



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)	Gt _t							1998	1999
		1991	1992	1993	1994	1995	1996	1997		
I. Earth										
A. Fuel Combustion (General Approach)	4,839,663.06	4,799,779.12	4,894,481.91	5,036,916.48	5,193,985.59	5,164,912.47	5,241,831.85	5,409,934.65	5,448,279.22	5,477,589.28
1. Enter Industries	4,795,514.03	4,791,899.96	4,895,144.56	5,019,939.64	5,187,120.91	5,160,492.87	5,233,495.40	5,400,591.40	5,448,779.22	5,520,596.98
2. Manufacturing, Industries and Construction	851,114.88	1,179,881.24	1,604,521.58	1,884,778.53	1,911,265.94	1,928,341.19	1,989,773.78	2,068,123.31	2,154,894.35	2,165,944.61
3. Transport	1,413,246.29	1,383,651.43	1,451,515.40	1,481,268.62	1,519,792.66	1,548,515.81	1,584,321.84	1,661,504.84	1,659,674.56	1,693,297.10
4. Other Sectors	369,574.62	571,943.83	576,871.67	585,861.58	578,565.87	578,173.37	598,173.97	620,733.41	570,930.32	570,930.32
5. Other	204,214.77	215,168.67	261,568.51	294,718.82	215,963.12	214,377.13	212,313.92	224,041.15	241,831.96	241,831.96
B. Fugitive Emissions from Fuels	5,265,061.06	5,871,16	5,306,83	6,706,82	6,852,82	6,986,76	8,529,28	7,873,85	6,986,19	6,986,19
1. Solid Fuels	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
2. Oil and Natural Gas	5,025,06	5,077,16	5,206,83	6,706,82	6,852,82	6,986,76	8,529,28	7,873,85	6,986,19	6,986,19
C. Industrial Processes	174,799.22	164,064.98	163,275.99	169,890.15	167,678.45	176,946.98	166,196.32	171,894.31	167,486.15	167,486.15
A. Metal Products	54,198.19	53,614.59	53,181.47	55,238.29	57,676.59	61,320.92	63,635.64	65,611.55	64,911.57	65,757.41
B. Chemical Industry	24,323.61	24,116.36	26,329.81	26,347.48	27,419.36	27,171.74	27,166.51	27,924.24	29,462.89	28,947.88
C. Metal Products	95,377.65	86,339.93	83,764.02	78,614.38	82,074.59	82,451.48	78,594.17	81,406.53	77,573.03	73,665.25
D. Other Production	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
E. Production of Halogeno and SF ₆										
F. Consumption of Halogeno and SF ₆										
G. Other	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF
J. Solvents and Other Product Use	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF
4. Agriculture										
A. Forestal Forestation										
B. Marine Management										
C. Bee Cultivation										
D. Agricultural Soils										
E. Prolonged Drying of Soils and										
F. Field Burning of Agricultural Residues										
G. Other										
S. Land Use, Land-Use Change and Forestry ^(d)	-919,375.10	-908,515.44	-872,596.25	-751,369.44	-747,849.43	-651,488.87	-603,849.95	-641,272.35	-764,081.71	-765,681.34
A. Forest Land	-551,109.86	-574,510.65	-530,219.65	-499,737.65	-397,597.11	-389,467.91	-372,651.43	-369,156.28	-417,667.88	-423,201.94
B. Cropland	-31,032.43	-33,216.93	-34,077.79	-33,772.41	-32,411.02	-32,482.53	-32,519.57	-32,518.60	-37,499.07	-37,499.07
C. Grassland	-22,164.74	-22,521.06	-22,511.10	-22,417.88	-22,482.53	-23,541.94	-23,541.97	-23,541.94	-13,662.41	-13,662.41
D. Wetlands	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF
E. Settlements	-83,187.81	-83,194.14	-85,107.59	-82,044.97	-47,133.29	-47,211.38	-41,218.27	-44,938.19	-84,212.80	-86,731.77
F. Other Land	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
G. Other	-210,058.25	-197,978.64	-292,751.02	-293,842.94	-219,448.89	-219,248.99	-219,515.64	-212,731.24	-206,122.95	-214,661.45
H. Waste	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF	NF,NF
I. Solid Waste Disposal on Land	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
J. Waste-water Treatment	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
K. Waste Incineration	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
L. Other	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
7. Other (not specified in Summary L-4)	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Other non-specified	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
Total CO ₂ emissions (excluding net CO ₂ from LULUCF ^(e))	4,894,881.76	4,853,211.56	4,185,900.35	4,495,377.16	4,523,033.55	4,716,482.73	4,894,878.32	4,876,134.81	4,829,367.08	
Total CO ₂ emissions excluding net CO ₂ from LULUCF ^(e)	5,045,254.88	4,951,337.00	5,387,595.69	5,187,396.61	5,273,653.98	5,325,389.59	5,588,728.27	5,581,368.18	5,610,176.12	5,695,386.61
Human Health:										
International Emissions	113,592.67	119,859.04	109,722.69	99,751.66	97,724.81	106,670.57	104,394.91	104,858.16	114,557.64	105,218.41
Arable	41,291.19	46,521.67	46,920.62	47,481.59	48,035.55	52,166.95	55,898.55	56,657.37	58,799.49	
Marine	6,373.48	7,517.57	6,821.94	5,2,230.36	4,648.56	56,168.85	53,579.81	57,908.06	46,329.70	
Methane Sources	NF	NF	NF	NF	NF	NF	NF	NF	NF	NF
CO ₂ Emissions from Biomass	216,932.62	217,557.47	228,441.27	223,393.36	231,383.35	241,585.38	244,395.64	233,243.38	217,261.03	221,446.14

Note: All estimates for this table are given at the end of the table on sheet 6.

