

BR CTF submission workbook

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Table 1

RUS_BR1_v1.0

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

CRF: RUS_CRF__ v1.2

<i>GREENHOUSE GAS EMISSIONS</i>	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq
CO ₂ emissions including net CO ₂ from LULUCF	2,564,079.8 0	2,422,810.6 6	1,899,276.5 4	1,714,469.4 5	1,430,719.5 8	1,337,467.4 3	1,221,863.0 3	1,055,438.0 5	1,020,608.4 6
CO ₂ emissions excluding net CO ₂ from LULUCF	2,498,542.3 0	2,352,212.7 8	1,931,026.1 8	1,834,246.0 8	1,622,360.7 9	1,572,597.2 6	1,533,869.7 7	1,458,380.5 1	1,432,744.2 5
CH ₄ emissions including CH ₄ from LULUCF	603,762.05	586,487.58	539,732.89	524,064.87	488,746.56	469,646.39	459,767.66	432,821.53	438,449.37
CH ₄ emissions excluding CH ₄ from LULUCF	593,579.00	577,178.25	530,296.59	514,551.25	479,818.55	461,177.22	449,004.69	424,185.76	424,703.78
N ₂ O emissions including N ₂ O from LULUCF	227,324.10	215,980.48	198,626.55	183,063.34	164,192.37	149,933.27	142,407.12	134,144.49	125,394.39
N ₂ O emissions excluding N ₂ O from LULUCF	218,530.20	207,864.43	190,405.67	174,780.03	156,455.87	142,593.71	133,103.69	126,633.77	113,609.24
HFCs	28,409.78	27,059.93	22,288.71	14,454.95	12,236.70	12,220.79	10,771.75	14,256.12	17,285.67
PFCs	11,680.24	12,421.08	11,102.03	10,797.23	10,486.31	10,019.27	8,785.61	7,465.75	7,182.29
SF ₆	1,202.49	1,092.47	353.89	169.69	101.85	416.27	1,054.61	1,052.86	845.33
Total (including LULUCF)	3,436,458.4 6	3,265,852.2 0	2,671,380.6 1	2,447,019.5 2	2,106,483.3 7	1,979,703.4 2	1,844,649.7 7	1,645,178.8 1	1,609,765.5 1
Total (excluding LULUCF)	3,351,944.0 1	3,177,828.9 4	2,685,473.0 6	2,548,999.2 2	2,281,460.0 7	2,199,024.5 2	2,136,590.1 3	2,031,974.7 8	1,996,370.5 6

<i>GREENHOUSE GAS SOURCE AND SINK CATEGORIES</i>	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq
1. Energy	2,714,711.1 4	2,589,316.4 9	2,145,895.1 7	2,065,723.1 3	1,848,728.7 1	1,777,993.9 2	1,748,890.1 4	1,657,037.2 6	1,645,728.6 4
2. Industrial Processes	257,431.42	224,069.43	202,506.46	168,648.67	143,974.34	154,306.15	140,123.95	139,805.58	134,106.96
3. Solvent and Other Product Use	561.61	528.85	521.42	510.65	515.88	511.68	510.65	508.21	517.34
4. Agriculture	318,117.77	304,259.42	280,186.82	260,179.14	236,212.60	212,828.84	194,728.12	181,426.70	161,833.68
5. Land Use, Land-Use Change and Forestry ^b	84,514.45	88,023.26	-14,092.45	-101,979.70	-174,976.70	-219,321.10	-291,940.35	-386,795.98	-386,605.05
6. Waste	61,122.07	59,654.75	56,363.19	53,937.64	52,028.53	53,383.93	52,337.27	53,197.04	54,183.93
7. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total (including LULUCF)	3,436,458.4 6	3,265,852.2 0	2,671,380.6 1	2,447,019.5 2	2,106,483.3 7	1,979,703.4 2	1,844,649.7 7	1,645,178.8 1	1,609,765.5 1

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

RUS_BR1_v1.0

Emission trends: summary ⁽¹⁾
(Sheet 2 of 3)

CRF: RUS_CRF__ v1.2

<i>GREENHOUSE GAS EMISSIONS</i>	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>
CO ₂ emissions including net CO ₂ from LULUCF	1,029,847.63	994,387.01	927,222.86	894,833.16	937,143.54	964,589.49	966,080.48	1,040,903.21	1,010,289.96	1,010,148.51
CO ₂ emissions excluding net CO ₂ from LULUCF	1,469,900.08	1,471,337.44	1,490,392.56	1,491,341.08	1,521,288.70	1,523,533.08	1,524,789.87	1,581,865.38	1,578,903.35	1,609,349.25
CH ₄ emissions including CH ₄ from LULUCF	434,027.35	444,811.85	449,085.98	456,032.65	472,866.93	499,449.76	483,544.78	496,851.75	500,060.85	504,090.99
CH ₄ emissions excluding CH ₄ from LULUCF	424,936.33	434,627.80	439,267.90	445,076.49	460,306.21	490,260.92	473,756.25	485,788.49	490,170.12	492,911.34
N ₂ O emissions including N ₂ O from LULUCF	115,974.16	120,878.39	121,631.07	123,522.61	122,175.47	118,660.81	117,078.86	118,487.02	120,268.38	125,746.35
N ₂ O emissions excluding N ₂ O from LULUCF	108,116.61	112,038.81	113,133.19	114,043.99	111,269.97	110,801.71	108,690.50	108,889.72	111,725.84	116,186.53
HFCs	17,951.34	21,037.20	19,900.05	15,171.98	11,410.18	14,379.07	15,450.86	14,008.79	13,538.85	14,421.61
PFCs	7,049.85	7,298.60	6,625.62	5,524.47	5,014.57	5,007.42	4,722.14	4,184.01	3,798.36	3,720.57
SF ₆	681.39	696.52	867.00	940.04	1,101.15	1,236.02	1,340.04	1,361.11	1,391.46	830.88
Total (including LULUCF)	1,605,531.72	1,589,109.56	1,525,332.58	1,496,024.92	1,549,711.84	1,603,322.57	1,588,217.16	1,675,795.89	1,649,347.86	1,658,958.92
Total (excluding LULUCF)	2,028,635.60	2,047,036.36	2,070,186.32	2,072,098.06	2,110,390.77	2,145,218.22	2,128,749.66	2,196,097.49	2,199,527.98	2,237,420.19

