

Table 8.4a Consumption for Electricity Generation by Energy Source: Total (All Sectors), Selected Years, 1949-2010
(Sum of Tables 8.4b and 8.4c; Trillion Btu)

| Year | Fossil Fuels | | | | | Nuclear Electric Power ⁵ | Renewable Energy | | | | | | | Other ⁹ | Electricity Net Imports ¹⁰ | Total |
|-------------------|----------------------|------------------------|--------------------------|--------------------------|----------------------|-------------------------------------|---|-------------------|--------------------|--------------------------|-------------------------|-------------------|----------------------|--------------------|---------------------------------------|-----------------------|
| | Coal ¹ | Petroleum ² | Natural Gas ³ | Other Gases ⁴ | Total | | Conventional Hydroelectric Power ⁵ | Biomass | | Geo-thermal ⁵ | Solar/PV ^{5,8} | Wind ⁵ | Total | | | |
| | | | | | | | | Wood ⁶ | Waste ⁷ | | | | | | | |
| 1949 | 1,995 | 415 | 569 | NA | 2,979 | 0 | 1,425 | 6 | NA | NA | NA | NA | 1,431 | NA | 5 | 4,415 |
| 1950 | 2,199 | 472 | 651 | NA | 3,322 | 0 | 1,415 | 5 | NA | NA | NA | NA | 1,421 | NA | 6 | 4,749 |
| 1955 | 3,458 | 471 | 1,194 | NA | 5,123 | 0 | 1,360 | 3 | NA | NA | NA | NA | 1,363 | NA | 14 | 6,500 |
| 1960 | 4,228 | 553 | 1,785 | NA | 6,565 | 6 | 1,608 | 2 | NA | R(s) | NA | NA | 1,610 | NA | 15 | 8,197 |
| 1965 | 5,821 | 722 | 2,395 | NA | 8,938 | 43 | 2,059 | 3 | NA | R2 | NA | NA | R2,064 | NA | (s) | R11,045 |
| 1970 | 7,227 | 2,117 | 4,054 | NA | 13,399 | 239 | 2,634 | 1 | 2 | R6 | NA | NA | R2,643 | NA | 7 | R16,287 |
| 1975 | 8,786 | 3,166 | 3,240 | NA | 15,191 | 1,900 | 3,155 | (s) | 2 | R34 | NA | NA | R3,190 | NA | 21 | R20,303 |
| 1976 | 9,720 | 3,477 | 3,152 | NA | 16,349 | 2,111 | 2,976 | 1 | 2 | R38 | NA | NA | R3,017 | NA | 29 | R21,506 |
| 1977 | 10,262 | 3,901 | 3,284 | NA | 17,446 | 2,702 | 2,333 | 3 | 2 | R37 | NA | NA | R2,376 | NA | 59 | R22,583 |
| 1978 | 10,238 | 3,987 | 3,297 | NA | 17,522 | 3,024 | 2,937 | 2 | 1 | R31 | NA | NA | R2,971 | NA | 67 | R23,585 |
| 1979 | 11,260 | 3,283 | 3,613 | NA | 18,156 | 2,776 | 2,931 | 3 | 2 | R40 | NA | NA | R2,976 | NA | 69 | R23,977 |
| 1980 | 12,123 | 2,634 | 3,810 | NA | 18,567 | 2,739 | 2,900 | 3 | 2 | R53 | NA | NA | R2,957 | NA | 71 | R24,335 |
| 1981 | 12,583 | 2,202 | 3,768 | NA | 18,553 | 3,008 | 2,758 | 3 | 1 | R59 | NA | NA | R2,821 | NA | 113 | R24,495 |
| 1982 | 12,582 | 1,568 | 3,342 | NA | 17,491 | 3,131 | 3,266 | 2 | 1 | R51 | NA | NA | R3,320 | NA | 100 | R24,042 |
| 1983 | 13,213 | 1,544 | 2,998 | NA | 17,754 | 3,203 | 3,527 | 2 | 2 | R64 | NA | (s) | R3,595 | NA | 121 | R24,673 |
| 1984 | 14,019 | 1,286 | 3,220 | NA | 18,526 | 3,553 | 3,386 | 5 | 4 | R81 | (s) | (s) | R3,476 | NA | 135 | R25,690 |
| 1985 | 14,542 | 1,090 | 3,160 | NA | 18,792 | 4,076 | 2,970 | 8 | 7 | R97 | (s) | (s) | R3,082 | NA | 140 | R26,090 |
| 1986 | 14,444 | 1,452 | 2,691 | NA | 18,586 | 4,380 | 3,071 | 5 | 7 | R108 | (s) | (s) | R3,191 | NA | 122 | R26,280 |
| 1987 | 15,173 | 1,257 | 2,935 | NA | 19,365 | 4,754 | 2,635 | 8 | 7 | R112 | (s) | (s) | R2,762 | NA | 158 | R27,040 |
| 1988 | 15,850 | 1,563 | 2,709 | NA | 20,123 | 5,587 | 2,334 | 10 | 8 | R106 | (s) | (s) | R2,458 | NA | 108 | R28,276 |
| 1989 | ¹¹ 16,359 | ¹¹ 1,756 | ¹¹ 3,582 | 90 | ¹¹ 21,788 | ¹¹ 5,602 | ¹² 2,837 | ¹¹ 345 | ¹¹ 151 | ¹¹ R152 | ¹¹ 3 | ¹¹ 22 | ¹¹ R3,510 | 39 | 37 | ¹¹ R30,976 |
| 1990 | 16,477 | 1,366 | 3,791 | 112 | 21,746 | 6,104 | 3,046 | 442 | 211 | R161 | 4 | 29 | R3,893 | 36 | 8 | R31,788 |
| 1991 | 16,460 | 1,276 | 3,861 | 125 | 21,723 | 6,422 | 3,016 | 425 | 247 | R167 | 5 | 31 | R3,889 | 59 | 67 | R32,160 |
| 1992 | 16,686 | 1,076 | 3,999 | 141 | 21,903 | 6,479 | 2,617 | 481 | 283 | R167 | 4 | 30 | R3,582 | 40 | 87 | R32,091 |
