



Appendix A

Emission Trends

TABLE 10. EMISSIONS TRENDS (CO₂)
(Sheet 1 of 5)
(Part 1 of 2)

Inventory 2004
Submission 2006 v1.1
UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year (1990)	1991	1992	1993	1994	1995	1996	1997	1998	1999
		Gg								
1. Energy	4,830,463.65	4,797,772.12	4,894,421.31	5,026,716.45	5,103,983.53	5,154,192.67	5,341,931.95	5,407,924.05	5,448,279.22	5,527,589.28
A. Fuel Combustion (Sectoral Approach)	4,824,658.59	4,791,898.96	4,889,114.46	5,019,929.64	5,097,120.91	5,145,205.92	5,333,402.67	5,400,050.40	5,441,713.03	5,520,646.48
1. Energy Industries	1,795,514.03	1,791,841.24	1,804,521.58	1,884,778.53	1,911,285.04	1,926,361.19	1,997,372.76	2,066,327.31	2,154,894.35	2,165,584.41
2. Manufacturing Industries and Construction	851,114.88	830,172.80	874,657.19	863,307.09	871,174.02	876,389.22	918,750.19	912,431.43	871,919.08	849,011.39
3. Transport	1,413,240.29	1,385,651.43	1,431,515.50	1,481,263.62	1,519,792.86	1,548,355.01	1,584,231.84	1,601,594.88	1,629,624.36	1,693,297.10
4. Other Sectors	560,574.62	571,043.83	576,871.67	585,861.58	578,965.37	579,563.37	620,733.97	599,063.30	551,234.11	570,920.52
5. Other	204,214.77	213,189.67	201,548.51	204,718.82	215,903.12	214,537.13	212,313.92	220,633.48	234,041.13	241,833.06
B. Fugitive Emissions from Fuels	5,805.06	5,873.16	5,306.85	6,786.82	6,862.62	8,986.76	8,529.28	7,873.65	6,566.19	6,942.79
1. Solid Fuels	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
2. Oil and Natural Gas	5,805.06	5,873.16	5,306.85	6,786.82	6,862.62	8,986.76	8,529.28	7,873.65	6,566.19	6,942.79
2. Industrial Processes	174,791.23	164,064.88	163,275.30	160,590.15	167,670.45	171,096.92	166,796.32	172,944.33	171,896.98	167,450.15
A. Mineral Products	54,195.19	52,614.59	53,181.47	55,228.29	57,676.50	61,320.02	62,635.64	63,611.55	64,911.37	65,737.41
B. Chemical Industry	25,323.61	25,110.36	26,329.81	26,747.48	27,919.36	27,317.42	27,166.51	27,926.24	29,462.50	38,047.48
C. Metal Production	95,272.43	86,339.93	83,764.02	78,614.38	82,074.59	82,459.48	76,994.17	81,406.55	77,523.03	73,665.25
D. Other Production	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
E. Production of Halocarbons and SF ₆										
F. Consumption of Halocarbons and SF ₆										
G. Other	NA,NE	NA,NE	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO
3. Solvent and Other Product Use	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
4. Agriculture										
A. Enteric Fermentation										
B. Manure Management										
C. Rice Cultivation										
D. Agricultural Soils										
E. Prescribed Burning of Savannas										
F. Field Burning of Agricultural Residues										
G. Other										
5. Land Use, Land-Use Change and Forestry⁽²⁾	-910,373.10	-908,515.44	-872,606.25	-751,969.44	-747,840.43	-614,886.87	-603,849.95	-641,272.25	-744,041.71	-765,692.34
A. Forest Land	-563,339.86	-574,330.65	-570,219.65	-409,757.66	-397,997.11	-285,402.91	-272,053.43	-300,776.28	-412,697.88	-423,203.94
B. Cropland	-31,632.43	-31,680.75	-32,216.90	-34,027.79	-33,772.41	-29,199.77	-29,119.57	-29,538.60	-27,385.35	-27,409.07
C. Grassland	-22,154.74	-22,231.06	-22,311.10	-22,417.88	-22,492.53	-13,548.90	-13,573.07	-13,587.94	-13,602.81	-13,643.71
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
E. Settlements	-83,187.81	-82,294.14	-85,107.59	-82,084.07	-83,138.29	-83,518.30	-81,518.27	-84,638.19	-84,232.80	-86,773.77
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	-210,058.25	-197,978.84	-202,751.02	-203,682.04	-210,440.09	-203,216.99	-207,585.60	-212,731.24	-206,122.86	-214,661.85
6. Waste	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA
A. Solid Waste Disposal on Land	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B. Waste-water Handling	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
C. Waste Incineration	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in Summary L₁)	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified	Other non-specified
Total CO₂ emissions including net CO₂ from LULUCF^(b)	4,094,881.78	4,053,321.56	4,185,090.35	4,435,337.16	4,523,813.55	4,710,402.73	4,904,878.32	4,939,596.13	4,876,134.41	4,929,347.08
Total CO₂ emissions excluding net CO₂ from LULUCF^(b)	5,005,254.88	4,961,837.00	5,057,696.60	5,187,306.61	5,271,653.98	5,325,289.59	5,508,728.27	5,580,868.38	5,620,176.12	5,695,039.42
Memo Items:										
International Bankers	113,502.67	119,859.04	109,725.60	99,751.86	97,724.81	100,670.57	102,294.91	109,858.16	114,557.44	105,238.41
Aviation	46,230.19	46,521.67	46,900.62	47,481.50	48,035.25	50,749.98	52,186.06	55,898.55	56,657.37	58,799.49
Marine	67,272.48	73,337.37	62,821.98	52,270.36	49,689.56	49,929.59	50,108.85	53,959.61	57,900.06	46,428.92
Multilateral Operations	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
CO₂ Emissions from Biomass	216,702.02	217,567.47	228,141.27	222,303.36	231,283.15	241,902.30	244,305.64	233,243.18	217,201.03	222,340.14

Note: All footnotes for this table are given at the end of the table on sheet 5.

