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Table 1 ROU_BR2_v1.0

Emission trends: summary [(1)]

(Sheet 1 of 3)

GREENHOUSE GAS EMISSIONS	Base year[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt CO_2 eq								
CO_2 emissions without net CO_2 from LULUCF	208,913.93	173,012.37	142,141.46	131,231.90	123,679.22	121,345.05	127,249.43	130,533.05	122,231.54
CO_2 emissions with net CO_2 from LULUCF	191,753.59	151,654.15	117,771.23	106,126.20	97,179.02	94,286.80	100,775.82	104,960.47	96,241.57
CH_4 emissions without CH_4 from LULUCF	66,817.22	62,137.66	51,446.66	45,738.64	43,987.23	42,945.14	42,889.53	42,453.06	39,269.10
CH_4 emissions with CH_4 from LULUCF	66,817.31	62,138.07	51,446.92	45,739.31	43,987.71	42,945.43	42,889.72	42,453.27	39,269.16
N_2O emissions without N_2O from LULUCF	18,399.77	15,711.85	11,210.35	10,903.34	11,565.52	10,818.36	11,496.40	11,046.38	10,636.58
N_2O emissions with N_2O from LULUCF	19,244.40	16,588.87	12,084.84	11,775.48	12,435.11	11,685.41	12,360.93	11,908.44	11,496.11
HFCs	0.16	0.18	0.29	0.45	0.73	1.20	2.53	4.72	10.36
PFCs	3,886.75	2,455.17	2,253.56	1,568.98	1,635.47	1,730.09	2,057.96	2,052.55	2,072.87
Unspecified mix of HFCs and PFCs	NO	NO	NO	NO	NO	NO	NO	NO	NO
SF_6	0.47	0.47	0.52	0.49	0.52	0.74	0.98	1.54	1.41
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total (without LULUCF)	298,018.31	253,317.70	207,052.84	189,443.79	180,868.69	176,840.58	183,696.81	186,091.30	174,221.86
Total (with LULUCF)	281,702.68	232,836.90	183,557.36	165,210.90	155,238.56	150,649.67	158,087.94	161,380.99	149,091.48
Total (without LULUCF, with indirect)	298,018.31	253,317.70	207,052.84	189,443.79	180,868.69	176,840.58	183,696.81	186,091.30	174,221.86
Total (with LULUCF, with indirect)	281,702.68	232,836.90	183,557.36	165,210.90	155,238.56	150,649.67	158,087.94	161,380.99	149,091.48

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year[a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt CO_2 eq								
1. Energy	220,008.16	185,004.71	153,396.33	142,056.36	132,508.31	129,939.22	133,456.44	137,312.75	127,743.45
2. Industrial processes and product use	39,016.24	28,413.57	20,814.12	17,828.20	18,872.06	18,773.55	21,928.19	21,254.14	20,421.26
3. Agriculture	33,858.25	34,876.06	27,901.38	24,674.99	24,584.89	23,187.62	23,141.56	22,289.11	20,748.00
4. Land Use, Land-Use Change and Forestry[b]	-16,315.63	-20,480.79	-23,495.49	-24,232.88	-25,630.13	-26,190.91	-25,608.87	-24,710.30	-25,130.38
5. Waste	5,135.66	5,023.36	4,941.02	4,884.24	4,903.42	4,940.19	5,170.62	5,235.30	5,309.15
6. Other									
Total (including LULUCF)	281,702.68	232,836.90	183,557.36	165,210.90	155,238.56	150,649.67	158,087.94	161,380.99	149,091.48

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

[1] 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 ROU_BR2_v1.0

Emission trends: summary [(1)]

(Sheet 2 of 3)

GREENHOUSE GAS EMISSIONS	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
CO_2 emissions without net CO_2 from LULUCF	106,323.39	89,732.14	94,087.96	99,503.04	99,756.71	104,630.35	103,518.26	101,219.26	104,126.59	103,314.60
CO_2 emissions with net CO_2 from LULUCF	78,099.41	62,614.17	67,394.42	71,619.45	74,608.02	79,784.68	79,219.06	75,341.40	78,293.26	78,830.55
CH_4 emissions without CH_4 from LULUCF	36,791.79	35,273.47	36,031.06	35,486.19	36,508.28	36,673.23	35,390.82	35,269.47	34,711.33	33,582.78
CH_4 emissions with CH_4 from LULUCF	36,791.92	35,273.82	36,034.39	35,487.14	36,511.59	36,673.93	35,390.93	35,269.67	34,712.20	33,585.48
N_2O emissions without N_2O from LULUCF	9,449.19	8,984.75	9,444.95	9,338.21	8,652.04	9,285.81	10,577.42	10,405.38	9,249.50	9,255.23
N_2O emissions with N_2O from LULUCF	10,306.26	9,839.41	10,298.10	10,188.10	9,500.23	10,130.66	11,419.60	11,245.10	10,086.96	10,060.02
HFCs	23.88	39.73	70.82	112.87	168.16	228.75	293.93	368.91	484.20	665.63
PFCs	2,034.53	1,860.49	1,499.32	1,211.66	832.99	304.54	153.86	95.28	64.06	28.18
Unspecified mix of HFCs and PFCs	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SF_6	1.51	1.70	8.68	14.33	12.10	10.54	14.10	15.67	24.13	29.88
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Total (without LULUCF)	154,624.29	135,892.28	141,142.79	145,666.31	145,930.28	151,133.22	149,948.39	147,373.97	148,659.80	146,876.30
Total (with LULUCF)	127,257.50	109,629.32	115,305.74	118,633.56	121,633.09	127,133.11	126,491.48	122,336.02	123,664.81	123,199.74
Total (without LULUCF, with indirect)	154,624.29	135,892.28	141,142.79	145,666.31	145,930.28	151,133.22	149,948.39	147,373.97	148,659.80	146,876.30
Total (with LULUCF, with indirect)	127,257.50	109,629.32	115,305.74	118,633.56	121,633.09	127,133.11	126,491.48	122,336.02	123,664.81	123,199.74

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	110,109.62	95,439.62	100,585.82	105,463.80	104,586.62	108,446.36	104,580.93	102,029.51	104,084.04	101,788.31
2. Industrial processes and product use	19,245.06	16,311.21	17,151.67	16,697.40	17,569.16	18,311.31	20,120.44	19,789.85	19,385.15	19,586.45
3. Agriculture	19,945.20	18,745.57	18,011.34	18,054.80	18,340.14	18,823.10	19,612.17	19,878.92	19,780.22	19,955.76
4. Land Use, Land-Use Change and Forestry[b]	-27,366.78	-26,262.96	-25,837.06	-27,032.75	-24,297.19	-24,000.12	-23,456.91	-25,037.95	-24,994.99	-23,676.56
5. Waste	5,324.41	5,395.89	5,393.96	5,450.31	5,434.36	5,552.46	5,634.86	5,675.69	5,410.39	5,545.78
6. Other										
Total (including LULUCF)	127,257.50	109,629.32	115,305.74	118,633.56	121,633.09	127,133.11	126,491.48	122,336.02	123,664.81	123,199.74

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

Table 1

ROU_BR2_v1.0

Emission trends: summary [(1)]

(Sheet 3 of 3)

GREENHOUSE GAS EMISSIONS	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year (%)
CO_2 emissions without net CO_2 from LULUCF	99,950.92	84,419.15	79,727.18	84,802.17	83,183.57	73,437.39	
CO_2 emissions with net CO_2 from LULUCF	75,121.26	59,556.22	54,844.15	59,593.60	57,919.80	47,883.82	
CH_4 emissions without CH_4 from LULUCF	32,953.12	31,436.26	29,295.78	28,651.17	29,292.16	28,709.80	
CH_4 emissions with CH_4 from LULUCF	32,953.90	31,437.16	29,295.97	28,652.28	29,293.35	28,711.06	
N_2O emissions without N_2O from LULUCF	8,063.46	7,413.02	7,631.65	7,959.87	7,246.04	7,418.60	
N_2O emissions with N_2O from LULUCF	8,834.35	8,150.67	8,336.79	8,634.52	7,889.93	8,031.73	
HFCs	946.95	924.42	982.46	1,092.24	1,197.43	1,298.58	
PFCs	17.87	8.16	9.13	12.72	7.43	6.15	
Unspecified mix of HFCs and PFCs	NO	NO	NO	NO	NO	NO	
SF_6	33.83	47.03	60.71	47.83	50.76	57.08	
NF3	NO	NO	NO	NO	NO	NO	
Total (without LULUCF)	141,966.15	124,248.03	117,706.91	122,565.99	120,977.39	110,927.60	
Total (with LULUCF)	117,908.16	100,123.66	93,529.21	98,033.19	96,358.70	85,988.41	
Total (without LULUCF, with indirect)	141,966.15	124,248.03	117,706.91	122,565.99	120,977.39	110,927.60	
Total (with LULUCF, with indirect)	117,908.16	100,123.66	93,529.21	98,033.19	96,358.70	85,988.41	

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year (%)
1. Energy	100,689.24	88,665.43	82,774.11	87,742.85	86,548.74	76,996.22	
2. Industrial processes and product use	16,109.97	10,944.17	12,260.33	12,504.39	11,600.67	10,434.74	
3. Agriculture	19,615.98	19,063.78	16,994.04	17,208.17	17,113.44	17,648.31	
4. Land Use, Land-Use Change and Forestry[b]	-24,057.99	-24,124.37	-24,177.70	-24,532.80	-24,618.69	-24,939.19	
5. Waste	5,550.96	5,574.66	5,678.43	5,110.58	5,714.54	5,848.33	
6. Other							
Total (including LULUCF)	117,908.16	100,123.66	93,529.21	98,033.19	96,358.70	85,988.41	

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_6)", 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.

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant 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] Includes net CO_2, CH_4 and N_2O from LULUCF.

Custom Footnotes

Table 1 (a) ROU_BR2_v1.0

Emission trends (CO_2)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year* [a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	179,931.17	151,141.55	126,139.67	118,201.43	109,780.54	107,203.19	110,729.31	114,741.04	106,776.49
A. Fuel combustion (sectoral approach)	178,531.28	149,928.48	125,104.78	117,143.61	108,709.81	106,129.29	109,625.61	113,643.80	105,683.81
1. Energy industries	80,157.25	51,205.36	46,412.59	60,436.49	59,399.90	60,210.66	62,722.24	65,269.10	58,361.74
2. Manufacturing industries and construction	70,923.28	74,477.73	56,308.89	35,207.98	32,117.40	29,633.81	30,188.81	28,925.84	24,840.71
3. Transport	10,809.37	12,059.33	10,310.68	10,572.94	8,448.25	8,994.80	8,271.63	11,620.24	11,879.40
4. Other sectors	14,173.02	10,953.94	10,789.26	9,934.81	8,434.93	6,852.35	7,886.34	7,552.56	9,756.24
5. Other	2,468.35	1,232.12	1,283.36	991.39	309.33	437.67	556.59	276.06	845.72
B. Fugitive emissions from fuels	1,399.89	1,213.08	1,034.90	1,057.82	1,070.73	1,073.89	1,103.70	1,097.24	1,092.67
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
2. Oil and natural gas and other emissions from energy production	1,399.89	1,213.08	1,034.90	1,057.82	1,070.73	1,073.89	1,103.70	1,097.24	1,092.67
C. CO2 transport and storage									
2. Industrial processes	28,779.81	21,750.77	15,948.86	12,969.99	13,825.03	14,040.71	16,424.69	15,685.66	15,353.61
A. Mineral industry	8,310.74	6,529.97	4,805.25	4,246.31	4,024.43	3,896.17	4,372.70	4,418.73	4,167.67
B. Chemical industry	4,050.47	3,308.63	2,323.34	2,446.74	2,464.79	2,112.82	2,703.90	2,574.46	1,209.24
C. Metal industry	15,772.64	11,371.57	8,371.93	6,039.20	7,098.12	7,806.24	9,118.58	8,467.01	9,757.54
D. Non-energy products from fuels and solvent use	645.95	540.61	448.34	237.75	237.68	225.48	229.51	225.46	219.16
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	202.96	120.04	52.93	49.58	57.43	79.62	68.58	72.23	61.77
A. Enteric fermentation									
B. Manure management									
C. Rice cultivation									
D. Agricultural soils									
E. Prescribed burning of savannas									
F. Field burning of agricultural residues									
G. Liming	149.00	66.83	30.63	28.67	29.40	54.23	43.78	50.50	40.51
H. Urea application	53.96	53.21	22.30	20.91	28.03	25.39	24.81	21.72	21.26
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NO	NO
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land Use, Land-Use Change and Forestry	-17,160.35	-21,358.22	-24,370.23	-25,105.70	-26,500.20	-27,058.25	-26,473.60	-25,572.57	-25,989.97
A. Forest land	-22,564.80	-25,567.79	-26,912.45	-27,598.18	-28,942.95	-29,451.26	-28,816.87	-27,866.11	-28,233.77
B. Cropland	-1,236.52	-1,477.66	-2,101.64	-2,123.87	-2,146.11	-2,168.34	-2,190.58	-2,212.81	-2,235.05
C. Grassland	1,989.96	911.52	-131.87	-159.37	-186.87	-214.37	-241.88	-269.38	-296.88
D. Wetlands	333.99	335.18	335.18	335.18	335.18	335.18	335.18	335.18	335.18
E. Settlements	3,444.21	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09
F. Other land	872.82	890.45	890.45	890.45	890.45	890.45	890.45	890.45	890.45
G. Harvested wood products	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE
H. Other									
5. Waste	NA, NO	NA, NO	NA, NO	10.90	16.21	21.53	26.84	34.12	39.67
A. Solid waste disposal	NA	NA	NA	NA	NA	NA	NA	NA	NA
B. Biological treatment of solid waste									
C. Incineration and open burning of waste	NO	NO	NO	10.90	16.21	21.53	26.84	34.12	39.67
D. Waste water treatment and discharge									
E. Other									
6. Other (as specified in the summary table in CRF)									
Memo items:									
International bunkers	854.61	790.16	560.50	842.40	852.84	557.02	623.14	292.65	418.15
Aviation	854.61	790.16	560.50	842.40	852.84	557.02	623.14	292.65	418.15
Navigation	NO	NO	NO	NO	NO	NO	NO	NO	NO
Multilateral operations									
CO2 emissions from biomass	2,986.70	2,760.24	3,246.99	3,684.13	4,880.06	5,635.17	6,328.11	11,954.66	15,574.72
CO2 captured	0.00	0.00	0.00	0.03	0.03	0.01	0.01	0.01	0.00
Long-term storage of C in waste disposal sites	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indirect N2O									
Indirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Total CO2 equivalent emissions without land use, land-use change and forestry	298,018.31	253,317.70	207,052.84	189,443.79	180,868.69	176,840.58	183,696.81	186,091.30	174,221.86
Total CO2 equivalent emissions with land use, land-use change and forestry	281,702.68	232,836.90	183,557.36	165,210.90	155,238.56	150,649.67	158,087.94	161,380.99	149,091.48
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	208,913.93	173,012.37	142,141.46	131,231.90	123,679.22	121,345.05	127,249.43	130,533.05	122,231.54
Total CO2 equivalent emissions, including indirect CO2, with land use, land-use change and forestry	191,753.59	151,654.15	117,771.23	106,126.20	97,179.02	94,286.80	100,775.82	104,960.47	96,241.57