<i>GREENHOUSE GAS SOURCE AND SINK CATEGORIES</i>	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>
1. Energy	1,671,083.81	1,668,022.95	1,687,275.54	1,690,021.21	1,728,564.30	1,754,617.72	1,739,309.98	1,796,383.37	1,791,755.17	1,834,144.32
2. Industrial Processes	151,158.28	166,682.75	167,719.92	166,010.75	167,754.99	176,595.34	178,539.67	187,436.35	190,712.49	180,381.36
3. Solvent and Other Product Use	515.46	522.89	532.87	531.53	532.63	534.76	531.90	531.96	541.40	543.67
4. Agriculture	149,326.00	152,980.24	154,318.24	153,507.74	149,530.53	147,359.80	141,680.87	140,574.47	143,233.60	148,025.31
5. Land Use, Land-Use Change and Forestry ^b	-423,103.87	-457,926.80	-544,853.74	-576,073.14	-560,678.93	-541,895.65	-540,532.50	-520,301.60	-550,180.13	-578,461.27
6. Waste	56,552.05	58,827.54	60,339.75	62,026.83	64,008.33	66,110.61	68,687.24	71,171.35	73,285.32	74,325.53
7. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total (including LULUCF)	1,605,531.72	1,589,109.56	1,525,332.58	1,496,024.92	1,549,711.84	1,603,322.57	1,588,217.16	1,675,795.89	1,649,347.86	1,658,958.92

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

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

CRF: RUS_CRF__ v1.2

<i>GREENHOUSE GAS EMISSIONS</i>	2009	2010	2011	Change from base to latest reported year
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	(%)
CO ₂ emissions including net CO ₂ from LULUCF	857,765.46	927,828.22	1,036,239.91	-59.59
CO ₂ emissions excluding net CO ₂ from LULUCF	1,526,424.20	1,598,210.91	1,684,432.63	-32.58
CH ₄ emissions including CH ₄ from LULUCF	476,623.37	501,733.93	517,301.40	-14.32
CH ₄ emissions excluding CH ₄ from LULUCF	464,722.37	491,083.84	506,637.22	-14.65
N ₂ O emissions including N ₂ O from LULUCF	126,966.08	122,890.94	126,662.49	-44.28
N ₂ O emissions excluding N ₂ O from LULUCF	116,814.45	113,771.17	117,568.82	-46.20
HFCs	10,146.03	10,859.90	9,142.15	-67.82
PFCs	2,524.58	2,677.57	2,544.15	-78.22
SF ₆	790.63	667.52	509.42	-57.64
Total (including LULUCF)	1,474,816.15	1,566,658.08	1,692,399.52	-50.75
Total (excluding LULUCF)	2,121,422.25	2,217,270.91	2,320,834.38	-30.76

<i>GREENHOUSE GAS SOURCE AND SINK CATEGORIES</i>	2009	2010	2011	Change from base to latest reported year
	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	<i>kt CO₂ eq</i>	(%)
1. Energy	1,737,236.12	1,824,316.80	1,920,401.47	-29.26
2. Industrial Processes	158,124.39	172,703.57	174,960.54	-32.04
3. Solvent and Other Product Use	557.59	564.92	570.87	1.65
4. Agriculture	147,324.71	141,853.53	144,043.85	-54.72
5. Land Use, Land-Use Change and Forestry ^b	-646,606.10	-650,612.83	-628,434.86	-843.58
6. Waste	78,179.44	77,832.09	80,857.66	32.29
7. Other	NA	NA	NA	0.00
Total (including LULUCF)	1,474,816.15	1,566,658.08	1,692,399.52	-50.75

Notes :

(1) Further detailed information could be found in the common reporting format tables of the Party's greenhouse gas inventory, namely "Emission trends (CO₂)", "Emission trends (CH₄)", "Emission trends (N₂O)" and "Emission trends (HFCs, PFCs and SF₆)", which is included in an annex to this biennial report.

(2) 2011 is the latest reported inventory year.

(3) 1 kt CO₂ eq equals 1 Gg CO₂ 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 CO₂, CH₄ and N₂O from LULUCF.

Custom Footnotes

Emission trends (CO₂)
(Sheet 1 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	2,286,974.52	2,173,269.56	1,766,105.09	1,694,152.10	1,503,766.75	1,443,813.59	1,417,393.79	1,344,134.82	1,326,373.28
A. Fuel Combustion (Sectoral Approach)	2,264,398.55	2,149,972.23	1,746,904.58	1,678,549.21	1,490,412.45	1,429,466.20	1,402,863.68	1,328,520.44	1,310,665.25
1. Energy Industries	1,172,334.24	1,101,865.23	1,078,083.27	1,053,801.20	962,544.52	909,929.28	907,992.38	855,496.44	860,077.58
2. Manufacturing Industries and Construction	216,338.77	209,540.57	137,315.04	117,363.90	94,188.16	105,696.05	106,514.45	106,311.62	88,414.68
3. Transport	340,738.42	330,632.90	268,906.71	226,078.73	198,930.08	184,618.01	176,525.45	163,400.28	191,824.45
4. Other Sectors	256,626.98	244,738.97	229,498.24	224,939.28	205,269.07	190,616.27	171,160.69	165,182.27	156,228.49
5. Other	278,360.14	263,194.55	33,101.32	56,366.09	29,480.62	38,606.60	40,670.70	38,129.84	14,120.06
B. Fugitive Emissions from Fuels	22,575.97	23,297.34	19,200.51	15,602.89	13,354.30	14,347.39	14,530.10	15,614.38	15,708.03
1. Solid Fuels	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
2. Oil and Natural Gas	22,575.97	23,297.34	19,200.51	15,602.89	13,354.30	14,347.39	14,530.10	15,614.38	15,708.03
2. Industrial Processes	211,567.78	178,943.21	164,921.09	140,093.98	118,594.03	128,783.67	116,475.98	114,245.69	106,370.97
A. Mineral Products	84,212.77	72,681.38	65,289.28	50,109.30	38,028.69	41,807.05	34,152.17	32,524.40	30,602.91
B. Chemical Industry	18,664.56	18,262.89	16,342.05	15,554.26	13,882.44	14,608.48	14,121.39	13,012.52	11,554.07
C. Metal Production	108,690.44	87,998.94	83,289.76	74,430.42	66,682.90	72,368.14	68,202.43	68,708.77	64,213.99
D. Other Production	NE	NE	NE	NE	NE	NE	NE	NE	NE
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
4. Agriculture									
A. Enteric Fermentation									
B. Manure Management									
C. Rice Cultivation									
D. Agricultural Soils									
E. Prescribed Burning of Savannas									
F. Field Burning of Agricultural Residues									
G. Other									
5. Land Use, Land-Use Change and Forestry	65,537.50	70,597.89	-31,749.64	-119,776.64	-191,641.21	-235,129.83	-312,006.75	-402,942.46	-412,135.79
A. Forest Land	-231,778.40	-235,943.71	-239,567.40	-245,616.05	-305,285.32	-364,982.05	-424,893.16	-485,120.71	-545,644.23
B. Cropland	268,572.42	276,986.94	192,615.31	112,496.86	120,962.83	163,305.13	169,580.54	139,765.77	216,066.38
C. Grassland	-7,432.75	-13,754.02	-28,604.86	-30,400.27	-47,864.64	-74,857.24	-96,915.06	-97,078.96	-120,811.98
D. Wetlands	0.75	0.75	0.75	0.74	0.74	0.74	0.73	0.72	0.66
E. Settlements	36,175.47	43,307.93	43,806.56	43,742.08	40,545.18	41,403.60	40,220.20	39,490.72	38,253.38
F. Other Land	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
A. Solid Waste Disposal on Land	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
B. Waste-water Handling									
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CO2 emissions including net CO2 from LULUCF	2,564,079.80	2,422,810.66	1,899,276.54	1,714,469.45	1,430,719.58	1,337,467.43	1,221,863.03	1,055,438.05	1,020,608.46
Total CO2 emissions excluding net CO2 from LULUCF	2,498,542.30	2,352,212.78	1,931,026.18	1,834,246.08	1,622,360.79	1,572,597.26	1,533,869.77	1,458,380.51	1,432,744.25
Memo Items:									
International Bunkers	12,113.22	11,413.71	10,223.67	9,482.06	8,441.94	7,811.11	8,119.80	7,427.08	7,291.73
Aviation	4,527.69	4,351.49	4,222.72	4,507.36	4,561.58	4,846.22	5,198.63	5,151.19	5,029.20
Marine	7,585.53	7,062.22	6,000.95	4,974.70	3,880.36	2,964.89	2,921.17	2,275.89	2,262.53
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO2 Emissions from Biomass	62,218.63	60,995.37	49,777.19	47,827.51	32,360.64	28,886.93	24,787.82	21,423.10	16,714.16

