEC's failure to cut oil production quotas, combined with Iraq's acceptance of U.N. weapons monitoring, crude oil prices fall to their lowest levels since November 1988. In real terms, oil prices are now as low as they have been since December 1973. (*DJ*)

- December 3** President Clinton extends the comprehensive financial and trade embargo against Libya for another year and tightens economic sanctions regarding sales of U.S. origin products. (*DJ*)
- December 3** Kazakhstan signs an agreement with a consortium of western oil companies (including U.S. company Mobil Oil) to explore and develop Caspian Sea oil and gas reserves, which it estimates at 40-100 billion barrels of crude oil and 1.5 trillion cubic feet of natural gas. (*DJ*)
- December 9** The United Nations lifts its non-binding oil embargo against South Africa. (*WP*)
- December 9** Scientists at Princeton University's Plasma Physics Laboratory report achieving a new world record in fusion energy, producing 3 million watts of power in a single burst. (*WP*)
- December 14** The United Mine Workers union approves a 5-year contract, ending a 7-month strike against some of the largest coal operators in the United States. The strike began May 10 and affected 17,500 bituminous coal miners in 7 states. (*DJ*)
- December 16** A U.S. delegation headed by Vice President Al Gore concludes a visit to Moscow by signing a series of agreements on the space station, science and technology, defense conversion, nuclear reactor safety, and taxation. Specific energy agreements include a \$125 million grant to purchase U.S.-made energy efficiency products, legal protections for U.S. companies working on older Russian nuclear reactors, a technology center to improve oil and gas recovery, a study of electric power options, and a model retail gasoline corporation. (*NYT*)
- December 20** Vietnam awards Mobil and three Japanese companies an interest in the Blue Dragon field, making Mobil the first U.S. company to win the right to drill for oil offshore of Vietnam. Mobil will be unable, however, to exploit any oil or gas finds unless an 18-year-old U.S. embargo against trade with Vietnam is lifted. (*NYT*)
- December 27** Russia begins auctioning about 18 percent of its biggest oil company, Surgutneftegaz, for privatization vouchers. Surgutneftegaz produced 850,000 barrels per day in 1992 (more than 10 percent of Russia's total production), but the company reported production had fallen in 1993. (*DJ*)

Glossary

Glossary

Alcohol: The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)_n-OH. Alcohol includes methanol and ethanol.

Anthracite Coal: Anthracite, or hard coal, is the highest rank of economically usable coal. It is jet black with a high luster. The moisture content generally is less than 15 percent. It usually has a high fixed carbon and ash content and is low in volatile matter. It is a non-coking coal.

API: The American Petroleum Institute, a trade association.

API Gravity: An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API. A lighter, less dense product has a higher API gravity.

Apparent Consumption (Coal): Primary coal production plus imports of coal and coke, minus exports of coal and coke plus or minus stock changes of coal and coke. Note: In the United States apparent consumption is reported data by major end-use sectors.

Apparent Consumption (Natural Gas): Dry natural gas production plus imports minus exports plus or minus stock changes.

Apparent Consumption (Petroleum): Includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

Asphalt (Natural): A natural mineral pitch, tar, or bitumen composed principally of hydrocarbons, a natural bituminous rock of dark color comparatively hard and nonvolatile. Does not include asphalt, bitumen, tar, etc., derived from petroleum processing.

Asphalt (Refined): A dark brown to black solid or semi-solid material obtained from petroleum processing in which the predominant component is bitumen. Used mainly in road construction.

Associated Gas: Gas produced in a field containing both oil and gas. The field is developed primarily for extraction of crude oil.

ASTM: The American Society for Testing and Materials.

Barrel (Petroleum): A unit of volume equal to 42 U.S. gallons.

Bitumen: A naturally occurring viscous mixture, mainly of hydrocarbons heavier than pentane, that may contain

sulphur compounds and that, in its natural occurring viscous state, is not recoverable at a commercial rate through a well.

Bituminous Coal: Bituminous coal is the most common coal. It is dense, black, often with well defined bands of bright and dull materials. Its moisture content usually is less than 20 percent. It is used for generating electricity, making coke, and space heating.

British Thermal Unit (Btu): The quantity of heat needed to raise the temperature of 1 pound of water by 1 degree Fahrenheit at or near 39.2 degrees Fahrenheit.

Bunkers: Fuels supplied to ships and aircraft in international transportation, irrespective of the flag of the carrier, consisting primarily of residual, distillate, and jet fuel oils.

Butane: A normally gaseous straight-chain or branch-chain hydrocarbon, (C₄H₁₀). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is covered by ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Coal: A black or brownish-black solid, combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, subanthracite, bituminous, subbituminous, and lignite, is based on fixed carbon, volatile matter, coking and coking properties, and heating value. Coal rank includes the progressive alteration, or coalification, from lignite to anthracite.

Coal Briquets: Anthracite, bituminous, and lignite briquets comprise the secondary solid fuels manufactured from coal by a process in which the coal is partly dried, warmed to expel excess moisture, and then compressed into briquets, usually without the use of a binding substance. In the reduction of briquets to coal equivalent, different conversion factors are applied according to their origin from hard coal, peat, brown coal, or lignite.

