### BR CTF submission workbook

Submission Year	2014	Party	EUROPEAN UNION (15)
Submission Version	v2.0	Submission Level	Submitted
Submission Key	EUC_2014_V2.0	Submission Status	Closed
Submitted By	Ana Maria Danila	Workbook Created	15.01.2014 11:39:11
Submitted Date	15.01.2014 11:38:56		

Contents

Table 1s1	
Table 1s2	
Table 1s3	
Table 1(a)s1	
Table 1(a)s2	
Table 1(a)s3	
Table 1(b)s1	
Table 1(b)s2	
Table 1(b)s3	
Table 1(c)s1	
Table 1(c)s2	
Table 1(c)s3	
Table 1(d)s1	
Table 1(d)s2	
Table 1(d)s3	
Table 2(a)	
Table 2(b)	
Table 2(c)	
Table 2(d)	
Table 2(e)I	
Table 2(e)II	
Table 2(f)	
Table 3	
Table 4	
Table 4(a)I_2011	
Table 4(a)I_2012	
Table 4(a)II	
Table 4(b)	
Table 5	
Table 6(a)	
Table 6(b)	Greenhouse gas projections: Scenario 'without measures' was not included.
Table 6(c)	
Table 7_2011	
Table 7_2012	
<u>Table 7(a)_2011</u>	
Table 7(a) 2012	
Table 7(b) 2011	
Table 7(b) 2012	
Table 8	

# Table 1Emission trends: summary <sup>(1)</sup>(Sheet 1 of 3)

### CRF: EUC\_CRF\_\_v1.3

	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
GREENHOUSE GAS EMISSIONS	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF	3,223,990.09	3,216,369.64	3,149,449.43	3,098,706.87	3,092,816.45	3,127,504.41	3,188,116.71	3,132,060.88	3,187,749.52
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF	3,367,101.26	3,391,489.94	3,315,827.03	3,259,052.42	3,261,694.79	3,297,510.12	3,372,483.09	3,318,056.59	3,367,624.75
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF	437,845.68	434,068.33	426,996.92	423,312.77	413,851.73	410,364.89	405,671.54	394,751.57	385,604.11
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF	435,572.18	431,851.12	425,165.29	421,380.50	409,892.74	406,652.53	402,238.34	391,540.55	382,280.30
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF	399,887.46	394,617.49	387,704.33	374,644.52	378,718.72	379,101.50	385,267.79	383,336.73	363,742.68
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF	395,851.58	390,692.66	383,907.58	370,842.19	374,912.80	375,431.62	381,425.20	379,737.45	360,080.84
HFCs	27,881.79	27,536.75	29,427.74	31,858.87	35,976.10	39,992.13	45,076.62	51,649.11	52,756.44
PFCs	17,329.44	15,960.10	13,803.95	12,947.76	12,283.41	11,717.52	11,287.80	10,289.04	9,645.03
SF <sub>6</sub>	10,767.65	11,191.38	12,013.04	12,910.38	13,950.34	15,012.20	14,811.23	13,130.08	12,314.82
Total (including LULUCF)	4,117,702.09	4,099,743.67	4,019,395.41	3,954,381.18	3,947,596.75	3,983,692.64	4,050,231.69	3,985,217.40	4,011,812.60
Total (excluding LULUCF)	4,254,503.89	4,268,721.94	4,180,144.63	4,108,992.13	4,108,710.18	4,146,316.12	4,227,322.27	4,164,402.82	4,184,702.17
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq
1. Energy	3,282,202.02	3,315,360.49	3,243,702.01	3,190,999.93	3,175,319.24	3,206,152.64	3,286,099.91	3,223,205.13	3,268,243.24
2. Industrial Processes	353.202.01	342.934.94	333.312.56	325.091.01	343,322.57	350.330.54	349,906.05	356,161,93	335.721.29

	- , - ,	- , ,	- , - ,	- , - ,	- , ,	- , - ,	- , ,	- , - ,	- , ,
2. Industrial Processes	353,202.01	342,934.94	333,312.56	325,091.01	343,322.57	350,330.54	349,906.05	356,161.93	335,721.29
3. Solvent and Other Product Use	13,212.24	12,860.41	12,611.30	12,233.85	11,691.33	11,748.89	11,790.32	11,826.46	11,841.05
4. Agriculture	433,868.14	423,554.22	418,027.45	410,115.56	409,654.36	412,156.08	416,284.54	416,241.00	416,191.58
5. Land Use, Land-Use Change and Forestry <sup>b</sup>	-136,801.79	-168,978.27	-160,749.22	-154,610.95	-161,113.43	-162,623.48	-177,090.58	-179,185.41	-172,889.58
6. Waste	172,019.47	174,011.89	172,491.31	170,551.78	168,722.68	165,927.97	163,241.45	156,968.30	152,705.01
7. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (including LULUCF)	4,117,702.09	4,099,743.67	4,019,395.41	3,954,381.18	3,947,596.75	3,983,692.64	4,050,231.69	3,985,217.40	4,011,812.60

**Note:** All footnotes for this table are given on sheet 3.

<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 <sup>(1)</sup> (Sheet 2 of 3)

### CRF: EUC\_CRF\_\_ v1.3

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS EMISSIONS	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF	3,147,439.42	3,189,022.08	3,223,772.96	3,257,436.19	3,347,883.29	3,340,335.37	3,318,820.33	3,281,952.15	3,249,185.82	3,143,196.36
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF	3,344,234.73	3,372,961.14	3,434,560.32	3,426,686.77	3,493,595.42	3,502,867.03	3,484,095.14	3,467,476.12	3,408,378.92	3,331,500.97
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF	376,515.67	369,034.41	357,170.88	347,149.08	338,016.00	326,973.89	319,571.51	313,264.39	308,412.07	303,879.20
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF	373,848.52	366,014.55	354,633.81	344,675.57	334,787.76	324,557.11	316,736.95	310,668.60	305,649.99	301,796.69
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF	342,703.22	339,169.66	330,305.25	321,051.64	315,833.70	316,887.59	307,624.09	295,456.34	293,846.92	285,948.98
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF	339,224.22	335,655.83	326,918.56	317,724.00	312,329.14	313,630.47	304,314.75	292,230.91	290,489.99	282,705.02
HFCs	45,830.81	44,952.05	43,709.86	45,729.99	50,025.19	51,153.84	54,418.09	55,866.44	58,818.23	62,767.54
PFCs	9,479.08	8,093.38	7,357.32	9,146.11	7,845.76	6,631.71	5,489.89	5,067.23	4,738.38	4,119.62
SF <sub>6</sub>	9,923.22	9,866.93	9,155.37	8,227.83	7,616.60	7,782.22	7,721.43	7,135.01	6,828.30	6,420.77
Total (including LULUCF)	3,931,891.41	3,960,138.51	3,971,471.65	3,988,740.83	4,067,220.54	4,049,764.63	4,013,645.34	3,958,741.56	3,921,829.73	3,806,332.47
Total (excluding LULUCF)	4,122,540.57	4,137,543.88	4,176,335.23	4,152,190.26	4,206,199.86	4,206,622.39	4,172,776.24	4,138,444.31	4,074,903.82	3,989,310.60
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt CO <sub>2</sub> eq	$\frac{2000}{kt CO_2 eq}$	kt CO <sub>2</sub> eq							
1. Energy	3,243,233.00	3,259,170.33	3,324,404.23	3,314,175.07	3,372,420.28	3,370,567.99	3,348,233.82	3,328,965.38	3,265,306.14	3,199,674.54
2. Industrial Processes	305,432.66	309,929.00	299,667.15	296,879.25	305,204.12	312,769.34	311,068.63	303,309.24	307,892.50	292,495.73
3. Solvent and Other Product Use	11,526.22	11,254.13	10,839.53	10,449.41	9,953.30	9,699.98	9,666.54	9,732.83	9,336.46	8,790.17
4. Agriculture	415,603.64	413,446.41	404,147.81	397,579.53	391,850.79	391,780.55	385,133.46	380,099.33	379,781.18	379,023.31
5. Land Use, Land-Use Change and Forestry <sup>b</sup>	-190,649.16	-177,405.37	-204,863.59	-163,449.44	-138,979.32	-156,857.75	-159,130.91	-179,702.76	-153,074.09	-182,978.14
6. Waste	146,745.06	143,744.02	137,276.51	133,107.01	126,771.37	121,804.51	118,673.79	116,337.53	112,587.54	109,326.85
7. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (including LULUCF)	3,931,891.41	3,960,138.51	3,971,471.65	3,988,740.83	4,067,220.54	4,049,764.63	4,013,645.34	3,958,741.56	3,921,829.73	3,806,332.47

**Note:** All footnotes for this table are given on sheet 3.

### Table 1 Emission trends: summary <sup>(1)</sup> (Sheet 3 of 3)

### CRF: EUC\_CRF\_\_v1.3

GREENHOUSE GAS EMISSIONS	2009	2010	2011	Change from base to latest reported year
	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	(%)
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF	2,875,805.76	2,979,914.36	2,823,473.21	-0.12
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF	3,067,034.75	3,155,308.45	3,002,815.36	-0.11
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF	298,332.83	295,750.24	289,255.56	-0.34
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF	296,084.94	293,458.50	287,160.16	-0.34
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF	275,481.32	266,025.98	263,657.09	-0.34
N2O emissions excluding N2O from LULUCF	272,200.61	262,770.37	260,402.80	-0.34
HFCs	66,040.25	69,310.92	70,745.54	1.54
PFCs	2,715.01	3,192.58	3,460.73	-0.80
SF <sub>6</sub>	6,081.31	6,183.84	6,072.75	-0.44
Total (including LULUCF)	3,524,456.48	3,620,377.92	3,456,664.88	-0.16
Total (excluding LULUCF)	3,710,156.87	3,790,224.66	3,630,657.34	-0.15

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	kt CO <sub>2</sub> eq	(%)
1. Energy	2,971,834.39	3,047,527.33	2,897,728.53	-0.12
2. Industrial Processes	254,056.34	260,580.93	253,234.19	-0.28
3. Solvent and Other Product Use	8,098.02	8,205.36	7,968.59	-0.40
4. Agriculture	370,386.76	369,490.81	369,784.65	-0.15
5. Land Use, Land-Use Change and Forestry <sup>b</sup>	-185,700.39	-169,846.73	-173,992.46	0.27
6. Waste	105,781.36	104,420.23	101,941.38	-0.41
7. Other	0.00	0.00	0.00	0.00
Total (including LULUCF)	3,524,456.48	3,620,377.92	3,456,664.88	-0.16

Notes:

(1) 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<sub>6</sub>)", which is included in an annex to this biennial report.