TABLE 10 EMISSIONS TRENDS (CO₂)
(Sheet 1 of 5)
(Part 2 of 2)

Inventory 2004
Submission 2006 v.1.1
UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2000	2001	2002	2003	2004	Change from base to latest reported year
1. Energy	5,698,086.15	5,642,663.67	5,663,283.81	5,730,028.56	5,835,334.67	20.80
A. Fuel Combustion (Sectoral Approach)	5,692,317.61	5,636,569.62	5,657,080.21	5,723,937.59	5,829,300.81	20.82
1. Energy Industries	2,269,311.57	2,237,292.82	2,233,455.50	2,262,197.79	2,290,619.61	27.57
2. Manufacturing Industries and Construction	862,564.74	861,167.85	842,119.24	844,620.59	863,461.40	1.45
3. Transport	1,738,962.74	1,725,508.49	1,771,756.85	1,772,254.33	1,825,631.34	29.18
4. Other Sectors	599,143.90	586,388.01	584,324.43	614,563.10	595,585.26	6.25
5. Other	222,334.67	226,212.45	225,424.19	230,301.78	254,003.20	24.38
B. Fugitive Emissions from Fuels	5,768.54	6,094.04	6,203.59	6,990.97	6,033.86	3.94
1. Solid Fuels	NE	NE	NE	NE	NE	0.00
2. Oil and Natural Gas	5,768.54	6,094.04	6,203.59	6,990.97	6,033.86	3.94
2. Industrial Processes	166,378.73	152,528.56	152,605.17	147,648.81	152,649.74	-12.67
A. Mineral Products	64,652.48	64,065.15	65,230.52	64,901.51	70,163.13	29.46
B. Chemical Industry	27,007.54	23,539.05	25,774.86	22,853.69	24,758.35	-2.23
C. Metal Production	74,718.71	64,924.36	61,599.79	59,893.61	57,728.26	-39.41
D. Other Production	NE	NE	NE	NE	NE	0.00
E. Production of Halocarbons and SF ₆						
F. Consumption of Halocarbons and SF ₆						
G. Other	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	0.00
3. Solvent and Other Product Use	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00
4. Agriculture						
A. Enteric Fermentation						
B. Manure Management						
C. Rice Cultivation						
D. Agricultural Soils						
E. Prescribed Burning of Savannas						
F. Field Burning of Agricultural Residues						
G. Other						
5. Land Use, Land-Use Change and Forestry⁽²⁾	-759,506.65	-767,987.44	-768,638.59	-774,847.66	-780,094.17	-14.31
A. Forest Land	-420,195.58	-420,195.58	-420,195.58	-420,195.58	-420,195.58	-25.41
B. Cropland	-28,944.42	-30,593.97	-30,328.23	-31,503.42	-31,759.51	0.40
C. Grassland	-13,685.35	-13,726.78	-13,769.66	-13,814.02	-13,859.92	-37.44
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00
E. Settlements	-85,865.99	-89,677.60	-89,936.27	-93,758.29	-97,311.28	16.98
F. Other Land	NE	NE	NE	NE	NE	0.00
G. Other	-210,815.31	-213,793.50	-214,408.85	-215,576.36	-216,967.86	3.29
6. Waste	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	0.00
A. Solid Waste Disposal on Land	NA	NA	NA	NA	NA	0.00
B. Waste-water Handling	IE	IE	IE	IE	IE	0.00
C. Waste Incineration	NA	NA	NA	NA	NA	0.00
D. Other	NA	NA	NA	NA	NA	0.00
7. Other (as specified in Summary 1.A)	NA	NA	NA	NA	NA	0.00
Other non-specified						
Total CO₂ emissions including net CO₂ from LULUCF⁽³⁾	5,104,958.23	5,027,204.79	5,047,250.39	5,102,829.71	5,207,890.25	27.18
Total CO₂ emissions excluding net CO₂ from LULUCF⁽³⁾	5,864,464.88	5,795,192.22	5,815,888.98	5,877,677.37	5,987,984.41	19.63
Memo Items:						
International Bankers	101,366.47	97,814.95	89,488.77	84,083.30	94,498.89	-16.74
Aviation	60,507.03	59,337.45	61,787.41	59,448.46	59,911.60	29.59
Marine	40,859.44	38,477.49	27,701.36	24,634.85	34,587.29	-48.59
Multilateral Operations	NE	NE	NE	NE	NE	0.00
CO₂ Emissions from Biomass	236,764.85	200,478.81	194,351.10	202,110.66	211,229.93	-2.53

Note: All footnotes for this table are given at the end of the table on sheet 5.



