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Emission trends: summary (1) (Sheet 1 of 3)

	Base year <sup>a</sup>	1990	1991	1992	1993	1994	1995	1996	1997
GREENHOUSE GAS EMISSIONS	kt CO <sub>2</sub> eq					•			
CO <sub>2</sub> emissions without net CO <sub>2</sub> from LULUCF	85,040.70	72,984.31	69,280.05	61,936.02	63,061.41	61,450.14	61,237.58	62,829.32	61,430.06
CO <sub>2</sub> emissions with net CO <sub>2</sub> from LULUCF	82,232.34	69,613.18	66,636.84	58,789.42	57,423.94	55,241.73	55,259.59	60,680.94	58,763.27
CH <sub>4</sub> emissions without CH <sub>4</sub> from LULUCF	13,234.64	12,524.52	12,183.17	10,818.84	10,265.17	9,730.79	9,379.48	9,550.03	9,387.38
CH <sub>4</sub> emissions with CH <sub>4</sub> from LULUCF	13,259.51	12,547.38	12,205.40	10,839.63	10,283.89	9,749.56	9,398.83	9,570.45	9,407.65
N <sub>2</sub> O emissions without N <sub>2</sub> O from LULUCF	11,060.32	8,326.83	5,561.16	4,401.84	4,615.67	5,573.84	4,800.94	5,382.52	5,387.83
N <sub>2</sub> O emissions with N <sub>2</sub> O from LULUCF	11,081.64	8,366.03	5,596.11	4,442.34	4,666.82	5,631.44	4,852.84	5,434.21	5,443.78
HFCs	NO	NO	NO	3.71	3.71	18.58	41.65	54.51	120.84
PFCs	371.08	375.72	323.60	180.04	194.59	212.19	222.72	212.81	212.28
Unspecified mix of HFCs and PFCs	NO	NO	NO	NO	NO	NO	NO	NO	NO
SF <sub>6</sub>	6.15	10.89	12.26	19.22	31.23	39.09	52.04	64.13	79.63
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total (without LULUCF)	109,712.88	94,222.27	87,360.24	77,359.67	78,171.78	77,024.63	75,734.40	78,093.31	76,618.03
Total (with LULUCF)	106,950.72	90,913.20	84,774.21	74,274.36	72,604.18	70,892.59	69,827.68	76,017.03	74,027.46
Total (without LULUCF, with indirect)	109,712.88	94,222.27	87,360.24	77,359.67	78,171.78	77,024.63	75,734.40	78,093.31	76,618.03
Total (with LULUCF, with indirect)	106,950.72	90,913.20	84,774.21	74,274.36	72,604.18	70,892.59	69,827.68	76,017.03	74,027.46
CREENHAUGE CAC COURGE AND CHIV CATECORIES	Base year <sup>a</sup>	1990	1991	1992	1993	1994	1995	1996	1997
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt CO 2 eq								
1. Energy	78,808.09	68,068.96	66,600.12	59,500.87	60,282.15	57,706.24	57,002.36	58,895.84	58,001.38
2. Industrial processes and product use	14,937.42	11,595.64	7,925.43	6,199.57	7,072.08	8,554.25	8,168.50	8,511.39	7,920.41
3. Agriculture	12,187.07	10,254.40	8,458.90	7,236.67	6,361.87	6,285.54	6,054.60	6,181.65	6,154.85
4. Land Use, Land-Use Change and Forestry <sup>b</sup>	-2,762.16	-3,309.07	-2,586.04	-3,085.31	-5,567.60	-6,132.04	-5,906.72	-2,076.27	-2,590.56
5. Waste	3,780.30	4,303.28	4,375.79	4,422.56	4,455.68	4,478.59	4,508.93	4,504.43	4,541.39
6. Other	NO	NO	NO	NO	NO	NO	NO	NO	NC
Total (including LULUCF)	106,950.72	90,913.20	84,774.21	74,274.36	72,604.18	70,892.59	69,827.68	76,017.03	74,027.46

<sup>&</sup>lt;sup>1</sup> The common tabular format will be revised, in accordance with relevant decisions of the Conference of the Parties and, where applicable, with decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol."

Table 1

Emission trends: summary (1)

(Sheet 2 of 3)

1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
60,968.24	61,477.38	58,217.54	59,878.11	58,851.92	61,649.09	60,107.47	60,223.06	59,658.21	58,327.75
57,191.16	59,830.96	57,263.34	57,333.86	56,966.57	57,430.94	56,861.58	54,540.79	56,166.73	54,502.92
9,319.76	9,418.58	9,346.03	9,289.99	9,433.69	9,559.50	8,983.42	8,761.89	8,671.83	8,639.66
9,342.64	9,431.55	9,371.89	9,308.85	9,453.86	9,577.88	8,996.64	8,785.80	8,679.34	8,659.65
5,313.46	5,131.20	5,445.47	5,891.55	5,201.17	5,191.54	6,004.15	5,785.52	5,521.17	5,002.59
5,372.38	5,185.32	5,511.49	5,954.42	5,266.12	5,257.00	6,066.35	5,855.50	5,578.14	5,068.21
202.78	373.00	273.44	355.94	447.15	579.92	704.42	804.02	948.67	1,033.27
263.73	287.03	283.11	266.85	271.91	254.41	269.43	280.52	3.18	4.54
NO	NO	NO	NO	NO	NO	NO	NO	NO	NC
93.64	75.47	84.04	82.96	66.71	78.40	95.70	94.26	106.94	121.16
NO	NO	NO	NO	NO	NO	NO	NO	NO	NC
76,161.62	76,762.67	73,649.64	75,765.40	74,272.55	77,312.86	76,164.59	75,949.27	74,909.99	73,128.98
72,466.34	75,183.33	72,787.31	73,302.87	72,472.32	73,178.56	72,994.12	70,360.89	71,482.99	69,389.74
76,161.62	76,762.67	73,649.64	75,765.40	74,272.55	77,312.86	76,164.59	75,949.27	74,909.99	73,128.98
72,466.34	75,183.33	72,787.31	73,302.87	72,472.32	73,178.56	72,994.12	70,360.89	71,482.99	69,389.74
1									
1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
57 676 68	58 170 26	54 410 55	56 328 43	55 422 05	58 277 63	56 354 07	55 768 72	55 002 07	53,579.78
									8,544.13
· · ·		-,					· ·		6,238.01
						· ·	· · ·		-3.739.23
									4,767.06
							· ·		4,707.00 NC
72,466.34	75,183.33	72,787.31	73,302.87	72,472.32	73,178.56	72,994.12	70,360.89	71,482.99	69,389.74
	60,968.24 57,191.16 9,319.76 9,342.64 5,313.46 5,372.38 202.78 263.73 NO 93.64 NO 76,161.62 72,466.34 76,161.62 72,466.34 1998 57,676.68 7,536.38 6,365.44 -3,695.28 4,583.12 NO	60,968.24 61,477.38 57,191.16 59,830.96 9,319.76 9,418.58 9,342.64 9,431.55 5,313.46 5,131.20 5,372.38 5,185.32 202.78 373.00 263.73 287.03 NO NO 93.64 75.47 NO NO 76,161.62 76,762.67 72,466.34 75,183.33 76,161.62 76,762.67 72,466.34 75,183.33 76,161.62 76,762.67 72,466.34 75,183.33 76,161.62 76,762.67 72,466.34 75,183.33 76,161.62 76,762.67 72,466.34 75,183.33 1998 1999	60,968.24 61,477.38 58,217.54 57,191.16 59,830.96 57,263.34 9,319.76 9,418.58 9,346.03 9,342.64 9,431.55 9,371.89 5,313.46 5,131.20 5,445.47 5,372.38 5,185.32 5,511.49 202.78 373.00 273.44 263.73 287.03 283.11 NO NO NO 93.64 75.47 84.04 NO NO NO 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 67,3649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 4,646.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31 76,161.62 76,762.67 73,649.64 72,466.34 75,183.33 72,787.31	60,968.24 61,477.38 58,217.54 59,878.11 57,191.16 59,830.96 57,263.34 57,333.86 9,319.76 9,418.58 9,346.03 9,289.99 9,342.64 9,431.55 9,371.89 9,308.85 5,313.46 5,131.20 5,445.47 5,891.55 5,372.38 5,185.32 5,511.49 5,954.42 202.78 373.00 273.44 355.94 263.73 287.03 283.11 266.85 NO NO NO NO NO NO TO TO,16161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,183.33 72,787.31 73,302.87 76,161.62 76,762.67 73,649.64 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.34 75,765.40 72,466.	60,968.24 61,477.38 58,217.54 59,878.11 58,851.92 57,191.16 59,830.96 57,263.34 57,333.86 56,966.57 9,319.76 9,418.58 9,346.03 9,289.99 9,433.69 9,342.64 9,431.55 9,371.89 9,308.85 9,453.86 5,313.46 5,131.20 5,445.47 5,891.55 5,201.17 5,372.38 5,185.32 5,511.49 5,954.42 5,266.12 202.78 373.00 273.44 355.94 447.15 263.73 287.03 283.11 266.85 271.91 NO NO NO NO NO NO NO TO NO TO NO TO NO TO NO TO NO TO	60,968.24 61,477.38 58,217.54 59,878.11 58,851.92 61,649.09 57,191.16 59,830.96 57,263.34 57,333.86 56,966.57 57,430.94 9,319.76 9,418.58 9,346.03 9,289.99 9,433.69 9,559.50 9,342.64 9,431.55 9,371.89 9,308.85 9,453.86 9,577.88 5,313.46 5,131.20 5,445.47 5,891.55 5,201.17 5,191.54 5,372.38 5,185.32 5,511.49 5,954.42 5,266.12 5,257.00 202.78 373.00 273.44 355.94 447.15 579.92 263.73 287.03 283.11 266.85 271.91 254.41 NO TO NO NO TO NO TO NO TO NO TO NO TO NO TO	60,968.24 61,477.38 58,217.54 59,878.11 58,851.92 61,649.09 60,107.47 57,191.16 59,830.96 57,263.34 57,333.86 56,966.57 57,430.94 56,861.58 9,319.76 9,418.58 9,346.03 9,289.99 9,433.69 9,559.50 8,983.42 9,342.64 9,431.55 9,371.89 9,308.85 9,453.86 9,577.88 8,996.64 5,313.46 5,131.20 5,445.47 5,891.55 5,201.17 5,191.54 6,004.15 5,372.38 5,185.32 5,511.49 5,954.42 5,266.12 5,257.00 6,066.35 202.78 373.00 273.44 355.94 447.15 579.92 704.42 263.73 287.03 283.11 266.85 271.91 254.41 269.43 NO	60,968.24 61,477.38 58,217.54 59,878.11 58,851.92 61,649.09 60,107.47 60,223.06 57,191.16 59,830.96 57,263.34 57,333.86 56,966.57 57,430.94 56,861.58 54,540.79 9,319.76 9,418.58 9,346.03 9,289.99 9,433.69 9,559.50 8,983.42 8,761.89 9,342.64 9,431.55 9,371.89 9,308.85 9,453.86 9,577.88 8,996.64 8,785.80 5,313.46 5,131.20 5,445.47 5,891.55 5,201.17 5,191.54 6,004.15 5,785.52 5,372.38 5,185.32 5,511.49 5,954.42 5,266.12 5,257.00 6,066.35 5,855.50 202.78 373.00 273.44 355.94 447.15 579.92 704.42 804.02 263.73 287.03 283.11 266.85 271.91 254.41 269.43 280.52 NO TO NO NO NO TO NO NO TO NO TO NO TO NO TO TO TO,161.62 76,762.67 73,649.64 75,765.40 74,272.55 77,312.86 76,164.59 75,949.27 72,466.34 75,183.33 72,787.31 73,302.87 72,472.32 73,178.56 72,994.12 70,360.89 76,161.62 76,762.67 73,649.64 75,765.40 74,272.55 77,312.86 76,164.59 75,949.27 72,466.34 75,183.33 72,787.31 73,302.87 72,472.32 73,178.56 72,994.12 70,360.89 76,161.62 76,762.67 73,649.64 75,765.40 74,272.55 77,312.86 76,164.59 75,949.27 72,466.34 75,183.33 72,787.31 73,302.87 72,472.32 73,178.56 72,994.12 70,360.89 76,161.62 76,762.67 73,649.64 75,765.40 74,272.55 77,312.86 76,164.59 75,949.27 72,466.34 75,183.33 72,787.31 73,302.87 72,472.32 73,178.56 72,994.12 70,360.89 76,161.62 76,762.67 73,649.64 75,765.40 74,272.55 77,312.86 76,164.59 75,949.27 72,466.34 75,183.33 72,787.31 73,302.87 72,472.32 73,178.56 72,994.12 70,360.89 74,13.02 76,66.02 8,437.15 9,196.47 6,365.44 6,472.74 6,350.27 6,521.17 6,588.38 6,437.82 6,605.48 6,262.38 -3,695.28 -1,579.34 -862.33 -2,462.53 -1,800.23 -4,134.31 -3,170.47 -5,588.38 4,583.12 4,646.47 4,713.80 4,755.91 4,848.20 4,929.40 4,767.89 4,721.70 NO	60,968.24 61,477.38 58,217.54 59,878.11 58,851.92 61,649.09 60,107.47 60,223.06 59,658.21 57,191.16 59,830.96 57,263.34 57,333.86 56,966.57 57,430.94 56,861.58 54,540.79 56,166.73 9,319.76 9,418.58 9,346.03 9,289.99 9,433.69 9,559.50 8,983.42 8,761.89 8,671.83 9,342.64 9,431.55 9,371.89 9,308.85 9,453.86 9,577.88 8,996.64 8,785.80 8,679.34 5,313.46 5,131.20 5,445.47 5,891.55 5,201.17 5,191.54 6,004.15 5,785.52 5,521.17 5,372.38 5,185.32 5,511.49 5,954.42 5,266.12 5,257.00 6,066.35 5,855.50 5,578.14 202.78 373.00 273.44 355.94 447.15 579.92 704.42 804.02 948.67 263.73 287.03 283.11 266.85 271.91 254.41 269.43 280.52 3.18 NO

Table 1 Emission trends: summary (1) (Sheet 3 of 3)