(2) 2011 is the latest reported inventory year.

(3) 1 kt  $CO_2$  eq equals 1 Gg  $CO_2$  eq.

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

<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>b</sup> Includes net CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from LULUCF.

### **Custom Footnotes**

The 'base year' column in fact contains 1990 data automatically imported from CRF Table 10.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	3,156,875.49	3,190,657.20	3,122,374.91	3,071,199.08	3,064,837.06	3,097,155.02	3,178,821.34	3,119,174.93	3,168,184.68
A. Fuel Combustion (Sectoral Approach)	3,136,785.33	3,170,557.39	3,101,796.71	3,050,376.08	3,043,306.68	3,074,337.95	3,155,329.31	3,096,920.62	3,146,878.98
1. Energy Industries	1,156,756.41	1,159,237.05	1,121,557.50	1,075,482.97	1,085,923.12	1,095,685.35	1,111,869.17	1,077,567.01	1,113,027.75
2. Manufacturing Industries and Construction	635,063.16	616,767.37	593,863.33	571,390.11	582,595.29	584,492.79	570,440.83	583,977.31	574,081.48
3. Transport	685,397.41	699,969.89	724,459.80	731,402.60	735,750.30	744,997.02	761,579.79	771,044.21	794,831.81
4. Other Sectors	638,234.80	677,272.58	646,805.15	658,314.14	625,697.57	636,726.86	700,282.29	653,551.32	654,668.16
5. Other	21,333.55	17,310.50	15,110.92	13,786.26	13,340.41	12,435.93	11,157.22	10,780.78	10,269.79
B. Fugitive Emissions from Fuels	20,090.16	20,099.81	20,578.20	20,822.99	21,530.38	22,817.07	23,492.03	22,254.31	21,305.70
1. Solid Fuels	1,301.34	992.27	921.72	832.05	761.66	774.84	1,049.02	996.72	684.74
2. Oil and Natural Gas	18,788.83	19,107.54	19,656.48	19,990.94	20,768.72	22,042.23	22,443.01	21,257.59	20,620.96
2. Industrial Processes	197,064.28	187,925.54	180,816.68	175,728.14	185,481.18	189,311.39	182,730.15	188,367.23	188,985.31
A. Mineral Products	112,503.84	106,845.87	105,212.51	101,482.98	107,039.17	110,808.48	106,736.33	109,575.61	112,006.68
B. Chemical Industry	30,407.38	29,366.87	28,292.69	27,777.83	29,026.99	30,805.22	30,893.52	30,897.11	31,841.12
C. Metal Production	53,793.99	51,284.09	46,852.85	46,074.69	49,028.60	47,353.30	44,721.91	47,543.09	44,780.64
D. Other Production	77.37	54.15	58.53	54.85	34.10	26.64	53.46	52.89	46.47
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	281.70	374.57	400.10	337.80	352.33	317.75	324.93	298.53	310.41
3. Solvent and Other Product Use	8,845.48	8,558.72	8,257.20	7,921.54	7,418.97	7,493.63	7,435.92	7,545.34	7,626.32
4. Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A. Enteric Fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Manure Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. Rice Cultivation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Agricultural Soils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	-143,111.17	-175,120.31	-166,377.60	-160,345.55	-168,878.34	-170,005.71	-184,366.38	-185,995.70	-179,875.23
A. Forest Land	-252,637.62	-284,358.69	-278,816.98	-272,428.58	-279,312.74	-279,940.71	-293,107.92	-293,582.97	-288,469.33
B. Cropland	78,455.15	78,473.37	81,591.80	79,047.20	78,314.44	80,035.71	78,331.14	77,737.38	77,370.36
C. Grassland	6,024.68	4,218.46	3,827.77	5,447.02	3,693.70	-70.55	651.31	1,404.39	2,041.29
D. Wetlands	2,426.21	2,341.18	2,514.73	2,438.86	2,615.76	2,594.57	2,572.88	2,527.91	2,433.64
E. Settlements	25,884.51	26,182.09	26,496.41	27,032.15	27,467.26	27,993.41	28,475.48	28,658.62	29,250.01
F. Other Land	1,656.68	1,339.54	1,031.72	712.07	599.57	1,857.00	1,801.62	1,365.24	989.96
G. Other	-4,920.78	-3,316.26	-3,023.05	-2,594.27	-2,256.34	-2,475.15	-3,090.90	-4,106.27	-3,491.17
6. Waste	4,316.01	4,348.48	4,378.23	4,203.67	3,957.58	3,550.08	3,495.68	2,969.09	2,828.44
A. Solid Waste Disposal on Land	226.69	267.78	307.69	299.09	243.64	104.22	82.83	60.18	58.34
B. Waste-water Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. Waste Incineration	4,071.04	4,062.05	4,050.90	3,886.32	3,695.65	3,425.75	3,392.49	2,889.62	2,752.02
D. Other	18.28	18.65	19.65	18.25	18.29	20.11	20.37	19.30	18.09
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total CO2 emissions including net CO2 from LULUCF	3,223,990.09	3,216,369.64	3,149,449.43	3,098,706.87	3,092,816.45	3,127,504.41	3,188,116.71	3,132,060.88	3,187,749.52
Total CO2 emissions excluding net CO2 from LULUCF	3,367,101.26	3,391,489.94	3,315,827.03	3,259,052.42	3,261,694.79	3,297,510.12	3,372,483.09	3,318,056.59	3,367,624.75
Memo Items:									
International Bunkers	168,930.47	167,731.26	174,048.95	181,983.95	181,703.11	187,529.68	199,342.95	213,421.70	226,386.44
Aviation	64,252.89	63,624.65	69,035.95	73,209.72	76,579.20	81,076.18	85,629.40	89,826.85	97,299.48
Marine	104,677.58	104,106.60	105,013.00	108,774.24	105,123.91	106,453.50	113,713.55	123,594.85	129,086.96
Multilateral Operations	1.35	1.78	1.56	1.83	2.05	2.48	2.70	2.91	2.69
CO2 Emissions from Biomass	154,075.11	164,297.91	164,352.02	167,973.19	167,772.39	171,101.87	177,415.21	185,862.43	188,258.10

**Note:** All footnotes for this table are given on sheet 3.

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

(Sheet 2 of 3)