TABLE 10 EMISSIONS TRENDS (CH₄)
(Sheet 2 of 5)
(Part 1 of 2)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year (1990)	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total CH₄ emissions	29,431.60	29,436.93	29,468.61	28,899.39	29,161.28	28,997.40	28,523.94	28,039.31	27,594.06	27,093.90
1. Energy	12,458.65	12,366.48	12,225.90	11,660.87	11,716.55	11,696.29	11,607.13	11,413.55	11,210.59	10,800.17
A. Fuel Combustion (Sectoral Approach)	598.31	599.51	613.80	588.13	581.13	592.64	593.59	538.13	506.50	508.29
1. Energy Industries	26.95	26.67	26.77	28.09	28.49	27.29	28.38	29.36	31.28	31.34
2. Manufacturing Industries and Construction	103.98	107.62	111.46	114.20	115.70	119.27	122.34	123.45	117.61	115.74
3. Transport	213.91	207.77	207.94	204.93	201.21	195.01	186.87	178.42	169.84	161.91
4. Other Sectors	244.74	253.59	263.90	237.19	231.96	247.59	252.67	203.47	184.31	195.84
5. Other	3.71	3.86	3.74	3.72	3.77	3.48	3.33	3.43	3.46	3.46
B. Fugitive Emissions from Fuels	11,860.34	11,766.96	11,612.10	11,072.74	11,135.42	11,103.65	11,013.54	10,875.42	10,704.09	10,291.87
1. Solid Fuels	4,186.17	4,056.25	3,984.15	3,429.25	3,487.42	3,322.95	3,407.47	3,341.12	3,317.66	3,136.97
2. Oil and Natural Gas	7,674.17	7,710.72	7,627.95	7,643.49	7,648.00	7,580.70	7,606.06	7,534.30	7,386.43	7,154.90
2. Industrial Processes	119.57	114.42	120.20	126.99	132.65	135.95	137.40	138.64	137.90	137.78
A. Mineral Products	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
B. Chemical Industry	56.77	58.91	61.63	67.29	72.26	73.68	76.98	79.09	80.69	82.02
C. Metal Production	62.80	55.51	58.57	59.70	60.39	62.27	60.42	59.55	57.21	55.77
D. Other Production										
E. Production of Halocarbons and SF ₆										
F. Consumption of Halocarbons and SF ₆										
G. Other	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO
3. Solvent and Other Product Use										
A. Agriculture	7,468.13	7,519.49	7,631.28	7,585.55	7,833.34	7,969.44	7,759.78	7,759.86	7,820.99	7,810.20
A. Enteric Fermentation	5,612.36	5,576.70	5,685.69	5,658.76	5,734.01	5,856.34	5,740.31	5,635.55	5,558.80	5,562.85
B. Manure Management	1,483.72	1,578.88	1,524.66	1,563.53	1,669.47	1,718.77	1,651.88	1,731.57	1,848.35	1,815.97
C. Rice Cultivation	339.21	333.19	374.79	334.24	391.13	362.90	331.75	356.24	376.26	394.87
D. Agricultural Soils	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
E. Prescribed Burning of Savannas	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F. Field Burning of Agricultural Residues	32.83	30.73	36.14	29.02	38.73	31.50	35.84	36.51	37.58	36.51
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5. Land Use, Land-Use Change and Forestry										
A. Forest Land	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
B. Cropland	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
C. Grassland	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
E. Settlements	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
6. Waste	9,385.24	9,436.55	9,501.22	9,525.99	9,478.74	9,195.71	9,019.63	8,727.25	8,424.58	8,345.75
A. Solid Waste Disposal on Land	8,205.61	8,209.12	8,219.31	8,208.67	8,104.02	7,772.54	7,557.44	7,217.94	6,874.39	6,743.43
B. Waste-water Handling	1,179.63	1,227.43	1,281.92	1,317.32	1,374.72	1,423.18	1,462.19	1,509.31	1,550.19	1,602.32
C. Waste Incineration	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in Summary 1-A)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Memo Items										
International Bankers	7.80	8.39	7.38	6.38	6.15	6.25	6.30	6.78	7.19	6.13
Aviation	1.27	1.28	1.29	1.31	1.32	1.44	1.44	1.54	1.56	1.62
Marine	6.53	7.11	6.10	5.08	4.82	4.85	4.86	5.24	5.63	4.51
Multilateral Operations	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
CO ₂ Emissions from Biomass										

Note: All footnotes for this table are given at the end of the table on sheet 5.