GREENHOUSE GAS EMISSIONS	2008	2009	2010	2011	2012	2013	Change from base to latest reported year
							(%)
CO <sub>2</sub> emissions without net CO <sub>2</sub> from LULUCF	57,232.55	51,545.36	52,079.22	50,401.88	46,731.54	43,887.92	-48.39
CO <sub>2</sub> emissions with net CO <sub>2</sub> from LULUCF	52,035.77	47,664.49	47,993.11	46,628.87	42,311.73	40,383.94	-50.89
CH <sub>4</sub> emissions without CH <sub>4</sub> from LULUCF	8,540.10	8,317.46	8,253.25	8,017.92	7,991.73	7,814.07	-40.96
CH <sub>4</sub> emissions with CH <sub>4</sub> from LULUCF	8,552.28	8,335.64	8,262.46	8,041.20	8,027.26	7,825.91	-40.98
N <sub>2</sub> O emissions without N <sub>2</sub> O from LULUCF	4,260.90	3,941.68	3,837.33	4,032.16	3,957.11	4,322.43	-60.92
N <sub>2</sub> O emissions with N <sub>2</sub> O from LULUCF	4,318.44	4,007.24	3,890.12	4,095.73	4,036.36	4,376.35	-60.51
HFCs	1,163.87	1,118.16	1,223.01	1,345.29	1,184.08	1,279.44	
PFCs	4.80	3.70	1.52	2.16	1.72	1.69	-99.54
Unspecified mix of HFCs and PFCs	NO	NO	NO	NO	NO	NO	
SF <sub>6</sub>	108.21	90.54	98.72	106.92	120.20	122.92	1,899.92
NF3	NO	NO	NO	NO	NO	NO	
Total (without LULUCF)	71,310.43	65,016.89	65,493.05	63,906.33	59,986.38	57,428.46	-47.66
Total (with LULUCF)	66,183.37	61,219.77	61,468.95	60,220.18	55,681.36	53,990.26	-49.52
Total (without LULUCF, with indirect)	71,310.43	65,016.89	65,493.05	63,906.33	59,986.38	57,428.46	-47.66
Total (with LULUCF, with indirect)	66,183.37	61,219.77	61,468.95	60,220.18	55,681.36	53,990.26	-49.52
	'	'					
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2008	2009	2010	2011	2012	2013	Change from base to latest reported year
			·				(%)
1. Energy	52,965.92	48,174.32	48,685.19	46,875.09	43,391.90	41,140.72	-47.80
2. Industrial processes and product use	7,381.95	6,341.01	6,496.02	6,628.97	6,166.07	5,634.83	-62.28
3. Agriculture	6,196.39	5,826.47	5,733.06	5,939.34	5,940.56	6,332.91	-48.04
4. Land Use, Land-Use Change and Forestry <sup>b</sup>	-5,127.06	-3,797.12	-4,024.10	-3,686.15	-4,305.02	-3,438.20	24.47
5. Waste	4,766.17	4,675.11	4,578.77	4,462.93	4,487.85	4,320.00	14.28
6. Other	NO	NO	NO	NO	NO	NO	

66,183.37

61,219.77

61,468.95

60,220.18

55,681.36

53,990.26

-49.52

#### Notes:

(3) 1 kt CO<sub>2</sub> eq equals 1 Gg CO<sub>2</sub> eq.

Total (including LULUCF)

 $Abbreviation: \ \ LULUCF = land \ use, \ land-use \ change \ and \ forestry.$ 

<sup>(1)</sup> Further detailed information could be found in the common reporting format tables of the Party's greenhouse gas inventory, namely "Emission trends ( $CO_2$ )", "Emission trends ( $CH_4$ )", "Emission trends ( $N_2O$ )" and "Emission trends (HFCs, PFCs and  $SF_6$ )", which is included in an annex to this biennial report.

<sup>(2) 2011</sup> is the latest reported inventory year.

<sup>&</sup>lt;sup>a</sup> 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 Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

 $<sup>^{\</sup>text{b}}\,$  Includes net CO2, CH4 and N2O from LULUCF.

Table 1 (a)
Emission trends (CO<sub>2</sub>)
(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year a	1990	1991	1992	1993	1994	1995	1996	1997
1. Energy	74,522.42	64,487.56	63,103.04	56,694.49	57,493.95	55,061.58	54,674.01	56,470.96	55,668.32
A. Fuel combustion (sectoral approach)	73,940.18	64,002.68	62,643.46	56,254.35	57,096.80	54,574.62	54,409.37	56,211.99	55,456.86
Energy industries	25,676.75	20,833.46	21,693.18	22,447.66	22,915.21	22,105.87	22,580.77	22,930.47	25,015.24
Manufacturing industries and construction	16,410.16	13,583.19	11,800.24	9,575.06	8,949.32	8,358.97	8,438.26	8,705.80	6,531.81
3. Transport	8,241.50	8,540.03	7,490.57	7,239.61	7,228.89	7,049.15	7,043.47	7,052.53	7,458.85
4. Other sectors	23,611.78	21,046.00	21,659.47	16,992.02	18,003.39	17,060.62	16,346.87	17,523.18	16,450.96
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	582.24	484.88	459.58	440.14	397.15	486.97	264.64	258.97	211.47
1. Solid fuels	3.60	6.75	5.23	5.03	5.44	2.07	2.41		NO, NA, IE
Oil and natural gas and other emissions from energy production	578.64	478.13	454.35	435.11	391.71	484.90	262.24	257.80	211.47
C. CO2 transport and storage	NO	NO	NO	NO	NO	NO	NO	NO	NO
2. Industrial processes	9,976.49	7,940.37	5,867.06	4,963.37	5,354.90	6,161.40	6,350.47	6,134.10	5,544.75
A. Mineral industry	2,762.55	2,772.62	1,848.13	1,489.10	1,670.08	1,881.81	1,941.59	1,768.50	1,864.49
B. Chemical industry	2,360.33	1,759.27	1,321.27	1,119.07	1,252.22	1,477.52	1,520.04	1,675.01	1,685.99
C. Metal industry	4,741.90	3,315.62	2,633.00	2,315.87	2,361.10	2,676.87	2,659.44	2,577.07	1,877.95
D. Non-energy products from fuels and solvent use	111.70	92.86	64.67	39.33	71.49	125.19	229.39	113.52	116.33
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Agriculture	420.92	435.50	189.09	157.29	91.68	106.28	92.23	103.39	96.12
A. Enteric fermentation									
B. Manure management									
C. Rice cultivation									
D. Agricultural soils									
E. Prescribed burning of savannas									
F. Field burning of agricultural residues									
G. Liming	143.78	241.62	102.54	83.60	24.71	47.35	33.90	45.22	38.80
H. Urea application	229.03	171.15	79.91	57.36	55.02	50.47	50.82	49.03	50.76
I. Other carbon-containing fertilizers	48.11	22.73	6.64	16.33	11.95	8.46	7.52	9.14	6.55
J. Other	46.11 NO	NO	NO	NO	NO	NO	NO	9.14 NO	NO
4. Land Use, Land-Use Change and Forestry	-2,808.36	-3,371.13	-2,643.21	-3,146.60	-5,637.47	-6,208.41	-5,977.98	-2,148.38	-2,666.79
A. Forest land	-2,534.13 170.38	-3,299.85 170.42	-2,609.58 201.52	-3,219.11 146.30	-5,730.54 6.92	-6,145.35 -49.19	-5,953.73 -107.54	-2,026.92 -163.69	-2,443.74 -204.60
B. Cropland									
C. Grassland	-52.48	16.49	-179.05	-192.14	-63.77	-56.43	-144.70	-192.48	-195.15
D. Wetlands	2.69	15.01	5.43	14.60	34.16	41.26	29.31	20.77	24.87
E. Settlements	68.63	114.52	82.46	71.45	102.48	93.64	110.12	104.05	115.76
F. Other land	NO	NO	NO	NO	0.01	0.02	0.03	0.04	0.05
G. Harvested wood products	-463.45	-387.72	-144.00	32.29	13.26	-92.36	88.54	109.85	36.02
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
5. Waste	120.87	120.87	120.87	120.87	120.87	120.87	120.87	120.87	120.87
A. Solid waste disposal	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA
B. Biological treatment of solid waste									
C. Incineration and open burning of waste	120.87	120.87	120.87	120.87	120.87	120.87	120.87	120.87	120.87
D. Waste water treatment and discharge									
E. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Memo items:									
International bunkers	434.43	480.48	378.38	399.40	366.37	552.55	531.53	564.56	537.54
Aviation	434.43	480.48	378.38	399.40	366.37	552.55	531.53	564.56	537.54
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Multilateral operations	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 emissions from biomass	2,534.13	3,132.51	3,324.07	3,316.15	3,401.28	3,378.36	3,627.77	3,538.78	3,462.61
CO2 captured	NO	NO	NO	NO	NO	NO	NO	NO	NO
Long-term storage of C in waste disposal sites	4,647.40	5,697.40	5,911.80	6,143.06	6,359.77	6,585.88	6,800.69	7,030.85	7,289.50
Indirect N2O									
Indirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Total CO2 equivalent emissions without land use, land-use change and forestry	109,712.88	94,222.27	87,360.24	77,359.67	78,171.78	77,024.63	75,734.40	78,093.31	76,618.03
Total CO2 equivalent emissions with land use, land-use change and forestry	106,950.72	90,913.20	84,774.21	74,274.36	72,604.18	70,892.59	69,827.68	76,017.03	74,027.46
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	85,040.70	72,984.31	69,280.05	61,936.02	63,061.41	61,450.14	61,237.58	62,829.32	61,430.06
Total CO2 equivalent emissions, including indirect CO2, with land use, land-use change and	82,232.34	69,613.18	66,636.84	58,789.42	57,423.94	55,241.73	55,259.59	60,680.94	58,763.27

Table 1 (a)
Emission trends (CO<sub>2</sub>)

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(She	oot ?	of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
. Energy	55,487.18	56,028.82	52,356.09	54,265.19	53,339.54	56,138.82	54,486.12	54,009.35	53,335.49	51,903.60
A. Fuel combustion (sectoral approach)	55,300.54	55,861.51	52,166.68	54,120.74	53,198.96	55,992.17	54,367.72	53,896.28	53,218.24	51,799.01
. Energy industries	26,621.40		23,701.55	24,076.23	22,486.99	23,723.22	21,878.90	19,975.16	20,299.20	21,421.46
. Manufacturing industries and construction	5,721.25	5,381.87	4,777.79	5,137.11	5,299.79	5,001.98	4,789.84	4,773.70	4,563,51	4,517.89
. Transport	8,290.80	8,771.86	8,680.91	9,147.78	9,716.20	10,190.03	10,672.46	11,578.85	12,389.95	12,754.96
. Other sectors	14,667.10	15,376.70	15,006.42	15,759.61	15,695.97	17,076.93	17,026.52	17,568.58	15,965.59	13,104.70
. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	186.64	167.31	189.41	144.45	140.58	146.66	118.40	113.07	117.25	104.59
. Solid fuels	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE
. Oil and natural gas and other emissions from energy production	186.64	167.31	189.41	144.45	140.58	146.66	118.40	113.07	117.25	104.59
C. CO2 transport and storage	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
. Industrial processes	5,294.08	5,257.34	5,623.73	5,365.23	5,262.45	5,246.69	5,356.91	5,977.80	6,010.28	6,141.32
A. Mineral industry	1,918.21	1,913.21	1,926.11	1,921.29	1,992.54	2,071.49	2,030.15	2,066.64	2,154.67	2,174.65
3. Chemical industry	1,615.84	1,486.09	1,828.03	1,736.16	1,482.91	1,459.69	1,659.32	2,293.56	2,246.37	2,445.71
C. Metal industry	1,613.93	1,750.46	1,718.05	1,618.12	1,719.64	1,696.13	1,648.88	1,595.66	1,559.75	1,489.68
Non-energy products from fuels and solvent use	146.10	107.58	151.53	89.66	67.36	19.37	18.56	21.94	49.49	31.28
E. Electronic industry										
Product uses as ODS substitutes										
G. Other product manufacture and use	NO		NO	NO	NO	NO	NO	NO	NO	NO
I. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
. Agriculture	66.11	70.35	116.86	126.82	129.06	142.71	144.67	140.16	147.68	139.58
A. Enteric fermentation										
3. Manure management										
C. Rice cultivation										
D. Agricultural soils										
Prescribed burning of savannas										
Field burning of agricultural residues										
G. Liming	3.94	0.07	37.10	41.80	35.39	45.67	27.57	31.05	32.54	13.99
H. Urea application	55.91	60.15	64.64	68.90	75.91	79.99	90.72	87.44	91.05	94.66
Other carbon-containing fertilizers	6.26	10.14	15.12	16.12	17.76	17.05	26.38	21.67	24.09	30.93
. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
. Land Use, Land-Use Change and Forestry	-3,777.09	-1,646.43	-954.20	-2,544.25	-1,885.35	-4,218.15	-3,245.89	-5,682.27	-3,491.47	-3,824.84
A. Forest land	-3,472.21	-1,222.09	-411.74	-2,058.42	-1,325.50	-3,706.60	-2,737.59	-4,931.77	-2,738.95	-2,942.38
3. Cropland	-300.13	-369.81	-435.61	-409.51	-475.82	-506.50	-515.35	-560.62	-597.82	-633.33
C. Grassland	-254.53	-280.30	-325.81	-278.78	-315.19	-328.36	-328.29	-325.70	-315.08	-317.79
D. Wetlands	37.94	26.72	17.01	16.84	15.01	12.51	11.13	13.44	13.12	12.71
2. Settlements	124.11	129.71	186.66	175.07	196.46	218.15	263.48	194.80	220.68	183.47
7. Other land	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
G. Harvested wood products	87.67	69.27	15.21	10.47	19.62	92.57	60.67	-72.50	-73.50	-127.59
I. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
i. Waste	120.87	120.87	120.87	120.87	120.87	120.87	119.77	95.75	164.76	143.25
A. Solid waste disposal	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA
B. Biological treatment of solid waste										
C. Incineration and open burning of waste	120.87	120.87	120.87	120.87	120.87	120.87	119.77	95.75	164.76	143.25
D. Waste water treatment and discharge									التحد	
2. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
o. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Memo items:										
nternational bunkers	570.29	612.33	684.31	642.46	606.42	594.41	678.59	783.78	792.79	822.82
Aviation	570.29	612.33	684.31	642.46	606.42	594.41	678.59	783.78	792.79	822.82
Varigation 1. Control of the Control	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Aultilateral operations	NO	NO	NO	NO 2 5 5 7 02	NO 2 CLC 74	NO	NO	NO	NO	NO
CO2 emissions from biomass	3,461.28	3,492.34	3,412.64	3,567.93	3,616.74	3,779.40	3,963.20	4,995.82	5,103.78	5,623.45
CO2 captured	NO	NO	NO	NO	NO SOME OF	NO	NO	NO	NO	NO
ong-term storage of C in waste disposal sites	7,552.01	7,824.02	8,055.31	8,353.80	8,637.08	8,923.98	9,188.74	9,455.64	9,713.05	9,918.21
ndirect N2O		AID ATT	1m 1	VIII. 1111	NID NO	.m	Nm 155	AID ATT	1m 1:-	.m
ndirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Total CO2 equivalent emissions without land use, land-use change and forestry	76,161.62	76,762.67	73,649.64	75,765.40	74,272.55	77,312.86	76,164.59	75,949.27	74,909.99	73,128.98
	72,466.34	75,183.33	72,787.31	73,302.87	72,472.32	73,178.56	72,994.12	70,360.89	71,482.99	69,389.74
Total CO2 equivalent emissions with land use, land-use change and forestry										
Total CO2 equivalent emissions with land use, land-use change and forestry  Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	60,968.24	61,477.38	58,217.54	59,878.11	58,851.92	61,649.09	60,107.47	60,223.06	59,658.21	58,327.75

