

Table 8.4a Consumption for Electricity Generation by Energy Source: Total (All Sectors), Selected Years, 1949-2003

(Sum of Tables 8.4b and 8.4c; Trillion Btu)

| Year | Fossil Fuels | | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ⁵ | Renewable Energy | | | | | | | Other ⁹ | Electricity Net Imports ¹⁰ | Total |
|------|----------------------|------------------------|--------------------------|--------------------------|----------------------|------------------------|--|----------------------------------|-------------------|--------------------|-------------------|--------------------|-------------------|---------------------|--------------------|---------------------------------------|---------------------|
| | Coal ¹ | Petroleum ² | Natural Gas ³ | Other Gases ⁴ | Total | | | Conventional Hydroelectric Power | Wood ⁶ | Waste ⁷ | Geo-thermal | Solar ⁸ | Wind | Total | | | |
| 1949 | 1,995 | 415 | 569 | NA | 2,979 | 0 | (¹¹) | 1,425 | 6 | NA | NA | NA | NA | 1,431 | NA | 5 | 4,415 |
| 1950 | 2,199 | 472 | 651 | NA | 3,322 | 0 | (¹¹) | 1,415 | 5 | NA | NA | NA | NA | 1,421 | NA | 6 | 4,749 |
| 1955 | 3,458 | 471 | 1,194 | NA | 5,123 | 0 | (¹¹) | 1,360 | 3 | NA | NA | NA | NA | 1,363 | NA | 14 | 6,500 |
| 1960 | 4,228 | 553 | 1,785 | NA | 6,565 | 6 | (¹¹) | 1,608 | 2 | NA | 1 | NA | NA | 1,610 | NA | 15 | 8,197 |
| 1965 | 5,821 | 722 | 2,395 | NA | 8,938 | 43 | (¹¹) | 2,059 | 3 | NA | 4 | NA | NA | 2,066 | NA | (s) | 11,047 |
| 1970 | 7,227 | 2,117 | 4,054 | NA | 13,399 | 239 | (¹¹) | 2,634 | 1 | 2 | 11 | NA | NA | 2,649 | NA | 7 | 16,293 |
| 1971 | 7,299 | 2,495 | 4,099 | NA | 13,893 | 413 | (¹¹) | 2,824 | 1 | 2 | 12 | NA | NA | 2,839 | NA | 12 | 17,158 |
| 1972 | 7,811 | 3,097 | 4,084 | NA | 14,992 | 584 | (¹¹) | 2,864 | 1 | 2 | 31 | NA | NA | 2,899 | NA | 26 | 18,501 |
| 1973 | 8,658 | 3,515 | 3,748 | NA | 15,921 | 910 | (¹¹) | 2,861 | 1 | 2 | 43 | NA | NA | 2,907 | NA | 49 | 19,788 |
| 1974 | 8,534 | 3,365 | 3,519 | NA | 15,418 | 1,272 | (¹¹) | 3,177 | 1 | 2 | 53 | NA | NA | 3,232 | NA | 43 | 19,966 |
| 1975 | 8,786 | 3,166 | 3,240 | NA | 15,191 | 1,900 | (¹¹) | 3,155 | (s) | 2 | 70 | NA | NA | 3,227 | NA | 21 | 20,339 |
| 1976 | 9,720 | 3,477 | 3,152 | NA | 16,349 | 2,111 | (¹¹) | 2,976 | 1 | 2 | 78 | NA | NA | 3,057 | NA | 29 | 21,547 |
| 1977 | 10,262 | 3,901 | 3,284 | NA | 17,446 | 2,702 | (¹¹) | 2,333 | 3 | 2 | 77 | NA | NA | 2,416 | NA | 59 | 22,623 |
| 1978 | 10,238 | 3,987 | 3,297 | NA | 17,522 | 3,024 | (¹¹) | 2,937 | 2 | 1 | 64 | NA | NA | 3,005 | NA | 67 | 23,618 |
| 1979 | 11,260 | 3,283 | 3,613 | NA | 18,156 | 2,776 | (¹¹) | 2,931 | 3 | 2 | 84 | NA | NA | 3,020 | NA | 69 | 24,021 |
| 1980 | 12,123 | 2,634 | 3,810 | NA | 18,567 | 2,739 | (¹¹) | 2,900 | 3 | 2 | 110 | NA | NA | 3,014 | NA | 71 | 24,392 |
| 1981 | 12,583 | 2,202 | 3,768 | NA | 18,553 | 3,008 | (¹¹) | 2,758 | 3 | 1 | 123 | NA | NA | 2,885 | NA | 113 | 24,559 |
| 1982 | 12,582 | 1,568 | 3,342 | NA | 17,491 | 3,131 | (¹¹) | 3,266 | 2 | 1 | 105 | NA | NA | 3,374 | NA | 100 | 24,096 |
| 1983 | 13,213 | 1,544 | 2,998 | NA | 17,754 | 3,203 | (¹¹) | 3,527 | 2 | 2 | 129 | NA | (s) | 3,661 | NA | 121 | 24,738 |
| 1984 | 14,019 | 1,286 | 3,220 | NA | 18,526 | 3,553 | (¹¹) | 3,386 | 5 | 4 | 165 | (s) | (s) | 3,560 | NA | 135 | 25,774 |
| 1985 | 14,542 | 1,090 | 3,160 | NA | 18,792 | 4,076 | (¹¹) | 2,970 | 8 | 7 | 198 | (s) | (s) | 3,183 | NA | 140 | 26,191 |
| 1986 | 14,444 | 1,452 | 2,691 | NA | 18,586 | 4,380 | (¹¹) | 3,071 | 5 | 7 | 219 | (s) | (s) | 3,303 | NA | 122 | 26,392 |
| 1987 | 15,173 | 1,257 | 2,935 | NA | 19,365 | 4,754 | (¹¹) | 2,635 | 8 | 7 | 229 | (s) | (s) | 2,879 | NA | 158 | 27,157 |
