

Table ES-2: Recent Trends in U.S. Greenhouse Gas Emissions and Sinks (Tg CO₂ Eq. or million metric tons CO₂ Eq.)

Gas/Source	1990	1995	2000	2005	2006	2007
CO₂	5,076.7	5,407.9	5,955.2	6,090.8	6,014.9	6,103.4
Fossil Fuel Combustion	4,708.9	5,013.9	5,561.5	5,723.5	5,635.4	5,735.8
Electricity Generation	1,809.7	1,938.9	2,283.2	2,381.0	2,327.3	2,397.2
Transportation	1,484.5	1,598.7	1,800.3	1,881.5	1,880.9	1,887.4
Industrial	834.2	862.6	844.6	828.0	844.5	845.4
Residential	337.7	354.4	370.4	358.0	321.9	340.6
Commercial	214.5	224.4	226.9	221.8	206.0	214.4
US Territories	28.3	35.0	36.2	53.2	54.8	50.8
Non-Energy Use of Fuels	117.0	137.5	144.5	138.1	145.1	133.9
Iron and Steel Production & Metallurgical Coke Production	109.8	103.1	95.1	73.2	76.1	77.4
Cement Production	33.3	36.8	41.2	45.9	46.6	44.5
Natural Gas Systems	33.7	33.8	29.4	29.5	29.5	28.7
Incineration of Waste	10.9	15.7	17.5	19.5	19.8	20.8
Lime Production	11.5	13.3	14.1	14.4	15.1	14.6
Ammonia Production and Urea Consumption	16.8	17.8	16.4	12.8	12.3	13.8
Cropland Remaining Cropland	7.1	7.0	7.5	7.9	7.9	8.0
Limestone and Dolomite Use	5.1	6.7	5.1	6.8	8.0	6.2
Aluminum Production	6.8	5.7	6.1	4.1	3.8	4.3
Soda Ash Production and Consumption	4.1	4.3	4.2	4.2	4.2	4.1
Petrochemical Production	2.2	2.8	3.0	2.8	2.6	2.6
Titanium Dioxide Production	1.2	1.5	1.8	1.8	1.9	1.9
Carbon Dioxide Consumption	1.4	1.4	1.4	1.3	1.7	1.9
Ferroalloy Production	2.2	2.0	1.9	1.4	1.5	1.6
Phosphoric Acid Production	1.5	1.5	1.4	1.4	1.2	1.2
Wetlands Remaining Wetlands	1.0	1.0	1.2	1.1	0.9	1.0
Zinc Production	0.9	1.0	1.1	0.5	0.5	0.5
Petroleum Systems	0.4	0.3	0.3	0.3	0.3	0.3
Lead Production	0.3	0.3	0.3	0.3	0.3	0.3
Silicon Carbide Production and Consumption	0.4	0.3	0.2	0.2	0.2	0.2
<i>Land Use, Land-Use Change, and Forestry (Sink)^a</i>	<i>(841.4)</i>	<i>(851.0)</i>	<i>(717.5)</i>	<i>(1,122.7)</i>	<i>(1,050.5)</i>	<i>(1,062.6)</i>
<i>Biomass—Wood</i>	<i>215.2</i>	<i>229.1</i>	<i>218.1</i>	<i>208.9</i>	<i>209.9</i>	<i>209.8</i>
<i>International Bunker Fuels^b</i>	<i>114.3</i>	<i>101.6</i>	<i>99.0</i>	<i>111.5</i>	<i>110.5</i>	<i>108.8</i>
<i>Biomass—Ethanol^b</i>	<i>4.2</i>	<i>7.7</i>	<i>9.2</i>	<i>22.6</i>	<i>30.5</i>	<i>38.0</i>
CH₄	616.6	615.8	591.1	561.7	582.0	585.3
Enteric Fermentation	133.2	143.6	134.4	136.0	138.2	139.0
Landfills	149.2	144.3	122.3	127.8	130.4	132.9
Natural Gas Systems	129.6	132.6	130.8	106.3	104.8	104.7
Coal Mining	84.1	67.1	60.5	57.1	58.4	57.6
Manure Management	30.4	34.5	37.9	41.8	41.9	44.0
Forest Land Remaining Forest Land	4.6	6.1	20.6	14.2	31.3	29.0
Petroleum Systems	33.9	32.0	30.3	28.3	28.3	28.8
Wastewater Treatment	23.5	24.8	25.2	24.3	24.5	24.4
Stationary Combustion	7.4	7.1	6.6	6.7	6.3	6.6
