

**Table 11.1 Carbon Dioxide Emissions From Energy Consumption by Source, Selected Years, 1949-2011**  
(Million Metric Tons of Carbon Dioxide <sup>1</sup>)

Year	Coal <sup>3</sup>	Natural Gas <sup>4</sup>	Petroleum											Total <sup>2,9</sup>	Biomass <sup>2</sup>				
			Aviation Gasoline	Distillate Fuel Oil <sup>5</sup>	Jet Fuel	Kero-sene	LPG <sup>6</sup>	Lubri-cants	Motor Gasoline <sup>7</sup>	Petroleum Coke	Residual Fuel Oil	Other <sup>8</sup>	Total		Wood <sup>10</sup>	Waste <sup>11</sup>	Fuel Ethanol <sup>12</sup>	Bio-diesel	Total
1949	1,118	270	12	140	NA	42	13	7	329	8	244	25	820	2,207	145	NA	NA	NA	145
1950	1,152	313	14	168	NA	48	16	9	357	8	273	26	918	2,382	147	NA	NA	NA	147
1955	1,038	472	24	247	21	48	27	10	473	13	274	38	1,175	2,685	134	NA	NA	NA	134
1960	915	650	21	291	53	41	42	10	543	29	275	45	1,349	2,914	124	NA	NA	NA	124
1965	1,075	828	15	330	87	40	57	11	627	39	289	65	1,559	3,462	125	NA	NA	NA	125
1970	1,134	1,144	7	394	141	39	78	11	789	41	396	85	1,983	4,261	134	(s)	NA	NA	134
1975	1,181	1,047	5	443	146	24	82	11	911	48	443	97	2,209	4,437	140	(s)	NA	NA	141
1976	1,266	1,068	5	488	144	25	86	13	955	47	506	103	2,372	4,705	161	(s)	NA	NA	161
1977	1,300	1,046	5	520	152	26	85	13	979	52	553	115	2,500	4,846	172	(s)	NA	NA	172
1978	1,298	1,050	5	533	154	26	83	14	1,011	50	544	127	2,548	4,896	191	(s)	NA	NA	191
1979	1,410	1,085	5	514	157	28	95	15	960	48	509	139	2,469	4,964	202	(s)	NA	NA	202
1980	1,436	1,063	4	446	156	24	87	13	900	46	453	142	2,272	4,770	232	(s)	NA	NA	232
1981	1,485	1,036	4	439	147	19	85	13	899	48	376	93	2,122	4,642	234	5	(s)	NA	240
1982	1,433	963	3	415	148	19	85	11	892	49	309	80	2,011	4,406	235	7	1	NA	244
1983	1,488	901	3	418	153	19	85	12	904	48	255	98	1,995	4,383	252	10	2	NA	264
1984	1,598	962	3	443	172	17	88	13	914	51	247	106	2,053	4,613	252	13	3	NA	267
1985	1,638	926	3	445	178	17	86	12	930	55	216	93	2,035	4,600	252	14	3	NA	270
1986	1,617	866	4	453	191	15	83	12	958	56	255	98	2,125	4,608	240	16	4	NA	260
1987	1,691	920	3	463	202	14	82	13	982	60	227	106	2,152	4,764	231	18	5	NA	253
1988	1,775	962	3	487	212	14	83	13	1,003	63	249	119	2,246	4,982	242	19	5	NA	266
1989	1,795	1,022	3	491	218	13	82	13	1,000	62	246	118	2,246	5,067	251	22	5	NA	278
1990	1,821	1,025	3	470	223	6	69	13	988	67	220	127	2,187	5,039	208	24	4	NA	237
1991	1,807	1,047	3	454	215	7	71	12	982	66	207	117	2,134	4,996	208	26	5	NA	239
1992	1,822	1,082	3	464	213	6	77	12	999	74	196	135	2,180	5,093	217	27	6	NA	250
1993	1,882	1,110	3	473	215	7	76	12	1,015	76	193	114	2,184	5,185	212	28	7	NA	246
1994	1,893	1,134	3	492	224	7	79	13	1,022	74	183	124	2,221	5,258	218	29	7	NA	255
1995	1,913	1,184	3	498	222	8	78	13	1,044	75	152	114	2,207	5,314	222	30	8	NA	260
1996	1,995	1,205	3	524	232	9	84	12	1,063	78	152	132	2,290	5,501	229	32	6	NA	266
1997	2,040	1,211	3	534	234	10	85	13	1,075	79	142	138	2,313	5,575	222	30	7	NA	259
1998	2,064	1,189	2	538	238	12	75	14	1,107	89	158	125	2,358	5,622	205	30	8	NA	242
1999	2,062	1,192	3	555	245	11	91	14	1,127	93	148	130	2,417	5,682	208	29	8	NA	245
2000	2,155	1,241	3	580	254	10	102	14	1,135	84	163	117	2,461	5,867	212	27	9	NA	248
2001	2,088	1,187	2	598	243	11	92	13	1,151	88	145	132	2,473	5,759	188	33	10	(s)	231
2002	2,095	R1,227	2	587	237	6	98	12	1,183	94	125	127	2,472	R5,806	187	36	12	(s)	235
2003	2,136	1,191	2	610	231	8	95	11	1,188	94	138	140	2,518	5,857	188	36	16	(s)	240
2004	2,160	R1,195	2	632	240	10	98	12	1,214	105	155	142	2,609	5,975	199	35	20	(s)	255
2005	2,182	1,175	2	640	246	10	94	12	1,214	105	164	141	2,628	R5,997	200	37	23	1	261
2006	2,147	R1,158	2	648	240	8	93	11	1,224	104	122	150	2,603	R5,919	R197	36	31	2	R266
2007	2,172	R1,233	2	652	238	5	94	12	1,227	98	129	148	2,603	R6,020	R194	37	39	3	R274
2008	2,139	1,243	2	615	226	2	89	11	1,166	92	111	130	2,444	5,838	R191	40	55	3	289
2009	1,876	R1,222	2	564	204	3	91	10	1,157	87	91	111	2,320	R5,429	R177	41	62	3	R284
2010	R1,988	R1,265	2	R590	R210	3	R94	11	R1,146	77	R96	R120	R2,349	R5,612	186	R43	R73	2	304
2011 <sup>P</sup>	1,874	1,296	2	596	209	2	92	10	1,111	75	86	116	2,299	5,481	186	43	73	8	311

<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> 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>3</sup> Includes coal coke net imports.

<sup>4</sup> Natural gas, excluding supplemental gaseous fuels.

<sup>5</sup> Distillate fuel oil, excluding biodiesel.

<sup>6</sup> Liquefied petroleum gases.

<sup>7</sup> Finished motor gasoline, excluding fuel ethanol.

<sup>8</sup> Aviation gasoline blending components, crude oil, motor gasoline blending components, pentanes plus, petrochemical feedstocks, special naphthas, still gas, unfinished oils, waxes, and miscellaneous petroleum products.

<sup>9</sup> Includes electric power sector use of geothermal energy and non-biomass waste. See Table 11.3e.

<sup>10</sup> Wood and wood-derived fuels.

<sup>11</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

<sup>12</sup> 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, 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 2.1b-2.1f, 5.12, 7.3, 7.8, 10.2a-10.2c, and A5. • 1973 forward—EIA, *Monthly Energy Review* (May 2012), Tables 12.1 and 12.7.