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

Table 1 (a) ROU_BR2_v1.0

Emission trends (CO_2)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	91,430.91	77,601.59	81,668.26	86,549.15	85,245.52	89,334.30	86,626.09	84,691.29	87,627.54	87,067.84
A. Fuel combustion (sectoral approach)	89,958.48	76,281.73	80,111.63	85,396.33	83,744.10	87,677.30	85,177.79	82,977.77	85,604.79	85,332.46
1. Energy industries	49,033.89	41,048.01	43,304.09	46,121.57	43,626.99	46,842.99	41,982.18	41,507.82	43,484.25	43,791.85
2. Manufacturing industries and construction	19,600.47	17,881.82	18,760.16	19,497.05	20,035.63	18,569.42	18,773.79	18,069.53	17,680.27	17,055.34
3. Transport	11,205.80	9,286.98	9,588.86	11,607.02	11,953.90	12,605.10	13,214.44	12,355.71	11,978.18	13,473.47
4. Other sectors	9,420.00	7,961.73	8,220.42	7,788.12	7,859.27	9,281.90	9,899.46	10,213.19	11,959.44	10,060.99
5. Other	698.33	103.19	238.11	382.58	268.32	377.89	1,307.92	831.51	502.65	950.81
B. Fugitive emissions from fuels	1,472.43	1,319.86	1,556.63	1,152.82	1,501.41	1,657.00	1,448.30	1,713.52	2,022.75	1,735.38
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
2. Oil and natural gas and other emissions from energy production	1,472.43	1,319.86	1,556.63	1,152.82	1,501.41	1,657.00	1,448.30	1,713.52	2,022.75	1,735.38
C. CO2 transport and storage										
2. Industrial processes	14,781.60	12,021.68	12,273.61	12,783.93	14,351.27	15,113.04	16,676.73	16,243.18	16,349.93	16,145.51
A. Mineral industry	4,267.28	3,832.83	3,879.58	4,142.67	4,008.53	4,026.50	4,442.40	4,432.66	5,079.63	5,775.73
B. Chemical industry	1,098.83	1,533.92	1,983.86	1,902.01	1,866.20	2,214.34	2,335.11	2,367.54	2,097.85	1,647.01
C. Metal industry	9,193.55	6,432.42	6,185.79	6,538.80	8,254.26	8,592.30	9,621.81	9,317.95	9,050.78	8,588.07
D. Non-energy products from fuels and solvent use	221.94	222.51	224.39	200.44	222.27	279.90	277.40	125.04	121.66	134.70
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	65.06	52.29	80.12	95.54	83.21	98.84	110.37	110.05	105.65	92.16
A. Enteric fermentation										
B. Manure management										
C. Rice cultivation										
D. Agricultural soils										
E. Prescribed burning of savannas										
F. Field burning of agricultural residues										
G. Liming	44.48	34.02	60.71	73.76	63.82	78.39	88.46	85.79	85.19	70.62
H. Urea application	20.58	18.26	19.41	21.77	19.39	20.45	21.91	24.27	20.46	21.53
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land Use, Land-Use Change and Forestry	-28,223.98	-27,117.97	-26,693.54	-27,883.59	-25,148.70	-24,845.67	-24,299.20	-25,877.87	-25,833.33	-24,484.05
A. Forest land	-30,418.04	-29,262.29	-28,788.13	-29,928.44	-27,143.82	-26,791.06	-26,194.86	-27,723.79	-27,629.52	-26,230.51
B. Cropland	-2,257.28	-2,279.51	-2,301.75	-2,323.98	-2,346.21	-2,368.43	-2,390.66	-2,412.89	-2,435.12	-2,457.34
C. Grassland	-324.39	-351.89	-379.39	-406.90	-434.40	-461.90	-489.41	-516.91	-544.41	-571.91
D. Wetlands	335.18	335.18	335.18	335.18	335.18	335.18	335.18	335.18	335.18	335.18
E. Settlements	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09
F. Other land	890.45	890.45	890.45	890.45	890.45	890.45	890.45	890.45	890.45	890.45
G. Harvested wood products	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE
H. Other										
5. Waste	45.82	56.58	65.97	74.42	76.72	84.18	105.07	174.74	43.47	9.10
A. Solid waste disposal	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B. Biological treatment of solid waste										
C. Incineration and open burning of waste	45.82	56.58	65.97	74.42	76.72	84.18	105.07	174.74	43.47	9.10
D. Waste water treatment and discharge										
E. Other										
6. Other (as specified in the summary table in CRF)										
Memo items:										
International bunkers	455.86	442.64	428.80	383.23	327.38	397.03	463.13	377.26	464.84	476.68
Aviation	355.80	442.64	428.80	383.23	327.38	397.03	463.13	377.26	464.84	368.51
Navigation	100.06	NO	NO	NO	NO	NO	NO	NO	NO	108.17
Multilateral operations										
CO2 emissions from biomass	13,998.21	13,208.16	12,949.44	10,003.06	11,025.80	13,331.81	14,616.34	14,972.38	14,687.12	15,347.36
CO2 captured	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00
Long-term storage of C in waste disposal sites	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indirect N2O										
Indirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
Total CO2 equivalent emissions without land use, land-use change and forestry	154,624.29	135,892.28	141,142.79	145,666.31	145,930.28	151,133.22	149,948.39	147,373.97	148,659.80	146,876.30
Total CO2 equivalent emissions with land use, land-use change and forestry	127,257.50	109,629.32	115,305.74	118,633.56	121,633.09	127,133.11	126,491.48	122,336.02	123,664.81	123,199.74
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	106,323.39	89,732.14	94,087.96	99,503.04	99,756.71	104,630.35	103,518.26	101,219.26	104,126.59	103,314.60
Total CO2 equivalent emissions, including indirect CO2, with land use, land-use change and forestry	78,099.41	62,614.17	67,394.42	71,619.45	74,608.02	79,784.68	79,219.06	75,341.40	78,293.26	78,830.55

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

Table 1(a) ROU_BR2_v1.0

Emission trends (CO_2)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	85,857.15	75,055.07	69,651.42	74,589.44	73,803.85	64,825.89	
A. Fuel combustion (sectoral approach)	84,015.43	73,548.18	68,156.79	73,385.00	72,650.66	63,924.66	
1. Energy industries	41,611.31	35,102.23	32,131.73	35,407.20	32,429.48	25,345.80	
2. Manufacturing industries and construction	17,578.59	13,125.16	12,801.36	14,126.92	14,967.03	13,942.79	
3. Transport	15,125.23	14,939.94	13,902.13	14,124.90	14,999.85	14,850.58	
4. Other sectors	8,888.61	10,110.12	9,053.77	9,187.50	9,695.94	9,362.02	
5. Other	811.68	270.73	267.81	538.48	558.37	423.48	
B. Fugitive emissions from fuels	1,841.72	1,506.89	1,494.63	1,204.44	1,153.18	901.22	
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	
2. Oil and natural gas and other emissions from energy production	1,841.72	1,506.89	1,494.63	1,204.44	1,153.18	901.22	
C. CO2 transport and storage							
2. Industrial processes	13,976.83	9,264.34	9,992.17	10,145.16	9,322.28	8,545.82	
A. Mineral industry	5,775.28	4,218.76	4,029.65	4,349.69	4,327.27	3,966.14	
B. Chemical industry	1,862.60	1,063.28	1,971.68	2,039.17	1,616.34	1,147.58	
C. Metal industry	6,208.33	3,865.23	3,871.73	3,632.03	3,256.73	3,308.16	
D. Non-energy products from fuels and solvent use	130.62	117.06	119.10	124.28	121.94	123.94	
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
3. Agriculture	110.34	94.86	78.10	60.82	49.02	57.15	
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannas							
F. Field burning of agricultural residues							
G. Liming	87.64	70.85	53.31	35.40	25.50	29.25	
H. Urea application	22.70	24.01	24.80	25.41	23.52	27.90	
I. Other carbon-containing fertilizers	NO	NO	NO	NO	NO	NO	
J. Other	NO	NO	NO	NO	NO	NO	
4. Land Use, Land-Use Change and Forestry	-24,829.66	-24,862.93	-24,883.04	-25,208.57	-25,263.78	-25,553.57	
A. Forest land	-26,526.39	-26,509.93	-26,499.85	-26,827.39	-26,884.60	-26,941.91	
B. Cropland	-2,479.57	-2,501.80	-2,517.90	-2,515.89	-2,513.89	-2,511.88	
C. Grassland	-599.42	-626.92	-641.02	-641.02	-641.02	-641.02	
D. Wetlands	335.18	335.18	335.18	335.18	335.18	335.18	
E. Settlements	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	3,550.09	
F. Other land	890.45	890.45	890.45	890.45	890.45	890.45	
G. Harvested wood products	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	NO, NA, NE, IE	-234.48	
H. Other							
5. Waste	6.61	4.87	5.49	6.75	8.43	8.54	
A. Solid waste disposal	NA	NA	NA	NA	NA	NA	
B. Biological treatment of solid waste							
C. Incineration and open burning of waste	6.61	4.87	5.49	6.75	8.43	8.54	
D. Waste water treatment and discharge							
E. Other							
6. Other (as specified in the summary table in CRF)							
Memo items:							
International bunkers	629.44	485.72	537.24	466.20	444.15	619.32	
Aviation	413.35	438.51	490.72	438.51	400.23	490.72	
Navigation	216.09	47.21	46.52	27.69	43.91	128.61	
Multilateral operations							
CO2 emissions from biomass	18,201.86	18,174.88	18,975.22	17,141.44	18,045.31	17,365.61	
CO2 captured	0.01	0.01	0.01	0.02	0.02	0.02	
Long-term storage of C in waste disposal sites	NA	NA	NA	NA	NA	NA	
Indirect N2O							
Indirect CO2 (3)	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
Total CO2 equivalent emissions without land use, land-use change and forestry	141,966.15	124,248.03	117,706.91	122,565.99	120,977.39	110,927.60	
Total CO2 equivalent emissions with land use, land-use change and forestry	117,908.16	100,123.66	93,529.21	98,033.19	96,358.70	85,988.41	
Total CO2 equivalent emissions, including indirect CO2, without land use, land-use change and forestry	99,950.92	84,419.15	79,727.18	84,802.17	83,183.57	73,437.39	
Total CO2 equivalent emissions, including indirect CO2, with land use, land-use change and forestry	75,121.26	59,556.22	54,844.15	59,593.60	57,919.80	47,883.82	

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

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant 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

Due to the issues on the functioning of the CRF Reporter software in 2015, software used in the preparation of the National Greenhouse Gas Inventory, some information could not be imported in the CTF tables and these contain some empty cells. The information associated to the empty cells is as follows:- 1C CO2 transport and storage: Not Occurring (NO);- 4H Other: NO;- 5E Other: NO;- 6 Other: NO;- Memo items-Multilateral operations: Not Estimated (NE; data and information are confidential).

Table 1(b) ROU_BR2_v1.0

Emission trends (CH_4)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year* [a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	1,576.06	1,330.19	1,069.27	931.02	887.35	887.94	887.16	876.80	811.76
A. Fuel combustion (sectoral approach)	25.29	24.38	20.08	18.22	18.68	18.03	19.90	36.03	45.41
1. Energy industries	1.45	1.17	0.96	1.08	1.08	1.10	1.23	1.24	1.18
2. Manufacturing industries and construction	2.82	2.30	1.47	1.65	1.50	1.21	1.49	1.21	1.17
3. Transport	3.11	3.76	3.18	2.45	2.11	2.33	2.06	2.75	2.90
4. Other sectors	17.74	17.03	12.26	12.67	13.44	12.86	14.29	29.86	39.46
5. Other	0.17	0.13	2.22	0.37	0.54	0.54	0.84	0.96	0.70
B. Fugitive emissions from fuels	1,550.77	1,305.81	1,049.19	912.80	868.67	869.91	867.25	840.77	766.36
1. Solid fuels	263.88	155.97	132.39	153.19	125.67	129.58	128.93	132.74	114.95
2. Oil and natural gas and other emissions from energy production	1,286.90	1,149.84	916.80	759.61	743.01	740.32	738.32	708.03	651.41
C. CO2 transport and storage									
2. Industrial processes	3.93	2.85	1.85	1.37	1.32	1.94	1.98	1.81	2.10
A. Mineral industry									
B. Chemical industry	2.91	2.00	1.31	1.01	1.07	1.53	1.50	1.40	1.64
C. Metal industry	1.03	0.84	0.54	0.36	0.25	0.41	0.49	0.40	0.47
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	907.43	971.75	809.30	722.08	695.59	651.42	641.34	632.05	566.65
A. Enteric fermentation	704.39	771.95	680.18	587.44	569.21	546.56	538.60	520.01	487.51
B. Manure management	180.33	178.16	108.62	95.38	94.05	77.30	76.13	77.19	56.25
C. Rice cultivation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Agricultural soils	NE	NE	NE	NE	NE	NE	NE	NE	NE
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	22.71	21.64	20.50	39.26	32.34	27.56	26.60	34.85	22.88
G. Liming									
H. Urea application									
I. Other carbon-containing fertilizers									
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	0.00	0.02	0.01	0.03	0.02	0.01	0.01	0.01	0.00
A. Forest land	0.00	0.02	0.01	0.03	0.02	0.01	0.01	0.01	0.00
B. Cropland	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Grassland	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Wetlands	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Other land									
G. Harvested wood products									
H. Other									
5. Waste	185.26	180.72	177.45	175.08	175.22	176.50	185.11	187.46	190.25
A. Solid waste disposal	53.24	54.86	56.51	58.09	59.48	60.77	62.83	66.48	69.93
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Incineration and open burning of waste	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Waste water treatment and discharge	132.03	125.86	120.94	116.99	115.74	115.73	122.28	120.99	120.32
E. Other									
6. Other (as specified in the summary table in CRF)									
Total CH4 emissions without CH4 from LULUCF	2,672.69	2,485.51	2,057.87	1,829.55	1,759.49	1,717.81	1,715.58	1,698.12	1,570.76
Total CH4 emissions with CH4 from LULUCF	2,672.69	2,485.52	2,057.88	1,829.57	1,759.51	1,717.82	1,715.59	1,698.13	1,570.77
Memo items:									
International bunkers	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Aviation	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Navigation	NO	NO	NO	NO	NO	NO	NO	NO	NO
Multilateral operations									
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									
Indirect N2O									
Indirect CO2 (3)									