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	
						CO ₂	%
1. Energy						5,898,888.35	3.88%
A. Fuel Combustion (Sectoral Approach)	5,693,071.61	5,636,569.62	5,601,066.21	5,730,618.56	5,835,334.67		
1. Energy Industries	2,363,311.57	2,337,232.82	2,233,453.50	5,725,977.59	5,805,300.81		
2. Manufacturing Industries and Construction	862,954.34	861,167.85	842,119.24	844,630.59	845,461.40		
3. Transport	1,715,987.34	1,771,758.49	1,771,756.85	1,825,651.34	1,861,187.48		
4. Other Sectors	599,431.90	586,388.01	584,324.43	614,565.10	595,585.36		
5. Other	222,334.67	236,212.45	235,434.19	230,301.78	256,301.30		
B. Fugitive Emissions from Tanks	5,216.54	4,704.04	4,703.59	6,060.07	6,431.86		
1. Solid Fuels	NE	NE	NE	NE	NE		
2. Oil and Natural Gas	5,216.54	4,704.04	4,703.59	6,060.07	6,431.86		
C. Industrial Processes	166,378.33	152,528.56	152,685.17	147,648.81	152,649.74		
A. Mineral Products	64,657.48	64,665.15	65,316.52	64,901.51	701,613.15		
B. Chemical Industry	21,087.54	23,599.05	25,714.86	27,831.69	24,798.35		
C. Metal Production	34,118.71	44,924.36	61,594.79	59,869.61	57,758.26		
D. Other Production	NE	NE	NE	NE	NE		
D. Production of Halocarbons and SF ₆							
E. Consumption of Halocarbons and SF ₆							
F. Consumption of Fossilcarbons and SF ₆							
G. Other	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE		
H. Solid and Other Product Use	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE		
I. Agriculture							
A. Domestic Farming							
B. Manure Management							
C. Rice Cultivation							
D. Agriculture Soils							
E. Prescribed Burning of Vegetation							
F. Field Burning of Agricultural Residues							
G. Other							
J. Land Use, Land-Use Change and Forestry ⁽¹⁾	-759,838.85	-787,487.44	-788,638.59	-774,847.66	-790,994.17		
A. Forest Land	-420,195.58	-420,195.58	-420,195.58	-420,195.58	-420,195.58		
B. Cropland	-28,444.42	-30,935.97	-38,179.23	-31,453.42	-31,751.31		
C. Grassland	-13,683.35	-13,726.78	-13,569.86	-13,814.03	-13,859.92		
D. Wetlands	NA,NE	NA,NE	NA,NE	NA,NE	NA,NE		
E. Settlements	-85,615.99	-85,677.60	-85,936.27	-85,758.39	-87,511.38		
F. Other Land	NE	NE	NE	NE	NE		
G. Other	-210,815.31	-213,795.93	-214,488.83	-215,578.36	-216,967.86		
K. Waste	HE,NE	HE,NE	HE,NE	HE,NE	HE,NE		
A. Solid Waste Disposal on Land	NA	NA	NA	NA	NA		
B. Waste-water Handling	HE	HE	HE	HE	HE		
C. Waste Incineration	NA	NA	NA	NA	NA		
D. Other	NA	NA	NA	NA	NA		
L. Other Gasosphere/Soil/Subsurface LULUCF ⁽¹⁾	Other non-specified	NA	NA	NA	NA	0.00	
M. Total CO ₂ emissions including net CO ₂ from LULUCF ⁽¹⁾	5,394,586.25	5,827,204.79	5,807,259.39	5,162,818.71	5,087,789.35	7,718	
N. Total CO ₂ emissions excluding net CO ₂ from LULUCF ⁽¹⁾	5,894,944.88	5,795,191.22	5,815,888.95	5,877,677.37	5,987,794.41	19,68	
O. Net Emiss.							
International Banking	NA	NA	NA	NA	NA	0.00	
Aviation	NA	NA	NA	NA	NA	0.00	
Marine	NA	NA	NA	NA	NA	0.00	
Methane Oxidation	NA	NA	NA	NA	NA	0.00	
CO ₂ Emissions from Biomass	226,764.85	200,479.81	194,331.19	202,118.66	211,218.93	-2.53	

Note: All figures 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)