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

Table 1 (a)

RUS_BR1_v1.0

Emission trends (CO₂)

(Sheet 2 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	1,347,142.17	1,336,911.03	1,353,494.81	1,350,895.35	1,374,897.85	1,371,640.41	1,372,106.20	1,418,342.62	1,411,523.23	1,452,127.33
A. Fuel Combustion (Sectoral Approach)	1,330,151.52	1,319,980.58	1,336,332.22	1,326,329.89	1,350,756.13	1,344,036.26	1,343,174.11	1,388,972.47	1,375,938.60	1,426,806.66
1. Energy Industries	848,183.06	861,006.77	859,163.20	868,173.78	878,605.04	863,375.07	866,010.89	897,103.41	883,755.32	902,199.36
2. Manufacturing Industries and Construction	96,891.52	115,097.21	116,564.13	113,408.77	111,929.16	115,891.01	125,385.91	126,881.70	117,609.87	133,559.42
3. Transport	193,467.56	151,464.33	159,820.01	165,823.77	174,306.49	180,953.38	189,365.17	197,942.16	205,409.09	216,748.22
4. Other Sectors	170,793.74	180,729.69	187,946.25	162,261.49	164,716.60	160,010.84	135,263.25	137,331.54	136,881.78	141,234.95
5. Other	20,815.63	11,682.58	12,838.63	16,662.08	21,198.84	23,805.96	27,148.89	29,713.66	32,282.54	33,064.71
B. Fugitive Emissions from Fuels	16,990.66	16,930.45	17,162.59	24,565.46	24,141.72	27,604.15	28,932.09	29,370.15	35,584.63	25,320.67
1. Solid Fuels	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
2. Oil and Natural Gas	16,990.66	16,930.45	17,162.59	24,565.46	24,141.72	27,604.15	28,932.09	29,370.15	35,584.63	25,320.67
2. Industrial Processes	122,757.91	134,426.41	136,897.75	140,445.73	146,390.85	151,892.67	152,683.66	163,522.76	167,380.12	157,221.93
A. Mineral Products	34,181.32	37,967.72	38,570.26	38,249.64	44,009.46	45,322.89	47,531.71	51,033.73	54,958.00	50,636.55
B. Chemical Industry	13,503.09	15,006.05	14,752.09	14,801.34	15,472.56	16,348.20	16,720.45	17,318.30	17,346.76	16,542.81
C. Metal Production	75,073.50	81,452.64	83,575.40	87,394.75	86,908.83	90,221.58	88,431.50	95,170.74	95,075.37	90,042.56
D. Other Production	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
4. Agriculture										
A. Enteric Fermentation										
B. Manure Management										
C. Rice Cultivation										
D. Agricultural Soils										
E. Prescribed Burning of Savannas										
F. Field Burning of Agricultural Residues										
G. Other										
5. Land Use, Land-Use Change and Forestry	-440,052.45	-476,950.44	-563,169.70	-596,507.92	-584,145.15	-558,943.60	-558,709.39	-540,962.17	-568,613.39	-599,200.74
A. Forest Land	-549,538.59	-590,063.15	-609,232.79	-615,339.50	-623,667.50	-613,604.44	-608,976.03	-622,070.88	-623,080.75	-640,520.63
B. Cropland	190,160.19	163,824.43	135,087.71	133,626.47	134,845.20	133,285.49	123,142.40	128,798.63	108,579.08	85,781.96
C. Grassland	-118,922.86	-89,350.46	-126,863.69	-152,188.31	-132,304.34	-115,451.06	-109,392.24	-84,253.00	-90,179.94	-81,191.05
D. Wetlands	0.57	0.62	0.61	0.59	0.56	0.54	0.53	0.53	0.52	0.51
E. Settlements	38,248.24	38,638.11	37,838.46	37,392.83	36,980.92	36,825.87	36,515.94	36,562.54	36,067.70	36,728.47
F. Other Land	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
A. Solid Waste Disposal on Land	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
B. Waste-water Handling										
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CO2 emissions including net CO2 from LULUCF	1,029,847.63	994,387.01	927,222.86	894,833.16	937,143.54	964,589.49	966,080.48	1,040,903.21	1,010,289.96	1,010,148.51
Total CO2 emissions excluding net CO2 from LULUCF	1,469,900.08	1,471,337.44	1,490,392.56	1,491,341.08	1,521,288.70	1,523,533.08	1,524,789.87	1,581,865.38	1,578,903.35	1,609,349.25
Memo Items:										
International Bunkers	6,610.46	6,922.17	7,243.92	7,167.70	7,353.56	8,274.08	7,817.06	8,334.42	9,326.34	10,043.57
Aviation	4,805.55	5,170.31	5,304.68	5,279.62	5,525.44	6,373.49	6,203.55	6,774.19	7,924.77	8,678.94
Marine	1,804.90	1,751.86	1,939.24	1,888.08	1,828.12	1,900.59	1,613.51	1,560.23	1,401.56	1,364.63
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO2 Emissions from Biomass	21,618.05	18,023.14	17,461.19	16,672.05	16,589.28	16,037.33	15,964.46	16,118.77	17,230.39	15,210.77

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

Emission trends (CO₂)