Coal Production: The sum of sales, mine consumption, issues to miners, and issues to coking, briquetting, and other ancillary plants at mines. Production data include quantities extracted from surface and underground working, and normally exclude wastes removed at mines or associated preparation plants.

Coke (Coal): In general, coke is made from bituminous coal (or blends of 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 ash are fused together. Coke is hard and porous, has gray submetallic luster, and is strong enough to support a load of iron ore in a blast furnace. It is used both as a fuel and a reducing agent in smelting iron ore in a blast furnace.

Conventional Thermal Electricity Generation:

Electricity generated by an electric power plant using coal, petroleum, or gas as its source of energy.

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.

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) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable.

Crude Oil Production: The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

Domestic Inland Consumption (Petroleum): Domestic inland consumption is the sum of all refined petroleum products supplied for domestic use (excludes international marine bunkers). Consumption is calculated by product by adding production, imports, crude oil burned directly, and refinery fuel and losses, and then subtracting exports and changes in primary stocks (net withdrawals is a plus quantity and net additions is a minus quantity).

Electricity Installed Capacity: The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time and not limited by existing service conditions.

Ethane: A normally gaseous straight-chain hydrocarbon, (C_2H_6). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees Fahrenheit. It is extracted from natural gas and refinery gas streams.

Gasohol: A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes

methanol) in which 10 percent or more of the product is alcohol.

Gasoline, Aviation: All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G5572. Excludes blending components that will be used in blending or compounding into finished aviation gasoline.

Gasoline Blending Components: Finished components in the gasoline range that will be used for blending or compounding into finished aviation or motor gasoline.

Gasoline, Motor (Leaded): Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon may vary. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded

Gasoline, Motor (Unleaded): Contains not more than 0.05 grams of lead per gallon and not more than 0.005 grams of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Geothermal Electric Power Generation: Electricity derived from heat found under the earth's surface. Within the earth, there are vast amounts of molten rock and metal, covered by succeeding layers of cooler material, up to the crust of the earth's surface. Underground rivers generate steam which is liberated in the form of geysers through fissures in the earth's surface.

Gross Electricity Generation: The total amount of electric energy produced by a generating facility, as measured at the generator terminals.

Hydroelectric Power Generation: Electricity generated by an electric power plant whose turbines are driven by falling water. It includes electric utility and industrial generation of hydroelectricity, unless otherwise specified. Generation is reported on a net basis, i. e., on the amount of electric energy generated after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

Jet Fuel (Kerosene-type): A quality kerosene product with an average gravity of 40.7 degrees API, and a 10 percent distillation temperature of 400 degrees Fahrenheit. It is covered by ASTM Specification D1655 and Military Specification MIL-T-5G24L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial 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 and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Joule: The meter-kilogram-second unit of work or energy, equal to the work done by a force of one newton when its point of application moves through a distance of one meter in the direction of the force; equivalent to 10^7 and one watt-second.

Kerosene: Light hydrocarbon distillates in the 150 degrees to 280 degrees Centigrade (300 degrees to 550 degrees Fahrenheit) distillation range. Includes vaporizing oil for use in reciprocating engines (primarily tractors), lamp oil, and kerosene and heating oil.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Lease Condensate: A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons. Also called field condensate. Does not include plant condensate.

Lignite: Lignite, the lowest rank of coal, is a young coal. It is brownish black in color and has a high moisture content, sometimes as high as 45 percent, and a high ash content. It tends to disintegrate when exposed to the weather. The heat content of lignite is one of the lower coals, usually less than 5700 Kcal/kg.

Liquefied Natural Gas (LNG): Conventional natural gas which is liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure. The volume of the LNG is 1/600 that of the gas in its vapor state.

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 raw natural gas plant liquids.

Liquefied Refinery Gases (LRG): Liquefied petroleum fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas used for chemical or rubber manufacture, which is reported as petrochemical feedstock, and also excludes liquefied petroleum gases intended for blending into gasoline, which are reported as gasoline blending components.

Lubricants (Greases): Mixtures of lubricating oils that contain substances that reduce their ability to flow.

Lubricants (Lubricating Oils): Substances used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

Metallurgical Coke: A strong, hard coke produced mainly for use in the iron and steel industry, where it serves as a chemical agent and source of energy. It is used mainly in blast furnaces to absorb the oxygen contained in iron oxides and provide energy for smelting. A portion of its potential energy is captured in the gases generated in the smelting process, then recycled in the form of blast furnace gas to provide additional energy inside or outside the smelting process. Metallurgical coke is also used to some extent as a domestic fuel and as a raw material for the manufacture of gas.

Naphthas: Refined or partly refined light distillates with an approximate boiling point range of 27 degrees to 221 degrees Centigrade. Blended further or mixed with other materials, they make high-grade motor gasoline or jet fuel. Also used as solvents, petrochemical feedstocks, or as raw materials for the production of town gas.