Inventory 2004
Submission 2006 v.1.1
UNITED STATES OF AMERICA

TABLE 10 EMISSIONS TRENDS (CH₄)
(Sheet 2 of 5)
(Part 2 of 2)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2000					2001					2002					2003					2004					Change from base to latest reported year				
	Gg					Gg					Gg					Gg					Gg					%				
Total CH₄ emissions	26,997.19	26,997.19	26,997.19	26,997.19	26,997.19	26,679.00	26,679.00	26,679.00	26,679.00	26,679.00	26,657.36	26,657.36	26,657.36	26,657.36	26,657.36	26,874.81	26,874.81	26,874.81	26,874.81	26,874.81	26,511.31	26,511.31	26,511.31	26,511.31	26,511.31	-9.92	-9.92	-9.92	-9.92	-9.92
1. Energy	10,892.53	10,892.53	10,892.53	10,892.53	10,892.53	10,714.78	10,714.78	10,714.78	10,714.78	10,714.78	10,480.17	10,480.17	10,480.17	10,480.17	10,480.17	10,517.44	10,517.44	10,517.44	10,517.44	10,517.44	10,277.20	10,277.20	10,277.20	10,277.20	10,277.20	-17.51	-17.51	-17.51	-17.51	-17.51
A. Fuel Combustion (Sectoral Approach)	512.75	512.75	512.75	512.75	512.75	474.40	474.40	474.40	474.40	474.40	447.10	447.10	447.10	447.10	447.10	455.08	455.08	455.08	455.08	455.08	446.59	446.59	446.59	446.59	446.59	-25.36	-25.36	-25.36	-25.36	-25.36
1. Energy Industries	32.40	32.40	32.40	32.40	32.40	32.16	32.16	32.16	32.16	32.16	31.98	31.98	31.98	31.98	31.98	33.10	33.10	33.10	33.10	33.10	33.43	33.43	33.43	33.43	33.43	24.02	24.02	24.02	24.02	24.02
2. Manufacturing Industries and Construction	117.32	117.32	117.32	117.32	117.32	110.11	110.11	110.11	110.11	110.11	108.15	108.15	108.15	108.15	108.15	106.70	106.70	106.70	106.70	106.70	110.82	110.82	110.82	110.82	110.82	1.68	1.68	1.68	1.68	1.68
3. Transport	155.85	155.85	155.85	155.85	155.85	146.65	146.65	146.65	146.65	146.65	139.43	139.43	139.43	139.43	139.43	131.02	131.02	131.02	131.02	131.02	126.19	126.19	126.19	126.19	126.19	-41.01	-41.01	-41.01	-41.01	-41.01
4. Other Sectors	203.77	203.77	203.77	203.77	203.77	181.30	181.30	181.30	181.30	181.30	163.74	163.74	163.74	163.74	163.74	180.11	180.11	180.11	180.11	180.11	171.74	171.74	171.74	171.74	171.74	-29.83	-29.83	-29.83	-29.83	-29.83
5. Other	3.42	3.42	3.42	3.42	3.42	4.18	4.18	4.18	4.18	4.18	3.80	3.80	3.80	3.80	3.80	4.15	4.15	4.15	4.15	4.15	4.41	4.41	4.41	4.41	4.41	18.85	18.85	18.85	18.85	18.85
B. Fugitive Emissions from Fuels	10,379.78	10,379.78	10,379.78	10,379.78	10,379.78	10,240.37	10,240.37	10,240.37	10,240.37	10,240.37	10,033.07	10,033.07	10,033.07	10,033.07	10,033.07	10,062.36	10,062.36	10,062.36	10,062.36	10,062.36	9,830.61	9,830.61	9,830.61	9,830.61	9,830.61	-17.11	-17.11	-17.11	-17.11	-17.11
1. Solid Fuels	3,022.39	3,022.39	3,022.39	3,022.39	3,022.39	2,956.39	2,956.39	2,956.39	2,956.39	2,956.39	2,787.76	2,787.76	2,787.76	2,787.76	2,787.76	2,888.02	2,888.02	2,888.02	2,888.02	2,888.02	2,951.20	2,951.20	2,951.20	2,951.20	2,951.20	-29.50	-29.50	-29.50	-29.50	-29.50
2. Oil and Natural Gas	7,357.39	7,357.39	7,357.39	7,357.39	7,357.39	7,283.99	7,283.99	7,283.99	7,283.99	7,283.99	7,245.32	7,245.32	7,245.32	7,245.32	7,245.32	7,174.34	7,174.34	7,174.34	7,174.34	7,174.34	6,879.41	6,879.41	6,879.41	6,879.41	6,879.41	-10.36	-10.36	-10.36	-10.36	-10.36
3. Industrial Processes	137.82	137.82	137.82	137.82	137.82	119.45	119.45	119.45	119.45	119.45	130.43	130.43	130.43	130.43	130.43	121.34	121.34	121.34	121.34	121.34	127.17	127.17	127.17	127.17	127.17	6.35	6.35	6.35	6.35	6.35
A. Mineral Products	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE	0.00	0.00	0.00	0.00	0.00