(Sheet 3 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	1,386,762.16	1,444,944.12	1,527,089.35	-33.23
A. Fuel Combustion (Sectoral Approach)	1,360,592.80	1,411,661.48	1,491,117.00	-34.15
1. Energy Industries	864,938.62	889,416.46	896,804.18	-23.50
2. Manufacturing Industries and Construction	131,486.13	137,765.77	144,907.35	-33.02
3. Transport	195,694.16	223,924.19	278,160.72	-18.37
4. Other Sectors	141,136.61	134,668.96	144,479.01	-43.70
5. Other	27,337.28	25,886.09	26,765.74	-90.38
B. Fugitive Emissions from Fuels	26,169.36	33,282.64	35,972.35	59.34
1. Solid Fuels	NA, NE	NA, NE	NA, NE	0.00
2. Oil and Natural Gas	26,169.36	33,282.64	35,972.35	59.34
2. Industrial Processes	139,662.03	153,266.79	157,343.28	-25.63
A. Mineral Products	41,279.98	46,764.43	50,026.84	-40.59
B. Chemical Industry	16,424.39	16,755.60	17,475.37	-6.37
C. Metal Production	81,957.66	89,746.76	89,841.07	-17.34
D. Other Production	NE	NE	NE	0.00
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6				
G. Other	NA	NA	NA	0.00
3. Solvent and Other Product Use	NA, NE	NA, NE	NA, NE	0.00
4. Agriculture				
A. Enteric Fermentation				
B. Manure Management				
C. Rice Cultivation				
D. Agricultural Soils				
E. Prescribed Burning of Savannas				
F. Field Burning of Agricultural Residues				
G. Other				
5. Land Use, Land-Use Change and Forestry	-668,658.74	-670,382.69	-648,192.72	-1,089.04
A. Forest Land	-704,912.81	-709,980.72	-674,692.11	191.09
B. Cropland	77,751.13	100,078.21	82,868.65	-69.14
C. Grassland	-76,901.40	-83,595.35	-78,623.39	957.80
D. Wetlands	0.50	0.50	0.49	-35.38
E. Settlements	35,403.84	23,114.68	22,253.64	-38.48
F. Other Land	NE, NO	NE, NO	NE, NO	0.00
G. Other	IE	IE	IE	0.00
6. Waste	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
A. Solid Waste Disposal on Land	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
B. Waste-water Handling				
C. Waste Incineration	IE	IE	IE	0.00
D. Other	NA	NA	NA	0.00
7. Other (as specified in the summary table in CRF)	NA	NA	NA	0.00
Total CO2 emissions including net CO2 from LULUCF	857,765.46	927,828.22	1,036,239.91	-59.59
Total CO2 emissions excluding net CO2 from LULUCF	1,526,424.20	1,598,210.91	1,684,432.63	-32.58
Memo Items:				
International Bunkers	9,212.04	9,839.05	11,266.82	-6.99
Aviation	7,315.69	7,791.52	8,810.80	94.60
Marine	1,896.35	2,047.53	2,456.02	-67.62
Multilateral Operations	IE	IE	IE	0.00
CO2 Emissions from Biomass	14,243.51	14,598.71	14,520.75	-76.66

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

Table 1(b)

RUS_BR1_v1.0

Emission trends (CH₄)

(Sheet 1 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	20,050.95	19,502.85	17,848.38	17,467.04	16,227.94	15,712.10	15,586.83	14,710.77	15,014.49
A. Fuel Combustion (Sectoral Approach)	536.96	511.02	316.82	369.85	260.65	248.74	208.26	194.56	175.15
1. Energy Industries	30.34	28.80	27.21	25.35	22.86	22.19	20.63	19.55	20.19
2. Manufacturing Industries and Construction	22.19	21.29	13.14	11.65	9.84	12.93	13.51	11.29	10.40
3. Transport	40.17	38.75	33.71	28.95	26.80	25.85	24.70	24.45	26.63
4. Other Sectors	296.51	283.77	225.88	217.11	171.15	156.23	143.87	134.48	116.37
5. Other	147.74	138.41	16.88	86.79	30.01	31.53	5.56	4.78	1.56
B. Fugitive Emissions from Fuels	19,513.99	18,991.83	17,531.56	17,097.19	15,967.30	15,463.36	15,378.57	14,516.21	14,839.34
1. Solid Fuels	3,476.75	2,914.26	2,913.51	2,656.84	2,405.38	2,323.39	2,186.98	2,040.79	1,842.10
2. Oil and Natural Gas	16,037.24	16,077.57	14,618.05	14,440.35	13,561.92	13,139.97	13,191.59	12,475.42	12,997.23
2. Industrial Processes	39.84	34.21	30.44	26.18	22.23	23.37	20.55	21.52	19.60
A. Mineral Products	NE	NE	NE	NE	NE	NE	NE	NE	NE
B. Chemical Industry	20.19	17.96	15.14	12.23	9.53	9.52	7.85	8.72	7.80
C. Metal Production	19.65	16.25	15.30	13.95	12.70	13.85	12.70	12.80	11.80
D. Other Production									
E. Production of Halocarbons and SF ₆									
F. Consumption of Halocarbons and SF ₆									
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use									
4. Agriculture	5,465.19	5,304.90	4,874.40	4,625.19	4,303.10	3,862.34	3,457.52	3,111.85	2,786.65
A. Enteric Fermentation	4,730.42	4,594.02	4,235.27	4,032.53	3,773.99	3,397.01	3,044.06	2,751.06	2,459.71
B. Manure Management	657.28	638.79	570.24	524.80	478.93	420.87	368.74	321.53	290.44
C. Rice Cultivation	77.49	72.09	68.90	67.86	50.18	44.46	44.72	39.26	36.50
D. Agricultural Soils	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	484.91	443.30	449.35	453.03	425.14	403.29	512.52	411.23	654.55
A. Forest Land	477.92	433.08	438.97	442.64	420.86	400.93	501.97	405.32	638.55
B. Cropland	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
C. Grassland	6.98	10.22	10.38	10.39	4.28	2.36	10.55	5.91	16.00
D. Wetlands	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
E. Settlements	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	2,709.69	2,642.72	2,498.99	2,384.03	2,295.24	2,363.01	2,316.27	2,355.18	2,403.25
A. Solid Waste Disposal on Land	1,342.87	1,375.32	1,395.16	1,422.31	1,445.30	1,476.68	1,506.81	1,542.13	1,571.74
B. Waste-water Handling	1,366.81	1,267.40	1,103.83	961.72	849.94	886.33	809.47	813.05	831.50
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CH₄ emissions including CH₄ from LULUCF	28,750.57	27,927.98	25,701.57	24,955.47	23,273.65	22,364.11	21,893.70	20,610.55	20,878.54
Total CH₄ emissions excluding CH₄ from LULUCF	28,265.67	27,484.68	25,252.22	24,502.44	22,848.50	21,960.82	21,381.18	20,199.32	20,223.99
Memo Items:									
International Bunkers	0.53	0.50	0.43	0.37	0.29	0.23	0.23	0.19	0.19
Aviation	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Marine	0.50	0.47	0.41	0.34	0.26	0.20	0.20	0.15	0.15
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO₂ Emissions from Biomass									