### CRF: EUC\_CRF\_\_ v1.3

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt									
1. Energy	3,146,197.67	3,167,400.94	3,236,554.36	3,228,814.82	3,288,977.89	3,290,969.28	3,272,433.97	3,256,041.01	3,194,464.86	3,129,276.07
A. Fuel Combustion (Sectoral Approach)	3,126,414.24	3,147,751.87	3,216,940.92	3,209,146.77	3,269,085.92	3,271,531.43	3,252,498.92	3,235,965.01	3,174,608.48	3,110,262.41
1. Energy Industries	1,092,802.48	1,124,228.40	1,151,553.24	1,182,863.67	1,215,466.61	1,212,093.40	1,204,963.28	1,208,370.36	1,210,773.21	1,148,924.03
2. Manufacturing Industries and Construction	568,476.20	572,663.34	557,643.04	543,522.81	555,210.63	554,258.06	554,824.32	556,436.00	550,457.60	528,614.79
3. Transport	814,283.00	815,549.33	825,721.81	835,812.59	839,271.83	851,370.21	845,138.51	845,198.37	846,133.12	822,084.58
4. Other Sectors	641,058.87	626,359.91	674,185.49	638,958.05	650,633.07	645,383.09	639,274.64	617,498.86	558,858.02	603,122.82
5. Other	9,793.68	8,950.89	7,837.35	7,989.65	8,503.77	8,426.67	8,298.17	8,461.42	8,386.52	7,516.18
B. Fugitive Emissions from Fuels	19,783.43	19,649.08	19,613.44	19,668.05	19,891.97	19,437.85	19,935.05	20,076.00	19,856.38	19,013.66
1. Solid Fuels	589.95	559.57	548.22	569.04	660.90	761.82	807.79	834.63	615.16	994.19
2. Oil and Natural Gas	19,193.49	19,089.50	19,065.22	19,099.01	19,231.07	18,676.03	19,127.26	19,241.38	19,241.22	18,019.47
2. Industrial Processes	187,889.76	195,691.84	188,378.62	188,186.66	195,107.23	202,490.43	202,116.57	201,946.26	204,779.08	193,471.73
A. Mineral Products	113,133.58	115,574.40	113,877.49	114,535.66	116,074.91	119,713.34	118,970.87	120,385.60	122,408.21	113,048.62
B. Chemical Industry	31,662.56	33,070.34	31,368.30	31,896.37	31,970.89	32,169.56	33,145.77	31,743.01	33,384.36	32,067.17
C. Metal Production	42,727.03	46,656.30	42,750.55	41,372.43	46,682.62	50,223.10	49,576.45	49,425.45	48,639.55	47,969.52
D. Other Production	56.36	53.16	48.04	36.53	50.83	45.50	38.30	22.26	31.07	36.32
E. Production of Halocarbons and SF6	0000	22110	10101	0000	20102	10100	20120		01107	0002
F. Consumption of Halocarbons and SF6										
G. Other	310.23	337.64	334.25	345.68	327.98	338.93	385.18	369.94	315.89	350.09
3. Solvent and Other Product Use	7,468.38	7,317.13	7,060.36	6,930.20	6,736.39	6,705.78	6,703.74	6,653.56	6,380.26	5,982.12
4. Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A. Enteric Fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Manure Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. Rice Cultivation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<ul><li>D. Agricultural Soils</li><li>E. Prescribed Burning of Savannas</li></ul>	0.00	0.00								0.00
č	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	-196,795.31	-183,939.06	-210,787.35	-169,250.59	-145,712.12	-162,531.65	-165,274.81	-185,523.98	-159,193.10	-188,304.61
A. Forest Land	-304,483.97	-288,040.35	-313,708.51	-271,396.97	-248,181.89	-263,845.43	-265,710.50	-281,946.94	-259,532.32	-282,712.40
B. Cropland	78,567.62	75,633.24	75,120.33	75,683.52	75,832.41	73,634.78	72,984.07	69,638.26	69,758.41	69,691.12
C. Grassland	-1,061.00	-787.25	-4,037.83	-4,762.88	-4,193.14	-5,048.07	-5,755.96	-6,324.08	-1,285.89	-7,434.76
D. Wetlands	2,755.30	2,880.14	3,146.52	2,594.92	2,812.07	2,872.95	3,050.78	2,884.69	2,849.92	2,029.54
E. Settlements	30,708.49	29,286.81	30,234.55	30,567.38	30,776.38	32,194.74	33,060.95	33,980.26	34,431.56	35,369.69
F. Other Land	940.13	577.35	452.17	-129.02	-435.02	-583.83	-1,243.87	-1,680.99	-2,058.52	-2,899.47
G. Other	-4,221.89	-3,489.00	-1,994.58	-1,807.53	-2,322.93	-1,756.80	-1,660.29	-2,075.17	-3,356.25	-2,348.33
6. Waste	2,678.92	2,551.22	2,566.98	2,755.10	2,773.91	2,701.54	2,840.85	2,835.28	2,754.72	2,771.06
A. Solid Waste Disposal on Land	54.36	37.91	35.75	27.14	26.82	25.89	24.79	14.37	12.11	9.85
B. Waste-water Handling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C. Waste Incineration	2,605.64	2,494.54	2,512.62	2,709.75	2,727.57	2,657.92	2,797.86	2,802.20	2,723.32	2,739.78
D. Other	18.91	18.77	18.61	18.20	19.52	17.73	18.20	18.72	19.29	21.43
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total CO2 emissions including net CO2 from LULUCF	3,147,439.42	3,189,022.08	3,223,772.96	3,257,436.19	3,347,883.29	3,340,335.37	3,318,820.33	3,281,952.15	3,249,185.82	3,143,196.36
Total CO2 emissions excluding net CO2 from LULUCF	3,344,234.73	3,372,961.14	3,434,560.32	3,426,686.77	3,493,595.42	3,502,867.03	3,484,095.14	3,467,476.12	3,408,378.92	3,331,500.97
Memo Items:										
International Bunkers	227,917.15	240,676.65	243,254.92	244,549.11	251,448.00	268,813.93	283,093.92	299,859.37	304,986.82	303,962.59
Aviation	105,090.93	111,082.23	109,448.12	106,919.94	110,851.42	119,410.61	125,837.22	131,145.10	135,336.75	135,719.76
Marine	122,826.21	129,594.42	133,806.80	137,629.17	140,596.59	149,403.32	157,256.70	168,714.27	169,650.07	168,242.82
Multilateral Operations	2.48	2.91	2.49	3.43	1.63	1.41	2.86	3.81	3.25	3.85
CO2 Emissions from Biomass	196,003.16	196,319.54	206,779.45	209,202.47	228,651.85	241,565.43	254,498.38	274,089.51	290,683.47	313,335.56

EUC\_BR1\_v2.0

1,0,00,10	1,0,01,01	200,117,45	207,202.47	220,051.05	271,000.70	234,470.30	274,007.51	270,005.47	515,555.50
	,	,	,	· · · · ·	,	,	,	,	,

**Note:** All footnotes for this table are given on sheet 3.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	2,904,511.86	2,978,979.04	2,831,237.46	-0.10
A. Fuel Combustion (Sectoral Approach)	2,885,953.56	2,960,440.10	2,813,538.50	-0.10
1. Energy Industries	1,051,580.95	1,060,565.82	1,030,350.25	-0.11
2. Manufacturing Industries and Construction	446,201.90	482,440.31	469,545.81	-0.26
3. Transport	802,028.24	796,665.41	787,083.80	0.15
4. Other Sectors	578,693.42	613,658.49	519,802.03	-0.19
5. Other	7,449.05	7,110.07	6,756.60	-0.68
B. Fugitive Emissions from Fuels	18,558.30	18,538.94	17,698.96	-0.12
1. Solid Fuels	725.18	1,235.65	948.07	-0.27
2. Oil and Natural Gas	17,833.12	17,303.29	16,750.89	-0.11
2. Industrial Processes	154,452.09	167,840.52	163,455.50	-0.17
A. Mineral Products	91,318.76	92,781.76	90,400.43	-0.20
B. Chemical Industry	29,242.64	31,608.23	31,069.84	0.02
C. Metal Production	33,543.37	43,076.39	41,625.08	-0.23
D. Other Production	31.95	30.88	21.08	-0.73
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6	_			
G. Other	315.37	343.26	339.07	0.20
3. Solvent and Other Product Use	5,392.55	5,688.97	5,570.55	-0.37
4. Agriculture	0.00	0.00	0.00	
A. Enteric Fermentation	0.00	0.00	0.00	1
B. Manure Management	0.00	0.00	0.00	1
C. Rice Cultivation	0.00	0.00	0.00	1
D. Agricultural Soils	0.00	0.00	0.00	1
E. Prescribed Burning of Savannas	0.00	0.00	0.00	
F. Field Burning of Agricultural Residues	0.00	0.00	0.00	1
G. Other	0.00	0.00	0.00	1
5. Land Use, Land-Use Change and Forestry	-191,228.99	-175,394.09	-179,342.15	0.25
A. Forest Land	-285,095.54	-263,350.87	-271,251.49	
B. Cropland	68,871.65	68,738.76	72,201.61	
C. Grassland	-7,648.37	-9,774.52	-9,648.87	
D. Wetlands	2,201.20	1,942.11	2,037.65	
E. Settlements	34,601.42	34,584.87	34,533.42	
F. Other Land	-2,605.55	-3,606.26	-3,804.26	
G. Other	-1,553.80	-3,928.19	-3,410.22	
6. Waste	2,678.26	2,799.92	2,551.85	
A. Solid Waste Disposal on Land	5.10	2.26	1.64	
B. Waste-water Handling	0.00	0.00	0.00	
C. Waste Incineration	2,652.15	2,779.47	2,532.00	-0.38
D. Other	21.01	18.19	18.21	
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	
Total CO2 emissions including net CO2 from LULUCF	2,875,805.76	2,979,914.36	2,823,473.21	
Total CO2 emissions excluding net CO2 from LULUCF	3,067,034.75	3,155,308.45	3,002,815.36	
Memo Items:				
International Bunkers	276,054.86	268,864.45	283,188.30	0.68
Aviation	125,732.96	125,486.45	129,114.80	
Marine	150,321.90	143,378.00	154,073.50	
Multilateral Operations	3.35	3.67	3.18	
CO2 Emissions from Biomass	327,261.33	367,409.29	366,078.37	

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

<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.

 $^{b}$  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 (+).

**Custom Footnotes** 

The 'base year' column in fact contains 1990 data automatically imported from CRF Table 10.