B. Chemical Industry	80.33	80.33	80.33	80.33	80.33	68.67	68.67	68.67	68.67	68.67	72.67	72.67	72.67	72.67	72.67	72.62	72.62	72.62	72.62	72.62	77.41	77.41	77.41	77.41	77.41	36.35	36.35	36.35	36.35	36.35
C. Metal Production	57.49	57.49	57.49	57.49	57.49	50.78	50.78	50.78	50.78	50.78	47.76	47.76	47.76	47.76	47.76	48.72	48.72	48.72	48.72	48.72	49.76	49.76	49.76	49.76	49.76	-20.77	-20.77	-20.77	-20.77	-20.77
D. Other Production																														
E. Production of Halocarbons and SF ₆																														
F. Consumption of Halocarbons and SF ₆																														
G. Other	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	0.00	0.00	0.00	0.00	0.00
3. Solvent and Other Product Use																														
4. Agriculture	7,712.89	7,712.89	7,712.89	7,712.89	7,712.89	7,709.95	7,709.95	7,709.95	7,709.95	7,709.95	7,692.83	7,692.83	7,692.83	7,692.83	7,692.83	7,711.89	7,711.89	7,711.89	7,711.89	7,711.89	7,639.94	7,639.94	7,639.94	7,639.94	7,639.94	2.30	2.30	2.30	2.30	2.30
A. Enteric Fermentation	5,507.09	5,507.09	5,507.09	5,507.09	5,507.09	5,459.14	5,459.14	5,459.14	5,459.14	5,459.14	5,462.73	5,462.73	5,462.73	5,462.73	5,462.73	5,481.04	5,481.04	5,481.04	5,481.04	5,481.04	5,362.36	5,362.36	5,362.36	5,362.36	5,362.36	-4.45	-4.45	-4.45	-4.45	-4.45
B. Manure Management	1,811.35	1,811.35	1,811.35	1,811.35	1,811.35	1,850.37	1,850.37	1,850.37	1,850.37	1,850.37	1,871.30	1,871.30	1,871.30	1,871.30	1,871.30	1,864.62	1,864.62	1,864.62	1,864.62	1,864.62	1,875.45	1,875.45	1,875.45	1,875.45	1,875.45	26.40	26.40	26.40	26.40	26.40
C. Rice Cultivation	356.84	356.84	356.84	356.84	356.84	363.78	363.78	363.78	363.78	363.78	325.20	325.20	325.20	325.20	325.20	328.31	328.31	328.31	328.31	328.31	360.37	360.37	360.37	360.37	360.37	6.24	6.24	6.24	6.24	6.24
D. Agricultural Soils	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
E. Prescribed Burning of Savannas	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	37.61	37.61	37.61	37.61	37.61	36.65	36.65	36.65	36.65	36.65	33.61	33.61	33.61	33.61	33.61	37.92	37.92	37.92	37.92	37.92	41.76	41.76	41.76	41.76	41.76	27.20	27.20	27.20	27.20	27.20
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
A. Forest Land	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
B. Cropland	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
C. Grassland	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
E. Settlements	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	0.00	0.00	0.00	0.00	0.00
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.00	0.00	0.00	0.00	0.00
G. Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	0.00	0.00	0.00	0.00	0.00
6. Waste	8,253.95	8,253.95	8,253.95	8,253.95	8,253.95	8,134.82	8,134.82	8,134.82	8,134.82	8,134.82	8,363.93	8,363.93	8,363.93	8,363.93	8,363.93	8,524.14	8,524.14	8,524.14	8,524.14	8,524.14	8,467.00	8,467.00	8,467.00	8,467.00	8,467.00	-9.78	-9.78	-9.78	-9.78	-9.78
A. Solid Waste Disposal on Land	6,618.57	6,618.57	6,618.57	6,618.57	6,618.57	6,484.23	6,484.23	6,484.23	6,484.23	6,484.23	6,658.73	6,658.73	6,658.73	6,658.73	6,658.73	6,782.47	6,782.47	6,782.47	6,782.47	6,782.47	6,708.96	6,708.96	6,708.96	6,708.96	6,708.96	-18.24	-18.24	-18.24	-18.24	-18.24
B. Waste-water Handling	1,635.37	1,635.37	1,635.37	1,635.37	1,635.37	1,650.59	1,650.59	1,650.59	1,650.59	1,650.59	1,705.19	1,705.19	1,705.19	1,705.19	1,705.19	1,741.67	1,741.67	1,741.67												