Table 1(a)
Emission trends (CO<sub>2</sub>)
(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2008	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	51,289.66	46,531.51	46,949.88	45,261.69	41,890.23	39,676.65	-46.76
A. Fuel combustion (sectoral approach)	51,109.39	46,351.33	46,761.61	45,076.19	41,740.55	39,526.56	-46.54
Energy industries	20,469.45	17,346.40	17,866.35	17,314.10	16,642.88	14,009.03	-45.44
	4,628.71	3,338.27	3,438.47	3,450.29	3,110.56	4,260.26	-74.04
Manufacturing industries and construction							
3. Transport	12,713.35	12,623.82	11,501.66	11,028.37	10,507.61	9,926.71	20.45
4. Other sectors	13,297.88	13,042.84	13,955.14	13,283.43	11,479.50	11,330.56	-52.01
5. Other	NO	NO	NO	NO	NO	NO	
B. Fugitive emissions from fuels	180.27	180.18	188.26	185.50	149.67	150.09	-74.22
1. Solid fuels	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	
2. Oil and natural gas and other emissions from energy production	180.27	180.18	188.26	185.50	149.67	150.09	-74.06
C. CO2 transport and storage	NO	NO	NO	NO	NO	NO	
2. Industrial processes	5,719.43	4,784.60	4,858.71	4,823.79	4,513.45	3,845.37	-61.46
A. Mineral industry	2,075.02	1,507.31	1,257.80	1,071.91	1,146.79	965.97	-65.03
B. Chemical industry	2,144.80	2,074.40	2,291.43	2,412.31	2,154.25	2,145.35	-9.11
C. Metal industry	1,468.97	1,176.87	1,283.73	1,325.64	1,200.03	725.49	-84.70
D. Non-energy products from fuels and solvent use	30.64	26.03	25.75	13.94	12.38	8.57	-92.33
E. Electronic industry	20.01				12.50		, 2.00
F. Product uses as ODS substitutes							
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	
H. Other	NO 92.09	NO 04.02	NO	NO	NO	NO	50.00
3. Agriculture	82.98	94.02	102.87	134.92	137.88	169.09	-59.83
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannas							
F. Field burning of agricultural residues							
G. Liming	9.70	12.12	11.41	23.07	13.19	12.74	-91.14
H. Urea application	45.84	43.32	46.24	57.94	55.53	79.08	-65.47
I. Other carbon-containing fertilizers	27.44	38.58	45.23	53.90	69.16	77.27	60.62
J. Other	NO	NO	NO	NO	NO	NO	
4. Land Use, Land-Use Change and Forestry	-5,196.78	-3,880.87	-4,086.11	-3,773.01	-4,419.81	-3,503.97	24.77
A. Forest land	-4,242.53	-3,320.71	-3,266.15	-3,083.59	-3,957.18	-3,246.37	28.11
B. Cropland	-661.30	-685.58	-719.27	-650.31	-587.30	-519.48	-404.89
C. Grassland	-349.97	-313.78	-345.08	-301.83	-168.11	-244.77	366.40
D. Wetlands	7.28	15.03	10.90	10.60	11.16	10.22	279.21
E. Settlements	186.39	215.07	185.51	207.28	219.09	232.05	238.13
F. Other land	0.08	0.08	0.08	0.08	0.08	0.07	
G. Harvested wood products	-136.72	209.02	47.90	44.75	62.45	264.32	-157.03
H. Other	NA	NA	NA	NA	NA	NA	
5. Waste	140.47	135.22	167.76	181.48	189.98	196.81	62.83
A. Solid waste disposal	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	NO, NA	
B. Biological treatment of solid waste							
C. Incineration and open burning of waste	140.47	135.22	167.76	181.48	189.98	196.81	62.83
D. Waste water treatment and discharge							
E. Other	NO	NO	NO	NO	NO	NO	
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	
Memo items:							
International bunkers	807.81	690.69	687.69	690.69	501.50	489.49	12.67
Aviation	807.81	690.69	687.69	690.69	501.50	489.49	12.67
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Multilateral operations	NO NO	NO NO	NO NO	NO NO	NO NO	NO NO	
	6,485.13	7,584.91	8,032.32	7,583.88	7,077.44	7,362.18	190.52
CO2 emissions from biomass							190.32
CO2 captured	NO	NO	NO	NO	NO	NO	100.55
Long-term storage of C in waste disposal sites	10,133.25	10,341.67	10,531.19	10,719.34	10,911.35	11,102.49	138.90
Indirect N2O							
Indirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Total CO2 equivalent emissions without land use, land-use change and forestry	71,310.43	65,016.89	65,493.05	63,906.33	59,986.38	57,428.46	-47.66
Total CO2 equivalent emissions with land use, land-use change and forestry	66,183.37	61,219.77	61,468.95	60,220.18	55,681.36	53,990.26	-49.52
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and	57,232.55	51,545.36	52,079.22	50,401.88	46,731.54	43,887.92	-48.39
forestry  Total CO2 equivalent emissions, including indirect CO2, with land use, land-use change and	52,035.77	47,664.49	47,993.11	46,628.87	42,311.73	40,383.94	-50.89
forestry							

 $Abbreviations: \ CRF = common \ reporting \ format, \ LULUCF = land \ use, \ land-use \ change \ and \ forestry.$ 

<sup>&</sup>lt;sup>a</sup> 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 Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

 $<sup>^</sup>b$  Fill in net emissions/removals as reported in CRF table Summary 1.A of the latest reported inventory year. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

Table 1(b)
Emission trends (CH<sub>4</sub>)
(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year a	1990	1991	1992	1993	1994	1995	1996	1997
1. Energy	150.12	124.24	123.30	97.14	96.69	91.41	78.33	82.15	78.40
A. Fuel combustion (sectoral approach)	45.50	37.84	37.29	24.56	26.64	21.48	20.48	20.99	20.24
1. Energy industries	0.51	0.38	0.46	0.49	0.53	0.51	0.50	0.50	0.54
2. Manufacturing industries and construction	0.64	0.44	0.38	0.29	0.25	0.24	0.29	0.30	0.25
3. Transport	2.25	2.76	2.49	2.39	2.46	2.38	2.34	2.20	2.23
4. Other sectors	42.10	34.26	33.96	21.39	23.41	18.34	17.35	18.00	17.22
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	104.62	86.40	86.01	72.58	70.05	69.93	57.86	61.17	58.15
1. Solid fuels	48.12	35.56	34.53	24.60	19.91	21.81	19.21	20.06	19.89
2. Oil and natural gas and other emissions from energy production	56.51	50.85	51.48	47.98	50.14	48.12	38.64	41.10	38.26
C. CO2 transport and storage									
2. Industrial processes	1.26	1.01	1.00	1.07	1.06	1.09	1.07	1.08	1.10
A. Mineral industry									
B. Chemical industry	0.82	0.71	0.77	0.85	0.84	0.83	0.82	0.84	0.91
C. Metal industry	0.45	0.30	0.23	0.22	0.23	0.26	0.25	0.24	0.19
D. Non-energy products from fuels and solvent use	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Agriculture	242.66	219.02	203.00	172.70	149.07	131.66	129.11	132.07	128.12
A. Enteric fermentation	160.42	143.16	134.06	116.24	98.34	86.78	84.77	84.65	82.68
B. Manure management	77.16	72.63	66.51	55.11	49.38	43.53	43.26	46.58	44.85
C. Rice cultivation	3.25	3.24	2.43	1.35	1.35	1.35	1.08	0.84	0.59
D. Agricultural soils	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	1.82	NO							
G. Liming									
H. Urea application									
I. Other carbon-containing fertilizers									
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	0.99	0.91	0.89	0.83	0.75	0.75	0.77	0.82	0.81
A. Forest land	0.68	0.60	0.58	0.52	0.44	0.44	0.46	0.51	0.50
B. Cropland	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
C. Grassland	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
D. Wetlands	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products									
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
5. Waste	135.35	156.71	160.03	161.84	163.79	165.07	166.67	166.70	167.88
A. Solid waste disposal	94.39	113.60	117.59	119.98	122.71	124.75	127.03	128.74	130.82
B. Biological treatment of solid waste	0.20	0.20	0.20	0.20	0.20	0.20	0.28	0.36	0.34
C. Incineration and open burning of waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
D. Waste water treatment and discharge	40.75	42.89	42.23	41.64	40.87	40.11	39.34	37.58	36.71
E. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total CH4 emissions without CH4 from LULUCF	529.39	500.98	487.33	432.75	410.61	389.23	375.18	382.00	375.50
Total CH4 emissions with CH4 from LULUCF	530.38	501.90	488.22	433.59	411.36	389.98	375.95	382.82	376.31
Memo items:									
International bunkers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Multilateral operations	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									
Indirect N2O									
Indirect CO2 (3)									

Table 1(b)
Emission trends (CH<sub>4</sub>)
(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	72.34	69.93	67.61	67.92	68.35	70.61	60.28	55.78	55.38	51.99
A. Fuel combustion (sectoral approach)	15.80	15.99	15.03	15.56	15.73	16.15	14.44	14.17	14.67	13.66
Energy industries	0.56	0.54	0.47	0.48	0.41	0.44	0.60	0.96	0.87	0.98
Manufacturing industries and construction	0.22	0.23	0.21	0.21	0.25	0.23	0.25	0.28	0.30	0.29
3. Transport	2.28	2.25	2.35	2.39	2.36	2.35	2.25	2.18	1.80	1.74
4. Other sectors	12.74	12.97	12.00	12.48	12.71	13.13	11.34	10.75	11.70	10.65
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	56.54	53.94	52.58	52.35	52.62	54.45	45.84	41.61	40.71	38.34
Solid fuels	18.90	17.36	17.29	17.01	17.31	15.65	8.45	3.78	3.57	3.52
Oil and natural gas and other emissions from energy production	37.63	36.58	35.29	35.34	35.31	38.80	37.40	37.83	37.14	34.82
C. CO2 transport and storage										
2. Industrial processes	1.16	1.13	1.33	1.30	1.32	1.28	1.35	2.00	1.96	2.18
A. Mineral industry										
B. Chemical industry	0.96	0.91	1.11	1.09	1.11	1.07	1.13	1.79	1.74	1.96
C. Metal industry	0.21	0.22	0.22	0.21	0.21	0.21	0.22	0.21	0.21	0.22
D. Non-energy products from fuels and solvent use	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Agriculture	129.66	133.78	130.97	126.47	128.19	128.82	121.98	118.48	115.72	116.91
A. Enteric fermentation	82.20	83.14	81.99	78.80	77.87	77.07	74.89	73.93	71.78	71.87
B. Manure management	46.84	50.03	48.11	47.04	49.75	51.06	46.34	43.83	43.28	44.34
C. Rice cultivation	0.62	0.61	0.87	0.63	0.57	0.69	0.76	0.72	0.65	0.71
D. Agricultural soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Liming	110	110	110	110	110	110	110	110	110	110
H. Urea application										
I. Other carbon-containing fertilizers										
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	0.92	0.52	1.03	0.75	0.81	0.74	0.53	0.96	0.30	0.80
A. Forest land	0.48	0.32	0.50	0.43	0.43	0.40	0.29	0.67	0.30	0.58
B. Cropland	0.48	0.02	0.08	0.09	0.06	0.05	0.29	0.07	0.00	0.03
C. Grassland	0.40	0.02	0.45	0.03	0.32	0.03	0.20	0.03	0.02	0.03
D. Wetlands	NO NO	NO NO	NO	NO NO	NO	NO NO	NO NO	NO NO	NO	NO NO
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	NO	NO	NO	NO		NO	NO	NO	NO	NO
F. Other land	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Harvested wood products	274	27.4	NT.A	NT.A	27.4	NT.A	27.4	274	274	27.4
H. Other	NA 150.52	NA 171.00	NA	NA 175.02	NA	NA 101.67	NA 175.72	NA 174.22	NA	NA 174.50
5. Waste	169.63	171.90	173.93	175.92	179.49	181.67	175.72	174.22	173.82	174.50
A. Solid waste disposal	133.67	136.72	139.94	142.25	146.98	150.98	146.48	149.12	149.73	151.31
B. Biological treatment of solid waste	0.30	0.39	0.37	0.43	0.70	0.95	0.69	1.00	1.20	1.50
C. Incineration and open burning of waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
D. Waste water treatment and discharge	35.65	34.78	33.61	33.22	31.80	29.72	28.54	24.09	22.89	21.68
E. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total CH4 emissions without CH4 from LULUCF	372.79	376.74	373.84	371.60	377.35	382.38	359.34	350.48	346.87	345.59
Total CH4 emissions with CH4 from LULUCF	373.71	377.26	374.88	372.35	378.15	383.12	359.87	351.43	347.17	346.39
Memo items:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
International bunkers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Aviation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Multilateral operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NC
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										
Indirect N2O										
Indirect CO2 (3)										

