

**Table 11.5b Emissions From Energy Consumption for Electricity Generation and Useful Thermal Output: Electric Power Sector, 1989-2010** (Subset of Table 11.5a; Thousand Metric Tons of Gas)

Year	Carbon Dioxide <sup>1</sup>						Sulfur Dioxide					Nitrogen Oxides				
	Coal <sup>2</sup>	Natural Gas <sup>3</sup>	Petroleum <sup>4</sup>	Geo-thermal <sup>5</sup>	Non-Biomass Waste <sup>6</sup>	Total	Coal <sup>2</sup>	Natural Gas <sup>3</sup>	Petroleum <sup>4</sup>	Other <sup>7</sup>	Total	Coal <sup>2</sup>	Natural Gas <sup>3</sup>	Petroleum <sup>4</sup>	Other <sup>7</sup>	Total
1989	1,520,230	169,653	133,546	363	4,366	1,828,158	13,815	1	810	7	14,633	7,055	390	246	25	7,717
1990	1,534,141	177,232	101,800	384	5,795	1,819,351	13,576	1	628	13	14,218	6,878	390	175	36	7,480
1991	1,534,559	180,541	95,149	398	7,207	1,817,854	13,590	1	621	15	14,227	6,886	384	165	42	7,476
1992	1,556,741	187,730	79,153	400	8,476	1,832,501	13,375	1	559	12	13,946	6,749	359	128	46	7,282
1993	1,626,161	188,291	90,400	415	8,592	1,913,860	13,133	1	735	13	13,882	6,996	357	143	49	7,544
1994	1,634,282	211,154	85,005	384	9,323	1,940,148	12,695	1	665	11	13,373	6,777	390	128	47	7,343
1995	1,656,743	228,675	61,057	329	10,015	1,956,819	10,573	1	581	34	11,189	4,974	402	282	95	5,754
1996	1,747,945	205,250	66,113	360	9,932	2,029,599	11,129	1	617	32	11,779	5,144	326	301	96	5,866
1997	1,794,629	220,174	75,079	374	10,372	2,100,628	11,515	1	653	36	12,205	5,157	370	269	98	5,894
1998	1,825,027	249,836	105,539	375	10,264	2,191,041	11,373	1	911	37	12,321	4,965	431	337	103	5,836
1999	1,831,670	262,455	97,892	381	10,312	2,202,710	10,843	1	836	42	11,722	4,535	381	332	109	5,357
2000	1,923,054	283,034	92,226	362	10,178	2,308,855	R10,081	1	746	45	R10,872	4,225	338	367	111	5,040
2001	1,862,800	291,101	102,900	353	10,900	2,268,054	9,281	2	754	5	10,041	3,878	425	253	96	4,652
2002	1,878,923	307,455	78,820	372	12,758	2,278,328	9,106	2	549	16	9,672	3,813	425	187	104	4,528
2003	1,917,303	279,300	98,208	371	11,453	2,306,635	9,255	2	579	13	9,849	3,496	282	207	98	4,082
2004	1,929,818	297,782	100,236	381	11,177	2,339,394	8,991	2	493	9	9,495	3,183	241	193	101	3,717
2005	1,970,908	320,545	102,537	377	11,257	2,405,625	9,071	2	461	10	9,543	3,051	243	189	103	3,585
2006	1,944,759	339,557	55,358	374	11,544	2,351,592	8,416	2	264	8	8,690	2,902	230	135	107	3,374
2007	1,977,528	373,268	55,545	376	11,304	2,418,022	8,002	3	265	9	8,279	2,781	236	130	112	3,259
2008	1,951,138	363,749	40,442	381	11,620	2,367,331	6,909	2	146	8	7,065	2,578	230	58	124	2,990
2009	1,736,284	374,082	33,700	386	11,256	2,155,707	5,253	2	110	9	5,374	1,688	214	50	128	2,080
2010	1,821,497	400,974	32,667	391	11,034	2,266,563	4,662	2	111	8	4,783	1,751	224	49	135	2,159

<sup>1</sup> Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

<sup>2</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

<sup>3</sup> Natural gas, plus a small amount of supplemental gaseous fuels.

<sup>4</sup> Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

<sup>5</sup> Carbon dioxide in geothermal steam.

<sup>6</sup> Municipal solid waste from non-biogenic sources, and tire-derived fuel.

<sup>7</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels; wood and wood-derived fuels; municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass; and chemicals, hydrogen, pitch, sulfur, and tar coal.

R=Revised.

Notes: • There are small differences in carbon dioxide emissions values between this table and Table 11.2e due to differences in the methodologies for calculating the data. • Data are for emissions from

energy consumption for electricity generation and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • See Table 11.5c for commercial and industrial CHP and electricity-only data. • See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 8. • See "Useful Thermal Output" in Glossary. • Totals may not equal sum of components due to independent rounding.

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

Sources: **Carbon Dioxide:** U.S. Energy Information Administration (EIA) estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). **Sulfur Dioxide and Nitrogen Oxides:** EIA estimates based on Form EIA-923, "Power Plant Operations Report" (and predecessor forms). Data were adjusted by the U.S. Environmental Protection Agency's Continuous Emissions Monitoring System.