Inventory 2004
Submission 2006 v.1.1
UNITED STATES OF AMERICA

TABLE 10 EMISSIONS TRENDS (N₂O)
(Sheet 3 of 5)
(Part 1 of 2)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year (1990)	1991	1992	1993	1994	1995	1996	1997	1998	1999
		Gr								
Total N₂O emissions	1,273.81	1,321.36	1,243.40	1,453.64	1,203.67	1,465.27	1,493.19	1,356.41	1,421.37	1,352.81
1. Energy	181.34	187.51	198.05	205.83	211.42	215.19	219.59	221.73	221.19	218.94
A. Fuel Combustion (Sectoral Approach)	181.34	187.51	198.05	205.83	211.42	215.19	219.59	221.73	221.19	218.94
1. Energy Industries	24.40	24.33	24.59	25.70	25.84	25.87	27.26	28.01	28.72	28.79
2. Manufacturing Industries and Construction	12.87	12.54	13.01	13.47	13.48	13.66	14.08	13.47	13.43	13.43
3. Transport	136.21	142.94	152.68	159.38	164.91	168.35	170.80	172.89	172.86	170.45
4. Other Sectors	4.65	4.77	4.88	4.48	4.40	4.59	4.76	4.04	3.67	3.89
5. Other	3.20	2.93	2.91	2.80	2.78	2.72	2.68	2.57	2.47	2.38
B. Fugitive Emissions from Fuels	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE
I. Solid Fuels	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
2. Oil and Natural Gas	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE
2. Industrial Processes	106.59	105.41	101.14	105.00	111.73	119.66	121.77	101.71	86.68	82.58
A. Mineral Products	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
B. Chemical Industry	106.59	105.41	101.14	105.00	111.73	119.66	121.77	101.71	86.68	82.58
C. Metal Production	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA	IE,NA
D. Other Production										
E. Production of Halocarbons and SF ₆										
F. Consumption of Halocarbons and SF ₆										
G. Other	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO	NA,NO
3. Solvent and Other Product Use	13.87	13.49	12.72	14.45	14.45	14.45	14.45	15.37	15.37	15.37
A. Agriculture	912.06	953.55	869.16	1,064.61	899.86	1,050.44	1,070.43	949.58	1,028.98	964.74
A. Enteric Fermentation										
B. Manure Management	52.44	54.08	53.37	54.75	54.74	55.27	54.96	55.95	56.12	56.22
C. Rice Cultivation										
D. Agricultural Soils	838.41	898.30	814.46	1,008.76	843.65	993.95	1,014.11	892.18	971.38	907.09
E. Prescribed Burning of Savannas	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F. Field Burning of Agricultural Residues	1.20	1.17	1.33	1.10	1.47	1.22	1.37	1.44	1.48	1.44
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5. Land Use, Land-Use Change and Forestry	18.31	18.59	18.82	19.50	20.32	19.83	20.64	20.86	21.08	21.51
A. Forest Land	0.19	0.19	0.30	0.36	0.42	0.60	0.77	0.96	1.14	1.50
B. Cropland	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE	IE,NA,NE
C. Grassland	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE
E. Settlements	18.12	18.40	18.52	19.14	19.90	19.23	19.87	19.89	19.93	20.00
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
6. Waste	41.64	42.81	43.51	44.24	45.89	45.70	46.32	47.17	48.07	49.66
A. Solid Waste Disposal on Land										
B. Waste-water Handling	41.64	42.81	43.51	44.24	45.89	45.70	46.32	47.17	48.07	49.66
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
7. Other (as specified in Summary 1-A)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Memo Items:										
International Bankers	3.12	3.27	3.03	2.79	2.75	2.84	2.89	3.10	3.22	3.01
Aviation	1.46	1.47	1.48	1.50	1.52	1.61	1.65	1.77	1.80	1.86
Marine	1.66	1.81	1.55	1.29	1.23	1.23	1.33	1.33	1.43	1.14
Multilateral Operations	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
CO₂ Emissions from Biomass										

Note: All footnotes for this table are given at the end of the table on sheet 5.

Inventory 2004
Submission 2006 v.1.1
UNITED STATES OF AMERICA

TABLE 10 EMISSION TRENDS (HFCs, PFCs and SF₆)
(Sheet 4 of 5)
(Part 1 of 2)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year (1990)	Gg										
		1991	1992	1993	1994	1995	1996	1997	1998	1999		
Emissions of HFCs⁽⁶⁾ - (Gg CO₂ equivalent)	35,551.51	31,693.24	37,110.47	36,712.60	41,404.53	51,441.45	66,072.83	75,491.05	95,056.44	93,632.22		
HFC-23	3.01	2.65	3.00	2.74	2.72	2.34	2.69	2.60	3.47	2.64		
HFC-32	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-41	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO		
HFC-43-10mee	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-125	IE,NA,NO	IE,NA,NO	0.21	0.49	0.79	1.30	1.87	2.52	3.13	3.57		
HFC-134	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-134a	IE,NA,NO	IE,NA,NO	0.49	1.75	4.62	13.63	18.48	23.36	27.06	30.90		
HFC-152a	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-143	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-143a	IE,NA,NO	IE,NA,NO	0.03	0.09	0.09	0.20	0.53	0.93	1.37	1.74		
HFC-227ea	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
HFC-236fa	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	0.06	0.14		
HFC-245ca	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO		
Unspecified mix of listed HFCs ⁽⁶⁾ - (Gg CO ₂ equivalent)	392.46	742.33	822.62	903.28	976.38	1,972.29	3,219.83	3,943.05	4,614.62	4,767.06		
Emissions of PFCs⁽⁶⁾ - (Gg CO₂ equivalent)	20,644.70	17,818.50	16,586.06	16,534.45	15,171.39	15,635.82	16,684.49	15,825.08	14,493.78	14,466.27		
CF ₄	2.60	2.22	2.06	2.02	1.81	1.82	1.93	1.76	1.53	1.52		
C ₂ F ₆	0.40	0.37	0.35	0.37	0.37	0.42	0.45	0.47	0.50	0.50		
C ₃ F ₈	0.00	0.00	0.00	0.00	0.00	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO		
C ₄ F ₁₀	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO		
e-C ₄ F ₈	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO		
C ₅ F ₁₂	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO		
C ₆ F ₁₄	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO		
Unspecified mix of listed PFCs ⁽⁶⁾ - (Gg CO ₂ equivalent)	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO		
Emissions of SF₆⁽⁶⁾ - (Gg CO₂ equivalent)	34,564.95	32,940.69	30,632.32	35,096.22	32,404.81	27,749.30	31,329.08	28,748.02	23,840.12	23,428.35		
SF ₆	1.45	1.38	1.28	1.47	1.36	1.16	1.31	1.20	1.00	0.98		

Note: All footnotes for this table are given at the end of the table on sheet 5.