| 1988 | 15,850 | 1,563 | 2,709 | NA | 20,123 | 5,587 | (¹¹) | 2,334 | 10 | 8 | 217 | (s) | (s) | 2,569 | NA | 108 | 28,387 |
| 1989 | ¹² 16,359 | ¹² 1,757 | ¹² 3,581 | 90 | ¹² 21,789 | ¹² 5,602 | (¹¹) | ¹³ 2,837 | ¹² 345 | ¹² 151 | ¹² 308 | ¹² 3 | ¹² 22 | ¹² 3,665 | 39 | 37 | 31,132 |
| 1990 | 16,477 | 1,367 | 3,752 | 112 | 21,708 | 6,104 | -36 | 3,046 | 442 | 211 | 326 | 4 | 29 | 4,058 | 36 | 8 | 31,878 |
| 1991 | 16,460 | 1,276 | 3,861 | 125 | 21,723 | 6,422 | -47 | 3,016 | 425 | 247 | 335 | 5 | 31 | 4,058 | 59 | 67 | 32,281 |
| 1992 | 16,686 | 1,076 | 3,999 | 141 | 21,903 | 6,479 | -43 | 2,617 | 481 | 283 | 338 | 4 | 30 | 3,752 | 40 | 87 | 32,218 |
| 1993 | 17,424 | 1,203 | 4,027 | 136 | 22,790 | 6,410 | -42 | 2,892 | 485 | 288 | 351 | 5 | 31 | 4,052 | 34 | 95 | 33,339 |
| 1994 | 17,485 | 1,135 | 4,476 | 136 | 23,233 | 6,694 | -35 | 2,683 | 498 | 301 | 325 | 5 | 36 | 3,848 | 40 | 153 | 33,933 |
| 1995 | 17,687 | 813 | 4,840 | 133 | 23,473 | 7,075 | -28 | 3,205 | 480 | 316 | 280 | 5 | 33 | 4,318 | 42 | 134 | 35,015 |
| 1996 | 18,650 | 888 | 4,400 | 159 | 24,097 | 7,087 | -32 | 3,590 | 513 | 324 | 300 | 5 | 33 | 4,765 | 37 | 137 | 36,091 |
| 1997 | 19,128 | 985 | 4,658 | 119 | 24,890 | 6,597 | -41 | 3,640 | 484 | 339 | 309 | 5 | 34 | 4,811 | 36 | 116 | 36,410 |
| 1998 | 19,417 | 1,378 | 5,205 | 125 | 26,124 | 7,068 | -46 | 3,297 | 475 | 332 | 311 | 5 | 31 | 4,450 | 36 | 88 | ^R 37,722 |
| 1999 | 19,467 | 1,285 | 5,441 | 126 | 26,320 | 7,610 | -62 | 3,268 | 490 | 332 | 312 | 5 | 46 | 4,452 | 41 | 99 | 38,459 |
| 2000 | 20,443 | 1,212 | 5,818 | 126 | 27,599 | 7,862 | -57 | 2,811 | 496 | 330 | 296 | 5 | 57 | 3,995 | 46 | ^R 115 | ^R 39,561 |
| 2001 | 19,734 | 1,337 | 5,982 | 97 | 27,150 | ^R 8,033 | -90 | 2,201 | 486 | 347 | 289 | 6 | 68 | 3,397 | 41 | 75 | ^R 38,606 |
| 2002 | ^R 19,997 | ^R 1,014 | ^R 6,250 | ^R 131 | ^R 27,392 | ^R 8,143 | ^{RP} -88 | ^{RP} 2,675 | ^R 605 | ^R 399 | ^R 305 | ^P 6 | ^{RP} 105 | ^{RP} 4,094 | ^R 49 | 78 | ^R 39,667 |
| 2003 | ^P 20,675 | ^P 1,271 | ^P 5,513 | ^P 119 | ^P 27,578 | ^P 7,973 | ^P -88 | ^P 2,779 | ^P 576 | ^P 381 | ^P 276 | ^P 5 | ^P 108 | ^P 4,127 | ^P 27 | ^P 22 | ^P 39,638 |

¹ Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

² Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

³ Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.

⁴ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

⁵ Pumped storage facility production minus energy used for pumping.

⁶ Wood, black liquor, and other wood waste.

⁷ Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

⁸ Solar thermal and photovoltaic energy.

⁹ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

¹⁰ See Note 3, "Electricity Imports and Exports," at end of section.

¹¹ Included in "Conventional Hydroelectric Power."

¹² Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities,

independent power producers, commercial plants, and industrial plants.

¹³ Through 1988, data are for electric utilities and industrial plants. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Data are for energy consumed to produce electricity. Data also include energy consumed to produce useful thermal output at a small number of electric utility combined-heat-and-power (CHP) plants. • See Note 1, "Coverage of Electricity Statistics," at end of section. • Totals may not equal sum of components due to independent rounding.

Web Pages: • For data not shown for 1951-1969, see <http://www.eia.doe.gov/emeu/aer/elect.html>.

• For related information, see <http://www.eia.doe.gov/fuelelectric.html>.

Sources: • 1949-1988—Table 8.4b for electric power sector, and Tables 8.1 and A6 for industrial sector.

• 1989 forward—Tables 8.4b and 8.4c.