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
						G4				
Total CH₄ emissions	29,031.60	29,436.93	29,468.61	28,899.39	29,161.28	28,997.40	28,825.94	28,899.81	29,594.66	27,693.96
I. Energy	12,255.65	12,355.48	12,275.98	11,660.87	11,716.85	11,696.29	11,687.13	11,413.55	11,210.59	10,806.17
A. Fuel Combustion (Stationary Sources)	5985.51	5995.51	613,360	5881.15	5811.3	5911.64	5931.58	5981.13	5961.53	5961.79
1. Energy Industries	26.93	26.87	26.71	28.09	28.49	27.29	21.38	20.56	21.25	21.24
2. Manufacturing, Industrial and Construction	1935.98	1976.62	111,466	114,20	115,70	119,27	122,24	123,45	117,61	115,94
3. Transport	21,341	20,777	20,744	20,493	20,121	19,5,91	18,851	17,642	16,984	16,191
4. Other Sectors	2445.74	2515.94	263,90	271,19	231,96	247,79	252,67	260,67	184,31	195,94
5. Other	3.71	3.86	3.74	3.72	3.77	3.48	3.43	3.43	3.46	3.46
B. Fugitive Emissions from Fuels	11,060.34	11,765.95	11,612.10	11,572.74	11,15,42	11,01,65	11,01,34	10,87,62	10,78,69	10,29,87
1. Solid Fuels	4,061.17	4,061.25	3,984.15	3,979.25	3,487.42	3,922,95	3,607.41	3,341.12	3,37,66	3,136,97
2. Oil and Natural Gas	7,524.17	7,730.72	7,627.95	7,643.49	7,648.66	7,500.70	7,505.50	7,524.50	7,154,43	7,154,93
C. Industrial Processes	1095.57	1344.2	1363.39	126,49	132,68	135,85	137,48	136,64	135,9	137,78
A. Mineral Product	1E	1E	1E	1E	1E	1E	1E	1E	1E	1E
B. Chemical Industry	56.77	51.91	61.63	47.29	72.16	75.68	76.98	70,09	80,69	81,02
C. Metal Production	62.89	55.51	58.57	59.20	60.39	62.27	60.42	60.55	57.21	55.77
D. Other Production										
E. Production of Hydrocarbons and SF₆										
F. Consumption of Hydrocarbons and SF₆										
G. Other	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO	N/A,NEO
 A. Solvent and Other Product Use										
 B. Agriculture	3,668.13	7,518.49	7,621.28	7,535.55	7,633.34	7,569.44	7,795.98	7,996.86	7,823.89	7,816.16
C. Forests and Forestation	5,525.23	5,785.70	5,685.69	5,638.76	5,714.61	5,656.34	5,740.21	5,651.55	5,451.80	5,462.85
D. Marine Management	1,448.72	1,578.88	1,524.66	1,563.53	1,609.47	1,711.70	1,637.80	1,731.57	1,844.25	1,815.97
E. Rice Cultivation	334.21	331.14	374.79	314.24	350.13	362.89	331.15	356.36	376.36	364.87
F. Agricultural Soils	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
G. Prescribed Burning of Vegetation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
F. Field Burning of Agricultural Residues	32.33	36.14	39.02	38.77	31.50	35.84	26.51	37.58	36.51	
G. Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5. Land Use, Land-Use Change and Forestry	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
A. Forest Land	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
B. Cropland	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
C. Grassland	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
D. Wetlands	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
E. Settlements	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE
F. Other Land	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E
G. Other	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E
6. Waste	9,086.34	9,408.68	9,591.22	8,515.89	9,478.74	9,189.71	9,019.63	8,727.25	8,424.58	8,368.75
A. Solid Waste Disposal on Land	8,065.61	8,366.13	8,219.31	8,208.67	8,164.03	7,772.94	7,557.44	7,21,94	6,610.43	6,740.43
B. Waste-water Handling	1,178.63	1,227.41	1,281.92	1,217.32	1,214.72	1,423.18	1,462.19	1,598.31	1,551.19	1,602.32
C. Waste Incineration	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E
D. Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7. Other (see specification in Rowkey 1,4)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Methane Item:										
International Balances	7.58	8.59	7.38	6.15	6.26	6.16	6.78	7.18	6.13	
Aviation	3.27	1.28	1.29	1.31	1.40	1.44	1.54	1.56	1.63	
Marine	6.53	7.11	6.10	5.04	4.82	4.85	5.24	5.63	4.51	
Non-Emissions Activities	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	N/E	
CO₂ Emissions from Biomass										

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

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

InVENTORY 2004
Submission 2006 v1.1
UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2000	2001	2002	2003	2004	Change from base to latter reported year
	Gr _t	%				
Total CH ₄ emissions	26,997.19	26,617.96	26,457.36	26,457.41	26,451.31	-0.92
I. Energy	10,893.63	10,714.78	10,480.17	10,457.44	10,379.36	-17.51
A. Fossil Combustion (Source Approach)	512.75	474.40	447.10	435.88	446.54	-23.35
1. Energy Industries	52.49	52.16	51.38	51.38	53.43	24.82
2. Manufacturing, Utilities and Construction	117.53	110.11	108.15	106.76	110.82	1.68
3. Transport	155.85	146.85	139.43	131.03	137.19	41.01
4. Other Sectors	203.77	181.30	163.74	160.11	171.74	-39.83
5. Other	3.42	4.18	3.88	4.15	4.41	18.85
B. Fugitive Emissions from Ponds	51,379.78	50,240.37	50,673.87	50,603.36	50,501.61	-17.11
1. Solid Ponds	3,872.39	2,956.39	2,197.78	2,888.03	3,951.30	-39.50
2. Oil and Natural Gas	3,357.39	3,203.89	7,345.32	7,174.34	6,870.41	-10.36
C. Industrial Processes	313.82	319.45	320.43	321.36	327.17	6.35
A. Mineral Products	—	—	—	—	—	—
B. Chemical Industry	90.33	68.67	71.67	72.62	77.41	16.35
C. Metal Production	57.49	59.78	41.76	48.72	49.36	-20.77
D. Other Processes	—	—	—	—	—	—
D. Production of Halocarbons and SF ₆	—	—	—	—	—	—
E. Consumption of Halocarbons and SF ₆	—	—	—	—	—	—
F. Other	—	—	—	—	—	—
G. Solvent and Other Product Use	—	—	—	—	—	—
H. Land Use, Land-Use Change and Forestry	—	—	—	—	—	—
A. Forest Land	7,713.89	7,706.96	7,692.83	7,711.89	7,698.84	2.39
B. Enteric Fermentation	5,507.09	5,459.14	5,482.73	5,481.04	5,103.36	-4.45
C. Manure Management	1,811.36	1,850.57	1,871.30	1,864.63	1,875.45	26.49
D. Rice Cultivation	356.84	363.78	375.20	323.31	366.37	6.24
E. Agricultural Soils	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
F. Perennial Burning of Biomass	N/A	N/A	N/A	N/A	N/A	0.00
G. Field Burning of Agricultural Residues	37.61	26.45	33.61	27.92	41.76	37.36
H. Other	N/A	N/A	N/A	N/A	N/A	0.00
I. Land Use, Land-Use Change and Forestry	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
J. Wetlands	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
K. Grasslands	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
L. Wetlands	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
M. Soil crusts	N/A,NE	N/A,NE	N/A,NE	N/A,NE	N/A,NE	0.00
N. Other Land	N/E	N/E	N/E	N/E	N/E	0.00
O. Other	N/E	N/E	N/E	N/E	N/E	0.00
I. Waste	8,153.66	8,134.82	8,063.98	8,024.64	8,472.89	-6.78
A. Solid Waste Disposal on Land	6,618.57	6,484.23	6,058.75	5,782.47	6,718.56	-18.24
B. Water-Related Handling	1,635.37	1,656.58	1,702.19	1,741.87	1,718.64	49.43
C. Waste Incineration	N/E	N/E	N/E	N/E	N/E	0.00
D. Other	N/A	N/A	N/A	N/A	N/A	0.00
E. Other (as specified in Summary Table)	N/A	N/A	N/A	N/A	N/A	0.00
M. Methane	—	—	—	—	—	—
F. Intrastate Pipelines	5.63	5.37	4.49	4.44	5.62	-25.64
G. Pipeline	1.67	1.66	1.59	1.64	1.65	-10.06
H. Marine	3.55	3.73	2.69	2.41	3.57	+8.42
I. Intrastate Operations	N/E	N/E	N/E	N/E	N/E	0.00
J. CO ₂ Emissions from Biomes	—	—	—	—	—	—