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

Table 1(b) ROU_BR2_v1.0

Emission trends (CH_4)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	723.35	692.83	734.07	734.80	751.26	740.62	693.24	674.08	638.49	567.10
A. Fuel combustion (sectoral approach)	40.32	37.77	36.89	29.96	30.57	35.92	41.77	42.58	40.43	41.36
1. Energy industries	0.93	0.79	0.81	1.01	0.81	0.83	0.73	0.71	0.72	0.65
2. Manufacturing industries and construction	0.97	0.90	1.04	1.02	1.28	1.33	1.25	1.16	1.29	1.26
3. Transport	2.81	2.36	2.41	3.18	3.07	3.13	3.28	2.80	2.51	2.31
4. Other sectors	35.21	33.06	32.18	22.89	23.43	28.70	34.87	35.53	33.70	35.30
5. Other	0.40	0.67	0.45	1.86	1.99	1.93	1.64	2.39	2.21	1.85
B. Fugitive emissions from fuels	683.03	655.06	697.19	704.84	720.69	704.71	651.47	631.49	598.05	525.73
1. Solid fuels	89.99	76.48	127.73	134.34	124.29	117.13	107.03	97.16	85.90	55.22
2. Oil and natural gas and other emissions from energy production	593.03	578.58	569.46	570.50	596.40	587.58	544.44	534.33	512.16	470.51
C. CO2 transport and storage										
2. Industrial processes	1.71	1.55	2.09	1.95	2.32	2.78	3.51	3.38	3.54	2.02
A. Mineral industry										
B. Chemical industry	1.24	1.26	1.81	1.51	1.85	2.31	3.05	2.92	3.13	1.58
C. Metal industry	0.46	0.29	0.28	0.43	0.48	0.46	0.46	0.46	0.41	0.45
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	556.40	524.09	513.48	489.28	513.47	527.70	520.57	536.18	555.02	575.66
A. Enteric fermentation	470.36	455.53	430.07	415.46	426.55	432.20	423.70	433.06	438.30	447.16
B. Manure management	54.85	44.03	40.37	47.34	56.61	61.67	75.13	82.02	95.11	88.74
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	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	31.19	24.53	43.04	26.47	30.32	33.83	21.74	21.10	21.60	39.76
G. Liming										
H. Urea application										
I. Other carbon-containing fertilizers										
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	0.01	0.01	0.13	0.04	0.13	0.03	0.00	0.01	0.03	0.11
A. Forest land	0.01	0.01	0.13	0.04	0.13	0.03	0.00	0.01	0.03	0.11
B. Cropland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Grassland	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Wetlands	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
E. Settlements	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Other land										
G. Harvested wood products										
H. Other										
5. Waste	190.22	192.46	191.60	193.43	193.28	195.83	198.31	197.14	191.41	198.53
A. Solid waste disposal	70.72	73.03	76.87	82.24	87.01	92.81	98.01	102.60	104.65	111.38
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Incineration and open burning of waste	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Waste water treatment and discharge	119.49	119.43	114.72	111.19	106.26	103.02	100.30	94.54	86.76	87.15
E. Other										
6. Other (as specified in the summary table in CRF)										
Total CH4 emissions without CH4 from LULUCF	1,471.67	1,410.94	1,441.24	1,419.45	1,460.33	1,466.93	1,415.63	1,410.78	1,388.45	1,343.31
Total CH4 emissions with CH4 from LULUCF	1,471.68	1,410.95	1,441.38	1,419.49	1,460.46	1,466.96	1,415.64	1,410.79	1,388.49	1,343.42
Memo items:										
International bunkers	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.04
Aviation	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03	0.03
Navigation	0.01	NO	NO	NO	NO	NO	NO	NO	NO	0.01
Multilateral operations										
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										
Indirect N2O										
Indirect CO2 (3)										

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

Table 1(b) ROU_BR2_v1.0

Emission trends (CH_4)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	570.02	523.05	503.94	504.07	487.34	466.41	
A. Fuel combustion (sectoral approach)	50.28	49.05	50.25	44.92	46.69	44.53	
1. Energy industries	0.62	0.53	0.51	0.57	0.51	0.46	
2. Manufacturing industries and construction	1.13	0.92	1.00	1.06	1.21	1.09	
3. Transport	2.16	2.07	1.73	1.67	1.60	1.51	
4. Other sectors	44.67	44.03	45.44	40.80	42.54	40.80	
5. Other	1.70	1.49	1.56	0.81	0.82	0.67	
B. Fugitive emissions from fuels	519.74	474.00	453.68	459.15	440.65	421.88	
1. Solid fuels	49.94	43.03	36.26	40.94	38.57	27.98	
2. Oil and natural gas and other emissions from energy production	469.80	430.97	417.42	418.22	402.08	393.90	
C. CO2 transport and storage							
2. Industrial processes	2.00	0.72	1.05	0.79	0.81	0.61	
A. Mineral industry							
B. Chemical industry	1.76	0.59	0.91	0.66	0.69	0.47	
C. Metal industry	0.24	0.13	0.14	0.13	0.12	0.15	
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	NO	NO	NO	NO	NO	NO	
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
3. Agriculture	547.56	533.29	462.62	459.68	477.16	469.91	
A. Enteric fermentation	441.93	431.54	376.66	375.40	381.44	387.15	
B. Manure management	85.64	79.92	69.14	67.25	65.42	64.82	
C. Rice cultivation	0.00	0.00	0.00	0.00	0.00	0.00	
D. Agricultural soils	NE	NE	NE	NE	NE	NE	
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	19.99	21.84	16.83	17.03	30.29	17.94	
G. Liming							
H. Urea application							
I. Other carbon-containing fertilizers							
J. Other	NO	NO	NO	NO	NO	NO	
4. Land use, land-use change and forestry	0.03	0.04	0.01	0.04	0.05	0.05	
A. Forest land	0.03	0.04	0.01	0.04	0.05	0.05	
B. Cropland	NO	NO	NO	NO	NO	NO	
C. Grassland	NO	NO	NO	NO	NO	NO	
D. Wetlands	NO	NO	NO	NO	NO	NO	
E. Settlements	NO	NO	NO	NO	NO	NO	
F. Other land							
G. Harvested wood products							
H. Other							
5. Waste	198.55	200.40	204.23	181.52	206.38	211.46	
A. Solid waste disposal	114.53	118.82	123.56	102.24	127.15	132.30	
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	
C. Incineration and open burning of waste	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	
D. Waste water treatment and discharge	84.02	81.58	80.67	79.27	79.22	79.16	
E. Other							
6. Other (as specified in the summary table in CRF)							
Total CH4 emissions without CH4 from LULUCF	1,318.12	1,257.45	1,171.83	1,146.05	1,171.69	1,148.39	
Total CH4 emissions with CH4 from LULUCF	1,318.16	1,257.49	1,171.84	1,146.09	1,171.73	1,148.44	
Memo items:							
International bunkers	0.05	0.03	0.03	0.03	0.02	0.03	
Aviation	0.03	0.03	0.03	0.02	0.02	0.02	
Navigation	0.02	0.00	0.00	0.00	0.00	0.01	
Multilateral operations							
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							
Indirect N2O							
Indirect CO2 (3)							

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

[a] The column “Base year” should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant 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

Due to the issues on the functioning of the CRF Reporter software in 2015, software used in the preparation of the National Greenhouse Gas Inventory, some information could not be imported in the CTF tables and these contain some empty cells. The information associated to the empty cells is as follows:- 4F Other land: NO;- 4H Other: NO;- 5E Other: NO;- Memo items- Multilateral operations: NE (data and information are confidential).

Table 1(c)

ROU_BR2_v1.0

Emission trends (N_2O)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year* [a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
1. Energy	2.27	2.04	1.76	1.94	1.83	1.80	1.84	2.19	2.26
A. Fuel combustion (sectoral approach)	2.25	2.03	1.75	1.93	1.82	1.79	1.83	2.18	2.25
1. Energy industries	0.81	0.60	0.58	0.63	0.60	0.61	0.64	0.64	0.56
2. Manufacturing industries and construction	0.40	0.30	0.19	0.23	0.21	0.17	0.20	0.17	0.17
3. Transport	0.82	0.96	0.81	0.90	0.82	0.83	0.77	0.95	0.98
4. Other sectors	0.19	0.16	0.12	0.15	0.17	0.18	0.20	0.40	0.53
5. Other	0.03	0.02	0.05	0.02	0.01	0.01	0.01	0.02	0.02
B. Fugitive emissions from fuels	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
2. Oil and natural gas and other emissions from energy production	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
C. CO2 transport and storage									
2. Industrial processes	20.98	13.88	8.61	10.92	11.33	9.91	11.38	11.63	9.83
A. Mineral industry									
B. Chemical industry	20.97	13.88	8.60	10.92	11.33	9.90	11.38	11.62	9.83
C. Metal industry	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
E. Electronic industry									
F. Product uses as ODS substitutes									
G. Other product manufacture and use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	36.81	35.11	25.56	22.06	23.95	22.89	23.62	21.53	21.88
A. Enteric fermentation									
B. Manure management	4.79	4.70	4.02	3.46	3.31	2.90	2.98	2.91	2.58
C. Rice cultivation									
D. Agricultural soils	31.33	29.75	20.91	17.39	19.65	19.15	19.83	17.55	18.60
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	0.69	0.66	0.63	1.20	0.99	0.84	0.81	1.06	0.70
G. Liming									
H. Urea application									
I. Other carbon containing fertlizers									
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	2.83	2.94	2.93	2.93	2.92	2.91	2.90	2.89	2.88
A. Forest land	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B. Cropland	1.24	1.30	1.30	1.30	1.29	1.29	1.29	1.28	1.28
C. Grassland	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11
D. Wetlands	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
E. Settlements	1.35	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38
F. Other land	NA	NA	NA	NA	NA	NA	NA	NA	NA
G. Harvested wood products									
H. Other									
5. Waste	1.69	1.70	1.69	1.67	1.70	1.70	1.73	1.73	1.72
A. Solid waste disposal									
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Incineration and open burning of waste	NO, NE	NO, NE	NO, NE	0.00	0.00	0.00	0.00	0.00	0.00
D. Waste water treatment and discharge	1.69	1.70	1.69	1.67	1.70	1.70	1.73	1.72	1.72
E. Other									
6. Other (as specified in the summary table in CRF)									
Total direct N2O emissions without N2O from LULUCF	61.74	52.72	37.62	36.59	38.81	36.30	38.58	37.07	35.69
Total direct N2O emissions with N2O from LULUCF	64.58	55.67	40.55	39.52	41.73	39.21	41.48	39.96	38.58
Memo items:									
International bunkers	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Aviation	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Navigation	NO	NO	NO	NO	NO	NO	NO	NO	NO
Multilateral operations									
CO2 emissions from biomass									
CO2 captured									
Long-term storage of C in waste disposal sites									
Indirect N2O	10.56	10.05	7.22	6.11	6.57	6.11	6.25	5.72	5.62
Indirect CO2 (3)									

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

Table 1(c) ROU_BR2_v1.0

Emission trends (N_2O)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
1. Energy	2.00	1.74	1.90	1.83	1.88	2.00	2.09	1.63	1.66	1.82
A. Fuel combustion (sectoral approach)	1.99	1.73	1.89	1.82	1.87	1.99	2.08	1.62	1.65	1.82
1. Energy industries	0.44	0.38	0.43	0.49	0.44	0.48	0.43	0.44	0.49	0.48
2. Manufacturing industries and construction	0.14	0.13	0.15	0.15	0.18	0.18	0.18	0.17	0.18	0.18
3. Transport	0.91	0.76	0.86	0.84	0.90	0.90	0.97	0.50	0.48	0.64
4. Other sectors	0.49	0.45	0.44	0.32	0.32	0.39	0.47	0.48	0.46	0.48
5. Other	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.04	0.03	0.03
B. Fugitive emissions from fuels	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
2. Oil and natural gas and other emissions from energy production	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
C. CO2 transport and storage										
2. Industrial processes	7.92	7.88	10.90	8.48	7.20	8.67	9.71	10.01	7.97	8.95
A. Mineral industry										
B. Chemical industry	7.92	7.88	10.89	8.47	7.20	8.67	9.70	10.00	7.96	8.94
C. Metal industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
E. Electronic industry										
F. Product uses as ODS substitutes										
G. Other product manufacture and use	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
3. Agriculture	20.03	18.76	17.09	19.22	18.19	18.56	21.77	21.36	19.46	18.36
A. Enteric fermentation										
B. Manure management	2.56	2.23	1.92	2.04	2.28	2.45	2.92	3.11	3.06	3.06
C. Rice cultivation										
D. Agricultural soils	16.52	15.78	13.86	16.37	14.98	15.08	18.19	17.60	15.74	14.08
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field burning of agricultural residues	0.95	0.75	1.31	0.81	0.93	1.03	0.66	0.64	0.66	1.22
G. Liming										
H. Urea application										
I. Other carbon containing fertlizers										
J. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
4. Land use, land-use change and forestry	2.88	2.87	2.86	2.85	2.85	2.84	2.83	2.82	2.81	2.70
A. Forest land	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
B. Cropland	1.28	1.27	1.27	1.27	1.26	1.26	1.26	1.25	1.25	1.19
C. Grassland	0.10	0.10	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.05
D. Wetlands	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
E. Settlements	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.35
F. Other land	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
G. Harvested wood products										
H. Other										
5. Waste	1.76	1.77	1.81	1.81	1.76	1.92	1.92	1.92	1.95	1.92
A. Solid waste disposal										
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
C. Incineration and open burning of waste	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.00
D. Waste water treatment and discharge	1.75	1.77	1.80	1.80	1.75	1.90	1.90	1.89	1.92	1.92
E. Other										
6. Other (as specified in the summary table in CRF)										
Total direct N2O emissions without N2O from LULUCF	31.71	30.15	31.69	31.34	29.03	31.16	35.49	34.92	31.04	31.06
Total direct N2O emissions with N2O from LULUCF	34.58	33.02	34.56	34.19	31.88	34.00	38.32	37.74	33.85	33.76
Memo items:										
International bunkers	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aviation	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Navigation	0.00	NO	NO	NO	NO	NO	NO	NO	NO	0.00
Multilateral operations										
CO2 emissions from biomass										
CO2 captured										
Long-term storage of C in waste disposal sites										
Indirect N2O	5.20	4.78	4.24	4.86	4.74	4.92	5.85	5.96	5.56	5.25
Indirect CO2 (3)										