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

CRF: EUC\_CRF\_\_v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
OREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	4,546.23	4,500.95	4,354.31	4,282.33	3,797.46	3,729.27	3,590.50	3,422.70	3,199.60
A. Fuel Combustion (Sectoral Approach)	893.20	890.65	842.12	815.53	752.62	741.77	762.86	723.38	704.70
1. Energy Industries	46.86	48.48	47.81	50.36	51.19	58.29	64.38	63.94	66.85
2. Manufacturing Industries and Construction	61.30	59.24	57.90	56.28	58.98	60.15	60.81	63.83	65.78
3. Transport	222.56	215.33	214.60	205.82	197.53	188.60	181.32	170.28	162.58
4. Other Sectors	550.67	559.87	516.49	499.35	442.75	433.36	455.34	424.42	408.60
5. Other	11.81	7.74	5.33	3.72	2.17	1.36	1.01	0.91	0.89
B. Fugitive Emissions from Fuels	3,653.04	3,610.30	3,512.19	3,466.79	3,044.85	2,987.50	2,827.64	2,699.32	2,494.90
1. Solid Fuels	2,194.81	2,145.03	2,000.71	1,951.75	1,578.89	1,639.20	1,514.47	1,461.22	1,270.89
2. Oil and Natural Gas	1,458.23	1,465.27	1,511.48	1,515.04	1,465.95	1,348.30	1,313.17	1,238.10	1,224.01
2. Industrial Processes	38.71	38.28	39.15	38.15	40.54	38.90	37.96	37.34	35.20
A. Mineral Products	1.40	1.24	1.18	1.04	1.17	1.20	1.17	1.20	1.21
B. Chemical Industry	29.77	29.99	31.12	29.95	32.01	30.10	29.54	28.62	26.68
C. Metal Production	5.29	4.78	4.60	4.95	5.11	5.33	5.02	5.28	5.17
D. Other Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	2.01	2.02	1.99	1.94	1.98	2.01	1.97	1.96	1.87
3. Solvent and Other Product Use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Agriculture	8,667.31	8,446.11	8,347.74	8,323.28	8,336.66	8,366.67	8,427.27	8,360.50	8,350.55
A. Enteric Fermentation	6,743.33	6,559.82	6,462.38	6,430.45	6,431.12	6,447.04	6,486.71	6,407.14	6,381.61
B. Manure Management	1,781.00	1,747.08	1,752.07	1,768.64	1,772.87	1,790.43	1,802.68	1,812.93	1,837.11
C. Rice Cultivation	104.76	101.54	99.96	98.07	106.83	104.30	111.22	111.62	105.72
D. Agricultural Soils	0.33	0.33	0.31	0.47	0.40	0.44	0.45	0.45	0.45
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	37.89	37.35	33.02	25.65	25.43	24.45	26.21	28.36	25.67
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	108.26	105.58	87.22	92.01	188.52	176.78	163.49	152.91	158.28
A. Forest Land	68.12	68.68	51.93	52.37	64.87	56.18	44.52	48.06	54.98
B. Cropland	7.13	8.19	7.43	7.25	6.68	6.87	7.25	6.35	7.16
C. Grassland	28.76	24.42	23.51	27.99	27.32	14.23	16.90	18.60	26.24
D. Wetlands	2.28	2.29	2.32	2.35	2.37	2.36	2.48	2.52	2.46
E. Settlements	1.90	1.93	1.95	1.99	2.10	2.05	2.13	2.25	2.35
F. Other Land	0.08	0.07	0.06	0.06	0.18	0.09	0.21	0.13	0.09
G. Other	0.00	0.00	0.00	0.00	85.00	95.00	90.00	75.00	65.00
6. Waste	7,489.28	7,578.99	7,504.77	7,421.99	7,344.05	7,229.57	7,098.47	6,824.25	6,618.46
A. Solid Waste Disposal on Land	6,797.38	6,900.11	6,832.90	6,755.65	6,676.42	6,563.23	6,444.75	6,184.78	5,980.96
B. Waste-water Handling	663.75	646.60	637.82	631.09	629.21	624.31	607.23	595.03	593.18
C. Waste Incineration	9.37	9.91	9.40	8.75	7.35	6.99	7.36	3.53	3.69
D. Other	18.78	22.36	24.65	26.50	31.06	35.05	39.14	40.90	40.63
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total CH4 emissions including CH4 from LULUCF	20,849.79	20,669.92	20,333.19	20,157.75	19,707.23	19,541.19	19,317.69	18,797.69	18,362.10
Total CH4 emissions excluding CH4 from LULUCF	20,741.53	20,564.34	20,245.97	20,065.74	19,707.23	19,364.41	19,154.21	18,644.79	18,203.82
Memo Items:	20,741.55								10,200.02
International Bunkers	4.93	4.68	4.73	4.94	4.80	5.00	5.09	5.42	5.73
Aviation	1.17	1.09	1.14	1.13	1.13	1.19	1.22	1.26	1.32
Marine	3.76	3.58	3.59	3.81	3.67	3.82	3.87	4.16	4.41
Multilateral Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CO2 Emissions from Biomass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EUC\_BR1\_v2.0

**Note:** All footnotes for this table are given on sheet 3.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt									
1. Energy	3,099.68	2,936.09	2,749.42	2,647.62	2,537.71	2,355.91	2,204.01	2,068.51	1,975.68	1,982.35
A. Fuel Combustion (Sectoral Approach)	685.50	642.85	632.69	593.99	611.11	612.19	599.76	592.73	600.49	620.23
1. Energy Industries	67.38	65.20	66.21	68.14	86.75	93.49	98.83	105.95	116.22	125.17
2. Manufacturing Industries and Construction	66.77	69.63	70.11	70.26	75.94	80.38	81.62	81.45	77.99	75.00
3. Transport	152.50	137.06	127.91	117.58	108.28	99.69	91.17	83.18	75.91	68.21
4. Other Sectors	398.01	370.15	367.70	337.27	339.40	337.90	327.30	321.38	329.65	351.19
5. Other	0.86	0.81	0.76	0.76	0.75	0.74	0.84	0.77	0.72	0.67
B. Fugitive Emissions from Fuels	2,414.18	2,293.24	2,116.73	2,053.63	1,926.60	1,743.72	1,604.25	1,475.78	1,375.19	1,362.12
1. Solid Fuels	1,261.94	1,157.42	993.76	952.58	837.52	689.80	563.90	499.78	423.45	401.09
2. Oil and Natural Gas	1,152.24	1,135.82	1,122.97	1,101.05	1,089.08	1,053.92	1,040.35	976.00	951.74	961.03
2. Industrial Processes	34.53	34.39	34.10	34.12	36.22	35.89	36.60	36.08	37.21	33.70
A. Mineral Products	1.11	1.14	1.20	1.21	1.23	1.25	1.18	1.52	1.63	1.19
B. Chemical Industry	26.05	25.71	25.81	26.20	27.89	26.85	25.75	24.26	24.99	22.48
C. Metal Production	5.20	5.36	4.94	4.60	4.93	5.70	7.59	8.18	8.52	8.00
D. Other Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	1.89	1.86	1.85	1.81	1.85	1.77	1.77	1.79	1.76	1.72
3. Solvent and Other Product Use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Agriculture	8,331.75	8,266.80	8,218.64	8,057.60	7,992.33	7,920.07	7,858.22	7,817.01	7,845.62	7,815.60
A. Enteric Fermentation	6,370.86	6,309.04	6,247.18	6,101.97	6,037.99	5,967.30	5,919.06	5,875.23	5,894.97	5,885.36
B. Manure Management	1,834.47	1,836.30	1,849.63	1,833.41	1,821.86	1,815.99	1,812.35	1,811.82	1,819.37	1,807.69
C. Rice Cultivation	102.39	96.76	96.90	102.03	105.53	113.71	108.91	108.34	109.20	101.40
D. Agricultural Soils	0.45	0.45	0.43	0.38	0.41	0.37	0.37	0.41	0.42	0.41
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	23.58	24.26	24.49	19.82	26.54	22.71	17.54	21.21	21.66	20.74
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	127.01	143.80	120.81	117.79	153.73	115.08	134.98	123.61	131.53	99.17
A. Forest Land	42.49	56.25	43.45	47.17	76.63	44.14	68.61	58.35	43.67	32.19
B. Cropland	6.61	6.43	6.44	6.00	8.62	7.49	6.88	6.86	6.85	7.11
C. Grassland	14.29	21.18	15.47	11.27	18.24	15.79	13.41	12.97	36.21	15.86
D. Wetlands	2.51	2.53	2.63	2.58	2.52	2.62	2.76	2.89	3.05	2.88
E. Settlements	2.93	2.31	2.62	2.69	2.66	2.91	3.12	3.28	3.42	3.45
F. Other Land	0.19	0.11	0.19	0.07	0.05	0.12	0.20	0.26	0.33	0.17
G. Other	58.00	55.00	50.00	48.00	45.00	42.00	40.00	39.00	38.00	37.50
6. Waste	6,336.34	6,191.99	5,885.16	5,673.78	5,376.01	5,143.23	4,983.88	4,872.14	4,696.25	4,539.62
A. Solid Waste Disposal on Land	5,710.88	5,584.13	5,300.08	5,087.10	4,787.48	4,546.01	4,385.70	4,274.84	4,114.45	3,977.05
B. Waste-water Handling	578.35	557.44	534.84	534.86	537.18	545.31	546.28	544.96	527.57	509.54
C. Waste Incineration	3.80	3.55	3.43	3.59	3.53	4.06	3.76	3.68	3.70	3.80
D. Other	43.32	46.87	46.82	48.22	47.84	47.85	48.13	48.65	50.53	49.23
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total CH4 emissions including CH4 from LULUCF	17,929.32	17,573.07	17,008.14	16,530.91	16,096.00	15,570.19	15,217.69	14,917.35	14,686.29	14,470.44
Total CH4 emissions including CH4 from LULUCF	17,929.32	17,373.07	16,887.32	16,413.12	15,942.27	15,455.10	15,082.71	14,793.74	14,080.29	14,470.44
Memo Items:	17,002.31	17,429.20	10,007.52	10,413.12	15,942.27	15,455.10	15,062.71	14,755.74	14,554.70	14,371.27
	5.65	5.05	6.00	6.05	6.02	6.40	6.60	6.06	7.00	6.07
International Bunkers	5.65	5.95	6.08	6.05	6.23	6.48	6.62	6.96	7.00	6.97
Aviation	1.35	1.30	1.21	1.18	1.19	1.26	1.29	1.29	1.28	1.28
Marine	4.30	4.65	4.87	4.88	5.04	5.22	5.34	5.67	5.73	5.69
Multilateral Operations CO2 Emissions from Biomass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: All footnotes for this table are given on sheet 3.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year	
	kt	kt	kt	%	
1. Energy	1,910.02	1,933.62	1,861.69	-0.59	
A. Fuel Combustion (Sectoral Approach)	604.11	646.86	609.89	-0.32	
1. Energy Industries	125.81	138.78	138.15	1.95	
2. Manufacturing Industries and Construction	62.38	69.38	71.46	0.17	
3. Transport	62.34	57.34	52.89	-0.76	
4. Other Sectors	352.94	380.73	346.76	-0.37	
5. Other	0.64	0.63	0.64	-0.95	
B. Fugitive Emissions from Fuels	1,305.91	1,286.76	1,251.79	-0.66	
1. Solid Fuels	340.66	321.87	316.28	-0.86	
2. Oil and Natural Gas	965.25	964.89	935.51	-0.36	
2. Industrial Processes	29.24	32.73	30.41	-0.21	
A. Mineral Products	1.04	1.06	1.04	-0.25	
B. Chemical Industry	21.83	24.43	21.97	-0.26	
C. Metal Production	4.37	5.24	5.40	0.02	
D. Other Production	0.00	0.00	0.00		
E. Production of Halocarbons and SF6			0.00		
F. Consumption of Halocarbons and SF6			0.00		
G. Other	1.69	1.69	1.69	-0.16	
3. Solvent and Other Product Use	0.00	0.00	0.00		
4. Agriculture	7,780.41	7,703.98	7,584.17	-0.12	
A. Enteric Fermentation	5,846.68	5,803.18	5,725.61	-0.15	
B. Manure Management	1,794.82	1,759.13	1,714.15	-0.04	
C. Rice Cultivation	115.01	118.02	120.79	0.15	
D. Agricultural Soils	0.42	0.46	0.44	0.34	
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	
F. Field Burning of Agricultural Residues	23.48	23.20	23.18	-0.39	
G. Other	0.00	0.00	0.00	0.00	
5. Land Use, Land-Use Change and Forestry	107.04	109.13	99.78	-0.08	
A. Forest Land	38.25	45.17	37.64	-0.45	
B. Cropland	7.18	7.80	6.74	-0.05	
C. Grassland	17.87	13.58	13.19	-0.54	
D. Wetlands	3.05	3.01	3.12	0.37	
E. Settlements	3.26	3.01	3.03	0.59	
F. Other Land	0.45	0.07	0.07	-0.11	
G. Other	37.00	36.50	36.00	0.00	
6. Waste	4,379.61	4,303.88	4,198.03	-0.44	
A. Solid Waste Disposal on Land	3,841.67	3,750.31	3,633.68	-0.47	
B. Waste-water Handling	487.03	502.23	512.73		
C. Waste Incineration	3.73	3.68	3.68		
D. Other	47.17	47.66	47.94		
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	
Total CH4 emissions including CH4 from LULUCF	14,206.33	14,083.34	13,774.07	-0.34	
Total CH4 emissions excluding CH4 from LULUCF	14,099.28	13,974.21	13,674.29		
Memo Items:					
International Bunkers	6.38	6.25	6.46	0.31	
Aviation	1.18	1.18	1.21		
Marine	5.20	5.08	5.25		
Multilateral Operations	0.00	0.00	0.00		
CO2 Emissions from Biomoss		,	2.50		