## Emission trends (CH<sub>4</sub>) (Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2008	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	51.74	50.47	53.74	49.43	46.12	43.38	-71.11
A. Fuel combustion (sectoral approach)	13.37	14.70	15.94	16.41	15.88	15.78	-65.32
Energy industries	1.12	1.17	1.20	0.97	0.86	0.88	74.56
Manufacturing industries and construction	0.29	0.25	0.25	0.24	0.20	0.22	-66.08
3. Transport	1.90	1.52	1.56	1.18	1.15	1.10	-51.22
4. Other sectors	10.05	11.75	12.93	14.03	13.67	13.58	-67.74
5. Other	NO	NO 25.77	NO	NO 22.02	NO	NO 27.60	72.62
B. Fugitive emissions from fuels	38.37	35.77	37.80	33.02	30.24	27.60	-73.62
Solid fuels	3.37	3.05	2.93	2.78	2.80	2.66	-94.47
Oil and natural gas and other emissions from energy production	34.99	32.72	34.87	30.23	27.44	24.94	-55.87
C. CO2 transport and storage	2.04	1.00	2.02	2.00	1.60	1.74	27.70
2. Industrial processes	2.04	1.89	2.02	2.00	1.69	1.74	37.79
A. Mineral industry	1.02	1.71	1.00	1 70	1 40	1.62	00.22
B. Chemical industry	1.83	1.71	1.80	1.78	1.48	1.63	99.32
C. Metal industry	0.21	0.19	0.22	0.22	0.21	0.11 NO	-74.95
D. Non-energy products from fuels and solvent use	NO	NO	NO	NO	NO	NO	
E. Electronic industry							
F. Product uses as ODS substitutes	NO	NO	NO	NO	NO	NO	
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	
H. Other	NO	NO	NO 109.26	NO	NO	NO	52.45
3. Agriculture	113.31	109.38	108.36	108.35	110.34	112.95	-53.45
A. Enteric fermentation	70.89	69.89	69.25	69.35	71.72	73.93	-53.92
B. Manure management	41.73	38.76	38.57	38.27	37.81	38.30	-50.36
C. Rice cultivation	0.68	0.73	0.54	0.73	0.80	0.71	-78.05
D. Agricultural soils	NA NO	NA	NA NO	NA	NA NO	NA	
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	
G. Liming							
H. Urea application							
Other carbon-containing fertilizers     Other	NO	NO	NO	NO	NO	NO	
4. Land use, land-use change and forestry	0.49	0.73	0.37	0.93	1.42	0.47	-52.38
A. Forest land	0.27	0.75	0.28	0.66	0.54	0.39	-43.03
B. Cropland	0.07	0.04	0.01	0.07	0.05	0.04	-19.80
C. Grassland	0.15	0.43	0.07	0.21	0.84	0.05	-81.85
D. Wetlands	NO	NO	NO	NO	NO	NO	01.00
E. Settlements	NO	NO	NO	NO	NO	NO	
F. Other land	NO	NO	NO	NO	NO	NO	
G. Harvested wood products		-1.0		-1.0			
H. Other	NA	NA	NA	NA	NA	NA	
5. Waste	174.51	170.95	166.01	160.94	161.52	154.50	14.15
A. Solid waste disposal	152.19	149.64	145.72	140.46	141.80	133.87	41.83
B. Biological treatment of solid waste	1.91	2.61	3.00	4.20	3.94	5.04	2,419.63
C. Incineration and open burning of waste	0.01	0.01	0.01	0.01	0.01	0.02	36.91
D. Waste water treatment and discharge	20.40	18.69	17.28	16.27	15.76	15.58	-61.77
E. Other	NO	NO	NO	NO	NO	NO	
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	
Total CH4 emissions without CH4 from LULUCF	341.60	332.70	330.13	320.72	319.67	312.56	-40.96
Total CH4 emissions with CH4 from LULUCF	342.09	333.43	330.50	321.65	321.09	313.04	-40.98
Memo items:							
International bunkers	0.01	0.00	0.00	0.00	0.00	0.00	12.67
Aviation	0.01	0.00	0.00	0.00	0.00	0.00	12.67
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Multilateral operations	NO NO	NO	NO NO	NO NO	NO NO	NO NO	
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							
Indirect N2O							
Indirect CO2 (3)							

 $Abbreviations: \ CRF = common \ reporting \ format, \ LULUCF = land \ use, \ land-use \ change \ and \ forest land \ use, \ land-use \ change \ and \ forest land \ use, \ land-use \ lan$ 

<sup>&</sup>lt;sup>a</sup> 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 Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

Table 1(c)Emission trends (N<sub>2</sub>O) (Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year a	1990	1991	1992	1993	1994	1995	1996	1997
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt								
1. Energy	1.79	1.60			1.25	1.21	1.24	1.25	1.25
A. Fuel combustion (sectoral approach)	1.78	1.59	1.39		1.24	1.20	1.24	1.24	1.25
Energy industries	0.27	0.22			0.24	0.23	0.23	0.24	0.25
Manufacturing industries and construction	0.17	0.17	0.12		0.07	0.07	0.14	0.13	0.14
3. Transport	0.49	0.44	0.37		0.34	0.34	0.34	0.34	0.35
4. Other sectors	0.85	0.76			0.59	0.57	0.53	0.54	0.52
5. Other	NO	NO	NO		NO	NO	NO	NO	NO
B. Fugitive emissions from fuels	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
1. Solid fuels	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE	NO, NA, IE
2. Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. CO2 transport and storage									
2. Industrial processes	15.28	10.88	5.70	3.38	4.90	7.03	4.95	6.77	6.49
A. Mineral industry									
B. Chemical industry	14.65	10.37	5.24		4.34	6.56		6.21	5.98
C. Metal industry	NO	NO	NO		NO	NO	NO	NO	NO
D. Non-energy products from fuels and solvent use	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	0.63	0.52	0.46		0.57	0.47	0.60	0.56	0.51
H. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Agriculture	19.13	14.57	10.72	9.27	8.54	9.69	9.18	9.32	9.58
A. Enteric fermentation									
B. Manure management	2.98	2.75	2.54	2.15	1.89	1.69	1.70	1.73	1.67
C. Rice cultivation									
D. Agricultural soils	16.10	11.83	8.18	7.11	6.65	8.00	7.48	7.59	7.91
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	0.05	NO							
G. Liming									
H. Urea application									
I. Other carbon containing fertlizers									
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	0.07	0.13	0.12	0.14	0.17	0.19	0.17	0.17	0.19
A. Forest land	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
B. Cropland	0.01	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.08
C. Grassland	0.02	0.04	0.03	0.04	0.06	0.07	0.05	0.04	0.04
D. Wetlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Settlements	0.00	0.01	0.01	0.02	0.02	0.03	0.02	0.02	0.02
F. Other land	NO	NO	NO	NO	0.00	0.00	0.00	0.00	0.00
G. Harvested wood products									
H. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
5. Waste	0.93	0.89	0.85	0.86	0.81	0.77	0.74	0.73	0.75
A. Solid waste disposal									
B. Biological treatment of solid waste	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
C. Incineration and open burning of waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Waste water treatment and discharge	0.91	0.87	0.84	0.84	0.79	0.76	0.72	0.70	0.73
E. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total direct N2O emissions without N2O from LULUCF	37.12	27.94	18.66	14.77	15.49	18.70	16.11	18.06	18.08
Total direct N2O emissions with N2O from LULUCF	37.19	28.07	18.78		15.66	18.90	16.28	18.24	18.27
Memo items:									
International bunkers	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02
Aviation	0.01	0.01	0.01		0.01	0.02		0.02	0.02
Navigation	NE, NO	NE, NO	NE, NO		NE, NO	NE, NO		NE, NO	NE, NO
Multilateral operations	NO	NO	NO		NO	NO		NO	NO
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									
Indirect N2O	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO

Table 1(c) Emission trends ( $N_2O$ ) (Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	1.28	1.32	1.25	1.23	1.26	1.25	1.21	1.22	1.25	1.26
A. Fuel combustion (sectoral approach)	1.28	1.32		1.22	1.26	1.25	1.21	1.22	1.25	1.26
Energy industries	0.25	0.25	0.23	0.22	0.20	0.21	0.22	0.24		0.24
Manufacturing industries and construction	0.14	0.15	0.17	0.17	0.20	0.20	0.20	0.22	0.22	0.21
3. Transport	0.38	0.42	0.38	0.38	0.39	0.38	0.38	0.39	0.39	0.41
4. Other sectors	0.51	0.50		0.45	0.47	0.46	0.41	0.38	0.42	0.40
5. Other	NO	NC								
B. Fugitive emissions from fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. Solid fuels	NO, NA, IE									
Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. CO2 transport and storage										
2. Industrial processes	5.55	4.87	6.27	6.90	4.47	4.96	6.63	6.68	5.61	3.99
A. Mineral industry										
B. Chemical industry	5.02	4.40	5.79	6.29	4.04	4.27	5.70	5.59	4.61	2.92
C. Metal industry	NO	NC								
D. Non-energy products from fuels and solvent use	NO	NC								
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	0.52	0.47	0.48	0.61	0.42	0.68	0.93	1.08	1.00	1.07
H. Other	NO									
3. Agriculture	10.26	10.26	9.93	10.85	10.92	10.32	11.45	10.61	10.77	10.66
A. Enteric fermentation										
B. Manure management	1.71	1.75	1.75	1.68	1.70	1.70	1.61	1.54	1.50	1.50
C. Rice cultivation										
D. Agricultural soils	8.55	8.51	8.18	9.17	9.22	8.62	9.84	9.06	9.27	9.15
E. Prescribed burning of savannas	NO									
F. Field burning of agricultural residues	NO									
G. Liming										
H. Urea application										
I. Other carbon containing fertlizers										
J. Other	NO									
4. Land use, land-use change and forestry	0.20	0.18	0.22	0.21	0.22	0.22	0.21	0.23	0.19	0.22
A. Forest land	0.04	0.04	0.05	0.05	0.06	0.06	0.05	0.07	0.05	0.06
B. Cropland	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.10
C. Grassland	0.05	0.02	0.04	0.03	0.03	0.03	0.02	0.02	0.00	0.02
D. Wetlands	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Settlements	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
F. Other land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G. Harvested wood products										
H. Other	NA									
5. Waste	0.74	0.77	0.82	0.80	0.81	0.90	0.86	0.91	0.90	0.88
A. Solid waste disposal										
B. Biological treatment of solid waste	0.02	0.02	0.02	0.02	0.03	0.04	0.02	0.04	0.04	0.05
C. Incineration and open burning of waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Waste water treatment and discharge	0.72	0.74	0.80	0.77	0.77	0.85	0.83	0.86	0.85	0.83
E. Other	NO									
6. Other (as specified in the summary table in CRF)	NO									
Total direct N2O emissions without N2O from LULUCF	17.83	17.22	18.27	19.77	17.45	17.42	20.15	19.41	18.53	16.79
Total direct N2O emissions with N2O from LULUCF	18.03	17.40	18.49	19.98	17.67	17.64	20.36	19.65	18.72	17.01
Memo items:										
International bunkers	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Aviation	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Navigation	NE, NO	NE, NO		NE, NO						
Multilateral operations	NO	NO		NO	NO	NO	NO	NO	NO	NC
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										
Indirect N2O	NE, NO	NE, NC								
Indirect CO2 (3)										

Table 1(c)
Emission trends (N<sub>2</sub>O)
(Sheet 3 of 3)

	2008	2009	2010	2011	2012	2013	Change from
							base to latest
GREENHOUSE GAS SOURCE AND SINK CATEGORIES							reported year
1. Energy	1.28	1.28	1.31	1.27	1.17	1.27	-28.72
A. Fuel combustion (sectoral approach)	1.28	1.28	1.31	1.27	1.17	1.27	
Energy industries	0.26	0.25	0.25	0.22	0.21	0.21	
Manufacturing industries and construction	0.20	0.19	0.18	0.18	0.17	0.17	
3. Transport	0.42	0.42	0.41	0.39	0.38	0.36	
4. Other sectors	0.41	0.41	0.47	0.48	0.42	0.53	
5. Other	NO	NO	NO	NO	NO	NO	
B. Fugitive emissions from fuels	0.00	0.00	0.00	0.00	0.00	0.00	
Solid fuels	NO, NA, IE	NO, NA, IE	NO, NA, IE			NO, NA, IE	
2. Oil and natural account other arrivaines from a construction	0.00	0.00	0.00	0.00	0.00	0.00	60.75
Oil and natural gas and other emissions from energy production	0.00	0.00	0.00	0.00	0.00	0.00	-69.75
C. CO2 transport and storage	1.12	1.00	0.88	1.01	1.02	1 15	-92.49
2. Industrial processes	1.12	1.00	0.88	1.01	1.02	1.15	-92.49
A. Mineral industry	0.02	0.05	0.02	0.05	0.07	0.12	00.12
B. Chemical industry	0.02 NO	0.05 NO	0.03 NO	0.05	0.07 NO	0.13 NO	
C. Metal industry				NO			
D. Non-energy products from fuels and solvent use	NO	NO	NO	NO	NO	NO	
E. Electronic industry							
F. Product uses as ODS substitutes	1.11	0.05	0.05	0.05	0.05	1.02	60.76
G. Other product manufacture and use	1.11	0.95	0.85	0.96	0.95	1.02	
H. Other	NO	NO	NO	NO	NO	NO	
3. Agriculture	11.01	10.06	9.80	10.39	10.22	11.21	-41.40
A. Enteric fermentation							
B. Manure management	1.45	1.39	1.38	1.34	1.34	1.35	-54.59
C. Rice cultivation							
D. Agricultural soils	9.56	8.67	8.42	9.05	8.88	9.86	
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	NO	NO	NO	NO	NO	NO	
G. Liming							
H. Urea application							
I. Other carbon containing fertlizers							
J. Other	NO	NO	NO	NO	NO	NO	
4. Land use, land-use change and forestry	0.19	0.22	0.18	0.21	0.27	0.18	
A. Forest land	0.05	0.04	0.04	0.06	0.05	0.05	
B. Cropland	0.10	0.09	0.09	0.09	0.09	0.09	
C. Grassland	0.01	0.04	0.01	0.02	0.08	0.00	
D. Wetlands	0.00	0.00	0.00	0.00	0.00	0.00	
E. Settlements	0.03	0.04	0.04	0.04	0.04	0.04	
F. Other land	0.00	0.00	0.00	0.00	0.00	0.00	
G. Harvested wood products							
H. Other	NA	NA	NA	NA	NA	NA	
5. Waste	0.88	0.89	0.88	0.87	0.87	0.87	-5.50
A. Solid waste disposal							
B. Biological treatment of solid waste	0.06	0.08	0.08	0.09	0.10	0.10	
C. Incineration and open burning of waste	0.00	0.01	0.01	0.01	0.01	0.01	
D. Waste water treatment and discharge	0.82	0.81	0.78	0.77	0.77	0.77	
E. Other	NO	NO	NO	NO	NO	NO	
6. Other (as specified in the summary table in CRF)	NO	NO	NO	NO	NO	NO	
Total direct N2O emissions without N2O from LULUCF	14.30	13.23	12.88	13.53	13.28	14.50	
Total direct N2O emissions with N2O from LULUCF	14.49	13.45	13.05	13.74	13.54	14.69	-60.51
Memo items:							
International bunkers	0.02	0.02	0.02	0.02	0.01	0.01	
Aviation	0.02	0.02	0.02	0.02	0.01	0.01	
Navigation	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Multilateral operations	NO	NO	NO	NO	NO	NO	
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							
Indirect N2O	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Indirect CO2 (3)							