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

Table 1(c) ROU_BR2_v1.0

Emission trends (N_2O)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
1. Energy	1.95	1.79	1.76	1.85	1.88	1.71	
A. Fuel combustion (sectoral approach)	1.94	1.79	1.75	1.84	1.88	1.71	
1. Energy industries	0.48	0.42	0.39	0.46	0.41	0.32	
2. Manufacturing industries and construction	0.16	0.13	0.14	0.15	0.17	0.15	
3. Transport	0.68	0.61	0.59	0.67	0.70	0.67	
4. Other sectors	0.60	0.60	0.61	0.55	0.58	0.55	
5. Other	0.03	0.02	0.02	0.01	0.02	0.01	
B. Fugitive emissions from fuels	0.01	0.01	0.01	0.01	0.01	0.01	
1. Solid fuels	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	
2. Oil and natural gas and other emissions from energy production	0.01	0.01	0.01	0.01	0.01	0.01	
C. CO2 transport and storage							
2. Industrial processes	3.64	2.29	3.99	3.98	3.36	1.72	
A. Mineral industry							
B. Chemical industry	3.63	2.28	3.98	3.97	3.35	1.71	
C. Metal industry	NO	NO	NO	NO	NO	NO	
D. Non-energy products from fuels and solvent use	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
E. Electronic industry							
F. Product uses as ODS substitutes							
G. Other product manufacture and use	0.01	0.01	0.01	0.01	0.01	0.01	
H. Other	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
3. Agriculture	19.52	18.92	17.95	18.98	17.23	19.61	
A. Enteric fermentation							
B. Manure management	3.06	2.87	2.59	2.55	2.54	2.56	
C. Rice cultivation							
D. Agricultural soils	15.85	15.38	14.85	15.91	13.77	16.51	
E. Prescribed burning of savannas	NO	NO	NO	NO	NO	NO	
F. Field burning of agricultural residues	0.61	0.67	0.51	0.52	0.93	0.55	
G. Liming							
H. Urea application							
I. Other carbon containing fertlizers							
J. Other	NO	NO	NO	NO	NO	NO	
4. Land use, land-use change and forestry	2.59	2.48	2.37	2.26	2.16	2.06	
A. Forest land	0.09	0.09	0.09	0.09	0.09	0.09	
B. Cropland	1.12	1.06	0.99	0.93	0.87	0.81	
C. Grassland	0.04	0.04	0.03	0.03	0.03	0.03	
D. Wetlands	0.02	0.02	0.02	0.02	0.02	0.02	
E. Settlements	1.31	1.27	1.23	1.19	1.16	1.12	
F. Other land	NA	NA	NA	NA	NA	NA	
G. Harvested wood products							
H. Other							
5. Waste	1.95	1.88	1.90	1.90	1.83	1.86	
A. Solid waste disposal							
B. Biological treatment of solid waste	NO	NO	NO	NO	NO	NO	
C. Incineration and open burning of waste	0.01	0.02	0.02	0.01	0.00	0.00	
D. Waste water treatment and discharge	1.93	1.86	1.89	1.89	1.83	1.85	
E. Other							
6. Other (as specified in the summary table in CRF)							
Total direct N2O emissions without N2O from LULUCF	27.06	24.88	25.61	26.71	24.32	24.89	
Total direct N2O emissions with N2O from LULUCF	29.65	27.35	27.98	28.97	26.48	26.95	
Memo items:							
International bunkers	0.02	0.01	0.01	0.01	0.01	0.01	
Aviation	0.01	0.01	0.01	0.01	0.01	0.01	
Navigation	0.01	0.00	0.00	0.00	0.00	0.00	
Multilateral operations							
CO2 emissions from biomass							
CO2 captured							
Long-term storage of C in waste disposal sites							
Indirect N2O	5.57	5.40	5.11	5.29	4.84	5.43	
Indirect CO2 (3)							

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

[a] The column “Base year” should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant 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.

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Table 1(d)

ROU_BR2_v1.0

Emission trends (HFCs, PFCs and SF_6)

(Sheet 1 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*Base year* [a]	1990	1991	1992	1993	1994	1995	1996	1997
	kt								
Emissions of HFCs and PFCs - (kt CO2 equivalent)	3,886.91	2,455.35	2,253.84	1,569.43	1,636.19	1,731.29	2,060.49	2,057.27	2,083.23
Emissions of HFCs - (kt CO2 equivalent)	0.16	0.18	0.29	0.45	0.73	1.20	2.53	4.72	10.36
HFC-23	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-32	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-41	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-43-10mee	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-125	NO	NO	NO	NO	NO	NO	0.00	0.00	0.00
HFC-134	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-134a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
HFC-143	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-143a	NO	NO	NO	NO	NO	NO	0.00	0.00	0.00
HFC-152	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-152a	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-161	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-227ea	NO	NO	NO	NO	NO	NO	NO	0.00	0.00
HFC-236cb	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236ea	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236fa	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245ca	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245fa	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-365mfc	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of PFCs - (kt CO2 equivalent)	3,886.75	2,455.17	2,253.56	1,568.98	1,635.47	1,730.09	2,057.96	2,052.55	2,072.87
CF_4	0.45	0.29	0.26	0.18	0.19	0.20	0.24	0.24	0.24
C_2F_6	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
C_3F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_4F_{10}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
c-C_4F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_5F_{12}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_6F_{14}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C10F18	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
c-C3F6	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of SF6 - (kt CO2 equivalent)	0.47	0.47	0.52	0.49	0.52	0.74	0.98	1.54	1.41
SF_6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO

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

Table 1(d) ROU_BR2_v1.0

Emission trends (HFCs, PFCs and SF_6)

(Sheet 2 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*1998*	1999	2000	2001	2002	2003	2004	2005	2006	2007
Emissions of HFCs and PFCs - (kt CO2 equivalent)	2,058.40	1,900.21	1,570.14	1,324.53	1,001.15	533.29	447.79	464.19	548.26	693.81
Emissions of HFCs - (kt CO2 equivalent)	23.88	39.73	70.82	112.87	168.16	228.75	293.93	368.91	484.20	665.63
HFC-23	NO	NO	NO	NO	0.00	0.00	0.00	0.00	0.00	0.00
HFC-32	NO	NO	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.05
HFC-41	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-43-10mee	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-125	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.06
HFC-134	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-134a	0.01	0.02	0.04	0.05	0.07	0.09	0.11	0.14	0.18	0.23
HFC-143	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-143a	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02
HFC-152	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-152a	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-161	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-227ea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HFC-236cb	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236ea	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-236fa	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245ca	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-245fa	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
HFC-365mfc	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of PFCs - (kt CO2 equivalent)	2,034.53	1,860.49	1,499.32	1,211.66	832.99	304.54	153.86	95.28	64.06	28.18
CF_4	0.24	0.22	0.17	0.14	0.10	0.03	0.02	0.01	0.01	0.00
C_2F_6	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00
C_3F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_4F_{10}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
c-C_4F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_5F_{12}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C_6F_{14}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
C10F18	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
c-C3F6	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Emissions of SF6 - (kt CO2 equivalent)	1.51	1.70	8.68	14.33	12.10	10.54	14.10	15.67	24.13	29.88
SF_6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
NF3	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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

Table 1(d) ROU_BR2_v1.0

Emission trends (HFCs, PFCs and SF_6)

(Sheet 3 of 3)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	*2008*	2009	2010	2011	2012	2013	Change from base to latest reported year
							%
Emissions of HFCs and PFCs - (kt CO2 equivalent)	964.81	932.58	991.60	1,104.95	1,204.86	1,304.73	
Emissions of HFCs - (kt CO2 equivalent)	946.95	924.42	982.46	1,092.24	1,197.43	1,298.58	
HFC-23	0.00	0.00	0.00	0.00	0.00	0.00	
HFC-32	0.07	0.07	0.07	0.08	0.09	0.09	
HFC-41	NO	NO	NO	NO	NO	NO	
HFC-43-10mee	NO	NO	NO	NO	NO	NO	
HFC-125	0.09	0.09	0.09	0.11	0.12	0.13	
HFC-134	NO	NO	NO	NO	NO	NO	
HFC-134a	0.35	0.32	0.35	0.37	0.40	0.42	
HFC-143	NO	NO	NO	NO	NO	NO	
HFC-143a	0.02	0.02	0.02	0.03	0.03	0.04	
HFC-152	NO	NO	NO	NO	NO	NO	
HFC-152a	NO	NO	0.00	0.00	0.00	0.00	
HFC-161	NO	NO	NO	NO	NO	NO	
HFC-227ea	0.00	0.00	0.00	0.00	0.00	0.00	
HFC-236cb	NO	NO	NO	NO	NO	NO	
HFC-236ea	NO	NO	NO	NO	NO	NO	
HFC-236fa	NO	NO	NO	NO	NO	NO	
HFC-245ca	NO	NO	NO	NO	NO	NO	
HFC-245fa	NO	NO	NO	NO	NO	NO	
HFC-365mfc	NO	NO	0.00	0.00	0.00	0.00	
Unspecified mix of HFCs(4) - (kt CO_2 equivalent)	NO	NO	NO	NO	NO	NO	
Emissions of PFCs - (kt CO2 equivalent)	17.87	8.16	9.13	12.72	7.43	6.15	
CF_4	0.00	0.00	0.00	0.00	0.00	0.00	
C_2F_6	0.00	0.00	0.00	0.00	0.00	0.00	
C_3F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
C_4F_{10}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
c-C_4F_8	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
C_5F_{12}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
C_6F_{14}	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
C10F18	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
c-C3F6	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
Unspecified mix of PFCs(4) - (kt CO_2 equivalent)	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	NO, NE	
Unspecified mix of HFCs and PFCs - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	
Emissions of SF6 - (kt CO2 equivalent)	33.83	47.03	60.71	47.83	50.76	57.08	
SF_6	0.00	0.00	0.00	0.00	0.00	0.00	
Emissions of NF3 - (kt CO2 equivalent)	NO	NO	NO	NO	NO	NO	
NF3	NO	NO	NO	NO	NO	NO	

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

[a] The column "Base year" should be filled in only by those Parties with economies in transition that use a base year different from 1990 in accordance with the relevant 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.

[c]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.

[d]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

Documentation Box:

Table 2(a) ROU_BR2_v1.0

Description of quantified economy-wide emission reduction target: base year[a]

Party	*Romania*	
Base year /base period	1989	
Emission reduction target	% of base year/base period	% of 1990 [b]
	20.00	20.00
Period for reaching target	BY-2020	

[a] 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] Optional.

Table 2(b) ROU_BR2_v1.0

Description of quantified economy-wide emission reduction target: gases and sectors covered[a]

Gases covered		*Base year for each gas (year):*
CO_2		1989
CH_4		1989
N_2O		1989
HFCs		1989
PFCs		1989
SF_6		1989
NF_3		1995/2000
Other Gases (specify)		
Sectors covered[b]	Energy	Yes
	Transport[f]	Yes
	Industrial processes[g]	Yes
	Agriculture	Yes
	LULUCF	No
	Waste	Yes
	Other Sectors (specify)	

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

[a] 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] More than one selection will be allowed. If Parties use sectors other than those indicated above, the explanation of how these sectors relate to the sectors defined by the IPCC should be provided.

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

[g] Industrial processes refer to the industrial processes and solvent and other product use sectors.

Table 2(c) ROU_BR2_v1.0

Description of quantified economy-wide emission reduction target: global warming potential values (GWP)[a]

Gases	*GWP values* [b]
CO_2	4th AR
CH_4	4th AR
N_2O	4th AR
HFCs	4th AR
PFCs	4th AR
SF_6	4th AR
NF_3	4th AR
Other Gases (specify)	

Abbreviations: GWP = global warming potential

[a] 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] 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) ROU_BR2_v1.0

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

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

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

[a] 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 ROU_BR2_v1.0

Description of quantified economy-wide emission reduction target: market-based mechanisms under the Convention[a]

Market-based mechanisms under the Convention	*Possible scale of contributions (estimated kt CO_2 eq)*
CERs	0.00
ERUs	0.00
AAUs[i]	NE
Carry-over units[j]	532,594,270.00
Other mechanism units under the Convention (specify)[d]	

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

[a] 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 .

[i] AAUs issued to or purchased by a Party.

[j] 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 ROU_BR2_v1.0

Description of quantified economy-wide emission reduction target: other market-based mechanisms[a]

Other market-based mechanisms	*Possible scale of contributions*
(Specify)	*(estimated kt CO_2 eq)*

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

Description of quantified economy-wide emission reduction target: any other information[a,b]

The EU and its Member States, including also Romania, communicated an independent quantified economy-wide emission reduction target of a 20 per cent emission reduction by 2020 compared with 1990 levels. This is documented in the UNFCCC document FCCC/SB/2011/INF.1/Rev.1 of 7 June 2011. In the EU submission to the UNFCCC from 20 March 2012 (FCCC/AWGLCA/2012/MISC.1) the EU target is explained further.

The use of carbon credits from international market-based mechanisms is explained in the EU submission from 2012. With regard to the role of Land Use, Land-Use Change and Forestry (LULUCF), the EU pledge does not include emissions/removals from LULUCF.

Romania's emission reduction target for the years 2013-2020 is part of the joint target of the European Union. The EU quantified economy-wide emission reduction target is implemented through the EU Climate and Energy Package. Key assumptions and conditions related to the EU's target (for example sectors, base year, coverage of gases) are included in the document

[a] 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] 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

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
Law no. 278/2013 on industrial emissions*	Cross-cutting	CO_2, CH_4, N_2O	Multi-sectoral policy (Cross-cutting)	Regulatory	Implemented	Setting permit conditions for IPPC installations, considering the BAT Conclusions. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Industrial Emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC).	2014	Government of Romania-Ministry of Environment, Waters and Forests				
GD no. 780/2006 establishing the scheme for greenhouse gas emission allowance trading, amended by GD no. 133/2010, GD no. 399/2010, GD no. 1300/2010, GEO no. 115/2011 and GD no. 204/2013*	Cross-cutting	CO_2, N_2O, PFCs	Multi-sectoral policy (Cross-cutting)	Regulatory	Implemented	Reduction of GHG emissions from ETS installation, for the period 2007-2020. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the EU ETS directive 2003/87/EC as amended by Directive 2008/101/EC and Directive 2009/29/EC and implementing legislation, in particular 2010/2/EU, 2011/278/EU and 2011/638/EU	2007	Government of Romania - Ministry of Environment, Water and Forests, Government of Romania:- Ministry of Energy, Small and Medium Enterprises and Business Environment				
Law no. 220/2008 on establishing the promotion system for the production of energy from renewable energy sources, amended and completed by Law no. 139/2010*	Cross-cutting	CO_2, CH_4, N_2O	Multi-sectoral policy (Cross-cutting)	Regulatory	Implemented	Establishes the promotion system for the production of energy from renewable energy sources (wind , solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases). Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the RES directive 2009/28/EC	2010	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
Law no. 121/2014 on energy efficiency*	Other (Energy_Supply, Energy_Consumption, Transport, Other)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Regulatory	Implemented	Establishes the legal framework of the measures for the promotion of energy efficiency in the supply and use of energy Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2012/27/EU	2014	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, National Regulatory Authority for Energy, Government of Romania:- Ministry of Transport				
Commitments up to 2020 for non-ETS sectors*	Cross-cutting	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Multi-sectoral policy (Cross-cutting)	Regulatory	Planned	Establishes the Romania's GHG emission limit in 2020, compared to 2005, and the annual emission allocations at national level for the period 2013-2020, in line with Decision 2013/162/EC, revised by Decision 2013/634/EU Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC	2013	Government of Romania-Ministry of Environment, Water and Forests, Ministry of Energy, Small and Medium Enterprises and Business Environment, Ministry of Economy				
GD no. 1069/2007 approving the National Energy Strategy for 2007-2020*	Other (Energy_Supply)	CO_2	Increase in renewable energy (Energy supply), Switch to less carbon-intensive fuels (Energy supply), Enhanced non-renewable low carbon generation (nuclear) (Energy supply), Reduction of losses (Energy supply), Efficiency improvement in the energy and tran	Regulatory	Implemented	The strategy foresees the national energy consumption until 2030 as well as the necessary measures to cover the consumption. This strategy shall be updated considering the effects of the economic recession. Single mitigation action.	2007	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GEO no. 64/2011 on the geological storage of carbon dioxide, approved by Law no. 114/2013*	Other (Energy_Supply)	CO_2	Carbon capture and storage (Energy supply)	Regulatory	Adopted	Reduction of CO2 emissions using CCS Technologies Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Directive on the geological storage of CO2 2009/31/EC	2011	Government of Romania-Ministry of Environment, Water and Forests, Government of Romania:- Ministry of Energy, Small and Medium Enterprises and Business Environment				