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

TABLE 10 EMISSIONS TRENDS (N₂O)

(Sheet 3 of 5)

(Part 1 of 2)

InVENTORY 2004
Submission 2006 v1.1
UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base Year (1996)	Gr						1999
		1991	1992	1993	1994	1995	1996	
Total N₂O emissions								
1. Energy	1,279.81	1,231.36	1,243.40	1,453.64	1,208.67	1,065.37	1,035.19	1,421.37
A. Fuel Combustion [Sectoral Approach]	181.34	187.49	198.05	205.83	211.42	215.19	218.49	221.19
1. Electricity	181.34	187.51	198.05	205.83	211.42	215.19	218.49	218.49
2. Manufacturing, Mechanics and Construction	24.46	24.33	24.59	25.79	25.84	25.81	27.35	28.72
3. Transport	12.87	12.94	13.01	13.47	13.48	13.66	14.22	15.47
4. Other Sectors	156.31	143.94	153.68	159.31	164.94	168.35	170.89	179.45
5. Other	4.65	4.77	4.88	4.48	4.46	4.59	4.04	3.87
B. Fugitive Emissions from Fuels	7.36	7.59	7.91	7.99	2.78	2.72	2.64	2.47
1. Solid Fuels	NF	NF	NF	NF	NF	NF	NF	NF
2. Oil and Natural Gas	NF	NF	NF	NF	NF	NF	NF	NF
C. Industrial Processes	166.59	165.41	161.14	185.88	111.73	119.66	121.37	161.71
A. Mineral Products	NF	NF	NF	NF	NF	NF	NF	NF
B. Chemical Industry	106.59	101.41	101.14	105.04	111.73	116.66	121.37	161.71
C. Metal Production	NF	NF	NF	NF	NF	NF	NF	NF
D. Other Production	NF	NF	NF	NF	NF	NF	NF	NF
E. Proportion of Hydrocarbons and SF ₆	NF	NF	NF	NF	NF	NF	NF	NF
F. Consumption of Hydrocarbons and SF ₆	NF	NF	NF	NF	NF	NF	NF	NF
G. Other	NF	NF	NF	NF	NF	NF	NF	NF
H. Solvent and Other Product Use	11.87	13.69	12.72	14.45	14.45	14.45	15.57	18.37
I. Agriculture	910.06	903.55	899.16	1,044.61	899.86	1,080.44	1,079.13	948.58
A. Emissions from Irrigation	NF	NF	NF	NF	NF	NF	NF	NF
B. Manure Management	52.44	54.06	55.37	54.75	54.74	55.27	54.86	55.93
C. Rice Cultivation	NF	NF	NF	NF	NF	NF	NF	NF
D. Agricultural Soils	859.41	856.50	814.46	1,088.76	843.65	909.94	1,051.11	892.18
E. Prescribed Burning of Savannahs	NF	NF	NF	NF	NF	NF	NF	NF
F. Field Burning of Agricultural Residues	1.20	1.17	1.39	1.10	1.47	1.22	1.37	1.44
G. Other	NF	NF	NF	NF	NF	NF	NF	NF
J. Land Use, Land-Use Change and Forestry	16.51	18.59	18.42	19.59	20.32	19.83	20.84	21.30
A. Forest Land	0.19	0.30	0.36	0.42	0.60	0.37	0.37	1.14
B. Cropland	NF	NF	NF	NF	NF	NF	NF	NF
C. Grassland	NF	NF	NF	NF	NF	NF	NF	NF
D. Wetlands	NF	NF	NF	NF	NF	NF	NF	NF
E. Settlements	18.12	18.60	18.52	19.14	19.90	19.23	19.87	19.93
F. Other Land	NF	NF	NF	NF	NF	NF	NF	NF
G. Other	NF	NF	NF	NF	NF	NF	NF	NF
K. Waste	41.64	43.81	43.81	44.34	45.89	45.76	47.32	48.97
A. Solid Waste Treatment Land	NF	NF	NF	NF	NF	NF	NF	NF
B. Water-Water Treatment	41.64	43.81	43.81	44.34	45.89	45.76	47.32	48.97
C. Waste Incineration	NF	NF	NF	NF	NF	NF	NF	NF
D. Other	NF	NF	NF	NF	NF	NF	NF	NF
L. Other (see Global Summary Table)	NF	NF	NF	NF	NF	NF	NF	NF
M. Direct Emissions	NF	NF	NF	NF	NF	NF	NF	NF
N. Net Emissions from Biomass	NF	NF	NF	NF	NF	NF	NF	NF

