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

(Million Metric Tons of Carbon Dioxide 1)

Year	Coal	Coal Coke Net Imports	Natural Gas ³	Petroleum											Biomass ²			
				Distillate Fuel Oil ⁴	Kero- sene	LPG ⁵	Lubri- cants	Motor Gasoline ⁶	Petroleum Coke	Residual Fuel Oil	Other ⁷	Total	Retail Elec- tricity ⁸	Total ²	Wood ⁹	Waste 10	Fuel Ethanol 11	Total
1949	500	-1	166	41	18	3	3	16	8	95	25	209	120	995	44	NA	NA	44
1950	531	(s)	184	51	20	4	3	18	8	110	26	239	140	1,095	50	NA	NA	50
1955	516	-1	244	72	17	10	4	24	13	122	38	299	222	1,281	59	NA	NA	59
1960	418	-1	310	74	12	17	4	27	29	123	45	329	252	1,308	64	NA	NA	64
1965	471	-2	380	83	12	24	5	24	39	123	65	376	328	1,553	80	NA	NA	80
1970	427	-7	494	89	13	31	6	21	39	126	85	410	434	1,759	96	NA	NA	96
1975	336	2	442	97	9	39	6	16	48	117	97	427	490	1,696	100	NA	NA	100
1976	335	(s)	453	111	9	41	6	15	47	141	103	474	549	1,811	114	NA	NA	114
1977	316	2	447	125	10	40	7	14	52	150	115	513	582	1,860	120	NA	NA	120
1978	304	14	442	127	11	40	7	13	48	133	127	506	580	1,846	131	NA	NA	131
1979	329	7	442	128	13	66	8	11	47	128	139	540	612	1,931	132	NA	NA	132
1980	289	-4	431	96	13	61	7	11	45	105	142	480	601	1,797	150	NA	NA	150
1981	290	-2	422	101	8	58	6	11	47	83	93	408	597	1,715	150	5 7	(s)	156
1982	235	-2	364	95	10	60	6	10	48	81	80	390	529	1,515	142		(s)	149
1983	230	-2	347	83	5 3	55	6 7	8	48	61	98	362	549	1,486	159	9	(s)	168
1984	262	-1	380	87	-	62		11	50	68	106	394	582	1,617	157	12	(s)	170
1985	256	-2	360	81	3	58	6	15	54	57	93	369	583	1,566	154	14	(s)	168
1986	245	-2 1	338	84 83	2	56 53	6 7	15	55 59	57 45	98 106	373	566 587	1,520	151 148	16 17	(s)	167
1987 1988	248 263	5	371 389	82	2		7	15				369	611	1,575	148 152	17	(s)	165 171
1988	259	3	411	83	2	54 49	7	14 14	61 60	42 31	119 118	381 365	638	1,648 1,677	149	19	(s)	161
1909	259	3 1	432	84	4	39	7	13	64	31	127	366	638	1,677	135	12	(s) (s)	147
1990	244	1	432	79	1	39	6	14	63	24	117	342	627	1,653	132	11	(s)	147
1992	235	4	456	81	1	45	6	14	70	28	135	380	649	1,724	137	10	(s)	148
1993	233	3	464	81	, i	43	6	13	68	33	114	360	655	1,724	139	11	(s)	150
1994	235	7	465	81	1	46	7	14	67	31	124	371	668	1,715	148	11	(s)	160
1995	233	7	490	82	1	45	7	14	67	24	114	355	659	1,743	155	11	(s)	166
1996	227	3	506	86	1	46	6	14	70	24	132	381	678	1,795	158	12	(s)	170
1997	224	5	506	88	i	48	7	15	68	21	138	386	694	1,815	162	10	(s)	172
1998	219	8	495	88	2	39	7	14	77	16	125	368	706	1,796	150	10	(s)	160
1999	208	7	474	86	1	48	7	11	81	14	130	378	704	1,772	152	9	(s)	161
2000	211	7	481	87	1	56	7	11	74	17	117	370	719	1,788	153	8	(s)	161
2001	204	3	439	95	2	49	6	21	77	14	132	395	667	1,709	135	12	(s)	147
2002	188	7	R448	88	1	54	6	22	76	13	127	388	654	R1,685	131	13	(s)	144
2003	190	6	430	83	2	50	6	23	76	15	140	394	672	1,692	128	13	(s)	141
2004	191	16	R432	88	2	55	6	26	82	17	142	419	675	R1,732	138	12	(s)	151
2005	183	5	398	92	3	51	6	25	80	20	141	417	673	1,675	136	13	(s)	150
2006	179	7	R395	92	2	56	6	26	82	16	150	430	650	R1,662	138	12	1	151
2007	175	3	R405	92	1	54	6	21	80	13	148	415	662	R1,661	R 132	13	1	146
2008	168	5	407	93	(s)	42	6	17	76	14	130	377	642	R1,599	126	13	1	140
2009	131	-3	383	80	(s)	46	5	17	73	7	111	339	551	1,401	R113	14	1	R 128
2010	R154	-1	R401	R86	R1	R50	6	R19	62	8	R120	R352	R587	R1,494	R 122	15	1	139
2011 ^P	150	1	419	88	(s)	48	5	18	62	8	116	345	567	1,482	123	16	1	140

¹ 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 and greater than -0.5 million metric tons of carbon dioxide.

Notes: • Data are estimates for carbon dioxide emissions from energy consumption, including the non-combustion use of fossil fuels. • 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 2.1d, 5.14b, 8.9, 10.2b, and 11.2e. • 1973 forward—EIA, Monthly Energy Review (MER) (May 2012), Tables 12.4 and 12.7, and MER data system calculations.

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 caption

Natural gas, excluding supplemental gaseous fuels.

Distillate fuel oil, excluding biodiesel.

Liquefied petroleum gases.

⁶ Finished motor gasoline, excluding fuel ethanol.

Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrorlemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.

⁸ 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.

⁹ Wood and wood-derived fuels.

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

¹¹ Fuel ethanol minus denaturant.