| 1993 | 17,424 | 1,203 | 4,027 | 136 | 22,790 | 6,410 | 2,892 | 485 | 288 | R173 | 5 | 31 | R3,874 | 34 | 95 | R33,203 |
| 1994 | 17,485 | 1,135 | 4,476 | 136 | 23,233 | 6,694 | 2,683 | 498 | 301 | R160 | 5 | 36 | R3,683 | 40 | 153 | R33,803 |
| 1995 | 17,687 | 813 | 4,840 | 133 | 23,473 | 7,075 | 3,205 | 480 | 316 | R138 | 5 | 33 | R4,177 | 42 | 134 | R34,901 |
| 1996 | 18,650 | 888 | 4,400 | 159 | 24,097 | 7,087 | 3,590 | 513 | 324 | R148 | 5 | 33 | R4,613 | 37 | 137 | R35,971 |
| 1997 | 19,128 | 985 | 4,658 | 119 | 24,890 | 6,597 | 3,640 | 484 | 339 | R150 | 5 | 34 | R4,653 | 36 | 116 | R36,293 |
| 1998 | 19,417 | 1,378 | 5,205 | 125 | 26,124 | 7,068 | 3,297 | 475 | 332 | R151 | 5 | 31 | R4,290 | 36 | 88 | R37,607 |
| 1999 | 19,467 | 1,285 | 5,441 | 126 | 26,320 | 7,610 | 3,268 | 490 | 332 | R152 | 5 | 46 | R4,292 | 41 | 99 | R38,362 |
| 2000 | 20,411 | 1,212 | 5,818 | 126 | 27,567 | 7,862 | 2,811 | 496 | 330 | R144 | 5 | 57 | R3,843 | 46 | 115 | R39,433 |
| 2001 | 19,789 | 1,347 | 6,001 | 97 | 27,235 | 8,029 | 2,242 | 486 | 228 | R142 | 6 | 70 | R3,173 | 160 | 75 | R38,672 |
| 2002 | 19,997 | 1,014 | 6,250 | 131 | 27,392 | 8,145 | 2,689 | 605 | 257 | R147 | 6 | 105 | R3,809 | 191 | 72 | R39,610 |
| 2003 | 20,367 | 1,266 | 5,736 | 156 | 27,525 | 7,959 | 2,825 | 519 | 249 | R148 | 5 | 115 | R3,860 | 193 | 22 | R39,559 |
| 2004 | 20,376 | 1,248 | 5,827 | 135 | 27,586 | 8,222 | 2,690 | 344 | 230 | R148 | 6 | 142 | R3,560 | 183 | 39 | R39,591 |
| 2005 | 20,802 | 1,269 | 6,212 | 110 | 28,393 | 8,161 | 2,703 | 355 | 230 | R147 | 6 | 178 | R3,619 | 173 | R85 | R40,430 |
| 2006 | 20,527 | 668 | 6,644 | 115 | 27,954 | 8,215 | 2,869 | 350 | 241 | R145 | 5 | 264 | R3,873 | 162 | 63 | R40,268 |
| 2007 | 20,842 | 683 | 7,288 | 115 | 28,927 | 8,455 | 2,446 | 353 | 245 | R145 | 6 | 341 | R3,536 | 168 | 107 | R41,193 |
| 2008 | 20,549 | 485 | 7,087 | 97 | 28,218 | 8,427 | 2,511 | 339 | 267 | R146 | 9 | 546 | R3,817 | R172 | 112 | R40,747 |
| 2009 | R18,241 | R403 | R7,302 | R84 | R26,029 | R8,356 | R2,669 | R320 | R272 | R146 | R9 | R721 | R4,137 | R170 | 116 | R38,808 |
| 2010 ^P | 19,187 | 385 | 7,805 | 89 | 27,465 | 8,441 | 2,509 | 335 | 263 | 153 | 13 | 924 | 4,196 | 161 | 88 | 40,351 |

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

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.

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

⁵ Values are converted from kilowatthours to Btu using the approximate heat rates in Table A6.

⁶ Wood and wood-derived fuels.

⁷ Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

⁸ Solar thermal and photovoltaic (PV) energy.

⁹ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, miscellaneous technologies, and, beginning in 2001, non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

¹⁰ Net imports equal imports minus exports. See Note 3, "Electricity Imports and Exports," at end of section.

¹¹ Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities,

independent power producers, commercial plants, and industrial plants.

¹² 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.

• This table no longer shows energy consumption by hydroelectric pumped storage plants. The change was made because most of the electricity used to pump water into elevated storage reservoirs is generated by plants other than pumped-storage plants; thus, the associated energy is already accounted for in other data columns in this table (such as "Conventional Hydroelectric Power," "Coal," "Natural Gas," and so on).

• See Note 1, "Coverage of Electricity Statistics," at end of section. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#electricity> for all data beginning in 1949.

• For related information, see <http://www.eia.gov/electricity/>.

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.