 $Abbreviations: \ CRF = common \ reporting \ format, \ LULUCF = land \ use, \ land-use \ change \ and \ fore$ 

<sup>&</sup>lt;sup>a</sup> 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 Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

Table 1(d)
Emission trends (HFCs, PFCs and SF<sub>6</sub>)
(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year a	1990	1991	1992	1993	1994	1995	1996	1997
GLEENIOUSE GLES GUID SU GREENING SILVIN CHIEDOURES	kt								
Emissions of HFCs and PFCs - (kt CO2 equivalent)	371.08	375.72	323.60	183.75	198.30	230.77	264.37	267.31	333.12
Emissions of HFCs - (kt CO2 equivalent)	NO	NO	NO	3.71	3.71	18.58	41.65	54.51	120.84
HFC-23	NO	NO	NO	NO	NO	NO	NO	NO	0.00
HFC-32	NO	NO	NO	NO	NO	NO	NO	NO	0.00
HFC-41	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-43-10mee	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-125	NO	NO	NO	NO	NO	NO	NO	0.00	0.00
HFC-134	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-134a	NO	NO	NO	0.00	0.00	0.01	0.03	0.03	0.07
HFC-143	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-143a	NO	NO	NO	NO	NO	NO	NO	0.00	0.00
HFC-152	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-152a	NO	NO	NO	NO	NO	NO	NO	NO	0.00
HFC-161	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-227ea	NO	NO	NO	NO	NO	NO	0.00	0.00	0.00
HFC-236cb	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236ea	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236fa	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245ca	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245fa	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-365mfc	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of HFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of PFCs - (kt CO2 equivalent)	371.08	375.72	323.60	180.04	194.59	212.19	222.72	212.81	212.28
CF <sub>4</sub>	0.05	0.05	0.04	0.02	0.02	0.03	0.03	0.03	0.03
$C_2F_6$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$C_3F_8$	NO	NO	NO	NO	NO	NO	NO	NO	0.00
$C_4F_{10}$	NO	NO	NO	NO	NO	NO	NO	NO	NO
c-C <sub>4</sub> F <sub>8</sub>	NO	NO	NO	NO	NO	NO	NO	NO	NO
$C_5F_{12}$	NO	NO	NO	NO	NO	NO	NO	NO	NO
$C_6F_{14}$	NO	NO	NO	NO	NO	NO	NO	NO	NO
C10F18	NO	NO	NO	NO	NO	NO	NO	NO	NO
c-C3F6	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of PFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of SF6 - (kt CO2 equivalent)	6.15	10.89	12.26	19.22	31.23	39.09	52.04	64.13	79.63
SF <sub>6</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO

Table 1(d)
Emission trends (HFCs, PFCs and SF<sub>6</sub>)
(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Emissions of HFCs and PFCs - (kt CO2 equivalent)	466.51	660.04	556.56	622.79	719.06	834.34	973.84	1,084.53	951.85	1.037.81
Emissions of HFCs - (kt CO2 equivalent)  Emissions of HFCs - (kt CO2 equivalent)	202.78	373.00	273.44	355.94	447.15	579.92	704.42	804.02	948.67	1,037.81
HFC-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC-25	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
HFC-52 HFC-41	0.00 NO	NO	NO	NO	NO	0.01 NO	NO	NO	NO	NO
HFC-41 HFC-43-10mee	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-125	0.01	0.02	0.02	0.02	0.03	0.04	0.05	0.04	0.06	0.07
HFC-134	NO	NO	NO	NO	NO	NO	NO	NO	NO 0.24	NO
HFC-134a	0.09	0.16	0.09	0.13	0.12	0.19	0.24	0.30	0.34	0.32
HFC-143	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-143a	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06
HFC-152	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-152a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
HFC-161	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-227ea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
HFC-236cb	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236ea	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236fa	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245ca	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245fa	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-365mfc	NO	NO	NO	NO	NO	0.01	0.01	0.03	0.04	0.04
Unspecified mix of HFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of PFCs - (kt CO2 equivalent)	263.73	287.03	283.11	266.85	271.91	254.41	269.43	280.52	3.18	4.54
CF <sub>4</sub>	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	NO	NO
$C_2F_6$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NO
$C_3F_8$	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$C_4F_{10}$	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
c-C <sub>4</sub> F <sub>8</sub>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
$C_sF_{12}$	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
$C_6F_{14}$	0.00	0.01	NO	NO	NO	NO	NO	NO	NO	NO
C10F18	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
c-C3F6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of PFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of SF6 - (kt CO2 equivalent)	93.64	75.47	84.04	82.96	66.71	78.40	95.70	94.26	106.94	121.16
SF <sub>6</sub>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

 $\label{eq:Table 1} Table\ 1(d) \\ \textbf{Emission trends}\ (\textbf{HFCs}, \textbf{PFCs and SF}_6) \\ (\textbf{Sheet 3 of 3})$ 

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2008	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
Emissions of HFCs and PFCs - (kt CO2 equivalent)	1,168.67	1,121.86	1,224.53	1,347.45	1,185.80	1,281.13	245.24
Emissions of HFCs - (kt CO2 equivalent)	1,163.87	1,118.16	1,223.01	1,345.29	1,184.08	1,279.44	
HFC-23	0.00	0.00	0.00	0.00	0.00	0.00	
HFC-32	0.02	0.01	0.02	0.02	0.01	0.02	
HFC-41	NO	NO	NO	NO	NO	NO	
HFC-43-10mee	NO	NO	NO	NO	NO	NO	
HFC-125	0.08	0.08	0.09	0.10	0.08	0.09	
HFC-134	NO	NO	NO	NO	NO	NO	
HFC-134a	0.37	0.34	0.37	0.41	0.36	0.42	
HFC-143	NO	NO	NO	NO	NO	NO	
HFC-143a	0.06	0.06	0.07	0.08	0.07	0.07	
HFC-152	NO	NO	NO	NO	NO	NO	
HFC-152a	0.00	0.00	0.00	0.00	0.00	0.00	
HFC-161	NO	NO	NO	NO	NO	NO	
HFC-227ea	0.01	0.01	0.01	0.01	0.01	0.01	
HFC-236cb	NO	NO	NO	NO	NO	NO	
HFC-236ea	NO	NO	NO	NO	NO	NO	
HFC-236fa	NO	NO	NO	0.00	0.00	0.00	
HFC-245ca	NO	NO	NO	NO	NO	NO	
HFC-245fa	NO	NO	NO	NO	NO	NO	
HFC-365mfc	0.04	0.04	0.03	0.03	0.03	0.04	
Unspecified mix of HFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	
Emissions of PFCs - (kt CO2 equivalent)	4.80	3.70	1.52	2.16	1.72	1.69	-99.54
CF <sub>4</sub>	NO	NO	NO	NO	NO	NO	
$C_2F_6$	0.00	0.00	NO	0.00	NO	0.00	-99.97
$C_3F_8$	0.00	0.00	0.00	0.00	0.00	0.00	
$C_4F_{10}$	NO	NO	NO	NO	NO	NO	
$c-C_4F_8$	NO	NO	NO	NO	NO	NO	
$C_5F_{12}$	NO	NO	NO	NO	NO	NO	
$C_6F_{14}$	NO	NO	NO	NO	NO	NO	
C10F18	NO	NO	NO	NO	NO	NO	
c-C3F6	NO	NO	NO	NO	NO	NO	
Unspecified mix of PFCs(4) - (kt CO <sub>2</sub> equivalent)	NO	NO	NO	NO	NO	NO	
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	
Emissions of SF6 - (kt CO2 equivalent)	108.21	90.54	98.72	106.92	120.20	122.92	1,899.92
SF <sub>6</sub>	0.00	0.00	0.00	0.00	0.01	0.01	1,899.92
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	
NF3	NO	NO	NO	NO	NO	NO	

 $\label{lower} \textit{Abbreviations}: \textit{CRF} = \textit{common reporting format}, \textit{LULUCF} = \textit{land use}, \textit{land-use change and forestry}.$ 

ŀ	Documentation Box:
ı	

<sup>&</sup>lt;sup>a</sup> 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 Conference of the Parties. For these Parties, this different base year is used to calculate the percentage change in the final column of this table.

<sup>&</sup>lt;sup>c</sup>Enter actual emissions estimates. If only potential emissions estimates are available, these should be reported in this table and an indication for this be provided in the documentation box. Only in these rows are the emissions expressed as CO2 equivalent emissions.

<sup>&</sup>lt;sup>d</sup>In accordance with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual inventories", 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 kt of CO2 equivalent and that appropriate notation keys should be entered in the cells for the individual chemicals.)

Table 2(a) HUN\_BR2\_v1.0

# Description of quantified economy-wide emission reduction target: base year

Party	Hungary				
Base year /base period	1990				
Emission reduction target	% of base year/base period	% of 1990 <sup>b</sup>			
	20.00	20.00			
Period for reaching target	BY-2020				

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> Optional.

Table 2(b) HUN\_BR2\_v1.0

# Description of quantified economy-wide emission reduction target: gases and sectors ${\bf covered}^a$

Ga	ses covered	Base year for each gas (year):
CO <sub>2</sub>		1990
CH <sub>4</sub>		1990
N <sub>2</sub> O		1990
HFCs		1990
PFCs		1990
SF <sub>6</sub>		1990
NF <sub>3</sub>		
Other Gases (specify)	)	
Sectors covered <sup>b</sup>	Energy	Yes
'	Transport <sup>f</sup>	Yes
	Industrial processes <sup>g</sup>	Yes
	Agriculture	Yes
	LULUCF	No
	Waste	Yes
	Other Sectors (specify)	'

Abbreviations: LULUCF = land use, land-use change and forestry.

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> More than one selection will be allowed. If Parties use sectors other than those indicated above, the explanation of how these sectors relate to the sectors defined by the IPCC should be provided.

f Transport is reported as a subsector of the energy sector.

<sup>&</sup>lt;sup>g</sup> Industrial processes refer to the industrial processes and solvent and other product use sectors.

Table 2(c) HUN\_BR2\_v1.0

# Description of quantified economy-wide emission reduction target: global warming potential values $(GWP)^a$

Gases	GWP values <sup>b</sup>				
CO <sub>2</sub>	4th AR				
CH <sub>4</sub>	4th AR				
$N_2O$	4th AR				
HFCs	4th AR				
PFCs	4th AR				
SF <sub>6</sub>	4th AR				
NF <sub>3</sub>					
Other Gases (specify)					

Abbreviations: GWP = global warming potential

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> Please specify the reference for the GWP: Second Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) or the Fourth Assessment Report of the IPCC.

Table 2(d) HUN\_BR2\_v1.0

Description of quantified economy-wide emission reduction target: approach to counting emissions and removals from the LULUCF sector  $^a$ 

Role of LULUCF	LULUCF in base year level and target	Excluded
	Contribution of LULUCF is calculated using	

Abbreviation: LULUCF = land use, land-use change and forestry.

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

Table 2(e)I HUN\_BR2\_v1.0

# Description of quantified economy-wide emission reduction target: market-based mechanisms under the Convention $^a$

Market-based mechanisms	Possible scale of contributions			
under the Convention	(estimated kt $CO_2$ eq)			
CERs				
ERUs				
AAUs <sup>i</sup>				
Carry-over units <sup>j</sup>				
Other mechanism units under the Convention (specify) <sup>d</sup>				

Abbreviations: AAU = assigned amount unit, CER = certified emission reduction, ERU = emission reduction unit.

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

 $<sup>^{\</sup>it d}$  As indicated in paragraph 5(e) of the guidelines contained in annex I of decision 2/CP.17 .

<sup>&</sup>lt;sup>i</sup> AAUs issued to or purchased by a Party.

<sup>&</sup>lt;sup>j</sup> Units carried over from the first to the second commitment periods of the Kyoto Protocol, as described in decision 13/CMP.1 and consistent with decision 1/CMP.8.

Table 2(e)II HUN\_BR2\_v1.0

# Description of quantified economy-wide emission reduction target: other market-based mechanisms<sup>a</sup>

Other market-based mechanisms	Possible scale of contributions
(Specify)	(estimated kt CO <sub>2</sub> eq)

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

Description of quantified economy-wide emission reduction target: any other information <sup>a,b</sup>										

HUN\_BR2\_v1.0

Custom Footnotes

Table 2(f)

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> This information could include information on the domestic legal status of the target or the total assigned amount of emission units for the period for reaching a target. Some of this information is presented in the narrative part of the biennial report.

