

Table 11.3b Carbon Dioxide Emissions From Energy Consumption: Commercial Sector, Selected Years, 1949-2010

(Million Metric Tons of Carbon Dioxide ¹)

Year	Coal	Natural Gas ³	Petroleum							Retail Electricity ⁷	Total ²	Biomass ²			
			Distillate Fuel Oil ⁴	Kerosene	LPG ⁵	Motor Gasoline ⁶	Petroleum Coke	Residual Fuel Oil	Total			Wood ⁸	Waste ⁹	Fuel Ethanol ¹⁰	Total
1949	148	19	16	3	2	7	NA	28	55	58	280	2	NA	NA	2
1950	147	21	19	3	2	7	NA	33	R66	63	R297	2	NA	NA	2
1955	76	35	28	4	3	9	NA	38	R82	88	R281	1	NA	NA	1
1960	39	56	36	3	5	5	NA	44	R93	124	R312	1	NA	NA	1
1965	25	79	39	4	6	5	NA	51	R106	177	R387	1	NA	NA	1
1970	16	131	43	4	9	6	NA	56	R119	268	R534	1	NA	NA	1
1975	14	136	43	4	8	6	NA	39	R100	333	583	1	NA	NA	1
1976	14	144	48	3	9	7	NA	45	111	358	627	1	NA	NA	1
1977	14	135	49	4	9	7	NA	46	115	380	645	1	NA	NA	1
1978	16	140	49	4	8	8	NA	42	110	381	R648	1	NA	NA	1
1979	14	150	43	6	6	7	NA	40	R102	395	661	1	NA	NA	1
1980	11	141	38	3	6	8	NA	44	98	412	662	2	NA	NA	2
1981	13	136	33	5	5	7	NA	33	83	431	R663	2	NA	(s)	2
1982	15	141	32	2	5	6	NA	31	77	432	R665	2	NA	(s)	2
1983	15	132	48	8	6	7	NA	16	85	439	671	2	NA	(s)	2
1984	16	137	54	3	5	8	NA	21	90	461	704	2	NA	(s)	2
1985	13	132	46	2	6	7	NA	18	79	480	704	2	NA	(s)	2
1986	13	126	46	4	6	8	NA	23	85	487	R711	3	NA	(s)	3
1987	12	132	44	4	6	8	NA	21	83	509	R736	3	NA	(s)	3
1988	12	145	44	2	6	8	NA	21	R81	534	772	3	NA	(s)	3
1989	11	148	42	2	7	7	0	18	76	559	794	7	1	(s)	9
1990	12	142	39	1	6	8	0	18	R73	R566	R793	6	2	(s)	8
1991	11	148	38	1	7	6	0	17	68	R567	R794	6	2	(s)	8
1992	11	152	37	1	7	6	(s)	15	65	R567	R796	7	2	(s)	9
1993	11	155	36	1	7	2	(s)	14	R60	R593	R819	7	2	(s)	9
1994	11	157	37	1	7	2	(s)	14	60	R605	R833	7	2	(s)	9
1995	11	164	35	2	7	1	(s)	11	56	R620	R851	7	2	(s)	9
1996	12	171	35	2	8	2	(s)	11	57	R643	R883	7	3	(s)	10
1997	12	174	32	2	8	3	(s)	9	R54	R686	R926	7	3	(s)	10
1998	9	164	31	2	7	3	(s)	7	R51	R724	R947	6	3	(s)	9
1999	10	165	32	2	9	2	(s)	6	R51	R735	R960	6	3	(s)	9
2000	9	173	36	2	9	3	(s)	7	R58	R783	R1,022	7	2	(s)	9
2001	9	164	37	2	9	3	(s)	6	R57	R797	R1,027	6	2	(s)	9
2002	9	171	32	1	9	3	(s)	6	R52	R795	R1,027	6	2	(s)	9
2003	8	173	35	1	10	4	(s)	9	59	R796	R1,036	7	3	(s)	9
2004	10	170	34	1	10	3	(s)	10	58	R816	R1,054	7	3	(s)	10
2005	9	163	33	2	8	3	(s)	9	R55	R842	R1,069	7	3	(s)	10
2006	6	154	29	1	8	3	(s)	6	R48	R836	R1,043	6	3	(s)	9
2007	7	164	28	1	8	4	(s)	6	R47	R861	R1,079	7	3	(s)	9
2008	7	R171	27	(s)	10	3	(s)	6	46	R850	R1,074	7	3	(s)	10
2009	6	169	30	(s)	9	4	(s)	6	R49	R785	R1,008	7	3	(s)	10
2010 ^P	5	174	32	(s)	9	4	(s)	7	51	805	1,035	7	3	(s)	10

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

² Carbon dioxide emissions from biomass energy consumption are excluded from total emissions in this table. See Note, "Accounting for Carbon Dioxide Emissions From Biomass Energy Combustion," at end of section.

³ Natural gas, excluding supplemental gaseous fuels.

⁴ Distillate fuel oil, excluding biodiesel.

⁵ Liquefied petroleum gases.

⁶ Finished motor gasoline, excluding fuel ethanol.

⁷ Emissions from energy consumption (for electricity and a small amount of useful thermal output) in the electric power sector are allocated to the end-use sectors in proportion to each sector's share of total electricity retail sales. See Tables 8.9 and 11.3e.

⁸ Wood and wood-derived fuels.

⁹ Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

¹⁰ Fuel ethanol minus denaturant.

R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.5 million metric tons of carbon dioxide.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption. • See "Carbon Dioxide" in Glossary. • Totals may not equal sum of components due to independent rounding.

Web Pages: • See <http://www.eia.gov/totalenergy/data/annual/#environment> for all data beginning in 1949. • For current data, see <http://www.eia.gov/totalenergy/data/monthly/#environment>. • For related information, see <http://www.eia.gov/environment/>.

Sources: • 1949-1972—U.S. Energy Information Administration (EIA) estimates based on data in *Annual Energy Review* Tables 2.1c, 5.14a, 8.9, 10.2a, and 11.3e. • 1973 forward—EIA, *Monthly Energy Review (MER)* (April 2011), Tables 12.3 and 12.7, and MER data system calculations.