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 55/2011 establishing the ecodesign requirements applicable for products with impact on energy, repealing GD no. 1043/2007 on the ecodesign requirements for energy-related products*	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Regulatory	Implemented	Eco design requirements for energy-related products Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Eco-design framework directive 2005/32/EC and its implementing regulations, combined with Labelling Directive 2003/66/EC and 2010/30/EC, including implementing measures	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 580/2011 for establishing measures to apply the Comission Regulations (EC) no. 640/2009, no. 641/2009, no. 642/2009 and no. 643/2009, implementing Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products*	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Regulatory	Implemented	Ecodesign requirements for electric motors, circulators pumps, TV sets, household refrigerating appliances. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Comission Regulation (EC) no. 640/2009, Comission Regulation (EC) no. 641/2009, Comission Regulation (EC) no. 642/2009 and Comission Regulation (EC) no. 643/2009	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 1090/2013 for establishing measures to apply Commision Regulations (EU) no. 327/2011, no. 206/2012 and no. 547/2012, implementing Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products*	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Regulatory	Adopted	Ecodesign requirements for ventilators, air conditioning appliances and ventilators, water pumps Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Commision Regulations (EU) no. 327/2011, Commision Regulations (EU) no. 206/2012 and Commision Regulations (EU) no. 547/2012	2014	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GO no. 22/2008 on energy efficiency and promotion of the use of renewable energy by final consumers*	Other (Energy_Supply, Energy_Consumption)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Regulatory	Implemented	Improvement of the energy end-use efficiency at the national level Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Directive 2006/32/EC on end-use energy efficiency and energy services	2008	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government:-Ministry of Regional Development and Public Administration, Government:-Ministry of Economy and the Tourism, Government:-Ministry of Transport				
National Action Plan for Energy Efficiency	Other (Energy_Supply, Energy_Consumption)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Other (Planning)	Planned	Improvement of energy efficiency in manufacturing, transport, design and operation. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2012/27/EU	2014	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government:-National Regulatory Authority for Energy, Government:-Ministry of Regional Development and Public Administration, Government:-Ministry of Transport				

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 219/2007 on the promotion of cogeneration based on useful heat demand*	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Regulatory	Implemented	Promoting and developing high-efficiency cogeneration, based on the useful thermal energy demand and on saving primary energy on the energy market, in order to increase energy efficiency and to improve the safety of energy supply; establishes the support schemes and guarantees of origin for electricity produced in high-efficiency cogeneration Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Cogeneration Directive 2004/8/EC	2007	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government:-National Regulatory Authority for Energy, Government:-Ministry of Internal Affairs				
GD no. 462/2006 for the appoval of the "Heating 2006-2015 heat and comfort" National Program*	Other (Energy_Supply, Energy_Consumption)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Regulatory	Implemented	Increasing the efficiency of district heating systems, rehabilitation of district heating systems and rehabilitation of buildings Single mitigation action.	2006	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government:-Ministry of Regional Development and Public Administration, Government:-Ministry of Internal Affairs				
Law no. 123/2012 on electricity and natural gas*	Other (Energy_Supply)	CO_2, CH_4	Increase in renewable energy (Energy supply), Efficiency improvement in the energy and transformation sector (Energy supply);	Regulatory	Implemented	Establishes the legal framework for the production, transmission, distribution, supply and storage of natural gas Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2009/73/EC	2012	Government of Romania-National Regulatory Authority for Energy				
GD no. 57/2011 establishing measures to apply the Regulation (EC) no. 1221/2009 on the voluntary participation of organizations in a Community eco-management and audit scheme (EMAS)*	Other (Energy_Supply, Energy_Consumption)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Control of fugitive emissions from energy production (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in indus	Regulatory	Implemented	Optimizing the production processes, reducing the impact on the environment and efficient resource use. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 1221/2009	2011	Government of Romania-Ministry of Environment, Waters and Forests				
Modernization of the industrial sector	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Voluntary Agreement	Planned	Optimizing the production processes, reducing the environmental impact and efficient use of resources. Single mitigation action.	2015	Companies:-Manufacturing and constructions industries				
Development of the energy sector to cover the demand for electrical and thermal power from cogeneration	Other (Energy_Supply)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply)	Other (Planning)	Planned	Promotion of high-efficiency cogeneration plants, rational and efficient use of primary energy sources Single mitigation action.	2015	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Internal Affairs				
National Action Plan for Electricity from Renewable Energy Sources	Other (Energy_Supply)	CO_2	Increase in renewable energy (Energy supply)	Other (Planning)	Planned	Promotion of energy from renewable sources, by types of technologies: hydro, photovoltaic, wind and biomass Single mitigation action.	2015	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GEO no. 40/2011 on the promotion of non-polluting and energy-efficient road transport vehicles, amended by GEO no. 9/2013*	Transport	CO_2	Efficiency improvements of vehicles (Transport), Low carbon fuels/electric cars (Transport)	Regulatory	Implemented	Promotion of non-polluting and energy efficient road transport vehicles, and improving the contribution of the transport sector to the environment, climate and energy policies Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles 2009/33/EC	2011	Government of Romania-Ministry of Environment, Water and Forests, Government:-Ministry of Transport, Government:-Ministry of Internal Affairs, Government:-Ministry of Public Finance				

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 928/2012 concerning the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions, amended by GD no. 1308/2012 and GD no. 1121/2013*	Transport	CO_2	Low carbon fuels/electric cars (Transport)	Regulatory	Implemented	Reduction of GHG emissions from use of diesel petrol and gas-oil, in order to reduce the adverse impact on environment and human health Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Fuel Quality Directive 2009/30/EC	2012	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Public Finance, Government of Romania:-Ministry of Environment, Water and Forest, Government of Romania:-Ministry of Agriculture and Rural Development				
GD no. 935/2011 promoting the use of biofuels and bio liquids, amended and supplemented by GD no. 1121/2013*	Transport	CO_2, CH_4, N_2O	Low carbon fuels/electric cars (Transport)	Regulatory	Implemented	Establishes the legal framework for the promotion of the use of biofuels and bioliquids in the transport sector. Starting with January 1st 2011, the biofuels share in the energy consumption in transport is at least 5%. In the following years, biofuels share shall increase gradually till 2018 for reaching the standard established by the directive Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2003/30/EC, repealed by Directive 2009/28/EC	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 90/2011 establishing measure for implementing Regulation (EC) no. 443/2009 setting emission performance standards for new passenger cars*	Transport	CO_2	Efficiency improvements of vehicles (Transport)	Regulatory	Implemented	Establishes emission performance standards for new passager cars; starting in 2020, the vehicle fleet shall have an emission average of 95 g CO_2/km, compared to the average emission from 2012-2013, i.e. 130 g CO_2/km. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Regulation on CO2 from cars and vans (2009/443/EC and no. 510/2011)	2011	Government of Romania-Ministry of Transport (Romanian Vehicle Registration Authority)				
GD no. 238/2012 for establishing measures to apply Regulation (EU) no. 510/2011 setting emission performance standards for new light commercial vehicles*	Transport	CO_2	Efficiency improvements of vehicles (Transport)	Regulatory	Implemented	Establishes emission performance standards for new light commercial vehicles; starting from 2020, the new light commercial vehicles fleet shall have an emission average of 147 g CO_2/km, compared to the average emission from 2014-2017, i.e. 175 g CO_2/km. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Regulation on CO2 from cars and vans (2009/443/EC and no. 510/2011)	2012	Government of Romania-Ministry of Transport (Romanian Vehicle Registration Authority)				
GD no. 53/2012 for establishing measures to apply Regulation (EC) no. 1222/2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters*	Transport	CO_2	Efficiency improvements of vehicles (Transport)	Regulatory	Implemented	Establishes the legal and institutional framework for direct implementation of Regulation (EC) no. 1222/2009 Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 1222/2009	2012	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GO No. 15/2002 concerning the application of use and passage toll for national road network in Romania, amended by GO no. 17/2010, GO no. 8/2010, GEO no. 157/2007	Transport	CO_2	Improved transport infrastructure (Transport)	Regulatory	Implemented	Establishes the value of passage tolls and concession fees for recovering construction, operation and maintenance costs. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2006/38/EC	2002	Government of Romania-Ministry of Transport				

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
Regulation (EC) no. 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6), amended by Commission Regulation (EU) no. 459/2012*	Transport	CO_2	Efficiency improvements of vehicles (Transport)	Regulatory	Adopted	Establishes the limit values for stages Euro 5 and Euro 6 in order to reach the EU objectives on air quality. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Regulation EURO 5 and 6 2007/715/EC	2012	Government of Romania-Ministry of Transport				
Order no. 457/2011 of the Ministry of Transport and Infrastructure approving the Strategy for intermodal transport units in Romania, amended by Order no. 1358/2012*	Transport	CO_2	Efficiency improvements of vehicles (Transport), Improved transport infrastructure (Transport)	Regulatory	Implemented	Developing the national intermodal goods transport system (railway, inland waterways, maritime transport) to reduce energy consumption and CO2 emissions. The general target for 2020 - reaching a transport share of at least 40% intermodal transport units of the quantity of transported goods on Romanian territory. Single mitigation action.	2011	Government of Romania-Ministry of Transport (Romanian Vehicle Registration Authority)				
GD no. 1563/2006 amending GD no. 1533/2003 on the interoperability of the Romanian high-speed railway system and GD no. 850/2003 on the interoperability of the Romanian conventional railway system with the trans-European conventional railway system*	Transport	CO_2	Improved transport infrastructure (Transport)	Regulatory	Implemented	Establishes the condition for improvement of the railway interoperability at the national level based on implementation of EU Directives on railway interoperability. These conditions concern the design, manufacturing, commissioning, modernization, renewal, operation and maintenance of the system parts commissioned after the date of entry into force of the GD. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2004/50/EC	2006	Government of Romania-Ministry of Transport				
Law no. 155/2005 amending GEO no. 12/1998 regarding Romanian railway transport and the reorganization of the Romanian National Railway Company*	Transport	CO_2	Improved transport infrastructure (Transport)	Regulatory	Implemented	Foreign railway transport operators and international groups, holding a license in an EU member state, have the right to access, under reasonable terms, the Romanian railway infrastructure, for the purpose of using any type of goods railway transportation services. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2004/51/EC	2005	Government of Romania-Ministry of Transport				
Modernization of the transport system	Transport	CO_2	Efficiency improvements of vehicles (Transport), Modal shift to public transport or non-motorized transport (Transport), Low carbon fuels/electric cars (Transport), Demand management/reduction (Transport), Improved behaviour (Transport), Improved transpor	Other (Planning)	Planned	Reducing the energy consumption and emission levels by increasing the usage of biofuels and bioliquids, encouraging alternative means of transport (bicycle, etc.), increasing the use of public transportation, using new low-emission vehicles, using intermodal transport, etc Single mitigation action.	2015	Government of Romania-Ministry of Transport				

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
Law no. 372/2005 regarding the energy performance of buildings, amended by Law no. 159/2013*	Other (Energy_Consumption)	CO_2	Efficiency improvements of buildings (Energy consumption)	Regulatory	Implemented	Promoting measures to increase the energy performance of buildings, considering the exterior climate conditions and the location, the interior comfort requirements, at optimal level related costs and energy performance requirements Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Recast of the Energy Performance of Buildings Directive (Directive 2010/31/EU)	2013	Government of Romania-Ministry of Regional Development and Public Administration				
GD no. 55/2011 establishing ecodesign requirements for energy-related products, repealing GD no. 1043/2007 on ecodesign requirements for energy-consuming products*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Ecodesign requirements applicable to energy-related products Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Eco-design framework directive 2005/32/EC and its implementing regulations, combined with Labelling Directive 2003/66/EC and 2010/30/EC, including implementing measures	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 217/2012 establishing the requirements for the identication by labelling and standard product information of the consumption of energy and other resources by energy-related products, amending GD no. 1039/2003.*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Requirements on the labelling and energy efficiency of household refrigerating appliances, with regard to their placement on the market Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2010/30/EU	2012	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 917/2012 establishing measures to apply Regulations (EU) no. 1059/2010, no. 1060/2010, no. 1061/2010, no. 1062/2010 and no. 626/2011, supplementing Directive 2010/30/EU*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Requirements on the labeling and energy efficiency of certain consumer goods (household dishwashers/washing machines, household refrigerating appliances, TV sets, air conditioning installations) Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulations (EU) no. 1059/2010, no. 1060/2010, no. 1061/2010, no. 1062/2010 and no. 626/2011,	2012	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 1490/2009 establishing measures for the implementation of the Regulations (EU) no. 1275/2008, no. 107/2009, no. 244/2009, no. 245/2009 and no. 278/2009, implementing Directive 2005/32/EC.*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Ecodesign requirements for: electrical and electronic household and office appliances, signal conversion units, lamps for household use, fluorescent lamps, external supply sources. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EU) no. 1275/2008, no. 107/2009, no. 244/2009, no. 245/2009 and no. 278/2009	2009	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 910/2011 establishing measures for the implementation of Regulations (EU) no. 1015/2010 and no. 1016/2010, implementing Directive 2009/125/EC with regard to ecodesign requirements for energy-related products*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Ecodesign requirements for household dishwashers/washing machines. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulations (EU) no. 1015/2010 and no. 1016/2010	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
GD no. 580/2011 establishing measures for the implementation of the Regulations (EC) no. 640/2009, no. 641/2009, no. 642/2009 and no. 643/2009, implementing Directive 2009/125/EC with regard to ecodesign requirements for energy-related products, amending *	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption);	Regulatory	Implemented	Ecodesign requirements for: electric engines, circulator pumps, TV sets, household refrigerating appliances Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 640/2009, no. 641/2009, no. 642/2009 and no. 643/2009	2011	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment				
Strategy to stimulate investments in renovating residential and commercial buildings, both public and private, existing at national level (April 2014)*	Other (Energy_Consumption)	CO_2	Efficiency improvements of buildings (Energy consumption)	Other (Planning)	Planned	The draft strategy, in line with the requirements of Article 4 of Directive 2012/27/EU on energy efficiency, establises the key successive stages for renovating the national building patrimony Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2012/27/EU	2014	Government of Romania-Ministry of Regional Development and Public Administration				
Modernization of the residential sector*	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption)	Other (Planning)	Planned	Reduction of the energy consumption by the following measures: rehabilitating the building heating systems, applying restrictions as regards the EU efficiency standards for new buildings, lighting systems efficiency, using low-energy consumption lamps, using new equipment with low energy consumption Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)	2015	Government of Romania-Ministry of Regional Development and Public Administration				
Modernization of the services sector	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption)	Other (Planning)	Planned	Reduction of the energy consumption by the following measures: rehabilitation of the building heating systems, applying restrictions as regards the EU efficiency standards for new buildings, lighting systems efficiency, using low-energy consumption lamps, using new equipment with low energy consumption. Single mitigation action.	2015	Government of Romania-Ministry of Economy and the Tourism, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Regional Development and Public Administration, Government of Romania:-National Regulatory Authority for E				
Modernization of the agricultural sector	Other (Energy_Consumption)	CO_2	Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction (Energy consumption)	Other (Planning)	Planned	Reducing energy intensity due to the farmlands concentration, use of BAT irrigation installations, as well as other new equipment. Single mitigation action.	2015	Government of Romania-Ministry of Agriculture and Rural Development				