TABLE 10 EMISSION TRENDS (HFCs, PFCs and SF₆)
 (Sheet 4 of 5)
 (Part 2 of 2)

Inventories 2004
 Submission 2006 v.1.1
 UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Gg						Change from base to latest reported year %
	2000	2001	2002	2003	2004	%	
Emissions of HFCs⁽⁶⁾ - (Gg CO₂ equivalent)	101,239.00	98,642.84	106,169.33	105,994.75	119,091.97	234.98	
HFC-23	2.57	1.71	1.71	1.08	1.36	-54.75	
HFC-32	0.44	0.46	0.50	0.56	0.63	100.00	
HFC-41	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	0.00	
HFC-43-10mee	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
HFC-125	4.01	4.39	4.79	5.26	5.82	100.00	
HFC-134	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
HFC-134a	34.93	38.20	41.17	43.66	47.39	100.00	
HFC-152a	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
HFC-143	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
HFC-143a	2.16	2.65	3.20	3.83	4.54	100.00	
HFC-227ea	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
HFC-236fa	0.21	0.28	0.34	0.37	0.37	100.00	
HFC-245ca	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	0.00	
Unspecified mix of limited HFCs ⁽⁷⁾ - (Gg CO ₂ equivalent)	4,647.92	4,501.66	4,563.99	4,641.82	5,287.85	1,247.55	
Emissions of PFCs⁽⁶⁾ - (Gg CO₂ equivalent)	13,892.62	7,536.96	8,774.61	7,119.14	6,426.97	-68.87	
CF ₄	1.52	0.74	0.88	0.67	0.56	-78.53	
C ₂ F ₆	0.42	0.29	0.32	0.28	0.29	-27.83	
C ₃ F ₈	0.02	0.01	0.01	0.01	0.01	1,268.84	
C ₄ F ₁₀	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,NA,NE,NO	0.00	
c-C ₄ F ₈	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	0.01	0.01	100.00	
C ₃ F ₇	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,NA,NE,NO	0.00	
C ₆ F ₁₄	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,IE,NA,NE,NO	C,NA,NE,NO	0.00	
Unspecified mix of limited PFCs ⁽⁷⁾ - (Gg CO ₂ equivalent)	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	0.00	
Emissions of SF₆⁽⁶⁾ - (Gg CO₂ equivalent)	19,557.46	18,676.05	17,762.52	17,898.53	17,454.45	-49.50	
SF ₆	0.82	0.78	0.74	0.75	0.73	-49.50	

Note: All footnotes for this table are given at the end of the table on sheet 5.

TABLE 10 EMISSION TRENDS (SUMMARY)
(Sheet 5 of 5)
(Part 1 of 2)

Inventory 2004
Submission 2006 v.1
UNITED STATES OF AMERICA

GREENHOUSE GAS EMISSIONS	Gg CO ₂ equivalent										
	Base Year (1990)	1991	1992	1993	1994	1995	1996	1997	1998	1999	
CO ₂ emissions (including net CO ₂ from LULUCF) ⁽¹⁾	4,094,881.78	4,053,321.56	4,185,090.35	4,435,337.16	4,523,813.55	4,710,402.73	4,904,878.32	4,939,596.13	4,876,134.41	4,929,347.08	
CO ₂ emissions (excluding net CO ₂ from LULUCF) ⁽¹⁾	5,005,254.88	4,961,837.00	5,057,696.60	5,187,306.61	5,271,653.98	5,325,289.59	5,508,728.27	5,580,868.38	5,620,176.12	5,695,039.42	
CH ₄	618,063.64	618,175.60	618,840.88	606,887.16	612,386.78	608,945.43	599,002.82	588,825.41	579,475.17	568,972.00	
N ₂ O	394,880.95	409,620.24	385,452.73	450,629.23	404,136.58	454,233.47	462,888.38	420,488.34	440,624.59	419,369.57	
HFCs	35,551.51	31,693.24	37,110.47	36,712.60	41,404.53	51,441.45	66,072.83	75,491.05	95,056.44	93,632.22	
PFCS	20,644.70	17,818.50	16,586.06	16,534.45	15,171.39	15,635.82	16,684.49	15,825.08	14,493.78	14,466.27	
SF ₆	34,564.95	32,940.69	30,632.32	35,096.22	32,404.81	27,749.30	31,329.08	28,748.02	23,840.12	23,428.35	
Total (including net CO ₂ from LULUCF) ⁽¹⁾	5,198,587.53	5,163,569.83	5,273,712.81	5,581,196.83	5,629,317.64	5,868,408.20	6,080,855.93	6,068,974.03	6,029,624.51	6,049,215.49	
Total (excluding net CO ₂ from LULUCF) ^{(1),(6)}	6,108,960.63	6,072,085.27	6,146,319.06	6,333,166.27	6,377,158.07	6,483,295.07	6,684,705.88	6,710,246.28	6,773,666.22	6,814,907.83	