Table 3

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

			1		T	T		T	
Name of mitigation action <sup>a</sup>	Sector(s) affected <sup>b</sup>	GHG(s) affected	Objective and/or activity affected	Type of instrument <sup>c</sup>	Status of implementation <sup>d</sup>	Brief description <sup>e</sup>	Start year of implementation	Implementing entity or entities	Estimate of mitigation impact (n cumulative, in kt CO 2 eq)
National Forest Strategy for increasing forest area	Forestry/LULUC F	CO <sub>2</sub>	Increasing forest area	Economic	Planned	The National Forest Strategy 2015-2030 sets the tegret to 2050: at least maintaining the current level of forestation but preferably increase its share to 27% of total surface of Hungary up to 2050. Neither the quantity nor the quality and value of the forests must not decrease. Use of wood in the society, as an environmentally friendly raw material, shall be encouraged. The Forest management shall ensure that the increased demands for wood would be met, without endangering sustainability.		Ministry of Agriculture	-704
Rural development for sustainable and modern agriculture*	Agriculture	CO <sub>2</sub>	Removing obstacles that hinder farmers and producers through the amendment of legislation and regulations.	Regulatory	Implemented	Darány Ignáci Plan: The first pillar aims at removing obstacles that hinder farmers and producers through the amendment of legislation and regulations. The second plans to reduce bureaucracy through the setting up of customerfriendly offices and by reducing administrative requirements. The third pillar focuses on changing people's way of thinking and on providing training courses. The fourth pillar will support rural areas in Hungary by launching jointly financed European Union and Hungarian tenders for rural development projects. The fifth and final pillar includes the preparation, launching and running of national programmes, including for example the Farmstead Programme and the Demographic Land Programme.		Ministry for Rural Development, State Secretariat for Rural Development	
Reduction of nitrate emission in waters and N-cycle*	Agriculture	N <sub>2</sub> O	Protection of waters against pollution caused by nitrates from agricultural sources.	Regulatory	Implemented	New Nitrate Action Programme: the earlier Government Decision No. 49/2001. (IV. 3.) on protection against the nitrate contamination of waters from agricultural sources (Nitrate Decree for short) referred to in the previous report was replaced and partly superseded by Government Decree 27/2006. (II. 7.), amended by Government Decree 81/2007. (IV.25.). The new decree also identifies the nitrate sensitive areas, contains an extended list of settlements in these areas (67 settlements were deleted from the list, 320 added), states the general rules of protection against nitrate pollution and prescribes an overall, coherent, nation-wide action plan.	2013	Ministry for Rural Development, Agricultural and Rural Development Agency	

Table 3

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action <sup>a</sup>	Sector(s) affected <sup>b</sup>	GHG(s) affected	Objective and/or activity affected	Type of instrument <sup>c</sup>	Status of implementation <sup>d</sup>	Brief description <sup>e</sup>	Start year of implementation	Implementing entity or entities	Estimate of micumulative	e, in kt CO	
Forest-environmental and agricultural payments of European Agricultural Fund for Rural Development (EAFRD) and Common Agricultural Policy (CAP) *	Agriculture, Forestry/LULUC F	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	Competitiveness of agriculture, forestry and food industry; Improvement of the condition of the environment; Quality of life in rural areas	Economic	Implemented	The Rural Development Programme for the period of 2014 - 2020 puts particular emphasis on actions related to restoring, preserving and enhancing ecosystems, promoting social inclusion, poverty reduction and economic development in rural areas and promoting food chain organisations and risk management in agriculture.  Main obstacles are as follows: Mitigation of agricultural emissions with partial change of nitrogen fertilizer utilization and cultivations change Support for perennial herbaceous energy plantation Complementary financing to support the plantation of energy crops Climate protection by efficient manure management and biogas	2015	Ministry of Agriculture	2020		
Ányos Jedlik Plan*	Transport	CO <sub>2</sub> , N <sub>2</sub> O	promoting electro- mobility		Implemented	The Plan, a blueprint for the regulatory and support framework has been formulated to promote electromobility in Hungary through, among others, the establishment of a country-wide network of charging stations and the streamlining of taxation and legal requirements of electric cars.	2015	Ministry for National Economy			
National Transport Infrastructure Development Strategy *	Transport	CO <sub>2</sub> , N <sub>2</sub> O	development of transport infrastructure with a focus on promoting sustainible transport	Economic	Implemented	The main task of the NTS is to determine the transport strategy until 2030 with an outlook until 2050 and with a first phase until 2020 with special regard to the supports for transport development of EU budget cycles beginning in 2014.	2014	Hungarian Transport Administration			
Transport Energy- Efficiency Improving Action Plan	Transport	CO <sub>2</sub> , N <sub>2</sub> O	increasing energy efficiency in transport sector	Economic	Planned	Transport Energy-Efficiency Improving Action Plan purposes is the determination of energetic targets to be enforced in the National Transport Strategy (NTS) and the means of their achievement, or the working out of the short and medium term energy efficiency action plan of transport.  The test of their action of the short and medium term energy efficiency action plan of transport.					
National Intelligent Transport Systems Strategy	Transport	CO <sub>2</sub> , N <sub>2</sub> O	increasing the efficiency of the transport system		Planned	The task of the intelligent transport systems (ITS) is to increase the efficiency of the transport system (e.g. capacity exploitation, energy efficiency, transportation safety and security) by integrating information technology.		Hungarian Transport Administration	-959.	00	

Table 3

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action <sup>a</sup>	Sector(s) affected <sup>b</sup>	GHG(s) affected	Objective and/or activity affected	Type of instrument <sup>c</sup>	Status of implementation <sup>d</sup>	Brief description <sup>e</sup>	Start year of implementation	Implementing entity or entities	Estimate of n cumulati	-	
National Energy Strategy*	Cross-cutting	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	security of energy supply; modernisation of electric power stations and grid; promoting RES, energy efficiency and sustainibilty; reduction of carbon intensity		Implemented	The goal of the strategy is to increase security of energy supply, competitiveness, the sustainability of the sector, energy efficiency, energy conservation, the share of renewable energy and nuclear energy in the energy mix until 2030.	2011	Ministry of National Development	2020	1	2000
National Renewable Energy Action Plan*	Cross-cutting	CH <sub>4</sub> , CO <sub>2</sub> , N <sub>2</sub> O	improving the share of RES and identifies the key areas of intervention		Implemented	The action plan sets the target of 14,65% of renewable energy share by the year 2020.	2010	Ministry of National Development			
3rd National Energy Efficiency Action Plan*	Cross-cutting	CH <sub>4</sub> , CO <sub>2</sub> , N <sub>2</sub> O	promoting an imposing reduction in primary energy consumption in all sectors of the economy	Other (Regulatory)	Implemented	The major goal of 3rd NEEAP is to achieve an imposant reduction in primary energy consumption in all sectors of the economy, which means a significant reduction in building, residential and transport sector as well.	2015	Ministry of National Development			-1,464.00
Economy Greening Scheeme (EGS)*	Cross-cutting	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	supporting RES, R&D&I and demonstration projects on field of transition to low emission economy	Fiscal	Implemented	The scheme can offer funding for research, innovation and demonstration projects in the field of emission reduction; energy production for renewable energy sources; support of transition for low emission transport and to fund the 50% of the national contribution to the Green Climate Fund.	2007	Ministry for National Economy			
Green Investment Scheme (GIS)*	Cross-cutting	CH <sub>4</sub> , CO <sub>2</sub> , N <sub>2</sub> O	implementing environmental programs related to energy efficiency and RES	Fiscal	Implemented	The scheme is aimed to foster green economic development in Hungary by implementing environmental programs related to energy efficiency and renewable energy sources using revenues from selling the country's Kyoto Units.	2007	Ministry of National Development			
Green Economy Financing Scheme (GEFS)*	Cross-cutting	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	implementing environmental programs related to energy efficiency and RES	Fiscal	Implemented	The scheme is aimed to foster green economic development in Hungary by implementing environmental programs related to energy efficiency and renewable energy sources using revenues from selling the country's Kyoto Units.	2014	Ministry of National Development			
"Warmth of Home" Programme*	Energy	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	promoting energy efficiency in domestic sector	Economic	Implemented	The aim of the programme is to further reduce the households' energy costs, from domestic budgetary resources, by replacing outdated household machines, boilers, doors and windows.	2014	Ministry of National Development			

Table 3

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action <sup>a</sup>	Sector(s) affected <sup>b</sup>	GHG(s) affected	Objective and/or activity affected	Type of instrument c	Status of implementation <sup>d</sup>	Brief description <sup>e</sup>	Start year of implementation	Implementing entity or entities	Estimate of m	-	
Extension and enlargement of Paks Nuclear Power Plant*	Energy	CH <sub>4</sub> , CO <sub>2</sub> , N <sub>2</sub> O	extension of the technical lifetime and capacity enlargement	Economic	Adopted	In accordance with the National Energy Strategy, it is assumed that two new units of approximately 1,000 MW each will be put into operation by 2030, i.e. the 4 Paks units currently in operation (2,000 MW) and the two new units (2,000 MW) will be operating parallel between 2032 and 2037 (the four current Paks units will be decommissioned by 2037).		Ministry of National Development	2020		2030
National Waste Management Plan (2014- 2020)*	Waste management/wast e	CH <sub>4</sub> , CO <sub>2</sub>	developing sepearate collection and recycling, decreasing lanfilling	Other (Regulatory)	Implemented	The main objectives of the plan is to increase recovery and recycling rates, reduce waste, decrease landfilling, develop separate collection and to separate reusable components.	2014	Ministry of Agriculture			
National Implementation Programme on Waste Water Collection and Treatment*	Waste management/wast e	CH <sub>4</sub> , N <sub>2</sub> O	improving waste water treatment	Other (Regulatory)	Implemented	The aim of the programme is to improve the treatment of waste water collected with public utility sewage systems, the sewerage of settlements and regions and to increase the recovery rate of wate water.	2014	Ministry of Interior			
National Waste Law*	Waste management/wast e	CH <sub>4</sub> , CO <sub>2</sub>	introduction of landfill tax, improving separate household waste collection and declearing principles of waste treatment	Other (Economic)	Implemented	The basis of Hungary's waste management policy is – the Act on Waste (Act No. CLXXXV in 2012) and its implementing regulations. This Act implements the Waste Framework Directive (2008/98/EC) of the European Union and have targets on the  • reduction of biodegradable residual wastes landfilled  • preparation for reuse and recycling on the different waste materials  • waste treatment		Ministry of Agriculture			
Promotion of renewables*	Energy	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O		Other (Regulatory)	Implemented	Compulsory take-over of renewable energy on subsidised prices		Ministry of National Development			

Table 3

Progress in achievement of the quantified economy-wide emission reduction target: information on mitigation actions and their effects

Name of mitigation action a  Environment and Energy Efficiency Programme*	Sector(s) affected <sup>b</sup> Cross-cutting	adaptation to the effects of climate change. Development of municipal sewage systems, waste water	Type of instrument <sup>c</sup> Fiscal	Brief description <sup>e</sup> Supporting the adaptation to the effects of climate change. Development of municipal sewage systems, waste water treatment facilities. Development related to waste management. Development related to the protection of nature. Energy efficiency improvements, application of renewables.	ting the adaptation to the effects of change. Development of municipal systems, waste water treatment facilities. pment related to waste management. pment related to the protection of nature. efficiency improvements, application of		Estimate of mits cumulative,	in kt CO 2	
		treatment facilities. Development related to waste management. Development related to the protection of nature. Energy efficiency improvements, application of renewables.							

Note: The two final columns specify the year identified by the Party for estimating impacts (based on the status of the measure and whether an ex post or ex ante estimation is available).

Abbreviations: GHG = greenhouse gas; LULUCF = land use, land-use change and forestry.

<sup>&</sup>lt;sup>a</sup> Parties should use an asterisk (\*) to indicate that a mitigation action is included in the 'with measures' projection.

b To the extent possible, the following sectors should be used: energy, transport, industry/industrial processes, agriculture, forestry/LULUCF, waste management/waste, other sectors, cross-cutting, as appropriate.

<sup>&</sup>lt;sup>c</sup> To the extent possible, the following types of instrument should be used: economic, fiscal, voluntary agreement, regulatory, information, education, research, other.

<sup>&</sup>lt;sup>d</sup> To the extent possible, the following descriptive terms should be used to report on the status of implementation: implemented, adopted, planned.

<sup>&</sup>lt;sup>e</sup> Additional information may be provided on the cost of the mitigation actions and the relevant timescale.

<sup>&</sup>lt;sup>f</sup> Optional year or years deemed relevant by the Party.

Table 4 HUN\_BR2\_v1.0

# Reporting on progress $^{a, b}$

	Total emissions excluding LULUCF	Contribution from LULUCF <sup>d</sup>	Quantity of units f mechanisms unde		Quantity of units from mecha	
Year <sup>c</sup>	(kt CO 2 eq)	(kt CO 2 eq)	(number of units)	(kt CO 2 eq)	(number of units)	$(kt CO_2 eq)$
(1990)	94,222.27	-3,309.07				
2010	65,493.05	-4,024.10				
2011	63,906.33	-3,686.15				
2012	59,986.38	-4,305.02				
2013	57,428.46	-3,438.20				
2014						

 $\label{eq:Abbreviation} Abbreviation: GHG = greenhouse \ gas, \ LULUCF = land \ use, \ land-use \ change \ and \ forestry.$ 

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> For the base year, information reported on the emission reduction target shall include the following: (a) total GHG emissions, excluding emissions and removals from the LULUCF sector; (b) emissions and/or removals from the LULUCF sector based on the accounting approach applied taking into consideration any relevant decisions of the Conference of the Parties and the activities and/or land that will be accounted for; (c) total GHG emissions, including emissions and removals from the LULUCF sector. For each reported year, information reported on progress made towards the emission reduction targets shall include, in addition to the information noted in paragraphs 9(a—c) of the UNFCCC biennial reporting guidelines for developed country Parties, information on the use of units from market-based mechanisms.

<sup>&</sup>lt;sup>c</sup> Parties may add additional rows for years other than those specified below.

d Information in this column should be consistent with the information reported in table 4(a)I or 4(a)II, as appropriate. The Parties for which all relevant information on the LULUCF contribution is reported in table 1 of this common tabular format can refer to table 1.

Table 4(a)I HUN\_BR2\_v1.0

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2013 a,b

	Net GHG emissions/removals from LULUCF categories <sup>c</sup>	Base year/period or reference level value <sup>d</sup>	Contribution from LULUCF for reported year	Cumulative contribution from LULUCF <sup>e</sup>	Accounting approach f
		(kt CO 2 eq	q)		
Total LULUCF					
A. Forest land					
Forest land remaining forest land					
2. Land converted to forest land					
3. Other <sup>g</sup>					
B. Cropland					
Cropland remaining cropland					
2. Land converted to cropland					
3. Other <sup>g</sup>					
C. Grassland					
Grassland remaining grassland					
2. Land converted to grassland					
3. Other <sup>g</sup>					
D. Wetlands					
Wetland remaining wetland					
2. Land converted to wetland					
3. Other <sup>g</sup>					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other <sup>g</sup>					
F. Other land					
Other land remaining other land					
2. Land converted to other land					
3. Other <sup>g</sup>					
Harvested wood products					

 $\label{eq:abbreviations} Abbreviations: GHG = greenhouse \ gas, LULUCF = land \ use, \ land-use \ change \ and \ forestry.$ 

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

b Parties that use the LULUCF approach that is based on table 1 do not need to complete this table, but should indicate the approach in table 2. Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

<sup>&</sup>lt;sup>c</sup> For each category, enter the net emissions or removals reported in the most recent inventory submission for the corresponding inventory year. If a category differs from that used for the reporting under the Convention or its Kyoto Protocol, explain in the biennial report how the value was derived.

d Enter one reference level or base year/period value for each category. Explain in the biennial report how these values have been calculated.

<sup>&</sup>lt;sup>e</sup> If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

<sup>&</sup>lt;sup>f</sup> Label each accounting approach and indicate where additional information is provided within this biennial report explaining how it was implemented, including all relevant accounting parameters (i.e. natural disturbances, caps).

g Specify what was used for the category "other". Explain in this biennial report how each was defined and how it relates to the categories used for reporting under the Convention or its Kyoto Protocol.