### CO2 Emissions from Biomass

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

<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.

#### **Custom Footnotes**

The 'base year' column in fact contains 1990 data automatically imported from CRF Table 10.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
	kt of ot	kt							
1. Energy	96.31	97.37	96.41	96.36	99.15	98.98	102.83	103.72	106.02
A. Fuel Combustion (Sectoral Approach)	95.99	97.06	96.08	96.03	98.81	98.61	102.45	103.35	105.66
1. Energy Industries	29.08	29.53	28.64	27.42	27.58	23.74	24.45	23.11	23.67
2. Manufacturing Industries and Construction	22.24	21.55	21.10	19.98	20.33	20.43	19.93	20.36	20.06
3. Transport	21.15	21.97	23.30	25.39	28.51	32.28	35.17	37.74	40.21
4. Other Sectors	21.35	21.99	21.11	21.31	20.49	20.44	21.23	20.48	20.18
5. Other	2.17	2.02	1.93	1.93	1.89	1.72	1.68	1.66	1.54
B. Fugitive Emissions from Fuels	0.31	0.31	0.32	0.33	0.34	0.37	0.38	0.37	0.36
1. Solid Fuels	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Oil and Natural Gas	0.31	0.31	0.32	0.33	0.34	0.37	0.38	0.37	0.36
2. Industrial Processes	320.47	321.02	311.06	293.05	305.74	301.55	307.11	296.59	229.94
A. Mineral Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Chemical Industry	320.12	320.67	310.71	292.69	305.38	301.21	306.77	296.23	229.59
C. Metal Production	0.13	0.12	0.11	0.11	0.12	0.09	0.09	0.10	0.09
D. Other Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
3. Solvent and Other Product Use	14.09	13.88	14.05	13.91	13.78	13.73	14.05	13.81	13.60
4. Agriculture	812.43	794.15	782.98	759.12	756.72	762.76	771.97	776.36	776.87
A. Enteric Fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Manure Management	75.78	74.45	73.46	72.89	72.46	72.67	72.68	72.64	72.33
C. Rice Cultivation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Agricultural Soils	735.82	718.91	708.82	685.68	683.71	689.56	698.72	703.12	703.98
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.83	0.00	0.00		0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues				0.54					0.33
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5. Land Use, Land-Use Change and Forestry	13.02	12.66	12.25	12.27	12.28	11.84	12.40	11.61	11.81
A. Forest Land	1.38	1.28	1.02	0.94	1.08	1.14	1.71	0.98	1.07
B. Cropland	10.66	10.56	10.45	10.38	10.25	10.14	10.05	9.93	9.82
C. Grassland	0.72	0.56	0.51	0.67	0.67	0.28	0.35	0.41	0.63
D. Wetlands	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.28	0.28
E. Settlements	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
F. Other Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Waste	33.64	33.89	33.91	33.83	34.00	34.05	34.44	34.48	35.13
A. Solid Waste Disposal on Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Waste-water Handling	32.46	32.59	32.52	32.36	32.37	32.27	32.42	32.49	32.84
C. Waste Incineration	0.70	0.71	0.71	0.70	0.69	0.67	0.67	0.60	0.68
D. Other	0.42	0.52	0.61	0.70	0.89	1.09	1.33	1.38	1.59
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total N2O emissions including N2O from LULUCF	1,289.96	1,272.96	1,250.66	1,208.53	1,221.67	1,222.91	1,242.80	1,236.57	1,173.36
Total N2O emissions excluding N2O from LULUCF	1,276.94	1,260.30	1,238.41	1,196.27	1,209.40	1,211.07	1,230.40	1,224.96	1,161.55
Memo Items:									
International Bunkers	4.39	4.32	4.70	5.01	5.18	5.56	5.55	5.84	6.16
Aviation	1.86	1.82	1.99	2.12	2.21	2.32	2.45	2.58	2.79
Marine	2.53	2.50	2.71	2.90	2.97	3.24	3.10	3.26	3.38
Multilateral Operations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CO2 Emissions from Biomass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EUC\_BR1\_v2.0

**Note:** All footnotes for this table are given on sheet 3.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	103.04	97.13	97.14	96.00	97.26	97.18	95.21	95.11	94.68	92.80
A. Fuel Combustion (Sectoral Approach)	102.68	96.79	96.79	95.67	96.96	96.86	94.85	94.76	94.29	92.47
1. Energy Industries	22.79	23.52	24.41	25.25	26.33	26.41	26.20	26.48	26.54	26.09
2. Manufacturing Industries and Construction	19.97	19.96	19.88	19.72	20.11	20.11	20.35	20.42	20.58	19.77
3. Transport	38.16	31.96	30.29	29.21	28.52	28.27	26.24	26.19	26.13	25.13
4. Other Sectors	20.29	19.95	20.94	20.23	20.59	20.59	20.71	20.28	19.70	20.26
5. Other	1.48	1.40	1.27	1.26	1.41	1.48	1.35	1.39	1.34	1.21
B. Fugitive Emissions from Fuels	0.35	0.35	0.35	0.33	0.30	0.32	0.36	0.36	0.39	0.33
1. Solid Fuels	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
2. Oil and Natural Gas	0.35	0.35	0.34	0.33	0.30	0.31	0.36	0.36	0.39	0.33
2. Industrial Processes	166.40	163.23	162.42	144.75	141.45	141.80	130.82	104.96	103.05	80.67
A. Mineral Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Chemical Industry	166.05	162.84	162.05	144.39	141.05	141.39	130.42	104.55	102.66	80.28
C. Metal Production	0.08	0.09	0.08	0.07	0.09	0.10	0.10	0.09	0.09	0.09
D. Other Production	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
3. Solvent and Other Product Use	13.09	12.70	12.19	11.35	10.38	9.66	9.56	9.93	9.54	9.06
4. Agriculture	776.25	773.69	746.96	736.68	722.62	727.29	710.03	696.59	693.62	693.21
A. Enteric Fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Manure Management	71.56	70.61	70.77	68.81	67.29	66.44	65.69	64.32	64.99	64.64
C. Rice Cultivation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Agricultural Soils	704.16	702.63	675.78	667.52	654.91	660.48	644.05	631.93	628.29	628.24
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	0.52	0.46	0.40	0.34	0.42	0.36	0.29	0.34	0.35	0.34
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	11.22	11.33	10.92	10.73	11.31	10.51	10.68	10.40	10.83	10.46
A. Forest Land	0.94	1.09	0.99	1.05	1.46	1.01	1.35	1.15	1.00	1.07
B. Cropland	9.68	9.48	9.33	9.18	9.06	8.87	8.77	8.70	8.65	8.76
C. Grassland	0.30	0.47	0.31	0.20	0.48	0.32	0.25	0.25	0.86	0.31
D. Wetlands	0.28	0.28	0.29	0.29	0.28	0.28	0.29	0.29	0.30	0.31
E. Settlements	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
F. Other Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
G. Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6. Waste	35.49	36.00	35.87	36.14	35.81	35.79	36.04	36.09	36.17	36.21
A. Solid Waste Disposal on Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Waste-water Handling	32.97	33.27	33.01	33.02	32.60	32.53	32.55	32.49	32.50	32.55
C. Waste Incineration	0.67	0.67	0.66	0.66	0.66	0.67	0.68	0.67	0.63	0.58
D. Other	1.84	2.06	2.20	2.45	2.55	2.58	2.81	2.92	3.04	3.07
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total N2O emissions including N2O from LULUCF	1,105.49	1,094.10	1,065.50	1,035.65	1,018.82	1,022.22	992.34	953.08	947.89	922.42
Total N2O emissions excluding N2O from LULUCF										
-	1,094.27	1,082.76	1,054.58	1,024.92	1,007.51	1,011.71	981.66	942.68	937.06	911.95
Memo Items:	( 00		6.25	C 10	C 20	6.62	6.70	7.10	7.00	7.05
International Bunkers	6.22	6.56	6.35	6.10	6.29	6.63	6.79	7.19	7.32	7.25
Aviation	3.02	3.20	3.16	3.08	3.17	3.43	3.61	3.77	3.90	3.91
Marine	3.21	3.36	3.19	3.02	3.11	3.21	3.17	3.42	3.42	3.34
Multilateral Operations CO2 Emissions from Biomass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: All footnotes for this table are given on sheet 3.