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

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

Inventory 2004
Submission 2006 v.1
UNITED STATES OF AMERICA

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2004	2005	2006	2007	2008	2009	2010	2011	C _t		Change from base to last reported year	%
									Cr	Cl		
Total N ₂ O emissions	1,312.61	1,311.68	1,311.18	1,315.41	1,317.46	1,317.46	1,317.46	1,317.46	-2.67	-2.67		
1. K-9	217.46	214.22	197.64	188.51	188.59	188.59	188.59	188.59	1.46	1.46		
A. Fuel Combustion (Sector Approach)	217.41	206.22	197.68	189.91	183.99	183.99	183.99	183.99	1.46	1.46		
1. Energy Industries	203.12	204.42	203.16	201.08	201.24	201.24	201.24	201.24	23.50	23.50		
2. Manufacturing Industries and Construction	13.63	13.79	13.03	13.12	13.63	13.63	13.63	13.63	5.93	5.93		
3. Transport	167.35	155.89	148.97	156.67	153.43	153.43	153.43	153.43	-3.65	-3.65		
4. Other Sector	4.94	3.78	3.46	3.78	3.69	3.69	3.69	3.69	-2.62	-2.62		
5. Other	2.44	2.34	2.66	2.67	2.62	2.62	2.62	2.62	-3.75	-3.75		
B. Fugitive Emissions from Fuels	182.92	181.86	181.86	181.86	181.86	181.86	181.86	181.86	0.00	0.00		
1. Solid Fuels	N/A	N/E	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00		
2. Oil and Natural Gas	182.92	181.86	181.86	181.86	181.86	181.86	181.86	181.86	0.00	0.00		
2. Industrial Processes	82.67	87.38	74.54	73.85	72.13	72.13	72.13	72.13	-32.53	-32.53		
A. Mineral Products	—	—	—	—	—	—	—	—	0.00	0.00		
B. Chemical Industry	82.67	87.39	74.54	73.85	72.13	72.13	72.13	72.13	-32.53	-32.53		
C. Metal Production	—	—	—	—	—	—	—	—	0.00	0.00		
D. Oil & Gas Production	—	—	—	—	—	—	—	—	0.00	0.00		
E. Production of Halocarbons and SO ₂	—	—	—	—	—	—	—	—	0.00	0.00		
F. Consumption of Halocarbons and SF ₆	—	—	—	—	—	—	—	—	0.00	0.00		
G. Other	N/A, N/G	0.00	0.00									
3. Solvents and Other Product Use	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37	18.37		
4. Agriculture	956.56	972.58	965.55	974.00	962.21	962.21	962.21	962.21	-1.08	-1.08		
A. Enteric Fermentation	—	—	—	—	—	—	—	—	0.00	0.00		
B. Manure Management	57.48	58.28	58.03	56.56	57.03	57.03	57.03	57.03	8.78	8.78		
C. Rice Culture	—	—	—	—	—	—	—	—	0.00	0.00		
D. Agricultural Soils	597.56	597.72	806.14	816.01	843.89	843.89	843.89	843.89	-3.74	-3.74		
E. Prevented Emission of Seaweed	—	—	—	—	—	—	—	—	0.00	0.00		
F. Field Burning of Agricultural Residues	1.48	—	1.49	1.39	1.43	1.43	1.43	1.43	78.51	78.51		
G. Other	N/A	0.00	0.00									
5. Land Use, Land-Use Change and Forestry	16.56	26.12	46.61	21.22	22.94	22.94	22.94	22.94	26.47	26.47		
A. Forest Land	1.14	1.36	1.26	1.26	1.26	1.26	1.26	1.26	536.25	536.25		
B. Cropland	N/A, N/G	0.00	0.00									
C. Grassland	N/A, N/G	0.00	0.00									
D. Wetlands	N/A, N/G	0.00	0.00									
E. Savannas	19.42	18.83	19.33	19.93	20.80	20.80	20.80	20.80	14.76	14.76		
F. Other Land	N/E	0.00	0.00									
G. Other	N/E	0.00	0.00									
6. Waste	50.65	58.17	56.43	51.96	51.69	51.69	51.69	51.69	24.15	24.15		
A. Solid Waste Disposal on Land	N/A	0.00	0.00									
B. Waste-water Treatment	50.65	50.71	50.63	51.96	51.69	51.69	51.69	51.69	24.15	24.15		
C. Waste Incineration	—	—	—	—	—	—	—	—	0.00	0.00		
D. Other	N/E	0.00	0.00									
E. Other (see "Waste-to-Energy," f, g)	N/A	0.00	0.00									
Methane Emissions:												
International Borders	3.92	2.83	2.64	2.59	2.75	2.75	2.75	2.75	-11.67 ^b	-11.67 ^b		
Aviation	1.92	1.88	1.96	1.85	1.89	1.89	1.89	1.89	30.06	30.06		
Marine	1.91	0.95	0.68	0.61	0.86	0.86	0.86	0.86	-48.42	-48.42		
Methane Operations	N/E	0.00	0.00									
CH₄ Emissions from Biomass												

Note: All Emissions for this table are given at the end of the table on sheet 2.

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

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year 1990	tCO ₂						1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	Base year 1990
		1991	1992	1993	1994	1995	1996											
Emissions of HFCs^(b) - (65 t CO₂ equivalent)																		93,632.22
HFC-32	3.01	2.65	3.00	2.74	2.72	2.34	2.68	2.60	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	2.64
HFC-32	C,IE,NA,ND	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	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	C,IE,NA,NO	9.44
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	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-41-(trans)	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	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	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	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO
HFC-134	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	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-134a	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	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-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	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	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	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	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO
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	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	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-245fa	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	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 HFCs (HFC ^(b) + 16% CO ₂ equivalent)	202.46	742.31	823.62	901.38	965.38	1,072.29	1,216.03	1,374.03	1,543.95	1,716.05	1,887.29	2,058.55	2,230.85	2,403.15	2,574.45	2,745.75	2,917.05	3,086.35
Emissions of PFCs^(b) - (65 t CO₂ equivalent)																		14,493.39
CF ₄	2.60	2.22	2.16	2.02	1.81	1.82	1.91	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93
CF ₄	0.40	0.37	0.35	0.37	0.37	0.37	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
CF ₆	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CF ₆	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,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-CF ₆	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,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
CF ₁₁	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,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
CF ₁₁	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO	N,NE,NO
Unspecified mix of HFCs (PFCs ^(b) + 16% CO ₂ equivalent)	34,565.95	32,564.69	34,612.12	35,096.22	37,494.91	37,749.39	38,339.68	38,989.05	39,644.12	40,308.59	41,074.07	41,840.55	42,607.03	43,373.51	44,140.99	44,908.47	45,675.95	46,443.43
SF ₆	1.45	1.31	1.28	1.47	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36

