

Table 8.4a Consumption for Electricity Generation by Energy Source: Total (All Sectors), Selected Years, 1949-2008
(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	1	NA	NA	1,610	NA	15	8,197
1965	5,821	722	2,395	NA	8,938	43	2,059	3	NA	4	NA	NA	2,066	NA	(s)	11,047
1970	7,227	2,117	4,054	NA	13,399	239	2,634	1	2	11	NA	NA	2,649	NA	7	16,293
1971	7,299	2,495	4,099	NA	13,893	413	2,824	1	2	12	NA	NA	2,839	NA	12	17,158
1972	7,811	3,097	4,084	NA	14,992	584	2,864	1	2	31	NA	NA	2,899	NA	26	18,501
1973	8,658	3,515	3,748	NA	15,921	910	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	2,334	10	8	217	(s)	(s)	2,569	NA	108	28,387
1989	¹¹ 16,359	^{11,R} 1,756	^{11,S} 3,582	90	^{11,R} 21,788	^{11,S} 6,022	¹² 2,837	^{11,S} 345	^{11,S} 211	^{11,S} 308	^{11,S} 22	^{11,S} 22	^{11,S} 3,665	39	37	^R 31,131
1990	16,477	^R 1,366	3,791	112	^R 21,746	6,104	3,046	442	211	326	4	29	4,058	36	8	^R 31,953
1991	16,460	1,276	3,861	125	21,723	6,422	3,016	425	247	335	5	31	4,058	59	67	32,329
1992	16,686	1,076	3,999	141	21,903	6,479	2,617	481	283	338	4	30	3,752	40	87	32,261
1993	17,424	1,203	4,027	136	22,790	6,410	2,892	485	288	351	5	31	4,052	34	95	33,381
1994	17,485	1,135	4,476	136	23,233	6,694	2,683	498	301	325	5	36	3,848	40	153	33,968
1995	17,687	813	4,840	133	23,473	7,075	3,205	480	316	280	5	33	4,318	42	134	35,043
1996	18,650	888	4,400	159	24,097	7,087	3,590	513	324	300	5	33	4,765	37	137	36,123
1997	19,128	985	4,658	119	24,890	6,597	3,640	484	339	309	5	34	4,811	36	116	36,451
1998	19,417	1,378	5,205	125	26,124	7,068	3,297	475	332	311	5	31	4,450	36	88	37,767
1999	19,467	1,285	5,441	126	26,320	7,610	3,268	490	332	312	5	46	4,452	41	99	38,522
2000	20,411	1,212	5,818	126	27,567	7,862	2,811	496	330	296	5	57	3,995	46	115	39,586
2001	19,789	1,347	6,001	97	27,235	8,033	2,242	486	228	289	6	70	3,320	160	75	38,823
2002	19,997	1,014	6,250	131	27,392	8,143	2,689	605	257	305	6	105	3,967	191	72	39,764
2003	20,367	1,266	5,736	156	27,525	7,959	2,825	519	249	303	5	115	4,016	193	22	39,715
2004	^R 20,376	^R 1,248	^R 5,827	^R 135	^R 27,586	8,222	2,690	^R 344	^R 230	311	6	142	^R 3,723	^R 183	39	^R 39,753
2005	^R 20,802	^R 1,269	^R 6,212	^R 110	^R 28,393	8,160	2,703	^R 355	^R 230	309	6	178	^R 3,781	^R 173	84	^R 40,591
2006	^R 20,527	^R 668	^R 6,644	^R 115	^R 27,954	8,214	2,869	^R 350	^R 241	306	5	264	^R 4,035	^R 162	63	^R 40,428
2007	^R 20,842	^R 683	^R 7,288	^R 115	^R 28,927	^R 8,458	^R 2,446	^R 353	^R 245	^R 308	6	^R 341	^R 3,699	^R 168	107	^R 41,358
2008 ^P	20,587	476	7,022	95	28,179	8,455	2,452	345	250	312	8	514	3,882	154	112	40,783

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 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: • For all data beginning in 1949, 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.