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

### CRF: EUC\_CRF\_\_ v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	87.78	90.14	88.37	-0.08
A. Fuel Combustion (Sectoral Approach)	87.46	89.83	88.05	-0.08
1. Energy Industries	25.23	25.79	25.40	-0.13
2. Manufacturing Industries and Construction	17.28	18.13	17.74	-0.20
3. Transport	23.77	24.00	24.32	0.15
4. Other Sectors	20.01	20.79	19.54	-0.08
5. Other	1.18	1.12	1.04	-0.52
B. Fugitive Emissions from Fuels	0.32	0.31	0.32	0.03
1. Solid Fuels	0.00	0.00	0.01	-0.18
2. Oil and Natural Gas	0.32	0.30	0.32	0.03
2. Industrial Processes	77.92	43.12	28.58	-0.91
A. Mineral Products	0.00	0.00	0.00	0.00
B. Chemical Industry	77.56	42.73	28.22	-0.91
C. Metal Production	0.06	0.08	0.07	-0.45
D. Other Production	0.00	0.00	0.00	
E. Production of Halocarbons and SF6			0.00	
F. Consumption of Halocarbons and SF6			0.00	
G. Other	0.03	0.04	0.04	2.73
3. Solvent and Other Product Use	8.73	8.12	7.74	-0.45
4. Agriculture	667.74	670.02	679.09	-0.16
A. Enteric Fermentation	0.00	0.00	0.00	
B. Manure Management	64.21	63.76	63.16	-0.17
C. Rice Cultivation	0.00	0.00	0.00	
D. Agricultural Soils	603.15	605.90	615.56	-0.16
E. Prescribed Burning of Savannas	0.00	0.00	0.00	0.00
F. Field Burning of Agricultural Residues	0.37	0.37	0.37	-0.56
G. Other	0.00	0.00	0.00	0.00
5. Land Use, Land-Use Change and Forestry	10.58	10.50	10.50	-0.19
A. Forest Land	1.10	1.23	1.16	-0.16
B. Cropland	8.77	8.67	8.59	-0.19
C. Grassland	0.37	0.25	0.38	-0.48
D. Wetlands	0.32	0.34	0.35	0.39
E. Settlements	0.02	0.02	0.02	
F. Other Land	0.00	0.00	0.00	
G. Other	0.00	0.00	0.00	
6. Waste	35.91	36.25	36.23	
A. Solid Waste Disposal on Land	0.00	0.00	0.00	
B. Waste-water Handling	32.23	32.44	32.41	
C. Waste Incineration	0.54	0.55	0.54	
D. Other	3.14	3.26	3.27	
7. Other (as specified in the summary table in CRF)	0.00	0.00	0.00	
Total N2O emissions including N2O from LULUCF	888.65	858.15	850.51	
Total N2O emissions excluding N2O from LULUCF	878.07	847.65	840.01	
Memo Items:				510
International Bunkers	6.73	6.68	6.80	0.55
Aviation	3.64	3.63	3.73	
Marine	3.09	3.05	3.07	
Multilateral Operations	0.00	0.00	0.00	
CO2 Emissions from Biomass	0.00	0.00	0.00	217.07

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

<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.

**Custom Footnotes** 

The 'base year' column in fact contains 1990 data automatically imported from CRF Table 10.

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

### CRF: EUC\_CRF\_\_v1.3

	Base year <sup>a</sup>	1991	1992	1993	1994	1995	1996	1997	1998
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt	kt	kt	kt	kt	kt	kt	kt	kt
Emissions of HFCsc - (kt CO2 eq)	27,881.79	27,536.75	29,427.74	31,858.87	35,976.10	39,992.13	45,076.62	51,649.11	52,756.44
HFC-23	1.81	1.81	1.95	2.05	2.26	2.41	2.60	2.78	2.54
HFC-32	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.06	0.10
HFC-41	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE		NA, NO, IE	NA, NO, IE	NA, NO, IE
HFC-43-10mee	0.00	0.00	0.00	0.01	0.01	0.02	0.04	0.04	0.04
HFC-125	0.02	0.02	0.02	0.04	0.09	0.16	0.27	0.47	0.68
HFC-134	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE		NA, NO, IE	NA, NO, IE	NA, NO, IE
HFC-134a	0.11	0.13	0.65	2.60	3.40		6.63	8.68	10.61
HFC-152a	0.00	0.00	0.01	0.14	0.15	0.91	1.04	1.16	1.16
HFC-143	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE		NA, NO, IE	NA, NO, IE	NA, NO, IE
HFC-143a	0.51	0.53	0.41	0.03	0.07	0.11	0.26	0.39	0.61
HFC-227ea	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.09
HFC-236fa	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE		NA, NO, IE	NA, NO, IE	NA, NO, IE
HFC-245ca	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE	NA, NO, NE, IE		NA, NO, IE	NA, NO, IE	NA, NO, IE
Unspecified mix of listed HFCsd - (kt CO <sub>2</sub> eq)	4,554.44	4,180.48	4,165.23	4,178.79	4,563.54	4,856.32	4,016.94	4,713.60	4,520.82
Emissions of PFCsc - (kt CO2 eq)	17,329.44	15,960.10	13,803.95	12,947.76	12,283.41	11,717.52	11,287.80	10,289.04	9,645.03
CF <sub>4</sub>	1.89	1.72	1.43	1.29	1.18	1.16	1.11	1.04	1.01
C <sub>2</sub> F <sub>6</sub>	0.41	0.38	0.35	0.36	0.34	0.26	0.26	0.25	0.22
C 3F8	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.03
$C_4F_{10}$	0.03	0.03	0.03	0.03	0.03	0.05	0.04	0.02	0.01
c-C <sub>4</sub> F <sub>8</sub>	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
C <sub>5</sub> F <sub>12</sub>	0.04	0.04	0.05	0.04	0.06	0.06	0.06	0.03	0.03
$C_{6}F_{14}$	0.06	0.05	0.05	0.06	0.05	0.06	0.05	0.04	0.04
Unspecified mix of listed PFCs(4) - (Gg CO <sub>2</sub> equivalent)	58.29	68.88	79.93	107.66	139.36	176.34	171.48	218.97	173.07
Emissions of SF6(3) - (Gg CO2 equivalent)	10,767.65	11,191.38	12,013.04	12,910.38	13,950.34	15,012.20	14,811.23	13,130.08	12,314.82
SF <sub>6</sub>	0.45	0.47	0.50	0.54	0.58	0.63	0.62	0.55	0.52

Note: All footnotes for this table are given on sheet 3.

EUC\_BR1\_v2.0

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

### CRF: EUC\_CRF\_\_ v1.3

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	kt									
Emissions of HFCsc - (kt CO2 eq)	45,830.81	44,952.05	43,709.86	45,729.99	50,025.19	51,153.84	54,418.09	55,866.44	58,818.23	62,767.54
HFC-23	1.70	1.36	0.85	0.71	0.69	0.49	0.44	0.29	0.26	0.26
HFC-32	0.16	0.24	0.37	0.47	0.63	0.80	0.97	1.15	1.34	1.53
HFC-41	NA, NO, IE									
HFC-43-10mee	0.06	0.10	0.14	0.16	0.19	0.21	0.24	0.27	0.29	0.32
HFC-125	0.95	1.24	1.62	1.89	2.34	2.71	3.08	3.52	3.82	4.16
HFC-134	NA, NO, IE	0.00								
HFC-134a	11.67	13.41	15.51	16.85	18.50	19.51	20.73	21.66	22.82	24.09
HFC-152a	1.29	1.85	2.94	3.64	3.58	3.12	2.32	2.35	2.19	1.91
HFC-143	NA, NO, IE									
HFC-143a	0.81	1.13	1.36	1.56	1.89	2.08	2.33	2.53	2.70	2.90
HFC-227ea	0.14	0.22	0.27	0.34	0.39	0.43	0.48	0.50	0.52	0.53
HFC-236fa	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC-245ca	NA, NO, IE									
Unspecified mix of listed HFCsd - (kt CO <sub>2</sub> eq)	4,223.01	2,606.18	2,206.27	2,244.50	1,737.52	1,905.76	1,955.42	1,857.81	1,900.49	2,227.00
Emissions of PFCsc - (kt CO2 eq)	9,479.08	8,093.38	7,357.32	9,146.11	7,845.76	6,631.71	5,489.89	5,067.23	4,738.38	4,119.62
CF <sub>4</sub>	1.00	0.78	0.72	0.95	0.81	0.67	0.54	0.49	0.46	0.39
$C_2F_6$	0.22	0.21	0.18	0.23	0.17	0.13	0.10	0.09	0.07	0.05
C 3F8	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.05	0.05
$C_4F_{10}$	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00
c-C <sub>4</sub> F <sub>8</sub>	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
C <sub>5</sub> F <sub>12</sub>	0.02	0.03	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00
C <sub>6</sub> F <sub>14</sub>	0.04	0.03	0.04	0.02	0.04	0.04	0.04	0.04	0.03	0.05
Unspecified mix of listed PFCs(4) - (Gg CO <sub>2</sub> equivalent)	219.90	268.88	256.47	209.14	284.77	307.54	306.68	333.11	405.98	346.67
Emissions of SF6(3) - (Gg CO2 equivalent)	9,923.22	9,866.93	9,155.37	8,227.83	7,616.60	7,782.22	7,721.43	7,135.01	6,828.30	6,420.77
SF <sub>6</sub>	0.42	0.41	0.38	0.34	0.32	0.33	0.32	0.30	0.29	0.27

Note: All footnotes for this table are given on sheet 3.

