

**Table 12.7b Emissions From Energy Consumption for Electricity Generation and Useful Thermal Output:
Electric Power Sector, 1989-2006** (Subset of Table 12.7a)

Year	Carbon Dioxide						Sulfur Dioxide					Nitrogen Oxides				
	Coal ¹	Petroleum ²	Natural Gas ³	MSW ⁴	Geo-thermal ⁵	Total	Coal ¹	Petroleum ²	Natural Gas ³	Other ⁶	Total	Coal ¹	Petroleum ²	Natural Gas ³	Other ⁶	Total
	Million Metric Tons of Carbon Dioxide ⁷						Thousand Short Tons of Sulfur Dioxide					Thousand Short Tons of Nitrogen Oxides				
1989	1,501.1	132.2	168.8	4.3	0.4	1,806.8	15,229	893	1	8	16,130	7,777	271	430	28	8,506
1990	1,514.8	100.8	176.3	5.7	.4	1,798.0	14,965	692	1	14	15,672	7,582	193	430	40	8,245
1991	1,515.2	94.2	179.6	7.1	.4	1,796.6	14,981	684	1	16	15,682	7,590	182	423	46	8,241
1992	1,537.1	78.4	186.8	8.4	.4	1,811.0	14,743	616	1	13	15,373	7,440	141	395	51	8,027
1993	1,605.4	89.5	187.3	8.5	.4	1,891.2	14,476	810	1	14	15,302	7,712	157	393	54	8,316
1994	1,613.3	84.2	210.1	9.2	.4	1,917.2	13,994	733	1	12	14,741	7,470	141	430	52	8,094
1995	1,635.4	60.5	227.5	9.9	.3	1,933.6	11,377	527	1	11	11,917	7,501	104	508	54	8,167
1996	1,725.3	65.5	204.2	9.8	.4	2,005.2	12,266	601	2	11	12,881	5,784	131	423	56	6,394
1997	1,771.3	74.4	219.1	10.2	.4	2,075.3	12,874	692	2	14	13,582	5,796	141	429	66	6,432
1998	1,801.3	104.6	248.6	10.1	.4	2,164.9	12,161	926	2	11	13,099	5,561	220	503	68	6,352
1999	1,807.8	97.0	261.1	10.2	.4	2,176.4	11,844	832	7	10	12,692	5,067	198	491	59	5,817
2000	1,897.7	91.3	281.6	10.0	.4	2,281.1	10,770	696	3	7	11,476	4,724	167	483	60	5,434
2001	1,837.8	101.9	289.6	10.8	.3	2,240.4	10,230	831	2	5	11,069	4,274	279	469	106	5,128
2002	1,853.7	78.0	305.9	12.6	.4	2,250.6	10,037	606	2	17	10,661	4,203	206	468	115	4,992
2003	1,891.5	97.2	277.9	11.3	.4	2,278.4	10,202	639	2	15	10,857	3,853	228	311	108	4,500
2004	1,903.7	99.2	296.2	11.1	.4	2,310.6	9,911	544	2	10	10,466	3,508	212	266	111	4,098
2005	1,944.2	101.5	318.9	11.1	.4	2,376.2	9,999	508	2	11	10,520	3,363	208	268	113	3,952
2006	1,918.4	54.8	337.9	11.4	.4	2,322.9	9,277	291	2	9	9,579	3,199	149	253	118	3,719

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.

⁴ Municipal solid waste (only the estimated plastics portion of municipal solid waste is included) and tire-derived fuel.

⁵ Carbon dioxide in geothermal steam.

⁶ 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.

⁷ Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

Notes: • 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 12.7c 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.doe.gov/fuelelectric.html>.

Sources: **Carbon Dioxide:** • 1989-1997—Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report," and Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000—EIA, Form EIA-759, "Monthly Power Plant Report," and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003—EIA, Form EIA-906, "Power Plant Report." • 2004 forward—EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report." **Sulfur Dioxide** and **Nitrogen Oxides:** EIA, Form EIA-767, "Steam-Electric Plant Operation and Design Report." Data were adjusted by the Environmental Protection Agency's Continuous Emission Monitoring System.