Natural Gas: A mixture of hydrocarbon compounds, primarily methane and small quantities of various nonhydrocarbons existing in gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Natural Gas Dry Production: Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas which is flared or vented, gas lost in transmission, and shrinkage. Derived by subtracting shrinkage or extraction loss from marketed production. It represents the amount of natural gas that can be marketed and consumed as a gas.

Natural Gas Gross Production: Total withdrawals of natural gas from oil/gas and gas reservoirs.

Natural Gas Liquids (NGL): Those portions of reservoir gas which are liquefied at the surface in lease separators, field facilities, or natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

Natural Gas Marketed Production: Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas that is flared and/or vented, and gas that is lost in transmission before the natural gas liquids have been extracted.

Natural Gas Plant Liquids (NGPL): Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators. Products obtained include ethane, liquefied petroleum gases, (propane, butane, propane-butane mixtures, and ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and other minor quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

Natural Gasoline: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon, (C_5H_{12}), obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Electricity Consumption: Consumption of electricity computed as generation, plus imports, minus exports, minus transmission and distribution losses.

Net Electricity Generation: Gross generation less the electric energy consumed at the generating station for station use.

Nuclear Electric Power Generation: Electricity generated by nuclear reactors of various types such as heavy water, light water, and boiling water. Generation is reported on a net basis and excludes energy that is generally used by the electric power plant for its own operating purposes and not for commercial use.

Other Hydrocarbons: Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Paraffin (Oil): A light-colored, wax-free oil obtained by pressing paraffin distillate.

Paraffin (Wax): The wax removed from paraffin distillates by chilling and pressing. When separating from solutions, it is a colorless, more or less translucent, crystalline mass, without odor and taste, slightly greasy to touch, and consisting of a mixture of solid hydrocarbons in which the paraffin series predominates.

Petrochemical Feedstocks: Products from petroleum refineries and natural gas liquids processing plants to be processed further at a petrochemical plant. Includes products primarily in the naphtha range, still gas (refinery gas), and liquefied gases for petrochemical use.

Petroleum: A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

Petroleum Coke: A solid refinery residue; the final product of the condensation process in cracking. Includes green or calcined petroleum coke and coke deposited on catalysts.

Petroleum Jelly: A semi-solid oily product produced from de-waxing lubricating oil basestocks.

Petroleum Products: Products obtained from the processing of crude oil, unfinished oils, natural gas liquids, and other miscellaneous hydrocarbon compounds. Includes aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt and road oil, still gas, and other miscellaneous products.

Petroleum Stocks: Primary stocks of crude oil and petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

Plant Condensate (Petroleum): Mixture of hydrocarbons, mostly pentanes and heavier hydrocarbons, recovered at natural gas liquids processing plants. Does not include field or lease condensate.

Primary Coal: All coal milled and, when necessary, washed and sorted.

Propane: A normally gaseous straight-chain hydrocarbon, (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835.

Proved Reserves of Coal: Proved reserves of coal are the estimated quantities, which analysis of geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Proved Reserves of Crude Oil: Proved reserves of crude oil are the estimated quantities of all liquids defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Proved Reserves of Natural Gas: Proved reserves of natural gas are the estimated quantities which analysis of geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Refinery Fuel: Crude oil and petroleum products consumed at the refinery for all purposes.

Refinery Losses and Gains (Petroleum): Processing gain and loss that takes place during the refining process itself. Excludes losses that do not take place during the refining process, e.g., spills, fire losses, and contamination during blending, transportation, or storage.

Refinery Processing Gain: The volumetric amount by which total refinery output is greater than input for a given period of time. This difference is due to the processing of crude oil into products which, in total, have a higher specific gravity than the crude oil processed.

Reinjected (Natural Gas): The forcing of gas under pressure into an oil reservoir in an attempt to increase recovery.

Residual Fuel Oil: The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned Directly 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.

Secondary Coal: (e.g. coke, briquets) is derived from primary coal.

Short Ton (coal): A unit of weight equal to 2,000 pounds.

Shrinkage (Natural Gas): The volume of natural gas that is transformed into liquid products during processing, primarily at natural gas liquids processing plants.

Special Naphthas: All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees Fahrenheit. "Special Naphthas" include all commercial hexane and cleaning solvents conforming to ASTM Specification 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.

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, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use. The conversion factor from gas to barrels is 6.000 million Btu per fuel oil equivalent barrel .

Subbituminous Coal: Similar to the poorer grades of bituminous coal; low in carbon, high in volatile matter and moisture. Its energy value is somewhat below that of bituminous coal.

Transmission and Distribution Loss: Electric energy lost due to the transmission and distribution of electricity. Much of the loss is thermal in nature.

Unfinished Oils: Includes all oils requiring further processing, except those requiring only mechanical blending.

Vented/Flared (Natural Gas): The release (venting) or burning (flaring) of associated gas as a means of disposal.

Watt: The electrical unit of power. The rate of energy transfer equivalent to one ampere flowing under a pressure of one volt at unity power factor.

Watthour (Wh): An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.

Wax: A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline fully refined, and crystalline-other.

White Spirit: A highly refined distillate with a boiling point range of about 150 degrees to 200 degrees Centigrade. It is used as a paint solvent and for dry-cleaning purposes.