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

### EUC\_BR1\_v2.0

### CRF: EUC\_CRF\_\_v1.3

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
Emissions of HFCsc - (kt CO2 eq)	66,040.25	69,310.92	70,745.54	1.54
HFC-23	0.24	0.30	0.24	-0.87
HFC-32	1.69	1.91	2.13	242.17
HFC-41	NA, NO, IE	NA, NO, IE	NA, NO, IE	0.00
HFC-43-10mee	0.35	0.37	0.37	1,046.24
HFC-125	4.56	5.11	5.46	313.35
HFC-134	0.00	0.00	0.00	0.00
HFC-134a	24.89	25.34	25.84	229.13
HFC-152a	1.84	1.77	1.55	3,879.62
HFC-143	NA, NO, IE	NA, NO, IE	NA, NO, IE	0.00
HFC-143a	3.10	3.32	3.41	5.72
HFC-227ea	0.55	0.56	0.58	2,216.81
HFC-236fa	0.00	0.00	0.00	0.00
HFC-245ca	NA, NO, IE	NA, NO, IE	NA, NO, IE	0.00
Unspecified mix of listed HFCsd - (kt CO <sub>2</sub> eq)	2,649.83	2,073.26	2,104.39	-0.54
Emissions of PFCsc - (kt CO2 eq)	2,715.01	3,192.58	3,460.73	-0.80
CF <sub>4</sub>	0.24	0.31	0.34	-0.82
$C_2F_6$	0.04	0.04	0.04	-0.91
C 3F8	0.04	0.05	0.05	1.18
$C_4F_{10}$	0.00	0.00	0.02	-0.29
c-C <sub>4</sub> F <sub>8</sub>	0.00	0.00	0.00	-0.58
C <sub>5</sub> F <sub>12</sub>	0.00	0.00	0.00	-1.00
$C_{6}F_{14}$	0.04	0.03	0.03	-0.49
Unspecified mix of listed PFCs(4) - (Gg $CO_2$ equivalent)	155.16	216.72	163.93	1.81
Emissions of SF6(3) - (Gg CO2 equivalent)	6,081.31	6,183.84	6,072.75	-0.44
SF <sub>6</sub>	0.25	0.26	0.25	-0.44

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

<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>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>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.)

#### **Custom Footnotes**

The 'base year' column in fact contains 1990 data automatically imported from CRF Table 10.

Documentation Box:

### Table 2(a)

### EUC\_BR1\_v2.0

### Description of quantified economy-wide emission reduction target: base year<sup>a</sup>

Party	European Union (15)	
Base year /base period		
Emission reduction target	% of base year/base period	% of 1990 <sup>b</sup>
Period for reaching target		

<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>b</sup> Optional.

## Table 2(b) $EUC_BR1_v2.0$ Description of quantified economy-wide emission reduction target: gasesand sectors covered<sup>a</sup>

Ga	ses covered	Base year for each gas (year):
CO <sub>2</sub>		
CH <sub>4</sub>		
N <sub>2</sub> O		
HFCs		
PFCs		
SF <sub>6</sub>		
NF <sub>3</sub>		
Other Gases (specify)	)	
Sectors covered <sup>b</sup>	Energy	Yes
1	Transport <sup>f</sup>	Yes
	Industrial processes <sup>g</sup>	Yes
	Agriculture	Yes
LULUCF		Yes
	Waste	Yes
	Other Sectors (specify)	

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

<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>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.

<sup>*f*</sup> Transport is reported as a subsector of the energy sector.

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

## Table 2(c) $EUC_BR1_v2.0$ Description of quantified economy-wide emission reduction target: globalwarming potential values (GWP)<sup>a</sup>

Gases	GWP values <sup>b</sup>
CO <sub>2</sub>	2nd AR
CH <sub>4</sub>	2nd AR
CO <sub>2</sub> CH <sub>4</sub> N <sub>2</sub> O HFCs	
HFCs	
PFCs	
SF <sub>6</sub> NF <sub>3</sub>	
NF <sub>3</sub>	2nd AR
Other Gases (specify)	^

### *Abbreviations* : GWP = global warming potential

<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>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)

### EUC\_BR1\_v2.0

Description of quantified economy-wide emission reduction target: approach to counting emissions and removals from the LULUCF sector<sup>*a*</sup>

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

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

<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 EUC\_BR1\_v2.0 Description of quantified economy-wide emission reduction target: market-based mechanisms under the Convention<sup>a</sup>

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>*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.

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

<sup>*i*</sup> AAUs issued to or purchased by a Party.

<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

### 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 $_2$ eq)

<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(f)

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

<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>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.

**Custom Footnotes** 

No target is reported for the EU-15.

table contains defaults as originally provided by CTF app

### 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		ation impact (not n kt CO <sub>2</sub> eq)			
									2010	2015	2020	2025	2030

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 expost or ex ante estimation is available).

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

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

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

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

<sup>*f*</sup> Optional year or years deemed relevant by the Party.

**Custom Footnotes** 

### EUC\_BR1\_v2.0

### Table 4Reporting on progress

	Total emissions excluding LULUCF	Contribution from LULUCF <sup>d</sup>	Quantity of units fi mechanisms unde		Quantity of units from mecha	
Year <sup>c</sup>	$(kt \ CO_2 \ eq)$	eq) (kt CO <sub>2</sub> eq) (number of units) (kt CO <sub>2</sub> eq)		$(kt \ CO_2 \ eq)$	(number of units)	$(kt \ CO_2 \ eq)$
Base year/base period	4,265,517.72					
2010	3,790,224.66	-63,882.35	1,621,787,612.00	1,621,787.61		
2011	3,630,657.22	-63,882.35	2,172,851,039.00	2,172,851.05		
2012		-63,882.35	2,114,032,058.00	2,114,032.05		

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

<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>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>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

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 2011 <sup>a,b</sup>

	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	Accounting approach <sup>f</sup>	
		$(kt CO_2 ec$	<i>(</i> )		
Total LULUCF					
A. Forest land					
1. 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					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other <sup>g</sup>					
D. Wetlands					
1. 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					
1. Other land remaining other land					
2. Land converted to other land					
3. Other <sup>g</sup>					
Harvested wood products					

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

<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>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.

 $^{c}$  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>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>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>*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).

<sup>g</sup> 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

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 2012 <sup>a, b</sup>

	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 <sup>f</sup>
		$(kt CO_2 ec$	<i>(</i> )		
Total LULUCF					
A. Forest land					
1. 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					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other <sup>g</sup>					
D. Wetlands					
1. 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					
1. Other land remaining other land					
2. Land converted to other land					
3. Other <sup>g</sup>					
Harvested wood products					

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

<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>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.

 $^{c}$  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>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>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>*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).

<sup>g</sup> 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)II

Progress in achievement of the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the counting of emissions and removals from the land use, land-use change and forestry sector in relation to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol<sup>*a,b, c*</sup>

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	Base year <sup>d</sup>		Accounting parameters <sup>h</sup>	Accounting quantity <sup>i</sup>				
		2008	2009	2010	2011	Total <sup>g</sup>		
				(kt CO <sub>2</sub> eq)		-		
A. Article 3.3 activities								
A.1. Afforestation and Reforestation								-185767.46
A.1.1. Units of land not harvested since the beginning of the commitment periodj		-43,924.61	-46,786.57	-47,840.99	-47,215.28	-185,767.46		-185767.46
A.1.2. Units of land harvested since the beginning of the commitment periodj								0.00
A.2. Deforestation		31,457.68	30,447.20	27,834.81	27,456.75	117,196.44		117196.43908
B. Article 3.4 activities								
B.1. Forest Management (if elected)		-233,029.29	-228,901.50	-205,081.67	-215,247.36	-882,259.83		-170225.13786
3.3 offset <sup>k</sup>							41'494.39	-41494.39464
FM cap <sup>1</sup>							128730.74322	-128730.74322
B.2. Cropland Management (if elected)	9600.25545	1,981.30	1,330.31	1,480.18	827.46	5,619.26	38401.02178	-32781.75741
B.3. Grazing Land Management (if elected)	2218.92221	-0.67	-130.96	-267.13	-430.03	-828.80	8875.68885	-9704.48523
B.4. Revegetation (if elected)	NA	NA	NA	NA	NA	NA	NA	NA

*Note:* 1 kt  $CO_2$  eq equals 1 Gg  $CO_2$  eq.

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

<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 marketbased mechanisms under the Convention or other market-based mechanisms towards achievement of quantified economy-wide emission reduction targets.

<sup>b</sup> Developed country Parties with a quantified economy-wide emission reduction target as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1 or any update to that document, that are Parties to the Kyoto Protocol, may use table 4(a)II for reporting of accounting quantities if LULUCF is contributing to the attainment of that target.

<sup>c</sup> Parties can include references to the relevant parts of the national inventory report, where accounting methodologies regarding LULUCF are further described in the documentation box or in the

d Net emissions and removals in the Party's base year, as established by decision 9/CP.2.

<sup>e</sup> All values are reported in the information table on accounting for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, of the CRF for the relevant inventory year as reported in the current submission and are automatically entered in this table.

<sup>*f*</sup> Additional columns for relevant years should be added, if applicable.

<sup>g</sup> Cumulative net emissions and removals for all years of the commitment period reported in the current submission.