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

Emission trends (CH₄)
(Sheet 2 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	15,221.88	15,562.43	15,680.23	15,930.61	16,616.85	18,003.68	17,249.22	17,753.47	17,851.76	17,906.82
A. Fuel Combustion (Sectoral Approach)	202.85	145.53	151.79	151.43	152.13	156.34	158.65	163.64	156.51	158.90
1. Energy Industries	20.47	20.45	20.55	20.79	20.10	22.37	20.74	21.69	20.46	20.50
2. Manufacturing Industries and Construction	10.90	17.40	17.60	17.42	17.91	18.61	18.82	16.23	15.44	16.55
3. Transport	26.95	20.60	22.79	23.68	24.12	24.52	25.75	28.82	30.19	31.76
4. Other Sectors	142.27	79.27	82.29	74.45	73.91	75.15	62.87	67.75	62.18	59.34
5. Other	2.26	7.80	8.56	15.10	16.09	15.69	30.47	29.16	28.26	30.76
B. Fugitive Emissions from Fuels	15,019.03	15,416.90	15,528.44	15,779.18	16,464.72	17,847.34	17,090.58	17,589.83	17,695.25	17,747.92
1. Solid Fuels	1,960.33	1,997.63	2,086.63	1,898.45	2,010.84	2,086.80	2,161.25	2,276.85	2,282.20	2,305.35
2. Oil and Natural Gas	13,058.70	13,419.26	13,441.82	13,880.73	14,453.88	15,760.54	14,929.33	15,312.98	15,413.04	15,442.57
2. Industrial Processes	23.85	27.25	28.65	30.16	33.55	35.15	34.35	34.87	36.65	35.40
A. Mineral Products	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
B. Chemical Industry	9.80	12.25	13.69	14.41	16.97	18.05	18.50	18.52	19.70	19.36
C. Metal Production	14.05	15.00	14.96	15.75	16.58	17.11	15.85	16.35	16.95	16.04
D. Other Production										
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use										
4. Agriculture	2,469.58	2,473.77	2,508.38	2,455.74	2,398.55	2,337.29	2,190.55	2,141.97	2,158.54	2,183.02
A. Enteric Fermentation	2,160.70	2,169.00	2,215.12	2,168.99	2,109.02	2,068.05	1,945.17	1,893.59	1,896.81	1,916.03
B. Manure Management	265.62	261.02	255.01	249.75	252.09	237.56	210.82	209.26	222.84	227.63
C. Rice Cultivation	43.25	43.75	38.25	37.00	37.44	31.68	34.56	39.12	38.88	39.36
D. Agricultural Soils	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	432.91	484.96	467.53	521.72	598.13	437.56	466.12	526.82	470.99	532.36
A. Forest Land	426.09	470.25	455.69	504.24	569.01	434.41	459.21	504.82	457.55	521.67
B. Cropland	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
C. Grassland	6.82	14.70	11.83	17.48	29.12	3.15	6.91	22.00	13.44	10.70
D. Wetlands	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
E. Settlements	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	2,519.76	2,633.11	2,700.26	2,777.61	2,870.39	2,969.64	3,085.70	3,202.47	3,294.49	3,346.72
A. Solid Waste Disposal on Land	1,611.13	1,659.73	1,699.82	1,746.49	1,802.09	1,865.18	1,931.75	2,012.52	2,086.03	2,132.18
B. Waste-water Handling	908.63	973.38	1,000.45	1,031.12	1,068.29	1,104.46	1,153.95	1,189.95	1,208.45	1,214.55
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total CH₄ emissions including CH₄ from LULUCF	20,667.97	21,181.52	21,385.05	21,715.84	22,517.47	23,783.32	23,025.94	23,659.61	23,812.42	24,004.33
Total CH₄ emissions excluding CH₄ from LULUCF	20,235.06	20,696.56	20,917.52	21,194.12	21,919.34	23,345.76	22,559.82	23,132.79	23,341.43	23,471.97
Memo Items:										
International Bunkers	0.15	0.15	0.17	0.16	0.16	0.17	0.15	0.15	0.15	0.15
Aviation	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.06
Marine	0.12	0.12	0.13	0.13	0.12	0.13	0.11	0.10	0.09	0.09
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO₂ Emissions from Biomass										

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

Emission trends (CH₄)

(Sheet 3 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	16,398.72	17,743.62	18,366.76	-8.40
A. Fuel Combustion (Sectoral Approach)	153.46	161.30	171.27	-68.10
1. Energy Industries	19.78	20.76	20.60	-32.10
2. Manufacturing Industries and Construction	17.21	18.57	19.10	-13.93
3. Transport	30.58	32.42	40.60	1.06
4. Other Sectors	54.26	58.20	58.81	-80.17
5. Other	31.62	31.35	32.16	-78.23
B. Fugitive Emissions from Fuels	16,245.27	17,582.32	18,195.49	-6.76
1. Solid Fuels	2,158.09	2,204.92	2,242.50	-35.50
2. Oil and Natural Gas	14,087.18	15,377.40	15,952.99	-0.53
2. Industrial Processes	27.60	31.79	33.04	-17.06
A. Mineral Products	NE	NE	NE	0.00
B. Chemical Industry	15.50	18.39	19.54	-3.19
C. Metal Production	12.10	13.40	13.50	-31.30
D. Other Production				
E. Production of Halocarbons and SF ₆				
F. Consumption of Halocarbons and SF ₆				
G. Other	NA	NA	NA	0.00
3. Solvent and Other Product Use				
4. Agriculture	2,174.49	2,106.12	2,078.60	-61.97
A. Enteric Fermentation	1,909.88	1,837.24	1,800.57	-61.94
B. Manure Management	220.71	220.09	227.38	-65.41
C. Rice Cultivation	43.90	48.78	50.65	-34.64
D. Agricultural Soils	NA, NE	NA, NE	NA, NE	0.00
E. Prescribed Burning of Savannas	NO	NO	NO	0.00
F. Field Burning of Agricultural Residues	NO	NO	NO	0.00
G. Other	NO	NO	NO	0.00
5. Land Use, Land-Use Change and Forestry	566.71	507.15	507.82	4.72
A. Forest Land	555.65	496.85	500.75	4.78
B. Cropland	NA, NO	NA, NO	NA, NO	0.00
C. Grassland	11.06	10.29	7.07	1.23
D. Wetlands	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
E. Settlements	NE, NO	NE, NO	NE, NO	0.00
F. Other Land	NE	NE	NE	0.00
G. Other	IE	IE	IE	0.00
6. Waste	3,528.82	3,503.41	3,647.18	34.60
A. Solid Waste Disposal on Land	2,343.98	2,321.45	2,442.14	81.86
B. Waste-water Handling	1,184.84	1,181.96	1,205.04	-11.84
C. Waste Incineration	IE	IE	IE	0.00
D. Other	NA	NA	NA	0.00
7. Other (as specified in the summary table in CRF)	NA	NA	NA	0.00
Total CH₄ emissions including CH₄ from LULUCF	22,696.35	23,892.09	24,633.40	-14.32
Total CH₄ emissions excluding CH₄ from LULUCF	22,129.64	23,384.94	24,125.58	-14.65
Memo Items:				
International Bunkers	0.18	0.19	0.23	-57.57
Aviation	0.05	0.05	0.06	92.43
Marine	0.13	0.14	0.17	-67.07
Multilateral Operations	IE	IE	IE	0.00
CO₂ Emissions from Biomass				

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.