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Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
Improving coal handling techniques	Other (Energy_Supply)	CO_2, CH_4	Control of fugitive emissions from energy production (Energy supply)	Voluntary Agreement	Planned	Optimizing the production processes, reducing the impact on the environment and efficient resource use Single mitigation action.	2015	Companies:-Mining companies				
Improvements in the oil and gas sector	Other (Energy_Supply)	CO_2, CH_4	Control of fugitive emissions from energy production (Energy supply)	Voluntary Agreement	Planned	Optimizing the production processes, reducing the impact on the environment and efficient resource use. Single mitigation action.	2015	Companies:-Oil and gas companies				
GD No. 939/2010 regarding certain measures for implementing the Regulation (EC) no. 842/2006 on certain fluorinated greenhouse gases*	Industry/industrial processes	HFCs, PFCs, SF_6	Reduction of emissions of fluorinated gases (Industrial processes), Replacement of fluorinated gases by other substances (Industrial processes)	Regulatory	Implemented	Establishes measures regarding the containment, use, recovery and destruction of the fluorinated greenhouse gases; labeling and disposing of products and equipment containing those gases; controlling the use and prohibiting the placement on the market of certain products and pieces of equipment; training and certification of personnel and the companies Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the F-gas Regulation 2006/842/EC	2007	Government of Romania-Ministry of Environment, Waters and Forests				
Implementing the best technologies for solvents and other products	Industry/industrial processes	HFCs, PFCs, SF_6	Installation of abatement technologies (Industrial processes)	Voluntary Agreement	Planned	Reducing the consumption of solvents and other products; ensuring quality products and services; environmental protection Single mitigation action.	2015	Companies:-Business entities dealing with industry, construction, services				
Water Law no. 107/1996, amended by Law no. 112/2006*	Agriculture	CH_4, N_2O	Reduction of fertilizer/manure use on cropland (Agriculture)	Regulatory	Implemented	Preserving, developing and protecting water resources, defense against flooding, gradual reduction of underground water pollution and prevention of subsequent pollution, preserving and protecting aqueous ecosystems. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Water Framework Directive 2000/60/EC	2003	Government of Romania-National Water Management Authority				
National Rural Development Programme 2014-2020 (RDP 2014-2020)*	Agriculture	CH_4, N_2O	Other activities improving cropland management (Agriculture), Improved livestock management (Agriculture), Improved animal waste management systems (Agriculture)	Regulatory	Planned	RDP 2014-2020 adresses the following strategic priorities: structural change and competitiveness of the agri-food sector; natural resources management; balanced local rural development. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Decision 2006/144/EC	2014	Government of Romania-Ministry of Agriculture and Rural Development				
GD no. 964/2000 on the approval of the Action Plan for water protection against pollution with nitrates of agricultural origin*	Agriculture	N_2O	Reduction of fertilizer/manure use on cropland (Agriculture)	Regulatory	Implemented	Approves the Action Plan for water protection against the pollution with nitrates from agricultural sources Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Nitrate Directive 1991/676/EEC	2000	Government of Romania-Ministry of Environment, Water and Forest, Government of Romania:-Ministry of Agriculture and Rural Development				
Order no. 44/708/2004 approving the technical rules on environment protection, particularly soil protection, when using sludge in agriculture*	Agriculture	CH_4, N_2O	Other activities improving cropland management (Agriculture), Improved livestock management (Agriculture), Improved animal waste management systems (Agriculture)	Regulatory	Implemented	Approves the technical rules on environment protection, particularly soil protection, when using sludge in agriculture Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 86/278/CEE	2004	Government of Romania-Ministry of Environment, Waters and Forests				

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Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 1261/2007 establishing measure for implementation of the Regulation (EC) no. 2003/2003 relating to fertilisers*	Agriculture	CH_4, N_2O	Reduction of fertilizer/manure use on cropland (Agriculture);	Regulatory	Implemented	Established the institutional framework for the direct implementation of Regulation (EC) no. 2003/2003 relating to fertilizers, and determines and sanctions misdemeanors against the fertilizers regulations Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 2003/2003	2007	Government of Romania-Ministry of Agriculture and Rural Development				
GD no. 897/2013 approving the amount of complementary direct national payments in the zootechnical sector, for the bovine species, in 2013*	Agriculture	CH_4, N_2O	Other activities improving cropland management (Agriculture), Improved livestock management (Agriculture), Improved animal waste management systems (Agriculture);	Regulatory	Implemented	Support schemes for farmers under common agricultural policy Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 1782/2003, amended by Regulation (EC) no. 2011/2006	2013	Government of Romania-Ministry of Agriculture and Rural Development				
Improving food quality for cattle, sheeps and goats*	Agriculture	CH_4	Improved livestock management (Agriculture);	Other (Planing)	Planned	Applying the provisions of the new common policy in the agriculture sector Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Common Agricultural Policy (CAP) Reform 2006/144/EC	2015	Owners of livestock farms				
Improving manure management	Agriculture	CH_4	Improved animal waste management systems (Agriculture);	Other (Planing)	Planned	Reduction of the methane emissions related to livestock breeding Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Common Agricultural Policy (CAP) Reform 2006/144/EC	2015	Government of Romania-Ministry of Agriculture and Rural Development				
National Forestry Strategy 2013-2022*	Forestry/LULUCF	CO_2	Afforestation and reforestation (LULUCF), Restoration of degraded lands (LULUCF);	Other (Planing)	Planned	Reducing emissions as per the Kyoto Protocol by A/R (afforestation/reforestation) and Rv (revegetation) activities, in addition to the obligations provided under Decision 406/2009/EC Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the PAM not related to Union policies	2013	Regional: Regional Forest and Hunting Inspectorate				
National Rural Development Plan 2014-2020	Forestry/LULUCF	CO_2	Restoration of degraded lands (LULUCF);	Other (Planning)	Planned	Reducing emissions by changing soil management and increasing the areas with vineyards and orchards Single mitigation action.	2015	Government of Romania-Ministry of Agriculture and Rural Development				
Law no. 211/2011 regarding waste management*	Waste management/waste	CH_4, N_2O	Demand management / reduction (Waste), Enhanced recycling (Waste), Enhanced CH4 collection and use (Waste), Improved treatment technologies (Waste), Improved landfill management (Waste), Waste incineration with energy use (Waste), Improved wastewater management	Regulatory	Implemented	Establishes measures to protect the environment and human health, by preventing or reducing the adverse impact of the generation and management of waste and by reducing the overall impacts of resource use and improving the efficiency of such use Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Waste Management Framework Directive 2008/98/EC	2011	Government of Romania-Ministry of Environment, Water and Forest				

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
GD no. 621/2005 on the management of packaging and packaging waste, amended and supplemented by GD no. 1872/2006 and GD no. 247/2011.*	Waste management/waste	CO_2, N_2O	Enhanced recycling (Waste), Waste incineration with energy use (Waste), Reduced landfilling (Waste);	Regulatory	Implemented	Establishes rules for the packaging and packaging waste management and objectives concerning the recovery or incineration at waste incineration plants with energy recovery and, respectively, concerning the recycling of packaging waste, in line with transition period. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 1994/62/EC, amended by Directive 2004/12/EC, Directive 2005/20/EC, Regulation (EC) no. 1883/2003	2005	Government of Romania-Ministry of Environment, Water and Forest				
GD no. 1037/2010 regarding waste from electric and electronic equipment*	Waste management/waste	CH_4	Enhanced recycling (Waste), Reduced landfilling (Waste);	Regulatory	Implemented	Prevent the generation of waste electrical and electronic equipment, and promote its reuse, its recycle and other forms of recovery. Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by theOther (Union policy not listed above or additional Union policy)Directive 2002/96/EC	2010	Government of Romania-Ministry of Environment, Water and Forest				
GD no. 349/2005 on landfill of waste, amended and supplemented by GD no. 201/2007 and GD no. 1292/2010*	Waste management/waste	CH_4	Enhanced recycling (Waste), Reduced landfilling (Waste);	Regulatory	Implemented	Establishes the national targets concerning the reduction of the quantities of biodegradable waste landfilled, comparing to the year 1995, in line with transition period. Also, establishes the compliance calendar for the existing landfills (41 non-compliant municipal landfills in operation between 2013-2017, shall stop operating by 2017). Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Landfill Directive 1999/31/EC	2005	Government of Romania-Ministry of Environment, Water and Forest				
GD no. 188/2002 for the approval of certain norms concerning the conditions of discharging the waste water into aquatic environment, amended by GD no. 352/2005.*	Waste management/waste	CH_4, N_2O	Improved treatment technologies (Waste), Improved wastewater management systems (Waste);	Regulatory	Implemented	"Establishes the requirements concerning the collection systems, treatment and discharge of waste water, in line with the transition periods: - collection of urban waste water - compliance to be ensured by December 31st 2013 (agglomerations with more than 10,000 inhabitants), respectively by December 31st 2018 (agglomerations with less than 10,000 inhabitants); - treatment and discharge of urban waste waters – compliance to be ensured by December 31st 2015 (agglomerations with more than 10.000 inhabitants), respectively by December 31st 2018 (agglomerations with less than 10.000 inhabitants)." Single mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 91/271/CEE, amended and supplemented by Directive 98/15/CE	2002	Government of Romania-National Water Management Authority				
Improving solid waste management	Waste management/waste	CH_4	Enhanced CH4 collection and use (Waste);	Voluntary Agreement	Planned	Increasing the CH4 recovery from compliant landfills Single mitigation action.	2015	Companies managing waste storage facilities				
Improving waste water management	Waste management/waste	CH_4	Improved wastewater management systems (Waste);	Other (Planning)	Planned	Improving the efficiency of water supply and sewage services. Single mitigation action.	2015	Government of Romania-Ministry of Internal Affairs, Other:-Business entitites				

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WEM Scenario for Combustion in Energy Industry and Manufacturing and Construction Industry sectors*	Cross-cutting, Transport, Other (Energy_Supply, Energy_Consumption,), Other (Other)	CO_2, CH_4, N_2O, PFCs, HFCs, SF_6	Increase in renewable energy (Energy supply), Switch to less carbon-intensive fuels (Energy supply), Enhanced non-renewable low carbon generation (nuclear) (Energy supply), Reduction of losses (Energy supply), Efficiency improvement in the energy and transport.	Regulatory	Implemented	Reduction of GHG emissions for Energy Industry and Manufacturing and Construction Industry sectors Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the EU ETS directive 2003/87/EC as amended by Directive 2008/101/EC and Directive 2009/29/EC and implementing legislation, in particular 2010/2/EU, 2011/278/EU and 2011/638/EU, Effort Sharing Decision 406/2009/EC, RES directive 2009/28/EC, Eco-design framework. The status of implementation of individual measures in the group is as follows: implemented, adopted and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 623.22 kt CO2-equivalent Non ETS in 2020: 253.14 kt CO2-equivalent ETS in 2025: 984.64 kt CO2-equivalent Non ETS in 2025: 357.84 kt CO2-equivalent ETS in 2030: 1239.72 kt CO2-equivalent Non ETS in 2030: 461.53 kt CO2-equivalent ETS in 2035: 1207.9 kt CO2-equivalent Non ETS in 2035: 446.76 kt CO2-equivalent	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of the Environment, Water and Forests, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Business Environment	876.36	1342.48	1701.25	1654.66
WEM Scenario for Transport sector*	Other (Energy_Supply, Energy_Consumption,), Transport, Other (Other), Cross-cutting	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Regulatory	Implemented	Reduction of GHG emissions in transport sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC, Regulation on CO2 from cars and vans (2009/443/EC and no. 510/2011), Regulation EURO 5 and 6 2007/715/EC, Fuel Quality Directive 2009/30/EC, Directive on the Promotion of Clean and Energy Efficient Road Transport Vehic The status of implementation of individual measures in the group is as follows: implemented, adopted and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 350.47 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent Non ETS in 2025: 395.07 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 558.01 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 1078.08 kt CO2-equivalent	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Buisness Environment, Government of Romania:-National Regulatory Authority for Energy, Government of Romania:-Ministry of Transport, Government:-Ministry of Environment, Water and Forests	350.47	395.07	558.01	1078.08

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WEM Scenario for Other sectors (services, residential, agriculture)*	Cross-cutting, Other (Energy_Supply, Energy_Consumption), Transport, Other (Other)	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Efficiency improvement in the energy and transformation sector (Energy supply), Control of fugitive emissions from energy production (Energy supply), Efficiency improvements of buildings (Energy consumption), Efficiency improvement in services/ tertiary s	Other (Other (Planning))	Implemented	Reduction of GHG emissions in Other sectors Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC, RES directive 2009/28/EC, Recast of the Energy Performance of Buildings Directive (Directive 2010/31/EU), Eco-design framework directive 2005/32/EC and its implementing regulations, combined with Labelling Directive 20 The status of implementation of individual measures in the group is as follows: implemented and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 320.39 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 739.29 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 788.78 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 907.66 kt CO2-equivalent.	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Environment, Water and Forests	320.39	739.29	788.76	907.66
WEM Scenario for Fugitive emissions sector*	Cross-cutting, Other (Energy_Supply, Energy_Consumption)	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Efficiency improvement in the energy and transformation sector (Energy supply), Control of fugitive emissions from energy production (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industry	Regulatory	Implemented	Reduction of GHG emissions in Fugitive emissions sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC, Industrial emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC), Other (Union policy not listed above or additional Union policy)Regulation (EC) no. 1221/2 The status of implementation of individual measures in the group is as follows: implemented and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 1450.74 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 1394.79 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 1230.74 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 1277.4 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of the Environment, Water and Forests, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Economy and the Tourism	1450.74	1394.79	1230.74	1277.4

