Table 11.2b Carbon Dioxide Emissions From Energy Consumption: Commercial Sector, Selected Years, 1949-2011

(Million Metric Tons of Carbon Dioxide 1)

Year	Coal	Natural Gas <sup>3</sup>	Petroleum									Biomass <sup>2</sup>			
			Distillate Fuel Oil <sup>4</sup>	Kerosene	LPG <sup>5</sup>	Motor Gasoline <sup>6</sup>	Petroleum Coke	Residual Fuel Oil	Total	Retail Electricity <sup>7</sup>	Total <sup>2</sup>	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	66	63	297	2	NA	NA	2
1955	76	35	28	4	3	9	NA	38	82	88	281	1	NA	NA	1
1960	39	56	36	3	5	5	NA	44	93	124	312	1	NA	NA	1
1965	25	79	39	4	6	5	NA	51	106	177	387	1	NA	NA	1
1970	16	131	43	4	9	6	NA	56	119	268	534	1	NA	NA	1
1975	14	136	43	4	8	6	NA	39	100	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 6	8 7	NA	42	110	381	648	1	NA	NA	1
1979 1980	14 11	150 141	43 38	6 3	6	8	NA NA	40 44	102 98	395 412	661 662	1 2	NA NA	NA NA	1 2
1981	13	136	33	5	5	7	NA	33	83	431	663	2	NA NA	(s)	2
1982	15	141	32	2	5	6	NA	31	77	432	665	2	NA	(s)	2
1983	15	132	48	8	6	7	NA	16	85	439	671	2	NA	(s)	2 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 2
1986	13	126	46	4	6	8	NA	23	85	487	711	3	NA	(s)	3
1987	12	132	44	4	6	8	NA	21	83	509	736	3	NA	(s)	3
1988	12	145	44	2	6	8	NA	21	81	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	73	566	793	6	2	(s)	8
1991	11	148	38	1	7	6	0	17	68	567	794	6	2	(s)	8
1992	11	152	37	1	7	6	(s)	15	65	567	796	7	2	(s)	9
1993	11	155	36	1	7	2	(s)	14	60	593	819	7	2	(s)	9
1994	11	157	37	1	7	2	(s)	14	60	605	833	7	2	(s)	9
1995	11	164	35	2	7	1	(s)	11	56	620	851	7	2	(s)	9
1996	12	171	35	2	8	2	(s)	11	57	643	883	7	3	(s)	10
1997	12	174	32	2	8	3	(s)	9	54	686	926	7	3	(s)	10
1998	9	164	31	2	7	3	(s)	7	51	724	947	6	3	(s)	9
1999	10	165 173	32	2	9	2	(s)	6	51	735	960	6	3	(s)	9
2000	9	173 164	36	2	9 9	3	(s)	7	58	783	1,022	7 6	2	(s)	9 9
2001 2002	9	R170	37 32	2 1	9	3	(s) (s)	6 6	57 52	797 795	1,027 R1,026	6	2	(s) (s)	9
2002	8	173	35	1	10	4	(s)	9	59	796	1,036	7	3	(s)	9
2003	10	173	34	1	10	3	(s)	10	58	816	1,054	7	3	(s)	10
2004	9	163	33	2	8	3	(s)	9	55	842	1,069	7	3	(s)	10
2006	6	154	29	1	8	3	(s)	6	48	836	1,043	6	3	(s)	9
2007	7	164	28	1	8	4	(s)	6	47	861	R1,078	7	3	(s)	9
2008	7	171	27	(s)	10	3	(s)	6	46	850	1,074	7	3	(s)	10
2009	6	169	30	(s)	9	4	(s)	6	49	785	1,008	7	3	(s)	10
2010	R6	R168	R30	(s)	9	4	(s)	R6	R49	805	R1,027	7	3	(s)	10
2011 <sup>P</sup>	5	171	30	(s)	9	4	(s)	6	49	767	992	7	3	(s)	10

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

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/monthly/#environment for updated monthly and annual data. • See http://www.eia.gov/totalenergy/data/annual/#environment for all annual data beginning in 1949. • See http://www.eia.gov/environment/ for related information.

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 11.2e. • 1973 forward—EIA, *Monthly Energy Review (MER)* (May 2012), Tables 12.3 and 12.7, and MER data system calculations.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Natural gas, excluding supplemental gaseous fuels.

<sup>&</sup>lt;sup>4</sup> Distillate fuel oil, excluding biodiesel.

<sup>5</sup> Liquefied petroleum gases.

<sup>&</sup>lt;sup>6</sup> Finished motor gasoline, excluding fuel ethanol.

<sup>&</sup>lt;sup>7</sup> 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 11.2e.

<sup>8</sup> Wood and wood-derived fuels.

 $<sup>^{9}</sup>$  Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

<sup>&</sup>lt;sup>10</sup> Fuel ethanol minus denaturant.