Note: All fractions 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)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES		2000	2001	2002	2003	2004	Change from base to latest reported year (%)
		Gg					
Emissions of HFCs⁽¹⁾ - (65 g CO₂ equivalent)		161,239.66	98,642.24	195,695.33	165,594.75	119,061.97	234.88
HFC-23		2.37	1.71	1.71	1.68	1.36	-54.75
HFC-32		0.44	0.46	0.50	0.56	0.63	190.99
HFC-41		11,834.90	11,834.90	11,834.90	11,834.90	11,834.90	0.00
HFC-43-10m		0.18	0.18	0.18	0.18	0.18	0.00
HFC-125		4.01	4.19	4.79	5.26	5.82	191.99
HFC-134		0.18	0.18	0.18	0.18	0.18	0.00
HFC-134a		54.95	58.10	41.17	41.66	47.39	190.99
HFC-152a		0.18	0.18	0.18	0.18	0.18	0.00
HFC-145		0.18	0.18	0.18	0.18	0.18	0.00
HFC-143a		2.16	2.65	3.39	3.83	4.54	191.99
HFC-227ea		0.18	0.18	0.18	0.18	0.18	0.00
HFC-236fa		0.21	0.28	0.34	0.57	0.57	191.99
HFC-245ca		0.18	0.18	0.18	0.18	0.18	0.00
Unspecified mix of listed HFCs ⁽²⁾ - (65 g CO ₂ equivalent)		4,687.92	4,901.66	4,963.39	4,641.82	5,287.85	1,247.25
Emissions of PFCs⁽³⁾ - (65 g CO₂ equivalent)		13,893.62	7,506.96	8,774.61	7,119.14	6,486.97	-48.87
CF ₄		1.52	0.74	0.88	0.67	0.56	-70.53
C ₂ F ₆		0.62	0.29	0.32	0.28	0.29	-27.83
C ₃ F ₈		0.02	0.01	0.01	0.01	0.01	1,248.84
CF ₂ I		0.18	0.18	0.18	0.18	0.18	0.00
C ₂ CF ₃ F ₇		0.18	0.18	0.18	0.18	0.18	0.00
C ₂ CF ₃ F ₉		0.18	0.18	0.18	0.18	0.18	0.00
C ₂ CF ₅ F ₁₁		0.18	0.18	0.18	0.18	0.18	0.00
C ₂ CF ₇ F ₁₃		0.18	0.18	0.18	0.18	0.18	0.00
SF ₆		0.02	0.02	0.74	0.75	0.75	-49.36
Unspecified mix of listed PFCs ⁽³⁾ - (65 g CO ₂ equivalent)		19,857.56	18,676.93	17,762.51	17,898.68	17,646.46	-48.87

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)

GREENHOUSE GAS EMISSIONS	Base year (1990)		1991		1992		1993		1994		1995		1996		1997		1998		1999		
CO₂ emissions (including net CO₂ from LULUCF)^a																					
CO ₂ emissions (excluding net CO ₂ from LULUCF) ^b	4,094,681.78	4,053,221.56	4,185,996.35	4,435,207.16	4,223,013.35	4,716,402.72	4,904,878.33	4,936,566.13	4,876,136.41	4,829,347.08											
CO ₂ emissions (excluding net CO ₂ from LULUCF) ^c	5,005,554.88	4,951,837.09	5,057,996.00	5,187,298.61	5,270,693.98	5,355,208.99	5,508,758.37	5,580,968.38	5,620,176.12	5,694,039.42											
CH ₄	61,803.64	61,817.69	61,842.18	60,887.18	61,238.78	60,945.43	599,002.82	588,325.41	579,475.17	565,772.90											
N ₂ O	294,000.95	479,620.24	285,452.73	456,629.23	464,136.58	454,233.47	462,888.18	463,618.34	460,624.59	419,380.57											
HFCs	35,551.51	31,693.24	37,105.47	26,712.60	40,484.33	51,441.45	66,072.83	72,461.02	95,036.44	93,632.22											
PFCs	28,644.70	17,818.59	16,586.66	16,534.45	15,311.39	15,655.82	16,684.49	15,872.08	14,495.78	14,366.27											
SF ₆	34,564.95	37,340.69	36,632.12	35,098.22	32,484.81	31,769.36	31,529.08	28,748.02	25,840.12	25,428.55											
Total (including net CO ₂ from LULUCF) ^a	5,199,587.53	5,083,599.83	5,273,712.81	5,581,196.83	5,629,317.84	5,868,468.36	6,080,825.93	6,088,974.03	6,049,574.51	6,049,215.49											
Total (excluding net CO ₂ from LULUCF) ^b	6,088,560.63	6,072,885.27	6,146,319.16	6,353,166.27	6,277,198.87	6,481,295.87	6,684,705.88	6,716,146.38	6,775,665.22	6,814,897.83											
GREENHOUSE GAS SOURCE AND SINK CATEGORIES																					
	Base year (1990)		1991		1992		1993		1994		1995		1996		1997		1998		1999		
1. Energy	5,143,10,53	5,115,596.96	5,211,262.16	5,335,402.07	5,415,271.48	5,466,523.41	5,653,753.34	5,716,543.59	5,752,269.19	5,822,286.51											
2. Industrial Processes	201,386.47	210,971.32	281,487.18	284,136.97	294,071.51	303,874.25	321,516.51	327,488.97	335,034.48	327,471.02											
3. Solvent and Other Product Use	4,398.25	4,193.39	3,941.88	4,679.42	4,679.42	4,679.42	4,679.42	4,679.42	4,679.42	4,679.42											
4. Agriculture	43,561.46	43,594.06	42,948.72	40,932.15	44,545.67	49,194.78	49,678.91	49,678.91	49,678.91	49,678.91											
5. Land Use, Land-Use Change and Forestry ^b	-604,685.77	-662,572.83	-745,903.21	-741,241.75	-608,739.52	-597,452.85	-654,806.99	-737,597.47	-759,025.60	-759,025.60											
6. Waste	206,897.59	211,428.67	215,012.35	215,766.43	215,286.89	201,271.86	203,770.59	197,766.14	191,318.47	190,154.07											
7. Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
Total (including LULUCF) ^a	5,199,587.53	5,083,599.83	5,273,712.81	5,581,196.83	5,629,317.84	5,868,468.36	6,080,825.93	6,088,974.03	6,049,574.51	6,049,215.49											