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Gg CO ₂ equivalent										
	Base Year (1990)	1991	1992	1993	1994	1995	1996	1997	1998	1999	
1. Energy	5,148,310.53	5,115,596.96	5,212,562.19	5,335,403.07	5,415,571.48	5,466,523.41	5,653,753.34	5,716,343.59	5,752,269.19	5,822,264.53	
2. Industrial Processes	301,106.47	281,597.15	281,481.18	284,150.97	294,071.53	305,874.25	321,516.51	327,448.97	335,054.48	327,471.02	
3. Solvent and Other Product Use	4,300.25	4,180.79	3,941.89	4,479.42	4,479.42	4,479.42	4,479.42	4,766.04	4,766.04	4,766.04	
4. Agriculture	439,568.46	453,509.06	429,487.72	489,326.15	443,456.07	492,994.78	494,789.12	457,325.58	483,223.40	463,084.23	
5. Land Use, Land-Use Change and Forestry ⁽²⁾	-904,695.77	-902,752.80	-866,772.51	-745,923.21	-741,541.75	-608,739.52	-597,452.85	-634,806.29	-737,507.47	-759,025.40	
6. Waste	209,997.59	211,438.67	213,012.35	213,760.43	213,280.89	207,275.86	203,770.39	197,896.14	191,818.87	190,655.07	
7. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total (including LULUCF) ⁽²⁾	5,198,587.53	5,163,569.83	5,273,712.81	5,581,196.83	5,629,317.64	5,868,408.20	6,080,855.93	6,068,974.03	6,029,624.51	6,049,215.49	

TABLE 10 EMISSION TRENDS (SUMMARY)
 (Sheet 5 of 5)
 (Part 2 of 2)
 Inventory 2004
 Submission 2006 v1.1
 UNITED STATES OF AMERICA

GREENHOUSE GAS EMISSIONS	Gg CO ₂ equivalent					Change from base to latest reported year (%)
	2000	2001	2002	2003	2004	
CO ₂ emissions including net CO ₂ from LULUCF ⁽¹⁾	5,104,958.23	5,027,204.79	5,047,250.39	5,102,829.71	5,207,890.25	27.18
CO ₂ emissions excluding net CO ₂ from LULUCF ⁽¹⁾	5,864,464.88	5,795,192.22	5,815,888.98	5,877,677.37	5,987,984.41	19.63
CH ₄	566,940.92	560,258.94	559,804.46	564,371.10	556,737.49	-9.92
N ₂ O	416,207.67	412,820.33	407,396.81	386,076.78	386,713.91	-2.07
HFCs	101,239.00	98,642.84	106,169.33	105,994.75	119,091.97	234.98
PFCs	13,892.62	7,536.96	8,774.61	7,119.14	6,426.97	-68.87
SF ₆	19,557.46	18,676.05	17,762.52	17,898.53	17,454.45	-49.50
Total (including net CO₂ from LULUCF)⁽¹⁾	6,222,795.90	6,125,139.91	6,147,158.12	6,184,290.01	6,294,315.04	21.08
Total (excluding net CO₂ from LULUCF)^{(1),(6)}	6,982,302.55	6,893,127.35	6,915,796.70	6,959,137.68	7,074,409.20	15.80

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Gg CO ₂ equivalent					Change from base to latest reported year (%)
	2000	2001	2002	2003	2004	
1. Energy	5,994,287.86	5,931,601.78	5,944,647.79	6,009,767.97	6,108,192.96	18.64
2. Industrial Processes	329,589.05	300,725.53	310,949.28	304,102.08	320,654.33	6.49
3. Solvent and Other Product Use	4,766.04	4,766.04	4,766.04	4,766.04	4,766.04	10.83
4. Agriculture	458,438.85	463,383.11	457,769.00	439,089.67	440,124.54	0.13
5. Land Use, Land-Use Change and Forestry ⁽⁷⁾	-753,132.79	-761,750.57	-762,249.18	-768,270.68	-773,254.52	-14.53
6. Waste	188,846.89	186,414.02	191,275.18	194,834.93	193,831.69	-7.70
7. Other	NA	NA	NA	NA	NA	0.00
Total (including LULUCF)⁽⁷⁾	6,222,795.90	6,125,139.91	6,147,158.12	6,184,290.01	6,294,315.04	21.08

⁽¹⁾ The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant decisions of the COP. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

⁽²⁾ Fill in net emissions/removals as reported in table Summary 1-A. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

⁽³⁾ The information in these rows is requested to facilitate comparison of data, because Parties differ in the way they report CO₂ emissions and removals from LULUCF.

⁽⁴⁾ Enter actual emissions estimates. If only potential emissions estimates are available, these should be reported in this table and an indication for this should be provided in the documentation box. Only in these rows are the emissions expressed as CO₂ equivalent emissions.

⁽⁵⁾ In accordance with the UNFCCC reporting guidelines, HFC and PFC emissions should be reported for each relevant chemical. However, if it is not possible to report values for each chemical (i.e., mixtures, confidential data, lack of disaggregation), this row could be used for reporting aggregate figures for HFCs and PFCs, respectively. Note that the unit used for this row is Gg of CO₂ equivalent and that appropriate notation keys should be entered in the cells for the individual chemicals.

⁽⁶⁾ These totals will differ from the totals reported in table Summary 2 if Parties report non-CO₂ emissions from LULUCF.

⁽⁷⁾ Includes net CO₂, CH₄, and N₂O from LULUCF.

Documentation box:

- Parties should provide detailed explanations on emissions trends in Chapter 2: Trends in Greenhouse Gas Emissions and, as appropriate, in the corresponding Chapters 3 - 9 of the NIR. Use this documentation box to provide references to relevant sections.
- Use the documentation box to provide explanations if potential emissions are reported.



Appendix B

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