Table 4(a)I HUN\_BR2\_v1.0

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2014  $^{\rm a,\,b}$ 

	Net GHG emissions/removals from LULUCF categories c	Base year/period or reference level value <sup>d</sup>	Contribution from LULUCF for reported year	Cumulative contribution from LULUCF <sup>e</sup>	Accounting approach f
		(kt CO 2 eq	v)		
otal LULUCF					
A. Forest land					
Forest land remaining forest land					
2. Land converted to forest land					
3. Other <sup>g</sup>					
B. Cropland					
1. Cropland remaining cropland					
2. Land converted to cropland					
3. Other <sup>g</sup>					
C. Grassland					
Grassland remaining grassland					
2. Land converted to grassland					
3. Other <sup>g</sup>					
D. Wetlands					
Wetland remaining wetland					
2. Land converted to wetland					
3. Other <sup>g</sup>					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other <sup>g</sup>					
F. Other land					
Other land remaining other land					
2. Land converted to other land					
3. Other <sup>g</sup>					
Harvested wood products					

 $\label{eq:abbreviations} Abbreviations: GHG = greenhouse \ gas, \ LULUCF = land \ use, \ land-use \ change \ and \ forestry.$ 

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> Parties that use the LULUCF approach that is based on table 1 do not need to complete this table, but should indicate the approach in table 2. Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

<sup>&</sup>lt;sup>c</sup> For each category, enter the net emissions or removals reported in the most recent inventory submission for the corresponding inventory year. If a category differs from that used for the reporting under the Convention or its Kyoto Protocol, explain in the biennial report how the value was derived.

<sup>&</sup>lt;sup>d</sup> Enter one reference level or base year/period value for each category. Explain in the biennial report how these values have been calculated.

<sup>&</sup>lt;sup>e</sup> If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

f Label each accounting approach and indicate where additional information is provided within this biennial report explaining how it was implemented, including all relevant accounting parameters (i.e. natural disturbances, caps).

g Specify what was used for the category "other". Explain in this biennial report how each was defined and how it relates to the categories used for reporting under the Convention or its Kyoto Protocol.

Table 4(b) HUN\_BR2\_v1.0

# Reporting on progress a, b, c

	Units of market based mechanisms		Ye	ear
	Onus of market basea mechanisms		2013	2014
	V to Durate all amite	(number of units)		
	Kyoto Protocol units	(kt CO <sub>2</sub> eq)		
	4477	(number of units)		
	AAUs	(kt CO2 eq)		
	EDII.	(number of units)		
Kyoto Protocol	ERUs	(kt CO2 eq)		
erotocot units <sup>d</sup>	GER	(number of units)		
шиз	CERs	(kt CO2 eq)		
	GER	(number of units)		
	tCERs	(kt CO2 eq)		
	ICIED	(number of units)		
	ICERs	(kt CO2 eq)		
	Units from market-based mechanisms under the	(number of units)		
	Convention	(kt CO <sub>2</sub> eq)		
Other units d,e		(number of units)		
	Units from other market-based mechanisms	$(kt CO_2 eq)$		
		2 1/		
Total		(number of units)		
ıvıaı		$(kt CO_2 eq)$		

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, tCERs = temporary certified emission reductions.

Note: 2011 is the latest reporting year.

<sup>&</sup>lt;sup>a</sup> Reporting by a developed country Party on the information specified in the common tabular format does not prejudge the position of other Parties with regard to the treatment of units from market-based mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>&</sup>lt;sup>b</sup> For each reported year, information reported on progress made towards the emission reduction target shall include, in addition to the information noted in paragraphs 9(a-c) of the reporting guidelines, on the use of units from market-based mechanisms.

<sup>&</sup>lt;sup>c</sup> Parties may include this information, as appropriate and if relevant to their target.

<sup>&</sup>lt;sup>d</sup> Units surrendered by that Party for that year that have not been previously surrendered by that or any other Party.

<sup>&</sup>lt;sup>e</sup> Additional rows for each market-based mechanism should be added, if applicable.

Table 5

Summary of key variables and assumptions used in the projections analysis<sup>a</sup>

Key underlying as	Key underlying assumptions				Historical <sup>b</sup>							Projected		
Assumption	Unit	1990	1995	2000	2005	2010	2011	2012	2013	2015	2020	2025	2030	
GDP growth rate	%				4.35	0.74	1.76	-1.69	1.89	2.80	2.67	2.38	2.21	
Population	thousands			10,043.00	10,098.00	10,014.00	9,986.00	9,931.00	9,909.00	9,855.00	9,541.00	9,295.00	9,047.00	
GDP (2010 prices)	billiion			22,155,339.2	27,336,460.0	27,051,695.0	27,527,129.0	27,062,224.7	27,573,637.0	29,386,616.2	33,748,616.0	38,158,966.6	42,701,882.1	
	Hungarian Forints			0	0	0	0	0	0	7	0	6	2	
aParties should include key un	Parties should include key underlying assumptions as appropriate.International				54.52	79.50	111.26	111.67	108.66	82.13	84.70	96.90	106.70	

Parties should include historical data used to develop the greenhouse gas projections reported.

Table 6(a) HUN\_BR2\_v1.0 Information on updated greenhouse gas projections under a 'with measures' scenario<sup>a</sup>

		GHG emissions and removals <sup>b</sup>									
		(kt CO 2 eq)									
	Base year (1990)	1990	1995	2000	2005	2010	2013	2020	2030		
Sector d,e											
Energy		68,068.96	57,002.36	54,419.55	55,768.72	48,685.19	41,140.72	41,652.67	40,865.92		
Transport		8,739.64	7,203.26	8,852.17	11,748.87	11,662.77	10,062.30	10,455.88	11,157.76		
Industry/industrial processes		11,595.64	8,168.50	8,166.02	9,196.47	6,496.02	5,634.83	7,410.78	8,361.64		
Agriculture		10,254.40	6,054.60	6,350.27	6,262.38	5,733.06	6,332.91	6,664.90	6,520.40		
Forestry/LULUCF		-3,309.07	-5,906.72	-862.33	-5,588.38	-4,024.10	-3,438.20	-2,810.02	-2,787.94		
Waste management/waste		4,303.28	4,508.93	4,713.80	4,721.70	4,578.77	4,320.00	4,194.19	3,620.06		
Other (specify)											
Gas											
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF		69,613.18	55,259.59	57,263.34	54,540.79	47,993.11	40,383.94	43,907.58	44,529.83		
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF		72,984.31	61,237.58	58,217.54	60,223.06	52,079.22	43,887.92	46,782.65	47,395.87		
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF		12,547.38	9,398.83	9,371.89	8,785.80	8,262.46	7,825.91	7,892.62	7,225.19		
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF		12,524.52	9,379.48	9,346.03	8,761.89	8,253.25	7,814.07	7,880.91	7,211.13		
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF		8,366.03	4,852.84	5,511.49	5,855.50	3,890.12	4,376.35	4,487.68	4,310.05		
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF		8,326.83	4,800.94	5,445.47	5,785.52	3,837.33	4,322.43	4,434.35	4,246.03		
HFCs			41.65	273.44	804.02	1,223.01	1,279.44	652.51	268.68		
PFCs		375.72	222.72	283.11	280.52	1.52	1.69	1.69	1.69		
SF <sub>6</sub>		10.89	52.04	84.04	94.26	98.72	122.92	171.76	246.53		
Other (specify)											
Total with LULUCF <sup>f</sup>		90,913.20	69,827.67	72,787.31	70,360.89	61,468.94	53,990.25	57,113.84	56,581.97		
Total without LULUCF		94,222.27	75,734.41	73,649.63	75,949.27	65,493.05	57,428.47	59,923.87	59,369.93		

Table 6(a) HUN\_BR2\_v1.0

#### Information on updated greenhouse gas projections under a 'with measures' scenario<sup>a</sup>

		GHG em	issions and ren	novals <sup>b</sup>			GHG emission	on projections
(kt CO <sub>2</sub> eq)							(kt C0	O <sub>2</sub> eq)
Base year								
(1990)								

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

- <sup>a</sup> In accordance with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", at a minimum Parties shall report a 'with measures' scenario, and may report 'without measures' and 'with additional measures' scenarios. If a Party chooses to report 'without measures' and/or 'with additional measures' scenarios they are to use tables 6(b) and/or 6(c), respectively. If a Party does not choose to report 'without measures' or 'with additional measures' scenarios then it should not include tables 6(b) or 6(c) in the biennial report.
- b Emissions and removals reported in these columns should be as reported in the latest GHG inventory and consistent with the emissions and removals reported in the table on GHG emissions and trends provided in this biennial report. Where the sectoral breakdown differs from that reported in the GHG inventory Parties should explain in their biennial report how the inventory sectors relate to the sectors reported in this table.
- <sup>c</sup> 20XX is the reporting due-date year (i.e. 2014 for the first biennial report).
- <sup>d</sup> In accordance with paragraph 34 of the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", projections shall be presented on a sectoral basis, to the extent possible, using the same sectoral categories used in the policies and measures section. This table should follow, to the extent possible, the same sectoral categories as those listed in paragraph 17 of those guidelines, namely, to the extent appropriate, the following sectors should be considered: energy, transport, industry, agriculture, forestry and waste management.
- <sup>e</sup> To the extent possible, the following sectors should be used: energy, transport, industry/industrial processes, agriculture, forestry/LULUCF, waste management/waste, other sectors (i.e. cross-cutting), as appropriate.
- f Parties may choose to report total emissions with or without LULUCF, as appropriate.

Table 6(c)

HUN\_BR2\_v1.0

Information on updated greenhouse gas projections under a 'with additional measures' scenario<sup>a</sup>

			GHG emis	sions and rem	ovals <sup>b</sup>			GHG emission	n projections
			(	kt CO <sub>2</sub> eq)				(kt CO	<sub>2</sub> eq)
	Base year (1990)	1990	1995	2000	2005	2010	2013	2020	2030
Sector d,e									
Energy		68,068.96	57,002.36	54,419.55	55,768.72	48,685.19	41,140.72	39,744.90	36,433.53
Transport		8,739.64	7,203.26	8,852.17	11,748.87	11,662.77	10,062.30	9,499.29	9,694.90
Industry/industrial processes		11,595.64	8,168.50	8,166.02	9,196.47	6,496.02	5,634.83	7,410.78	8,361.64
Agriculture		10,254.40	6,054.60	6,350.27	6,262.38	5,733.06	6,332.91	6,664.90	6,520.40
Forestry/LULUCF		-3,309.07	-5,906.72	-862.33	-5,588.38	-4,024.10	-3,438.20	-3,356.10	-3,491.90
Waste management/waste		4,303.28	4,508.93	4,713.80	4,721.70	4,578.77	4,320.00	4,096.80	3,271.20
Other (specify)									
Gas									
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF		69,613.18	55,259.59	57,263.34	54,540.79	47,993.11	40,383.94	41,489.62	39,449.70
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF		72,984.31	61,237.58	58,217.54	60,223.06	52,079.22	43,887.92	44,923.40	43,039.40
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF		12,547.38	9,398.83	9,371.89	8,785.80	8,262.46	7,825.91	7,766.17	6,829.30
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF		12,524.52	9,379.48	9,346.03	8,761.89	8,253.25	7,814.07	7,752.18	6,811.68
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF		8,366.03	4,852.84	5,511.49	5,855.50	3,890.12	4,376.35	4,483.75	4,300.84
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF		8,326.83	4,800.94	5,445.47	5,785.52	3,837.33	4,322.43	4,420.06	4,220.66
HFCs			41.65	273.44	804.02	1,223.01	1,279.44	652.51	268.68
PFCs		375.72	222.72	283.11	280.52	1.52	1.69	1.69	1.69
SF <sub>6</sub>		10.89	52.04	84.04	94.26	98.72	122.92	171.76	246.53
Other (specify)									
Total with LULUCF <sup>f</sup>		90,913.20	69,827.67	72,787.31	70,360.89	61,468.94	53,990.25	54,565.50	51,096.74
Total without LULUCF		94,222.27	75,734.41	73,649.63	75,949.27	65,493.05	57,428.47	57,921.60	54,588.64

## Table 6(c)

## Information on updated greenhouse gas projections under a 'with additional measures' scenario<sup>a</sup>

		GHG em	issions and rer	novals <sup>b</sup>			GHG emission	on projections
			(kt CO <sub>2</sub> eq)				(kt C0	O <sub>2</sub> eq)
Base year         1990         1995         2000         2005         2010         2013           (1990)								2030

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.

<sup>&</sup>lt;sup>a</sup> In accordance with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", at a minimum Parties shall report a 'with measures' scenario, and may report 'without measures' and 'with additional measures' scenarios. If a Party chooses to report 'without measures' and/or 'with additional measures' or 'with additional measures' or 'with additional measures' scenarios then it should not include tables 6(b) or 6(c) in the biennial report.

<sup>&</sup>lt;sup>b</sup> Emissions and removals reported in these columns should be as reported in the latest GHG inventory and consistent with the emissions and removals reported in the table on GHG emissions and trends provided in this biennial report. Where the sectoral breakdown differs from that reported in the GHG inventory Parties should explain in their biennial report how the inventory sectors relate to the sectors reported in this table.

<sup>&</sup>lt;sup>c</sup> 20XX is the reporting due-date year (i.e. 2014 for the first biennial report).

In accordance with paragraph 34 of the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications", projections shall be presented on a sectoral basis, to the extent possible, using the same sectoral categories used in the policies and measures section. This table should follow, to the extent possible, the same sectoral categories as those listed in paragraph 17 of those guidelines, namely, to the extent appropriate, the following sectors should be considered: energy, transport, industry, agriculture, forestry and waste management.

<sup>&</sup>lt;sup>e</sup> To the extent possible, the following sectors should be used: energy, transport, industry/industrial processes, agriculture, forestry/LULUCF, waste management/waste, other sectors (i.e. crosscutting), as appropriate.

<sup>&</sup>lt;sup>f</sup> Parties may choose to report total emissions with or without LULUCF, as appropriate.

Table 7

Provision of public financial support: summary information in 2013<sup>a</sup>

		Year									
		Hun	garian forint -	HUF		USD <sup>b</sup>					
Allocation channels	Core/		Climate-	specific <sup>d</sup>		Core/		Climate-	specific <sup>d</sup>		
	Cross-	Other <sup>f</sup>	general <sup>c</sup>	Mitigation	Adaptation	Cross- cutting <sup>e</sup>	Other <sup>f</sup>				
Total contributions through multilateral channels:											
Multilateral climate change funds <sup>g</sup>											
Other multilateral climate change funds <sup>h</sup>											
Multilateral financial institutions, including regional development banks											
Specialized United Nations bodies											
Total contributions through bilateral, regional and other channels											
Total											

Abbreviation: USD = United States dollars.