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WEM Scenario for Industrial Processes and Product Use sector*	Cross-cutting, Industry/industrial processes	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Reduction of emissions of fluorinated gases (Industrial processes), Replacement of fluorinated gases by other substances (Industrial processes), Multi-sectoral policy (Cross-cutting)	Regulatory	Implemented	Reduction of GHG emissions in Industrial Processes and Product Use sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the EU ETS directive 2003/87/EC as amended by Directive 2008/101/EC and Directive 2009/29/EC and implementing legislation, in particular 2010/2/EU, 2011/278/EU and 2011/638/EU, Effort Sharing Decision 406/2009/EC, F-gas Regulation 2006/842/EC, Industrial emi The status of implementation of individual measures in the group is as follows: implemented and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 90.24 kt CO2-equivalent; Non ETS in 2020: 0 kt CO2-equivalent; ETS in 2025: 161.55 kt CO2-equivalent; Non ETS in 2025: 0 kt CO2-equivalent; ETS in 2030: 227.13 kt CO2-equivalent; Non ETS in 2030: 0 kt CO2-equivalent; ETS in 2035: 425.75 kt CO2-equivalent; Non ETS in 2035: 0 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of the Environment, Water and Forests, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Business Environment	90.24	161.55	227.13	425.75
WEM Scenario for Agriculture sector*	Cross-cutting, Agriculture	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Reduction of fertilizer/manure use on cropland (Agriculture), Other activities improving cropland management (Agriculture), Improved livestock management (Agriculture), Improved animal waste management systems (Agriculture), Multi-sectoral policy (Cross-cutting)	Regulatory	Implemented	Reduction of GHG emissions in Agriculture sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC, Industrial emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC), Water Framework Directive 2000/60/EC, Nitrate Directive 1991/676/EEC, Other (Union policy The status of implementation of individual measures in the group is as follows: implemented and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 1644.04 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 2130.5 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 2066.42 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 3505.67 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of the Environment, Water and Forests, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Buisness Environment, Government of Romania:-Ministry of Economy and the Tourism	1644.04	2130.5	2066.42	3505.67
WEM Scenario for LULUCF sector*	Forestry/LULUCF	CO_2	Afforestation and reforestation (LULUCF), Restoration of degraded lands (LULUCF);	Other (Planning)	Planned	Reduction of GHG emissions in LULUCF sector Group mitigation action.	2013	Regional:-Regional Forest and Hunting Inspectorate				

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WEM Scenario for Waste sector*	Cross-cutting, Waste management/waste	CO_2, CH_4, N_2O, HFCs, PFCs, SF_6	Demand management / reduction (Waste), Enhanced recycling (Waste), Enhanced CH4 collection and use (Waste), Improved treatment technologies (Waste), Improved landfill management (Waste), Waste incineration with energy use (Waste), Improved wastewater management	Regulatory	Implemented	Reduction of GHG emissions in Waste sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Effort Sharing Decision 406/2009/EC, Industrial emissions Directive 2010/75/EU (Recast of IPPC Directive 2008/1/EC and Large Combustion Plant Directive 2001/80/EC), Landfill Directive 1999/31/EC, Waste Management Framework Directive 2008/98/EC, Other (Uni The status of implementation of individual measures in the group is as follows: implemented, adopted and planned. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 1891.5 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 2316.75 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 2883.75 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 3390.75 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of the Environment, Water and Forests, Government of Romania:-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-Ministry of Economy and the Tourism	1891.5	2316.75	2883.75	3390.75
WAM Scenario for Combustion in Energy Industry and Manufacturing and Construction Industry sectors	Other (Energy_Supply, Energy_Consumption)	CO_2	Increase in renewable energy (Energy supply), Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption)	Other (Planning, Voluntary)	Planned	Reduction of GHG emissions in Combustion in Energy Industry and Manufacturing and Construction Industry sectors Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy), PAM not related to Union policiesDirective 2012/27/EU The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 188.69 kt CO2-equivalent; Non ETS in 2020: 69.79 kt CO2-equivalent; ETS in 2025: 208.4 kt CO2-equivalent; Non ETS in 2025: 77.08 kt CO2-equivalent; ETS in 2030: 225.8 kt CO2-equivalent; Non ETS in 2030: 83.51 kt CO2-equivalent; ETS in 2035: 583.76 kt CO2-equivalent; Non ETS in 2035: 215.82 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-National Regulatory Authority for Energy, Government of Romania:-Ministry of Regional Development and Public Administration, Government of Romania:-Ministry of Transport, Companies	258.48	285.48	309.31	799.58
WAM Scenario for Transport sector	Transport	CO_2	Efficiency improvements of vehicles (Transport), Modal shift to public transport or non-motorized transport (Transport), Low carbon fuels/electric cars (Transport), Demand management/reduction (Transport), Improved behaviour (Transport), Improved transport	Other (Planning)	Planned	Reduction of GHG emissions in Transport sector Group mitigation action. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 251.33 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 334.96 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 326.17 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 276.3 kt CO2-equivalent;	2015	Government of Romania-Ministry of Transport	251.33	334.96	326.17	276.3

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WAM Scenario for Other sectors (services, residential, agriculture)	Other (Energy_Supply, Energy_Consumption)	CO_2	Efficiency improvement in the energy and transformation sector (Energy supply), Efficiency improvement in services/ tertiary sector (Energy consumption), Efficiency improvement in industrial end-use sectors (Energy consumption), Demand management/reduction	Other (Planning)	Planned	Reduction of GHG emissions in Other sectors (services, residential, agriculture) Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Other (Union policy not listed above or additional Union policy)Directive 2012/27/EU The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 612.96 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 727.5 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 835.89 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 817.94 kt CO2-equivalent;	Please see the start year of implementation of individual mitigation actions in the group.	Government of Romania-Ministry of Energy, Small and Medium Enterprises and Business Environment, Government of Romania:-National Regulatory Authority for Energy, Government of Romania:-Ministry of Regional Development and Public Administration, Government of Romania:-Ministry of Transport	612.96	727.5	835.89	817.94
WAM Scenario for Fugitive emissions sector	Other (Energy_Supply)	CO_2, CH_4	Control of fugitive emissions from energy production (Energy supply)	Voluntary Agreement	Planned	Reduction of GHG emissions in Fugitive emissions sector Group mitigation action. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 576.76 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 839.56 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 816.71 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 1181.4 kt CO2-equivalent;	2015	Companies:-Mining companies, Companies:-Oil and gas companies	576.76	839.56	816.71	1181.4

Table 3 ROU_BR2_v1.0

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

Name of mitigation action [a]	*Sector(s) affected* [b]	*GHG(s) affected*	*Objective and/or activity affected*	*Type of instrument* [c]	*Status of implementation* [d]	*Brief description* [e]	*Start year of implementation*	*Implementing entity or entities*	*Estimate of mitigation impact (not cumulative, in kt CO_2 eq)*			
									2020	*2025*	*2030*	*2035*
WAM Scenario for Industrial Processes and Product Use sector	Industry/industrial processes	HFCs, PFCs, SF_6	Installation of abatement technologies (Industrial processes)	Voluntary Agreement	Planned	Reduction of GHG emissions in Industrial Processes and Product Use sector The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 1.9 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 4.1 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 14.9 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 13.4 kt CO2-equivalent;	2015	Companies:-Business entities dealing with industry, construction, services	1.9	4.1	14.9	13.4
WAM Scenario for Agriculture sector	Agriculture	CH_4	Improved livestock management (Agriculture), Improved animal waste management systems (Agriculture)	Other (Planning)	Planned	Reduction of GHG emissions in Agriculture sector Group mitigation action. The European Union policy which resulted in the implementation of the mitigation action is represented by the Common Agricultural Policy (CAP) Reform 2006/144/EC The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 551.1 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 941.7 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 1149.86 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 1466.11 kt CO2-equivalent;	2015	Other:-Owners of livestock farms, Government of Romania:-Ministry of Agriculture and Rural Development	551.1	941.7	1149.86	1466.11
WAM Scenario for LULUCF sector	Forestry/LULUCF	CO_2	Restoration of degraded lands (LULUCF)	Other (Planning)	Planned	Changing soil management Group mitigation action.	2015	Government of Romania-Ministry of Agriculture and Rural Development				
WAM Scenario for Waste sector	Waste management/waste	CH_4	Enhanced CH4 collection and use (Waste), Improved wastewater management systems (Waste)	Other (Other (Planning))	Planned	Reduction of GHG emissions in Waste sector Group mitigation action. The mitigation impact splited by ETS - Non ETS are: ETS in 2020: 0 kt CO2-equivalent; Non ETS in 2020: 335.5 kt CO2-equivalent; ETS in 2025: 0 kt CO2-equivalent; Non ETS in 2025: 471.25 kt CO2-equivalent; ETS in 2030: 0 kt CO2-equivalent; Non ETS in 2030: 446.5 kt CO2-equivalent; ETS in 2035: 0 kt CO2-equivalent; Non ETS in 2035: 489.5 kt CO2-equivalent;	2015	Other:-Companies managing waste storage facilities, Government:-Ministry of Internal Affairs, Other:-Business entities	335.5	471.25	446.5	489.5

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

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

[a] Parties should use an asterisk (*) to indicate that a mitigation action is included in the 'with measures' projection.

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

[c] To the extent possible, the following types of instrument should be used: economic, fiscal, voluntary agreement, regulatory, information, education, research, other.

[d] To the extent possible, the following descriptive terms should be used to report on the status of implementation: implemented, adopted, planned.

[e] Additional information may be provided on the cost of the mitigation actions and the relevant timescale.

[f] Optional year or years deemed relevant by the Party.

Custom Footnotes

Table 4 ROU_BR2_v1.0

Reporting on progress[a, b]

	Total emissions excluding LULUCF	*Contribution from LULUCF*[d]	*Quantity of units from market based mechanisms under the Convention*		*Quantity of units from other market based mechanisms*	
Year[c]	*(kt CO_2 eq)*	*(kt CO_2 eq)*	*(number of units)*	*(kt CO_2 eq)*	*(number of units)*	*(kt CO_2 eq)*
(1989)	298,018.31	NE	1,279,835,099.00	1,279,835.09	NO	NO
2010	117,706.91	-22,953.21	NO	NO	NO	NO
2011	122,565.99	-20,989.66	NO	NO	NO	NO
2012	120,977.39	-18,898.91	NO	NO	NO	NO
2013	110,927.60	NO	NO	NO	NO	NO
2014	NE	NO	NO	NO	NO	NO

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

[a] 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 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.

[c] 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.

Custom Footnotes

The CTF table 4(a)II is not filled in because the European Union joint target does not include the LULUCF Sector.
Additionally, due to the issues on the functioning of the CRF Reporter application, application which is used for the preparation of the National Greenhouse Gas Inventory, the CRF tables associated to the LULUCF Sector under the Kyoto Protocol could not be generated.

Table 4(a)I ROU_BR2_v1.0

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

	Net GHG emissions/removals from LULUCF categories [c]	*Base year/period or reference level value* [d]	*Contribution from LULUCF for reported year*	*Cumulative contribution from LULUCF* [e]	*Accounting approach* [f]
	(kt CO_2 eq)				
Total LULUCF					
A. Forest land					
1. Forest land remaining forest land					
2. Land converted to forest land					
3. Other [g]					
B. Cropland					
1. Cropland remaining cropland					
2. Land converted to cropland					
3. Other [g]					
C. Grassland					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other [g]					
D. Wetlands					
1. Wetland remaining wetland					
2. Land converted to wetland					
3. Other [g]					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other [g]					
F. Other land					
1. Other land remaining other land					
2. Land converted to other land					
3. Other [g]					
Harvested wood products					

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

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

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

[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.

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

[e] If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

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

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

Custom Footnotes

This table is not filled because the European Union joint target does not include the LULUCF Sector.

Table 4(a)I ROU_BR2_v1.0

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2014 [a, b]

	Net GHG emissions/removals from LULUCF categories [c]	*Base year/period or reference level value* [d]	*Contribution from LULUCF for reported year*	*Cumulative contribution from LULUCF* [e]	*Accounting approach* [f]
	(kt CO_2 eq)				
Total LULUCF					
A. Forest land					
1. Forest land remaining forest land					
2. Land converted to forest land					
3. Other [g]					
B. Cropland					
1. Cropland remaining cropland					
2. Land converted to cropland					
3. Other [g]					
C. Grassland					
1. Grassland remaining grassland					
2. Land converted to grassland					
3. Other [g]					
D. Wetlands					
1. Wetland remaining wetland					
2. Land converted to wetland					
3. Other [g]					
E. Settlements					
1. Settlements remaining settlements					
2. Land converted to settlements					
3. Other [g]					
F. Other land					
1. Other land remaining other land					
2. Land converted to other land					
3. Other [g]					
Harvested wood products					

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

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

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

[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.

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

[e] If applicable to the accounting approach chosen. Explain in this biennial report to which years or period the cumulative contribution refers to.

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

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

Custom Footnotes

This table is not filled because the European Union joint target does not include the LULUCF Sector.

Table 4(b) ROU_BR2_v1.0

Reporting on progress[a, b, c]

Units of market based mechanisms			*Year*	
			2013	*2014*
Kyoto Protocol units[d]	*Kyoto Protocol units*	*(number of units)*	NO	NO
		(kt CO_2 eq)	NO	NO
	AAUs	*(number of units)*	NO	NO
		(kt CO2 eq)	NO	NO
	ERUs	*(number of units)*	NO	NO
		(kt CO2 eq)	NO	NO
	CERs	*(number of units)*	NO	NO
		(kt CO2 eq)	NO	NO
	tCERs	*(number of units)*	NO	NO
		(kt CO2 eq)	NO	NO
	lCERs	*(number of units)*	NO	NO
		(kt CO2 eq)	NO	NO
Other units[d,e]	*Units from market-based mechanisms under the Convention*	*(number of units)*		
		(kt CO_2 eq)		
	Units from other market-based mechanisms	*(number of units)*		
		(kt CO_2 eq)		
Total		*(number of units)*	NO	NO
		(kt CO_2 eq)	NO	NO

Abbreviations : AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, lCERs = long-term certified emission reductions, tCERs = temporary certified emission reductions.
Note: 2011 is the latest reporting year.

[a] 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.

[c] 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.

[e] Additional rows for each market-based mechanism should be added, if applicable.

Custom Footnotes

Table 5 ROU_BR2_v1.0

Summary of key variables and assumptions used in the projections analysis[a]

Key underlying assumptions		*Historical*[b]							Projected			
Assumption	*Unit*	*1990*	*1995*	2000	2005	2010	2011	2015	2020	2025	2030	2035
GDP growth rate	*%*	NE	NE	NE	NE	NE	NE	3.20	3.20	2.98	1.99	1.99
Population	thousands	NE	NE	NE	NE	21,431.00	NE	19,909.00	19,686.00	19,390.00	19,003.00	18,691.00
Population growth	%	NE	NE	NE	NE	NE	NE	NE	1.12	1.50	1.99	1.64
Number of households	thousands	NE	NE	NE	NE	8,200.00	NE	8,500.00	8,570.00	8,620.00	8,620.00	8,700.00
International oil price	Euro2010/boe	NE	NE	NE	NE	1.04	NE	2.03	2.33	2.35	2.45	2.52
International coal price	EURO2010/boe	NE	NE	NE	NE	0.43	NE	0.39	0.59	0.63	0.63	0.66
International gas price	*EURO2010/boe*	NE	NE	NE	NE	1.00	NE	1.31	1.62	1.55	1.71	1.74

[a] Parties should include key underlying assumptions as appropriate.