Rice Cultivation	7.1	7.6	7.5	6.8	5.9	6.2
Abandoned Underground Coal Mines	6.0	8.2	7.4	5.6	5.5	5.7
Mobile Combustion	4.7	4.3	3.4	2.5	2.4	2.3
Composting	0.3	0.7	1.3	1.6	1.6	1.7
Petrochemical Production	0.9	1.1	1.2	1.1	1.0	1.0
Field Burning of Agricultural Residues	0.7	0.7	0.8	0.9	0.8	0.9
Iron and Steel Production & Metallurgical Coke Production	1.0	1.0	0.9	0.7	0.7	0.7
Ferroalloy Production	+	+	+	+	+	+
Silicon Carbide Production and Consumption	+	+	+	+	+	+
<i>International Bunker Fuels^b</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>
N₂O	315.0	334.1	329.2	315.9	312.1	311.9
Agricultural Soil Management	200.3	202.3	204.5	210.6	208.4	207.9
Mobile Combustion	43.7	53.7	52.8	36.7	33.5	30.1
Nitric Acid Production	20.0	22.3	21.9	18.6	18.2	21.7
Manure Management	12.1	12.9	14.0	14.2	14.6	14.7
Stationary Combustion	12.8	13.3	14.5	14.8	14.5	14.7
Adipic Acid Production	15.3	17.3	6.2	5.9	5.9	5.9
Wastewater Treatment	3.7	4.0	4.5	4.8	4.8	4.9
N ₂ O from Product Uses	4.4	4.6	4.9	4.4	4.4	4.4
Forest Land Remaining Forest Land	0.5	0.8	2.4	1.8	3.5	3.3
Composting	0.4	0.8	1.4	1.7	1.8	1.8
Settlements Remaining Settlements	1.0	1.2	1.2	1.5	1.5	1.6
Field Burning of Agricultural Residues	0.4	0.4	0.5	0.5	0.5	0.5
Incineration of Waste	0.5	0.5	0.4	0.4	0.4	0.4
Wetlands Remaining Wetlands	+	+	+	+	+	+
<i>International Bunker Fuels^b</i>	<i>1.1</i>	<i>0.9</i>	<i>0.9</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
HFCs	36.9	61.8	100.1	116.1	119.1	125.5
Substitution of Ozone Depleting Substances ^c	0.3	28.5	71.2	100.0	105.0	108.3
HCFC-22 Production	36.4	33.0	28.6	15.8	13.8	17.0
Semiconductor Manufacture	0.2	0.3	0.3	0.2	0.3	0.3
PFCs	20.8	15.6	13.5	6.2	6.0	7.5
Aluminum Production	18.5	11.8	8.6	3.0	2.5	3.8
Semiconductor Manufacture	2.2	3.8	4.9	3.2	3.5	3.6
SF₆	32.8	28.1	19.2	17.9	17.0	16.5
Electrical Transmission and Distribution	26.8	21.6	15.1	14.0	13.2	12.7
Magnesium Production and Processing	5.4	5.6	3.0	2.9	2.9	3.0
Semiconductor Manufacture	0.5	0.9	1.1	1.0	1.0	0.8
Total	6,098.7	6,463.3	7,008.2	7,108.6	7,051.1	7,150.1
Net Emissions (Sources and Sinks)	5,257.3	5,612.3	6,290.7	5,985.9	6,000.6	6,087.5

^a Does not exceed 0.05 Tg CO₂ Eq.

^b Parentheses indicate negative values or sequestration. The net CO₂ flux total includes both emissions and sequestration, and constitutes a sink in the United States. Sinks are only included in net emissions total.

^c Emissions from International Bunker Fuels and Biomass Combustion are not included in totals.

^d Small amounts of PFC emissions also result from this source.

Note: Totals may not sum due to independent rounding.

Note: One teragram (Tg) equals one million metric tons.