

Table 12.1 Emissions of Greenhouse Gases, 1980-2005

Year	Greenhouse Gases				Greenhouse Gases, Based on Global Warming Potential ¹				
	Carbon Dioxide ^{2,3}	Methane	Nitrous Oxide	HFCs PFCs SF ₆	Carbon Dioxide ²	Methane	Nitrous Oxide	HFCs PFCs SF ₆	Total
	Million Metric Tons of Gas				Million Metric Tons Carbon Dioxide Equivalent ²				
1980	4,824.7	28.6	1.0	--	4,824.7	658.0	287.0	70.4	5,840.0
1981	4,704.3	29.2	1.0	--	4,704.3	671.1	292.0	74.0	5,741.3
1982	4,448.8	29.4	1.0	--	4,448.8	676.8	282.6	55.4	5,463.7
1983	4,408.0	29.1	.9	--	4,408.0	669.9	270.2	67.1	5,415.3
1984	4,655.8	29.8	1.0	--	4,655.8	684.5	294.0	75.5	5,709.9
1985	4,638.3	30.0	1.1	--	4,638.3	689.7	330.7	70.5	5,729.3
1986	4,642.5	29.4	1.1	--	4,642.5	676.5	323.8	75.0	5,717.8
1987	4,800.2	29.9	1.1	--	4,800.2	688.3	323.4	77.8	5,889.8
1988	5,012.6	30.1	1.1	--	5,012.6	692.0	316.9	91.3	6,112.8
1989	5,105.8	30.2	1.1	--	5,105.8	693.8	332.8	94.5	6,226.9
1990	^R 4,990.6	^R 30.5	1.1	--	^R 4,990.6	^R 701.7	^R 333.5	^R 87.1	^R 6,112.8
1991	^R 4,940.6	^R 30.4	1.2	--	^R 4,940.6	^R 698.2	342.6	^R 79.0	^R 6,060.4
1992	^R 5,056.6	^R 30.4	1.2	--	^R 5,056.6	^R 700.2	349.7	^R 83.7	^R 6,190.1
1993	^R 5,170.0	^R 29.4	1.2	--	^R 5,170.0	^R 675.7	^R 349.1	^R 82.9	^R 6,277.8
1994	^R 5,255.0	^R 29.3	1.3	--	^R 5,255.0	^R 674.7	374.5	^R 85.2	^R 6,389.5
1995	^R 5,308.5	^R 29.2	1.2	--	^R 5,308.5	^R 672.5	^R 357.7	^R 94.9	^R 6,433.5
1996	^R 5,495.6	^R 28.3	1.2	--	^R 5,495.6	^R 651.3	^R 357.9	^R 110.6	^R 6,615.4
1997	^R 5,559.3	^R 28.3	1.2	--	^R 5,559.3	^R 650.8	^R 350.1	^R 118.1	^R 6,678.4
1998	^R 5,594.0	^R 27.4	1.2	--	^R 5,594.0	^R 629.8	348.8	^R 134.3	^R 6,707.0
1999	^R 5,673.9	^R 26.8	1.2	--	^R 5,673.9	^R 616.5	^R 346.8	^R 133.9	^R 6,771.1
2000	^R 5,853.4	^R 26.6	1.2	--	^R 5,853.4	^R 611.2	^R 342.8	^R 138.0	^R 6,945.4
2001	^R 5,767.0	^R 26.0	1.1	--	^R 5,767.0	^R 597.7	^R 337.9	^R 128.5	^R 6,831.0
2002	^R 5,814.7	^R 26.1	1.1	--	^R 5,814.7	^R 600.2	^R 333.6	^R 137.8	^R 6,886.3
2003	^R 5,875.3	^R 26.2	1.1	--	^R 5,875.3	^R 602.2	^R 332.9	^R 136.6	^R 6,946.9
2004	^R 5,988.7	^R 26.4	1.2	--	^R 5,988.7	^R 606.5	^R 359.9	^R 149.5	^R 7,104.6
2005 ^P	6,008.6	26.6	1.2	--	6,008.6	611.9	366.6	160.2	7,147.2

¹ Emissions of greenhouse gases are weighted based upon their relative global warming potential (GWP), with carbon dioxide equal to a weight of one. The use of updated estimates of GWP resulted in a number of revisions to previously published data. It is also important to note that revisions in estimated emissions result from revisions in energy consumption as well.

² Metric tons of carbon dioxide can be converted to metric tons of carbon equivalent by multiplying by 12/44.

³ Carbon dioxide data in this table differ from those for the United States in Table 11.19 due to: the exclusion of emissions from international bunker fuels consumption; the inclusion of emissions from geothermal power generation, cement production and other industrial processes, and municipal solid waste combustion; and the inclusion of data for the U.S. Territories.

R=Revised. P=Preliminary. -- = Not applicable because these gases cannot be summed in native units.

Notes: • HFCs = hydrofluorocarbons; PFCs = perfluorocarbons; and SF₆ = sulfur hexafluoride. • Emissions are from anthropogenic sources. "Anthropogenic" means produced as the result of human activities, including emissions from agricultural activity and domestic livestock. Emissions from natural sources, such as wetlands and wild animals, are not included. • Because of the continuing goal to improve estimation methods for greenhouse gases, data are frequently revised on an annual basis in keeping with the latest findings of the international scientific community. • Totals may not equal sum of components due to independent rounding.

Web Page: For related information, see <http://www.eia.doe.gov/environment.html>.

Sources: **1990, 1995, and 1998-2005:** Energy Information Administration (EIA), *Emissions of Greenhouse Gases in the United States 2005* (November 2006), Tables ES1 and ES2. **All Other Data:** EIA, *Emissions of Greenhouse Gases in the United States*, annual reports and unpublished revisions.