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

Custom Footnotes

The values are associated with the With Existing Measures GHG projections scenario.

Table 6(a) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'with measures' scenario[a]

	GHG emissions and removals[b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	2020	2030
Sector[d,e]									
Energy	220,008.16	185,004.71	133,456.44	100,585.82	102,029.51	82,774.11	76,996.22	85,124.25	92,650.49
Transport	11,132.73	12,438.59	8,553.11	9,906.62	12,574.27	14,122.00	15,088.28	18,271.54	20,335.91
Industry/industrial processes	39,016.24	28,413.57	21,928.19	17,151.67	19,789.85	12,260.33	10,434.74	16,430.03	21,071.16
Agriculture	33,858.25	34,876.06	23,141.56	18,011.34	19,878.92	16,994.04	17,648.31	19,795.30	27,391.35
Forestry/LULUCF	-16,315.63	-20,480.79	-25,608.87	-25,837.06	-25,037.95	-24,177.70	-24,939.19	-17,963.34	-17,425.81
Waste management/waste	5,135.66	5,023.36	5,170.62	5,393.96	5,675.69	5,678.43	5,848.33	5,500.89	5,644.62
Other (specify)									
Gas									
CO_2 emissions including net CO_2 from LULUCF	191,753.59	151,654.15	100,775.82	67,394.42	75,341.40	54,844.15	47,883.82	67,753.63	76,136.22
CO_2 emissions excluding net CO_2 from LULUCF	208,913.93	173,012.37	127,249.43	94,087.96	101,219.26	79,727.18	73,437.39	86,595.99	94,441.07
CH_4 emissions including CH_4 from LULUCF	66,817.31	62,138.07	42,889.72	36,034.39	35,269.67	29,295.97	28,711.06	29,060.79	34,698.41
CH_4 emissions excluding CH_4 from LULUCF	66,817.22	62,137.66	42,889.53	36,031.06	35,269.47	29,295.78	28,709.80	29,059.79	34,697.41
N_2O emissions including N_2O from LULUCF	19,244.40	16,588.87	12,360.93	10,298.10	11,245.10	8,336.79	8,031.73	10,157.72	15,383.78
N_2O emissions excluding N_2O from LULUCF	18,399.77	15,711.85	11,496.40	9,444.95	10,405.38	7,631.65	7,418.60	9,279.65	14,505.71
HFCs	0.16	0.18	2.53	70.82	368.91	982.46	1,298.58	1,829.20	2,979.60
PFCs	3,886.75	2,455.17	2,057.96	1,499.32	95.28	9.13	6.15	9.43	9.43
SF_6	0.47	0.47	0.98	8.68	15.67	60.71	57.08	76.40	124.40
Other (specify)									
Total with LULUCF[f]	281,702.68	232,836.91	158,087.94	115,305.73	122,336.03	93,529.21	85,988.42	108,887.17	129,331.84
Total without LULUCF	298,018.30	253,317.70	183,696.83	141,142.79	147,373.97	117,706.91	110,927.60	126,850.46	146,757.62

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

[a] 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) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'with measures' scenario[a]

	GHG emissions and removals[b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	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.

[c] 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.

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

[f] Parties may choose to report total emissions with or without LULUCF, as appropriate.

Custom Footnotes

Table 6(b) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'without measures' scenario[a]

	GHG emissions and removals [b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	2020	2030
Sector [d,e]									
Energy	220,008.16	185,004.71	133,456.44	100,585.82	102,029.51	82,774.11	76,996.22	88,422.40	96,929.28
Transport	11,132.73	12,438.59	8,553.11	9,906.62	12,574.27	14,122.00	15,088.28	18,622.01	20,893.92
Industry/industrial processes	39,016.24	28,413.57	21,928.19	17,151.67	19,789.85	12,260.33	10,434.74	16,520.27	21,298.28
Agriculture	33,858.25	34,876.06	23,141.56	18,011.34	19,878.92	16,994.04	17,648.31	21,439.34	29,457.77
Forestry/LULUCF	-16,315.63	-20,480.79	-25,608.87	-25,837.06	-25,037.95	-24,177.70	-24,939.19	-21,124.07	-20,187.00
Waste management/waste	5,135.66	5,023.36	5,170.62	5,393.96	5,675.69	5,678.43	5,848.33	7,392.39	8,528.37
Other (specify)									
Gas									
CO_2 emissions including net CO_2 from LULUCF	191,753.59	151,654.15	100,775.82	67,394.42	75,341.40	54,844.15	47,883.82	66,578.90	76,681.96
CO_2 emissions excluding net CO_2 from LULUCF	208,913.93	173,012.37	127,249.43	94,087.96	101,219.26	79,727.18	73,437.39	88,582.00	97,748.00
CH_4 emissions including CH_4 from LULUCF	66,817.31	62,138.07	42,889.72	36,034.39	35,269.67	29,295.97	28,711.06	32,972.27	39,510.78
CH_4 emissions excluding CH_4 from LULUCF	66,817.22	62,137.66	42,889.53	36,031.06	35,269.47	29,295.78	28,709.80	32,971.32	39,509.79
N_2O emissions including N_2O from LULUCF	19,244.40	16,588.87	12,360.93	10,298.10	11,245.10	8,336.79	8,031.73	11,184.12	16,720.54
N_2O emissions excluding N_2O from LULUCF	18,399.77	15,711.85	11,496.40	9,444.95	10,405.38	7,631.65	7,418.60	10,306.06	15,842.49
HFCs	0.16	0.18	2.53	70.82	368.91	982.46	1,298.58	1,829.20	2,979.60
PFCs	3,886.75	2,455.17	2,057.96	1,499.32	95.28	9.13	6.15	9.43	9.43
SF_6	0.47	0.47	0.98	8.68	15.67	60.71	57.08	76.40	124.40
Other (specify)									
Total with LULUCF[f]	281,702.68	232,836.91	158,087.94	115,305.73	122,336.03	93,529.21	85,988.42	112,650.32	136,026.71
Total without LULUCF	298,018.30	253,317.70	183,696.83	141,142.79	147,373.97	117,706.91	110,927.60	133,774.41	156,213.71

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

[a] 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(b) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'without measures' scenario[a]

	GHG emissions and removals [b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	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.

[c] 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.

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

[f] Parties may choose to report total emissions with or without LULUCF, as appropriate.

Table 6(c) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'with additional measures' scenario[a]

	GHG emissions and removals[b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	2020	2030
Sector[d,e]									
Energy	220,008.16	185,004.71	133,456.44	100,585.82	102,029.51	82,774.11	76,996.22	83,425.61	90,362.42
Transport	11,132.73	12,438.59	8,553.11	9,906.62	12,574.27	14,122.00	15,088.28	18,020.22	20,009.74
Industry/industrial processes	39,016.24	28,413.57	21,928.19	17,151.67	19,789.85	12,260.33	10,434.74	16,428.13	21,056.26
Agriculture	33,858.25	34,876.06	23,141.56	18,011.34	19,878.92	16,994.04	17,648.31	19,020.70	24,858.77
Forestry/LULUCF	-16,315.63	-20,480.79	-25,608.87	-25,837.06	-25,037.95	-24,177.70	-24,939.19	-17,351.14	-10,881.22
Waste management/waste	5,135.66	5,023.36	5,170.62	5,393.96	5,675.69	5,678.43	5,848.33	5,165.39	5,198.12
Other (specify)									
Gas									
CO_2 emissions including net CO_2 from LULUCF	191,753.59	151,654.15	100,775.82	67,394.42	75,341.40	54,844.15	47,883.82	67,499.31	81,073.95
CO_2 emissions excluding net CO_2 from LULUCF	208,913.93	173,012.37	127,249.43	94,087.96	101,219.26	79,727.18	73,437.39	85,382.22	92,834.21
CH_4 emissions including CH_4 from LULUCF	66,817.31	62,138.07	42,889.72	36,034.39	35,269.67	29,295.97	28,711.06	27,814.39	32,562.92
CH_4 emissions excluding CH_4 from LULUCF	66,817.22	62,137.66	42,889.53	36,031.06	35,269.47	29,295.78	28,709.80	27,813.43	32,561.96
N_2O emissions including N_2O from LULUCF	19,244.40	16,588.87	12,360.93	10,298.10	11,245.10	8,336.79	8,031.73	9,807.11	13,843.92
N_2O emissions excluding N_2O from LULUCF	18,399.77	15,711.85	11,496.40	9,444.95	10,405.38	7,631.65	7,418.60	8,929.15	12,965.96
HFCs	0.16	0.18	2.53	70.82	368.91	982.46	1,298.58	1,829.20	2,979.60
PFCs	3,886.75	2,455.17	2,057.96	1,499.32	95.28	9.13	6.15	9.43	9.43
SF_6	0.47	0.47	0.98	8.68	15.67	60.71	57.08	76.40	124.40
Other (specify)									
Total with LULUCF[f]	281,702.68	232,836.91	158,087.94	115,305.73	122,336.03	93,529.21	85,988.42	107,035.84	130,594.22
Total without LULUCF	298,018.30	253,317.70	183,696.83	141,142.79	147,373.97	117,706.91	110,927.60	124,039.83	141,475.56

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

[a] 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(c) ROU_BR2_v1.0

Information on updated greenhouse gas projections under a 'with additional measures' scenario[a]

	GHG emissions and removals[b]							GHG emission projections	
	(kt CO_2 eq)							(kt CO_2 eq)	
	Base year (1989)	1990	1995	2000	2005	2010	2013	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.

[c] 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.

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

[f] Parties may choose to report total emissions with or without LULUCF, as appropriate.

Table 7 ROU_BR2_v1.0

Provision of public financial support: summary information in 2013[a]

Allocation channels	*Year*									
	Romanian leu - RON					*USD[b]*				
	Core/ general[c]	*Climate-specific[d]*				*Core/ general[c]*	*Climate-specific[d]*			
		Mitigation	*Adaptation*	*Cross-cutting[e]*	*Other[f]*		*Mitigation*	*Adaptation*	*Cross-cutting[e]*	*Other[f]*
Total contributions through multilateral channels:										
Multilateral climate change funds[g]										
Other multilateral climate change funds[h]										
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.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.

[c] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

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

[e] This refers to funding for activities which are cross-cutting across mitigation and adaptation.

[f] Please specify.

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

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

Custom Footnotes

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

Table 7 ROU_BR2_v1.0

Provision of public financial support: summary information in 2014[a]

Allocation channels	*Year*									
	Romanian leu - RON					*USD*[b]				
	Core/ general[c]	*Climate-specific*[d]				*Core/ general*[c]	*Climate-specific*[d]			
		Mitigation	*Adaptation*	*Cross-cutting*[e]	*Other*[f]		*Mitigation*	*Adaptation*	*Cross-cutting*[e]	*Other*[f]
Total contributions through multilateral channels:										
Multilateral climate change funds[g]										
Other multilateral climate change funds[h]										
Multilateral financial institutions, including regional development banks										
Specialized United Nations bodies										
Total contributions through bilateral, regional and other channels	140,000.00		140,000.00			35,564.58		35,564.58		
Total	140,000.00		140,000.00			35,564.58		35,564.58		

Abbreviation: USD = United States dollars.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should provide an explanation on methodology used for currency exchange for the information provided in table 7, 7(a) and 7(b) in the box below.

[c] This refers to support to multilateral institutions that Parties cannot specify as climate-specific.

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

[e] This refers to funding for activities which are cross-cutting across mitigation and adaptation.

[f] Please specify.

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

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

Custom Footnotes

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

Table 7(a) ROU_BR2_v1.0

Provision of public financial support: contribution through multilateral channels in 2013[a]

Donor funding	*Total amount*				*Status*[b]	*Funding source*[f]	*Financial instrument*[f]	*Type of support*[f, g]	*Sector*[c]
	Core/general[d]		*Climate-specific*[e]						
	Romanian leu - RON	*USD*	*Romanian leu - RON*	*USD*					
Total contributions through multilateral channels									
Multilateral climate change funds[g]									
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.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

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

[c] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

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

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

[f] Please specify.

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

Custom Footnotes

Table 7(a) ROU_BR2_v1.0

Provision of public financial support: contribution through multilateral channels in 2014[a]

Donor funding	*Total amount*				*Status*[b]	*Funding source*[f]	*Financial instrument*[f]	*Type of support*[f, g]	*Sector*[c]
	Core/general[d]		*Climate-specific*[e]						
	Romanian leu - RON	*USD*	*Romanian leu - RON*	*USD*					
Total contributions through multilateral channels									
Multilateral climate change funds[g]									
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.

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

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

[c] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

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

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

[f] Please specify.

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

Custom Footnotes

Table 7(b) ROU_BR2_v1.0

Provision of public financial support: contribution through bilateral, regional and other channels in 2013[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	Romanian leu - RON	*USD*						
Total contributions through bilateral, regional and other channels								

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

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should report, to the extent possible, on details contained in this table.

[c] 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.

[d] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under "Other".

[e] Parties should report, as appropriate, on project details and the implementing agency.

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

[g] Please specify.

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

Custom Footnotes

Table 7(b) ROU_BR2_v1.0

Provision of public financial support: contribution through bilateral, regional and other channels in 2014[a]

Recipient country/ region/project/programme [b]	*Total amount*		*Status* [c]	*Funding source* [g]	*Financial instrument* [g]	*Type of support* [g, h]	*Sector* [d]	*Additional information* [e]
	Climate-specific [f]							
	Romanian leu - RON	*USD*						
Total contributions through bilateral, regional and other channels	140,000.00	35,564.58						
/ Total contributions through bilateral, regional and other channels	140,000.00	35,564.58	Provided	ODA	Grant	Adaptation		The "Disaster Risk Reduction-a way to sustainable development" is dedicated to the community of Tsintskaro, Georgia. The project is financed through the budget of Romanian Ministry of Foreign Affairs.

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

[a] Parties should fill in a separate table for each year, namely 2011 and 2012, where 2014 is the reporting year.

[b] Parties should report, to the extent possible, on details contained in this table.

[c] 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.

[d] Parties may select several applicable sectors. Parties may report sectoral distribution, as applicable, under “Other”.

[e] Parties should report, as appropriate, on project details and the implementing agency.

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

[g] Please specify.

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

Custom Footnotes

Table 8 ROU_BR2_v1.0

Provision of technology development and transfer support[a,b]

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

[a] To be reported to the extent possible.

[b] The tables should include measures and activities since the last national communication or biennial report.

[c] Parties may report sectoral disaggregation, as appropriate.

[d] 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.

Custom Footnotes

Table 9 ROU_BR2_v1.0

Provision of capacity-building support[a]

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

[a] To be reported to the extent possible.

[b] 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.

[c] Additional information may be provided on, for example, the measure or activity and co-financing arrangements.

Custom Footnotes