Inventory 2004
Submission 2006 v1.1
UNITED STATES OF AMERICA

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

Inventory 2004
Submissions 2005 & 1.
UNITED STATES OF AMERICA

GREENHOUSE GAS EMISSIONS	2000	2001	2002	2003	2004	Change from base to last reported year (%)
	Gg CO ₂ equivalent					
CO ₂ emissions including net CO ₂ from LULUCF ^(a)	5,104,928.23	5,027,764.79	5,047,258.39	5,102,628.71	5,207,890.25	27.18
CO ₂ emissions excluding net CO ₂ from LULUCF ^(a)	5,894,464.98	5,764,152.22	5,815,268.96	5,875,767.57	5,937,964.41	19.63
CH ₄	566,046.93	560,251.94	559,894.46	564,371.10	565,737.89	-9.93
N ₂ O	415,207.67	412,328.13	407,396.81	380,076.76	383,715.91	-2.67
HFCs	101,239.06	98,642.84	106,169.33	105,924.75	113,091.97	254.98
PFCs	1,389.65	1,318.96	8,774.65	1,119.14	6,426.97	68.87
SF ₆	19,557.46	18,676.05	17,763.52	17,806.53	17,454.45	-49.30
Total (including net CO ₂ from LULUCF) ^(b)	6,222,795.96	6,125,138.96	6,147,158.12	6,184,206.01	6,294,315.94	21.08
Total (including net CO ₂ from LULUCF) ^(b)	6,901,360.65	6,893,131.56	6,915,796.78	6,959,487.68	7,074,499.29	15.86

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2000	2001	2002	2003	2004	Change from base to last reported year (%)
	Gg CO ₂ equivalent					
1. Energy	5,994,267.86	5,921,601.78	5,944,647.79	6,009,767.97	6,108,192.96	18.64
2. Industrial Processes	329,589.03	300,723.53	316,949.28	304,020.08	320,654.33	6.89
3. Solvent and Other Product Use	4,766.04	4,766.04	4,766.04	4,766.04	4,766.04	0.03
4. Agriculture	488,498.81	503,153.11	491,169.66	509,086.67	491,124.54	0.13
5. Land Use, Land-Use Change and Forestry ^(c)	-751,132.79	-761,756.57	-763,248.18	-768,270.08	-773,254.52	-14.25
6. Waste	188,946.89	186,414.02	191,215.18	194,834.91	193,831.69	-7.70
7. Other	N/A	—	N/A	N/A	N/A	0.00
Total (including LULUCF) ^(d)	6,222,795.96	6,125,138.96	6,147,158.12	6,184,206.01	6,294,315.94	21.08

(a) 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 decision of the UNFCCC. For those Parties, this different base year is used to calculate the percentage change in the final columns of this table.

(b) Filled in each emission/release as reported in table Summary 1-A. For the purposes of reporting, the sign for intervals are always negative (-) and for emissions positive (+).

(c) The information in these notes is required to facilitate comparison of data, because Parties differ in the way they report CO₂ emissions and removals from LULUCF. In accordance with the UNFCCC reporting guidelines, lack of disaggregation data, or other technical data, such as annual forest area, may result in significant differences between the data used for this row in Gg of CO₂ equivalent and that appropriate emission/offsets should be entered in the cells for the individual categories.

(d) These totals will differ from the totals reported in table 5 Summary 2 if Parties report non-CO₂ emissions from LULUCF.

(e) 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 UNFCCC. Use this documentation box to provide references to relevant sections.
- Use the documentation box to provide explanations if particular emissions are reported.

(f) The information in these notes is required to facilitate comparison of data, because Parties differ in the way they report CO₂ emissions and removals from LULUCF. In accordance with the UNFCCC reporting guidelines, lack of disaggregation data, or other technical data, such as annual forest area, may result in significant differences between the data used for this row in Gg of CO₂ equivalent and that appropriate emission/offsets should be entered in the cells for the individual categories.

(g) These totals will differ from the totals reported in table 5 Summary 2 if Parties report non-CO₂ emissions from LULUCF.

(h) The information in these notes is required to facilitate comparison of data, because Parties differ in the way they report CO₂ emissions and removals from LULUCF. In accordance with the UNFCCC reporting guidelines, lack of disaggregation data, or other technical data, such as annual forest area, may result in significant differences between the data used for this row in Gg of CO₂ equivalent and that appropriate emission/offsets should be entered in the cells for the individual categories.