- <sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.
- b Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.
- <sup>c</sup> This refers to support to multilateral institutions that Parties cannot specify as climate-specific.
- <sup>d</sup> Parties should explain in their biennial reports how they define funds as being climate-specific.
- <sup>e</sup> This refers to funding for activities which are cross-cutting across mitigation and adaptation.
- f Please specify.
- g Multilateral climate change funds listed in paragraph 17(a) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.
- <sup>h</sup> Other multilateral climate change funds as referred in paragraph 17(b) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

					Y	ear				
		Hung	arian forint -	HUF		USD <sup>b</sup>				
Allocation channels	Core/		Climate-specific <sup>d</sup>				Climate-specific <sup>d</sup>			
	general c	Mitigation	Adaptation	Cross- cutting <sup>e</sup>	$Other^f$	Core/ general <sup>c</sup>	Mitigation	Adaptation	Cross- cutting <sup>e</sup>	$Other^f$
Total contributions through multilateral channels:	2,228,716,91 0.00	485,417,240. 00				9,230,306.00	2,086,748.00			
Multilateral climate change funds <sup>g</sup>		485,417,240. 00					2,086,748.00			
Other multilateral climate change funds <sup>h</sup>		485,417,240. 00					2,086,748.00			
Multilateral financial institutions, including regional development banks	1,876,400,00 0.00					8,066,409.00				
Specialized United Nations bodies	352,316,910. 00					1,163,897.00				
Total contributions through bilateral, regional and other		740,000.00	334,307,052.	15,181,636.0			3,181.00	1,437,116.00	65,264.00	
channels			00	0						
Total	2,228,716,91 0.00	1 ' '		15,181,636.0 0		9,230,306.00	2,089,929.00	1,437,116.00	65,264.00	

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Abbreviation: USD = United States dollars.

#### Custom Footnotes

Each Party shall provide an indication of what new and additional financial resources they have provided, and clarify how they have determined that such resources are new and additional. Please provide this information in relation to table 7(a) and table 7(b).

\*Documentation Box:\*

<sup>&</sup>lt;sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

<sup>&</sup>lt;sup>b</sup> Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.

<sup>&</sup>lt;sup>c</sup> This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

<sup>&</sup>lt;sup>d</sup> Parties should explain in their biennial reports how they define funds as being climate-specific.

<sup>&</sup>lt;sup>e</sup> This refers to funding for activities which are cross-cutting across mitigation and adaptation.

f Please specify.

g Multilateral climate change funds listed in paragraph 17(a) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

h Other multilateral climate change funds as referred in paragraph 17(b) of the "UNFCCC biennial reporting guidelines for developed country Parties" in decision 2/CP.17.

Table 7(a) HUN\_BR2\_v1.0

### Provision of public financial support: contribution through multilateral channels in 2013<sup>a</sup>

		Total	amount						
Donor funding	Core/ge	neral <sup>d</sup>	Climate-	specific <sup>e</sup>	Status b	Funding source <sup>f</sup>	Financial	Type of support f, g	Sector c
,	Hungarian forint - HUF	USD	Hungarian forint - HUF	USD	Status	1 many source	instrument <sup>J</sup>	Type of support	Secio
Total contributions through multilateral channels									
Multilateral climate change funds <sup>g</sup>									
Global Environment Facility									
2. Least Developed Countries Fund									
3. Special Climate Change Fund									
4. Adaptation Fund									
5. Green Climate Fund									
6. UNFCCC Trust Fund for Supplementary Activities									
7. Other multilateral climate change funds									
Multilateral financial institutions, including regional development banks									
1. World Bank									
2. International Finance Corporation									
3. African Development Bank									
4. Asian Development Bank									
5. European Bank for Reconstruction and Development									
6. Inter-American Development Bank									
7. Other									
Specialized United Nations bodies									
1. United Nations Development Programme									
2. United Nations Environment Programme									
3. Other									

Abbreviations: ODA = official development assistance, OOF = other official flows.

<sup>&</sup>lt;sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

b Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

<sup>&</sup>lt;sup>c</sup> Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

<sup>&</sup>lt;sup>d</sup> This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

<sup>&</sup>lt;sup>e</sup> Parties should explain in their biennial reports how they define funds as being climate-specific.

f Please specify.

g Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

		Total a	mount						
	Core/ges		Climate-	specific <sup>e</sup>			Financial	l .	
Donor funding	Hungarian forint - HUF	USD	Hungarian forint - HUF	USD	Status b	Funding source <sup>f</sup>	instrument f	Type of support <sup>f, g</sup>	Sector <sup>c</sup>
Total contributions through multilateral channels	2,228,716,910.00	9,230,306.00		2,086,748.00					
Multilateral climate change funds <sup>g</sup>			485,417,240.00	2,086,748.00					
Global Environment Facility									
Least Developed Countries Fund									
3. Special Climate Change Fund									
4. Adaptation Fund									
5. Green Climate Fund									
6. UNFCCC Trust Fund for Supplementary Activities									
Other multilateral climate change funds			485,417,240.00	2,086,748.00					
			485,417,240.00	2,086,748.00	Provided	ODA		Mitigation	Other (Biosphere protection)
Multilateral financial institutions, including regional development banks	1,876,400,000.00	8,066,409.00							
1. World Bank	1,876,400,000.00	8,066,409.00			Provided	ODA	Grant	Cross-cutting	Other (Multisector aid)
2. International Finance Corporation									
African Development Bank									
4. Asian Development Bank									
5. European Bank for Reconstruction and Development									
6. Inter-American Development Bank									
7. Other									
Specialized United Nations bodies	352,316,910.00	1,163,897.00							
United Nations Development Programme									
United Nations Environment Programme	2,236,700.00	9,615.00							
United Nations Enivronment Programme	2,236,700.00	9,615.00			Provided	ODA	Grant	Cross-cutting	Other (Environmental policy and administrative management)
3. Other	350,080,210.00	1,154,282.00							
UNFCCC Membership Contribution	4,658,125.00	20,024.00			Provided	ODA		Cross-cutting	Other (Environmental policy and administrative management)
UNCCD payment for 2014	5,867,617.00	25,223.00			Provided	ODA		Cross-cutting	
UNCCD payment for 2015	7,071,492.00	30,399.00			Provided	ODA		Cross-cutting	Other (Environmental policy and administrative management)
FAO payment for 2014	158,066,691.00	512,023.00			Provided	ODA		Cross-cutting	Other (Agricultural policy and administrative management)
FAO payment for 2015	172,878,135.00	560,001.00			Provided	ODA		Cross-cutting	Other (Agricultural policy and administrative management)
United Nations Economic Commission for Europe	1,538,150.00	6,612.00			Provided	ODA		Cross-cutting	Other (Water resources conservation (incuding data collection))

Abbreviations: ODA = official development assistance, OOF = other official flows.

<sup>&</sup>lt;sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

b Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

<sup>&</sup>lt;sup>c</sup> Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

d This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

Parties should explain in their biennial reports how they define funds as being climate-specific.

f Please specify.

<sup>8</sup> Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Table 7(b)

# Provision of public financial support: contribution through bilateral, regional and other channels in 2013<sup>a</sup>

	Total a	Total amount								
Recipient country/ region/project/programme b	Climate-specific f		Climate-specific f		Status <sup>c</sup>	Funding	Financial instrument <sup>g</sup>	Type of support g, h	Sector d	Additional information <sup>e</sup>
region/project/programme	t/programme" Hungarian forint - HUF	USD		source <sup>g</sup>	instrument	support				
Total contributions through bilateral, regional and other channels										
/										

Abbreviations: ODA = official development assistance, OOF = other official flows; USD = United States dollars.

<sup>&</sup>lt;sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

<sup>&</sup>lt;sup>b</sup> Parties should report, to the extent possible, on details contained in this table.

<sup>&</sup>lt;sup>c</sup> Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

<sup>&</sup>lt;sup>d</sup> Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

<sup>&</sup>lt;sup>e</sup> Parties should report, as appropriate, on project details and the implementing agency.

f Parties should explain in their biennial reports how they define funds as being climate-specific.

<sup>&</sup>lt;sup>g</sup> Please specify.

<sup>&</sup>lt;sup>h</sup> Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Table 7(b) HUN\_BR2\_v1.0

Provision of public financial support: contribution through bilateral, regional and other channels in 2014<sup>a</sup>

	Total a	mount						
Recipient country/ region/project/programme <sup>b</sup>	Climate-s	pecific <sup>f</sup>	Status c	Funding source g	Financial instrument g	Type of support g, h	Sector d	Additional information <sup>e</sup>
	Hungarian forint - HUF	USD		source	instrument	зирроп		
Total contributions through bilateral,	350,228,688.	1,505,561.00						
regional and other channels	00	65 001 00	D 1 1	ODA	Control	Administra	XX7-41	
Bosnia and Herzegovina /	15,327,551.0 0	65,891.00		ODA	Grant	Adaptation	Water and sanitation	
Bosnia and Herzegovina /	3,000,000.00	12,896.00	Provided	ODA	Grant	Adaptation	Agriculture	
/ Convention on International Trade in Endangered Species of Wild Flora and Fauna	3,676,911.00	15,807.00	Provided	ODA	Grant	Cross- cutting	Other (Biodiversity	
/ European and Mediterranean Plant Protection Organisation	11,504,725.0 0	49,457.00	Provided	ODA	Grant	Cross- cutting	Other (Biodiversity	
Ethiopia / Ethiopia	812,800.00	3,494.00	Provided	ODA	Grant	Adaptation	Water and sanitation	
Ethiopia /	919,930.00	3,955.00	Provided	ODA	Grant	Adaptation	Water and sanitation	
/ International Union for the Conservation of Nature payments for 2014	7,344,385.00	31,573.00	Provided	ODA	Grant	Adaptation	Other (Environmen tal policy and administrativ e management )	
Republic of Moldova /	740,000.00	3,181.00	Provided	ODA	Grant	Mitigation	Energy	
Sri Lanka /	89,869,625.0 0	386,338.00	Provided	ODA	Grant	Adaptation	Water and sanitation	
Sri Lanka /	149,345,013. 00	642,016.00	Provided	ODA	Grant	Adaptation	Water and sanitation	
Tanzania /	2,667,361.00	11,466.00	Provided	ODA	Grant	Adaptation	Other (Water sector policy and administrativ e management )	

Table 7(b) HUN\_BR2\_v1.0

Provision of public financial support: contribution through bilateral, regional and other channels in 2014<sup>a</sup>

	Total a	mount						
Recipient country/ region/project/programme <sup>b</sup>	Climate-s	Climate-specific f		Funding source g	Financial instrument g	Type of support g, h	Sector d	Additional information <sup>e</sup>
regionsprojecuprogranane	Hungarian forint - HUF	USD		Source	institution.	support		
Uganda /	9,482,306.00	40,736.00	Provided	ODA	Grant	Adaptation	Other (Basic drinking water supply and basic sanitation)	
Ukraine, Serbia, Bosnia and Herzegovina /	95,810.00	412.00	Provided	ODA	Grant	Adaptation	Other (Water sector policy and administrativ e management )	
Viet Nam /	44,311,795.0	190,491.00	Provided	ODA	Grant	Adaptation	Other (Basic drinking water supply)	

Table 7(b)

HUN\_BR2\_v1.0

Provision of public financial support: contribution through bilateral, regional and other channels in 2014<sup>a</sup>

	Total a	mount						
Recipient country/ region/project/programme b	Climate-specific f		Status c	Funding source g	Financial instrument <sup>g</sup>	Type of support g, h	Sector d	Additional information <sup>e</sup>
regionsprojecuprogramme	Hungarian forint - HUF	USD		source	instrument	зирроп		
World Meteorological Organisation payments for 2014 /	1,703,490.00	7,323.00	Provided	ODA	Grant	Adaptation	Other (Environmen tal policy and administrativ e management )	
World Meteorological Organisation payment for 2015 /	1,703,490.00	7,323.00	Provided	ODA	Grant	Adaptation	Other (Environmen tal policy and administrativ e mnagement)	
/ International Union for the Conservation of Nature payments for 2015	7,723,496.00	33,202.00	Provided	ODA	Grant	Adaptation	Other (Environmen tal policy and administrativ e management )	

Abbreviations: ODA = official development assistance, OOF = other official flows; USD = United States dollars.

<sup>&</sup>lt;sup>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

<sup>&</sup>lt;sup>b</sup> Parties should report, to the extent possible, on details contained in this table.

<sup>&</sup>lt;sup>c</sup> Parties should explain, in their biennial reports, the methodologies used to specify the funds as provided, committed and/or pledged. Parties will provide the information for as many status categories as appropriate in the following order of priority: provided, committed, pledged.

<sup>&</sup>lt;sup>d</sup> Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

<sup>&</sup>lt;sup>e</sup> Parties should report, as appropriate, on project details and the implementing agency.

f Parties should explain in their biennial reports how they define funds as being climate-specific.

g Please specify.

<sup>&</sup>lt;sup>h</sup> Cross-cutting type of support refers to funding for activities which are cross-cutting across mitigation and adaptation.

Table 8 HUN\_BR2\_v1.0

### Provision of technology development and transfer support a,b

Recipient country and/or region	Targeted area	Measures and activities related to technology transfer	Sector <sup>c</sup>	Source of the funding for technology transfer	Activities undertaken by	Status	Additional information <sup>d</sup>

<sup>&</sup>lt;sup>a</sup> To be reported to the extent possible.

<sup>&</sup>lt;sup>b</sup> The tables should include measures and activities since the last national communication or biennial report.

<sup>&</sup>lt;sup>c</sup> Parties may report sectoral disaggregation, as appropriate.

<sup>&</sup>lt;sup>d</sup> Additional information may include, for example, funding for technology development and transfer provided, a short description of the measure or activity and co-financing arrangements.

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# Provision of capacity-building support<sup>a</sup>

Recipient country/region	Targeted area	Programme or project title	Description of programme or project b,c		

<sup>&</sup>lt;sup>a</sup> To be reported to the extent possible.

<sup>&</sup>lt;sup>b</sup> Each Party included in Annex II to the Convention shall provide information, to the extent possible, on how it has provided capacity-building support that responds to the existing and emerging capacity-building needs identified by Parties not included in Annex I to the Convention in the areas of mitigation, adaptation and technology development and transfer.

<sup>&</sup>lt;sup>c</sup> Additional information may be provided on, for example, the measure or activity and co-financing arrangements.