Custom Footnotes

Emission trends (N₂O)
(Sheet 1 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	21.51	20.93	16.05	15.37	13.47	13.63	13.46	12.83	13.07
A. Fuel Combustion (Sectoral Approach)	21.25	20.66	15.83	15.19	13.32	13.47	13.30	12.65	12.89
1. Energy Industries	9.91	9.32	8.36	8.00	7.29	7.05	6.93	6.38	6.35
2. Manufacturing Industries and Construction	2.34	2.20	1.34	1.17	0.94	1.27	1.31	1.07	0.99
3. Transport	2.53	2.97	3.10	2.90	2.91	3.06	3.23	3.49	4.24
4. Other Sectors	3.88	3.71	2.70	2.39	1.86	1.70	1.48	1.40	1.17
5. Other	2.60	2.45	0.31	0.72	0.32	0.38	0.34	0.32	0.14
B. Fugitive Emissions from Fuels	0.26	0.27	0.22	0.18	0.15	0.16	0.17	0.18	0.18
1. Solid Fuels	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
2. Oil and Natural Gas	0.26	0.27	0.22	0.18	0.15	0.16	0.17	0.18	0.18
2. Industrial Processes	12.05	12.37	10.33	8.33	6.74	7.66	8.40	7.53	6.49
A. Mineral Products	NE	NE	NE	NE	NE	NE	NE	NE	NE
B. Chemical Industry	12.05	12.37	10.33	8.33	6.74	7.66	8.40	7.53	6.49
C. Metal Production	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Other Production									
E. Production of Halocarbons and SF ₆									
F. Consumption of Halocarbons and SF ₆									
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use	1.81	1.71	1.68	1.65	1.66	1.65	1.65	1.64	1.67
4. Agriculture	655.96	622.12	573.63	525.97	470.48	424.90	393.94	374.44	333.27
A. Enteric Fermentation									
B. Manure Management	139.92	136.62	126.11	119.01	111.54	98.76	86.90	78.11	71.05
C. Rice Cultivation									
D. Agricultural Soils	516.04	485.49	447.52	406.96	358.94	326.14	307.04	296.34	262.22
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	28.37	26.18	26.52	26.72	24.96	23.68	30.01	24.23	38.02
A. Forest Land	27.26	24.78	25.10	25.31	24.10	23.00	28.59	23.24	36.14
B. Cropland	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
C. Grassland	0.64	0.93	0.95	0.95	0.39	0.22	0.96	0.54	1.46
D. Wetlands	0.47	0.47	0.47	0.47	0.46	0.46	0.46	0.45	0.41
E. Settlements	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	13.61	13.41	12.53	12.49	12.35	12.13	11.92	12.06	11.99
A. Solid Waste Disposal on Land									
B. Waste-water Handling	13.61	13.41	12.53	12.49	12.35	12.13	11.92	12.06	11.99
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total N₂O emissions including N₂O from LULUCF	733.30	696.71	640.73	590.53	529.65	483.66	459.38	432.72	404.50
Total N₂O emissions excluding N₂O from LULUCF	704.94	670.53	614.21	563.81	504.70	459.98	429.37	408.50	366.48
Memo Items:									
International Bunkers	0.19	0.18	0.17	0.17	0.16	0.16	0.17	0.16	0.16
Aviation	0.13	0.12	0.12	0.13	0.13	0.14	0.15	0.14	0.14
Marine	0.06	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.02
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO₂ Emissions from Biomass									

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

Table 1(c)

RUS_BR1_v1.0

Emission trends (N₂O)

(Sheet 2 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
1. Energy	13.81	13.87	14.50	14.78	15.20	15.81	16.03	16.83	17.24	19.27
A. Fuel Combustion (Sectoral Approach)	13.62	13.68	14.31	14.50	14.93	15.49	15.70	16.50	16.83	18.98
1. Energy Industries	6.28	6.54	6.47	6.54	6.42	6.45	6.23	6.57	6.17	6.52
2. Manufacturing Industries and Construction	1.06	1.92	1.93	1.88	1.93	2.01	2.00	1.60	1.62	1.70
3. Transport	4.63	3.64	4.28	4.71	5.19	5.53	6.23	7.07	7.80	9.47
4. Other Sectors	1.45	1.40	1.44	1.13	1.12	1.24	0.86	0.88	0.88	0.87
5. Other	0.20	0.17	0.19	0.24	0.26	0.26	0.38	0.37	0.37	0.42
B. Fugitive Emissions from Fuels	0.19	0.19	0.20	0.28	0.28	0.32	0.33	0.34	0.41	0.29
1. Solid Fuels	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
2. Oil and Natural Gas	0.19	0.19	0.20	0.28	0.28	0.32	0.33	0.34	0.41	0.29
2. Industrial Processes	7.15	8.55	9.12	10.63	10.11	10.78	11.68	11.70	12.37	11.11
A. Mineral Products	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
B. Chemical Industry	7.15	8.55	9.12	10.63	10.11	10.78	11.68	11.70	12.37	11.11
C. Metal Production	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
D. Other Production										
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3. Solvent and Other Product Use	1.66	1.69	1.72	1.71	1.72	1.73	1.72	1.72	1.75	1.75
4. Agriculture	314.40	325.91	327.88	328.83	319.87	317.02	308.64	308.36	315.82	329.62
A. Enteric Fermentation										
B. Manure Management	63.74	63.47	64.85	65.08	64.41	63.39	60.89	60.10	61.82	63.53
C. Rice Cultivation										
D. Agricultural Soils	250.67	262.43	263.03	263.75	255.46	253.63	247.75	248.26	254.00	266.08
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	25.35	28.51	27.41	30.58	35.18	25.35	27.06	30.96	27.56	30.84
A. Forest Land	24.36	26.78	25.95	28.61	32.17	24.72	26.09	28.62	26.00	29.54
B. Cropland	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
C. Grassland	0.62	1.34	1.08	1.60	2.66	0.29	0.63	2.01	1.23	0.98
D. Wetlands	0.36	0.39	0.38	0.37	0.35	0.34	0.33	0.33	0.33	0.32
E. Settlements	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
F. Other Land	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
G. Other	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
6. Waste	11.73	11.39	11.72	11.93	12.03	12.09	12.54	12.64	13.23	13.05
A. Solid Waste Disposal on Land										
B. Waste-water Handling	11.73	11.39	11.72	11.93	12.03	12.09	12.54	12.64	13.23	13.05
C. Waste Incineration	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
D. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7. Other (as specified in the summary table in CRF)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total N2O emissions including N2O from LULUCF	374.11	389.93	392.36	398.46	394.11	382.78	377.67	382.22	387.96	405.63
Total N2O emissions excluding N2O from LULUCF	348.76	361.42	364.95	367.88	358.94	357.42	350.61	351.26	360.41	374.80
Memo Items:										
International Bunkers	0.15	0.16	0.16	0.16	0.17	0.19	0.19	0.20	0.23	0.25
Aviation	0.13	0.14	0.15	0.15	0.15	0.18	0.17	0.19	0.22	0.24
Marine	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Multilateral Operations	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
CO2 Emissions from Biomass										