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ t					CH ₄		N ₂ O		HFCs t		PFCs t		SF ₆ t ^b		Total	
						t GJ CO ₂ equivalent											
Total (Net Emissions) ^a	5,307,090.25	586,573.48	386,513.81	8,098,891.97	6,426,97											6,254,315.64	
1. Energy																6,106,492.96	
A. Fuel Combustion (Scattered Approach)	5,329,900.81	515,821.24	57,071.65													5,305,716.28	
1. Energy Industries	2,390,615.61	515,821.24	57,071.65													2,300,692.98	
2. Manufacturing, Industries and Construction	885,491.40	2,133.16	4,124.96													870,013.43	
3. Transport	1,825,561.34	2,659.01	41,359.18													1,809,640.54	
4. Other	595,518.26	2,666.63	1,142.48													590,514.36	
5. Other	754,001.20	92.64	526.03													753,001.20	
B. Fugitive Emissions from Fuels	6,033,86	208,443.83	1E+NA,2E													255,031.87	
1. Solid Fuels	6,033,86	208,443.83	1E+NA,2E													212,476.67	
2. Oil and Natural Gas	6,033,86	144,463.54	1E+NA,2E													61,997.37	
C. Industrial Processes	182,649.34	2,678.47	22,268.73	18,936.97	6,426,97											326,684.33	
A. Mineral Products	76,163.13	1E	1E													70,163.13	
B. Chemical Industry	24,751.35	1,625.59	22,366.73	1E+NA	1E+NA											48,744.67	
C. Metal Production	37,713.26	1,044.88	1E+NA	1E+NA	1E+NA											64,726.24	
D. Other Production	NE															NE	
D. Fugitive of Hydrocarbons and SF ₆																15,600.75	
E. Consumption of Hydrocarbons and SF ₆																121,819.56	
F. Other	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	NA,ND	
E. Solvent and Other Product Use	NA,NE	4,766.04														4,766.04	
F. Agriculture	166,418.74	279,688.80														449,134.54	
A. Enteric Fermentation	112,009.58															112,009.58	
B. Manure Management	39,394.41															37,968.44	
C. Rice Cultivation	7,267.72															7,267.72	
D. Agro-forestry Soil ^c	NA,NE	261,768.40														261,768.40	
E. Prescribed Burns of Biomass	NA	NA														NA	
F. Field Burning of Agricultural Residues	NA	877.00	514.97													1,391.97	
G. Other	NA	NA														NA	
G. Land Use, Land-Use Change and Forestry ^d	-788,064.11	NA,NE	6,836.65													-795,258.52	
A. Forest Land	-631,192.18	NA,NE	591.87													-631,192.18	
B. Cropland	-31,759.51	NA,NE	1E+NA,NE													-31,759.51	
C. Grassland	-11,851.92	NA,NE	NA,NE													-11,851.92	
D. Wetlands	NA,NE	NA,NE	NA,NE													NA,NE	
E. Scrublands	-97,311.28	NA,NE	6,447.79													-97,311.28	
F. Other Land	NE	NE	NE													NE	
G. Other	NA	NA	NE													-21,636.76	
H. Water	NA	177,807.05	16,024.94													183,831.69	
I. Solid Waste Disposal on Land	NA	1E+NA,NE	1E+NA,NE													1E+NA,NE	
J. Waste-water Treatment	NA	26,918.90	1E+NA,NE													26,918.90	
K. Waste Treatment	NA	NA	NE													NE	
L. Other	NA	NA	NA													NA	
H. Other (not specified in Summary LA)	NA	NA	NA													NA	
M. Miscellaneous																	
International Bankers	94,496,890	105.90	855.72													95,458.90	
Aviation	59,511.60	56.69	566.63													60,534.62	
Marine	34,587.29	70.71	285.99													34,523.98	
Multilateral Operations	NA	NE	NE													NE	
CO ₂ Emissions from Business	211,229.95															211,229.93	

Total CO₂ Equivalent Emissions without Land Use, Land-Use Change and Forestry^b

Total CO₂ Equivalent Emissions with Land Use, Land-Use Change and Forestry^b

^a For CO₂ From Land Use, Land-use Change and Forestry, the net emissions/imports to be reported. If no actual emissions were reported, the sign for net/imports is always negative (-) and for emissions positive (+).

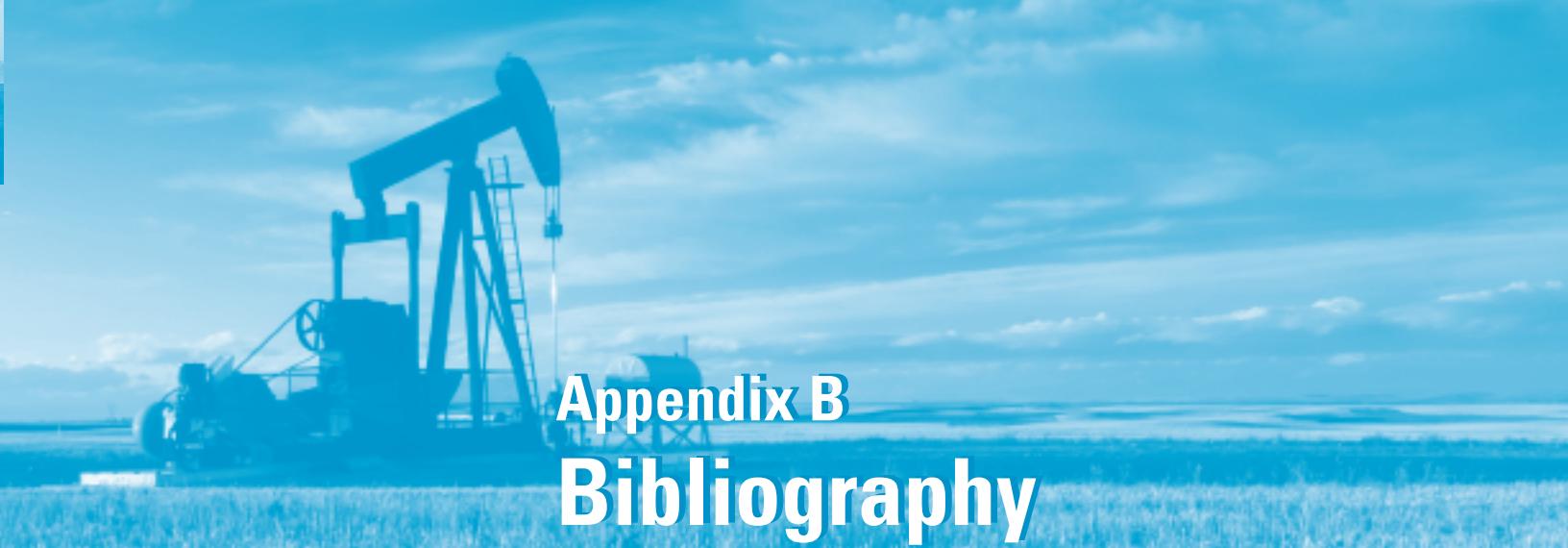
^b Actual emissions should be included in the national total. If no actual emissions were reported, potential emissions should be included.

^c Parties which previously reported CO₂ from soils in the Agricultural sector should note this in the NII.

^d These totals will differ from the totals reported in table 10, sheet 3 if Parties report net-CO₂ emissions from LULUCF.

^e See footnote 8 in table 3 Inventory LA.

^f See footnote 9 in table 3 Inventory LA.



Appendix B

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