<sup>*h*</sup> The values in the cells "3.3 offset" and "Forest management cap" are absolute values.

<sup>*i*</sup> The accounting quantity is the total quantity of units to be added to or subtracted from a Party's assigned amount for a particular activity in accordance with the provisions of Article 7, paragraph 4, of the Kyoto Protocol.

<sup>j</sup> In accordance with paragraph 4 of the annex to decision 16/CMP.1, debits resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than the credits accounted for on that unit of land.

<sup>k</sup> In accordance with paragraph 10 of the annex to decision 16/CMP.1, for the first commitment period a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3 paragraph 3, may account for anthropogenic greenhouse gas emissions by sources and removals by sinks in areas under forest management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 megatonnes of carbon times five, if the total anthropogenic greenhouse gas emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.

<sup>1</sup> In accordance with paragraph 11 of the annex to decision 16/CMP.1, for the first commitment period of the Kyoto Protocol only, additions to and subtractions from the assigned amount of a Party resulting from Forest management under Article 3, paragraph 4, after the application of paragraph 10 of the annex to decision 16/CMP.1 and resulting from forest management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix of the annex to decision 16/CMP.1, times five.

### **Custom Footnotes**

Documentation Box:

### Table 4(b) **Reporting on progress<sup>a, b, c</sup>**

	Units of market based moch minne		Yea	r
	Units of market based mechanisms		2011	2012
	Kunda Dunda ad umita	(number of units)	2,172,851,039.00	2,114,032,058.00
	Kyoto Protocol units	$(kt CO_2 eq)$	2,172,851.05	2,114,032.05
	A A T T	(number of units)	2,060,295,747.00	1,908,493,342.00
	AAUS	(kt CO2 eq)	2,060,295.75	1,908,493.34
	Convention	(number of units)	12,003,006.00	57,617,782.00
Kyoto Protocol	ERUs	(kt CO2 eq)	12,003.01	57,617.78
protocol units <sup>d</sup>		(number of units)	100,552,286.00	147,920,934.00
unus	CERs	(kt CO2 eq)	100,552.29	147,920.93
	AAUs ERUs CERs tCERs tCERs Units from market-based mechanisms under the Convention	(number of units)	NO	NC
		(kt CO2 eq)	NO	NO
		(number of units)	NO	NO
	ICERs	(kt CO2 eq)	NO	NO
	Units from market-based mechanisms under the	(number of units)		
	Convention	$(kt \ CO_2 \ eq)$		
Other units				
d,e	Units from other market has ad mechanisms	(number of units)		
	Onis from other market-based mechanisms	$(kt CO_2 eq)$		
Total		(number of units)	2,172,851,039.00	2,114,032,058.00
10tal		$(kt CO_2 eq)$	2,172,851.05	2,114,032.05

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>*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.

 $^{b}$  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>c</sup> Parties may include this information, as appropriate and if relevant to their target.

d Units surrendered by that Party for that year that have not been previously surrendered by that or any other Party.

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

**Custom Footnotes** 

In addition, 288 245 RMUs (= 288.25 kt CO2 eq) were retired in 2012.

### Table 5

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

Key underlying assum	ptions	ons Historical <sup>b</sup>					Projected				
Assumption	Unit	1990	1995	2000	2005	2010	2011	2015	2020	2025	2030

<sup>*a*</sup> Parties should include key underlying assumptions as appropriate.

<sup>b</sup> Parties should include historical data used to develop the greenhouse gas projections reported.

### Table 6(a)

### EUC\_BR1\_v2.0

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

		GHG emissions and removals <sup>b</sup>							
				$(kt CO_2 eq)$				(kt C	$O_2$ eq)
	Base Year	1990	1995	2000	2005	2010	2011	2020	2030
Sector <sup>d,e</sup>									
Energy									
Transport									
Industry/industrial processes									
Agriculture									
Forestry/LULUCF									
Waste management/waste									
Other (specify)									
Gas									
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF									
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF									
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF									
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF									
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF									
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF									
HFCs									
PFCs									
SF <sub>6</sub>									1
Other (specify)									
Total with LULUCF <sup>f</sup>									
Total without LULUCF									

*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.

### Table 6(a)

### EUC\_BR1\_v2.0

### 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         1995         2000         2005         2010         2011						2020	2030	

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).

 $^{d}$  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.

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

**Custom Footnotes** 

not reported for EU-15

### Table 6(c)

### EUC\_BR1\_v2.0

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

		GHG emissions and removals <sup>b</sup>							on projections
		$(kt \ CO_2 \ eq)$							
	Base Year	1990	1995	2000	2005	2010	2011	2020	2030
Sector <sup>d,e</sup>			-						
Energy									
Transport									
Industry/industrial processes									
Agriculture									
Forestry/LULUCF									
Waste management/waste									
Other (specify)									
Gas									
CO <sub>2</sub> emissions including net CO <sub>2</sub> from LULUCF									
CO <sub>2</sub> emissions excluding net CO <sub>2</sub> from LULUCF									
CH <sub>4</sub> emissions including CH <sub>4</sub> from LULUCF									
CH <sub>4</sub> emissions excluding CH <sub>4</sub> from LULUCF									
N <sub>2</sub> O emissions including N <sub>2</sub> O from LULUCF									
N <sub>2</sub> O emissions excluding N <sub>2</sub> O from LULUCF									
HFCs									
PFCs									
SF <sub>6</sub>									
Other (specify)									
Total with LULUCF <sup>f</sup>									
Total without LULUCF									

*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' or 'with additional measures' scenarios then it should not include tables 6(b) or 6(c) in the biennial report.

### Table 6(c)

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

GHG emissions and removals <sup>b</sup>						GHG emissio	on projections		
$(kt \ CO_2 \ eq)$							(kt CC	$O_2$ eq)	
Base Year	1990	1995	2000	2005	2010	2011	2020	2030	ns

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

d 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.

<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 2011**<sup>a</sup>

	Year										
		Eur	opean euro - E	EUR		$USD^{b}$					
Allocation channels	Core/ Climate-specific					Core/		Climate-	specific <sup>d</sup>		
	general <sup>c</sup>	Mitigation	Adaptation	Cross- cutting <sup>e</sup>	<i>Other</i> <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.

<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>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.

<sup>*f*</sup> Please specify.

<sup>*g*</sup> 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.

**Custom Footnotes** 

not reported for EU-15

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:

### Table 7 **Provision of public financial support: summary information in 2012**<sup>a</sup>

Year European euro - EUR  $USD^{b}$ Allocation channels Climate-specific<sup>d</sup> *Climate-specific*<sup>d</sup> Core/ Core/ Cross-Crossgeneral Mitigation Adaptation  $Other^{f}$ general<sup>c</sup> Mitigation Adaptation Other<sup>f</sup> cutting " cutting<sup>e</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>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>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.

<sup>*f*</sup> Please specify.

<sup>g</sup> 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.

**Custom Footnotes** 

not reported for EU-15

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.

### Table 7(a)

### Provision of public financial support: contribution through multilateral channels in 2011<sup>a</sup>

		Tota	ıl amount							
Donor funding	Core/ge	neral <sup>d</sup>	Climate-	specific <sup>e</sup>	Status <sup>b</sup>	Funding source <sup>f</sup>	Financial	Type of support <sup>f, g</sup>	Sector <sup>c</sup>	
	European euro - EUR	USD	European euro - EUR	USD		I unung source	instrument <sup>f</sup>	Type of support		
Total contributions through multilateral channels										
Multilateral climate change funds <sup>g</sup>										
1. 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>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

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

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

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

<sup>f</sup> Please specify.

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

### **Custom Footnotes**

### EUC\_BR1\_v2.0

### Table 7(a) Provision of public financial support: contribution through multilateral channels in 2012<sup>a</sup>

		Total	amount						
Donor funding	Core/ge	eneral <sup>d</sup>	Climate-	specific <sup>e</sup>	Status <sup>b</sup>	Funding source <sup>f</sup>	Financial	Type of support <sup>f, g</sup>	Sector <sup>c</sup>
Donor junang	European euro - EUR	USD	European euro - EUR	USD	Suus	Funding source	instrument <sup>f</sup>	1 ype of support	Sector
Total contributions through multilateral channels									
Multilateral climate change funds <sup>g</sup>									
1. 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>a</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

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

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

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

<sup>f</sup> Please specify.

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

### **Custom Footnotes**

### EUC\_BR1\_v2.0

### Table 7(b)

### Provision of public financial support: contribution through bilateral, regional and other channels in 2011<sup>a</sup>

	Total amount Climate-specific <sup>f</sup>		Status <sup>c</sup>	Funding	Financial instrument <sup>8</sup>	Type of support <sup>g, h</sup>	Sector <sup>d</sup>		
Recipient country/								Additional information <sup>e</sup>	
region/project/programme <sup>b</sup>	European euro - EUR	USD	-	source <sup>s</sup>	insir ument <sup>*</sup>	support			
Total contributions through bilateral, regional and other channels									

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

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

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

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

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

<sup>*g*</sup> Please specify.

<sup>*h*</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 2012<sup>a</sup>

	Total a	mount						
Recipient country/ region/project/programme <sup>b</sup>	Climate-specific <sup>f</sup>		Status <sup>c</sup>	Funding	Financial instrument <sup>g</sup>	Type of support <sup>g, h</sup>	Sector <sup>d</sup>	Additional information <sup>e</sup>
	European euro - EUR	USD		source <sup>s</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>*a*</sup> Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

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

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

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

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

<sup>*g*</sup> Please specify.

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

### Table 8

### **Provision of technology development and transfer support**<sup>*a,b*</sup>

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>*a*</sup> To be reported to the extent possible.

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

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

<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.

### EUC\_BR1\_v2.0

## Table 9**Provision of capacity-building support**

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

<sup>*a*</sup> To be reported to the extent possible.

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