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

Emission trends (N₂O)**(Sheet 3 of 3)**

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	19.68	21.80	24.55	14.15
A. Fuel Combustion (Sectoral Approach)	19.38	21.41	24.14	13.60
1. Energy Industries	6.10	6.09	6.16	-37.81
2. Manufacturing Industries and Construction	1.75	1.87	1.90	-18.65
3. Transport	10.29	12.18	14.75	483.80
4. Other Sectors	0.79	0.79	0.83	-78.59
5. Other	0.45	0.48	0.49	-81.03
B. Fugitive Emissions from Fuels	0.30	0.38	0.41	59.82
1. Solid Fuels	NA, NE	NA, NE	NA, NE	0.00
2. Oil and Natural Gas	0.30	0.38	0.41	59.82
2. Industrial Processes	14.26	14.72	15.25	26.59
A. Mineral Products	NE	NE	NE	0.00
B. Chemical Industry	14.26	14.72	15.25	26.59
C. Metal Production	NA	NA	NA	0.00
D. Other Production				
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6				
G. Other	NA	NA	NA	0.00
3. Solvent and Other Product Use	1.80	1.82	1.84	1.65
4. Agriculture	327.94	314.92	323.85	-50.63
A. Enteric Fermentation				
B. Manure Management	63.66	62.66	60.71	-56.61
C. Rice Cultivation				
D. Agricultural Soils	264.28	252.26	263.14	-49.01
E. Prescribed Burning of Savannas	NO	NO	NO	0.00
F. Field Burning of Agricultural Residues	NO	NO	NO	0.00
G. Other	NO	NO	NO	0.00
5. Land Use, Land-Use Change and Forestry	32.75	29.42	29.33	3.41
A. Forest Land	31.42	28.17	28.38	4.13
B. Cropland	NA, NO	NA, NO	NA, NO	0.00
C. Grassland	1.01	0.94	0.65	1.23
D. Wetlands	0.32	0.31	0.31	-35.38
E. Settlements	NE, NO	NE, NO	NE, NO	0.00
F. Other Land	NE	NE	NE	0.00
G. Other	IE	IE	IE	0.00
6. Waste	13.14	13.74	13.76	1.14
A. Solid Waste Disposal on Land				
B. Waste-water Handling	13.14	13.74	13.76	1.14
C. Waste Incineration	IE	IE	IE	0.00
D. Other	NA	NA	NA	0.00
7. Other (as specified in the summary table in CRF)	NA	NA	NA	0.00
Total N2O emissions including N2O from LULUCF	409.57	396.42	408.59	-44.28
Total N2O emissions excluding N2O from LULUCF	376.82	367.00	379.25	-46.20
Memo Items:				
International Bunkers	0.22	0.23	0.27	42.82
Aviation	0.20	0.22	0.25	94.71
Marine	0.02	0.02	0.02	-66.67
Multilateral Operations	IE	IE	IE	0.00
CO2 Emissions from Biomass				

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

^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

Table 1(d)

RUS_BR1_v1.0

Emission trends (HFCs, PFCs and SF₆)**(Sheet 1 of 3)**

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year ^a	1991	1992	1993	1994	1995	1996	1997	1998
	kt	kt	kt	kt	kt	kt	kt	kt	kt
Emissions of HFCsc - (kt CO₂ eq)	28,409.78	27,059.93	22,288.71	14,454.95	12,236.70	12,220.79	10,771.75	14,256.12	17,285.67
HFC-23	2.43	2.31	1.90	1.23	1.04	1.04	0.92	1.21	1.47
HFC-32	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	0.00	0.00
HFC-41	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-43-10mee	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-125	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	0.00	0.00	0.00
HFC-134	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-134a	NA, NO	NA, NO	0.00	0.01	0.02	0.02	0.03	0.05	0.08
HFC-152a	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	0.00
HFC-143	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-143a	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	0.00	0.00
HFC-227ea	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	0.00
HFC-236fa	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-245ca	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Emissions of PFCsc - (kt CO₂ eq)	11,680.24	12,421.08	11,102.03	10,797.23	10,486.31	10,019.27	8,785.61	7,465.75	7,182.29
CF ₄	1.63	1.73	1.56	1.51	1.47	1.41	1.23	1.05	1.01
C ₂ F ₆	0.11	0.12	0.11	0.10	0.10	0.09	0.08	0.07	0.06
C 3F8	0.00	0.00	0.00	0.00	0.00	0.00	NA, NE, NO	0.00	0.00
C ₄ F ₁₀	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
c-C ₄ F ₈	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C ₅ F ₁₂	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
C ₆ F ₁₄	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
Unspecified mix of listed PFCs(4) - (Gg CO ₂ equivalent)	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
Emissions of SF₆(3) - (Gg CO₂ equivalent)	1,202.49	1,092.47	353.89	169.69	101.85	416.27	1,054.61	1,052.86	845.33
SF ₆	0.05	0.05	0.01	0.01	0.00	0.02	0.04	0.04	0.04

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

Table 1(d)

RUS_BR1_v1.0

Emission trends (HFCs, PFCs and SF₆)

(Sheet 2 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	kt	kt	kt	kt	kt	kt	kt	kt	kt	kt
Emissions of HFCsc - (kt CO₂ eq)	17,951.34	21,037.20	19,900.05	15,171.98	11,410.18	14,379.07	15,450.86	14,008.79	13,538.85	14,421.61
HFC-23	1.52	1.78	1.68	1.27	0.93	1.16	1.22	1.05	0.94	0.96
HFC-32	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.05	0.06
HFC-41	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-43-10mee	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-125	0.00	0.01	0.01	0.02	0.03	0.06	0.10	0.15	0.21	0.28
HFC-134	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-134a	0.09	0.11	0.15	0.20	0.25	0.37	0.50	0.69	0.96	1.26
HFC-152a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
HFC-143	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-143a	0.00	0.00	0.00	0.01	0.02	0.03	0.06	0.10	0.15	0.19
HFC-227ea	0.00	NA, NO	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02
HFC-236fa	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
HFC-245ca	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Emissions of PFCsc - (kt CO₂ eq)	7,049.85	7,298.60	6,625.62	5,524.47	5,014.57	5,007.42	4,722.14	4,184.01	3,798.36	3,720.57
CF ₄	0.98	1.02	0.92	0.77	0.69	0.68	0.65	0.58	0.52	0.50
C ₂ F ₆	0.07	0.07	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03
C 3F8	NA, NE, NO	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
C ₄ F ₁₀	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
c-C ₄ F ₈	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
C ₃ F ₁₂	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
C ₆ F ₁₄	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
Unspecified mix of listed PFCs(4) - (Gg CO ₂ equivalent)	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO
Emissions of SF₆(3) - (Gg CO₂ equivalent)	681.39	696.52	867.00	940.04	1,101.15	1,236.02	1,340.04	1,361.11	1,391.46	830.88
SF ₆	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.03

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

Emission trends (HFCs, PFCs and SF₆)

(Sheet 3 of 3)

CRF: RUS_CRF__ v1.2

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
Emissions of HFCsc - (kt CO₂ eq)	10,146.03	10,859.90	9,142.15	-67.82
HFC-23	0.57	0.57	0.32	-86.94
HFC-32	0.07	0.09	0.18	100.00
HFC-41	NA, NO	NA, NO	NA, NO	0.00
HFC-43-10mee	NA, NO	NA, NO	NA, NO	0.00
HFC-125	0.30	0.37	0.55	100.00
HFC-134	NA, NO	NA, NO	NA, NO	0.00
HFC-134a	1.35	1.56	1.86	100.00
HFC-152a	0.01	0.14	0.31	100.00
HFC-143	NA, NO	NA, NO	NA, NO	0.00
HFC-143a	0.20	0.25	0.32	100.00
HFC-227ea	0.02	0.03	0.04	100.00
HFC-236fa	NA, NO	NA, NO	NA, NO	0.00
HFC-245ca	NA, NO	NA, NO	NA, NO	0.00
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	NA, NO	NA, NO	NA, NO	0.00
Emissions of PFCsc - (kt CO₂ eq)	2,524.58	2,677.57	2,544.15	-78.22
CF ₄	0.34	0.36	0.34	-79.33
C ₂ F ₆	0.02	0.02	0.02	-80.71
C ₃ F ₈	0.00	0.00	0.00	2,458.10
C ₄ F ₁₀	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
c-C ₄ F ₈	0.02	0.01	0.02	478.82
C ₅ F ₁₂	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
C ₆ F ₁₄	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
Unspecified mix of listed PFCs(4) - (Gg CO ₂ equivalent)	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
Emissions of SF₆(3) - (Gg CO₂ equivalent)	790.63	667.52	509.42	-57.64
SF ₆	0.03	0.03	0.02	-57.64

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.

^cEnter 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.

^dIn 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)

RUS_BR1_v1.0

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

<i>Party</i>	<i>Russian Federation</i>	
Base year /base period	1990	
Emission reduction target	% of base year/base period	% of 1990 ^b
	75.00	75.00
Period for reaching target	BY-2020	

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice 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.

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

<i>Gases covered</i>		<i>Base year for each gas (year):</i>
CO ₂		1990
CH ₄		1990
N ₂ O		1990
HFCs		1990
PFCs		1990
SF ₆		1990
NF ₃		1990
Other Gases (specify)		
Sectors covered ^b	Energy	Yes
	Transport ^f	Yes
	Industrial processes ^g	Yes
	Agriculture	Yes
	LULUCF	Yes
	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 prejudice 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.

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

<i>Gases</i>	<i>GWP values^b</i>
CO ₂	4nd AR
CH ₄	4nd AR
N ₂ O	4nd AR
HFCs	4nd AR
PFCs	4nd AR
SF ₆	4nd AR
NF ₃	4nd 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 prejudice 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.

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	Other (NA)

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.

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

<i>Market-based mechanisms under the Convention</i>	<i>Possible scale of contributions (estimated kt CO₂ eq)</i>
CERs	0.00
ERUs	0.00
AAUs ⁱ	0.00
Carry-over units ^j	0.00
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 prejudice 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.

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

<i>Other market-based mechanisms</i>	<i>Possible scale of contributions</i>
<i>(Specify)</i>	<i>(estimated kt CO₂ eq)</i>

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice 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}

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^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice 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

RUS_BR1_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)	

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

National action plan should be developed in 2014 to ensure achievement of the quantified economy-wide emission reduction target.

The information required by Table 3 will be available after the adoption of this plan.

Reporting on progress^{a, b}

<i>Year^c</i>	<i>Total emissions excluding LULUCF</i>	<i>Contribution from LULUCF^d</i>	<i>Quantity of units from market based mechanisms under the Convention</i>		<i>Quantity of units from other market based mechanisms</i>	
	<i>(kt CO₂ eq)</i>	<i>(kt CO₂ eq)</i>	<i>(number of units)</i>	<i>(kt CO₂ eq)</i>	<i>(number of units)</i>	<i>(kt CO₂ eq)</i>
(1990)	3,351,944.01	84,514.45	0.00	0.00	0.00	0.00
2010	2,217,270.91	-650,612.83	0.00	0.00	0.00	0.00
2011	2,320,834.38	-628,434.86	16,501,174,714.00	16,501,174.72		
2012	NE	NE	16,336,061,402.00	16,336,061.40		

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 prejudice 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

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2011^{a,b}

	<i>Net GHG emissions/removals from LULUCF categories^c</i>	<i>Base year/period or reference level value^d</i>	<i>Contribution from LULUCF for reported year</i>	<i>Cumulative contribution from LULUCF^e</i>	<i>Accounting approach^f</i>
	<i>(kt CO₂ eq)</i>				
Total LULUCF					Other (NA)
A. Forest land					Other (NA)
1. Forest land remaining forest land					Other (NA)
2. Land converted to forest land					Other (NA)
3. Other ^g					Other (NA)
B. Cropland					Other (NA)
1. Cropland remaining cropland					Other (NA)
2. Land converted to cropland					Other (NA)
3. Other ^g					Other (NA)
C. Grassland					Other (NA)
1. Grassland remaining grassland					Other (NA)
2. Land converted to grassland					Other (NA)
3. Other ^g					Other (NA)
D. Wetlands					Other (NA)
1. Wetland remaining wetland					Other (NA)
2. Land converted to wetland					Other (NA)
3. Other ^g					Other (NA)
E. Settlements					Other (NA)
1. Settlements remaining settlements					Other (NA)
2. Land converted to settlements					Other (NA)
3. Other ^g					Other (NA)
F. Other land					Other (NA)
1. Other land remaining other land					Other (NA)
2. Land converted to other land					Other (NA)
3. Other ^g					Other (NA)
Harvested wood products					Other (NA)

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 prejudice 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

Progress in achieving the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the contribution of the land use, land-use change and forestry sector in 2012^{a, b}

	<i>Net GHG emissions/removals from LULUCF categories^c</i>	<i>Base year/period or reference level value^d</i>	<i>Contribution from LULUCF for reported year</i>	<i>Cumulative contribution from LULUCF^e</i>	<i>Accounting approach^f</i>
	<i>(kt CO₂ eq)</i>				
Total LULUCF					Other (NA)
A. Forest land					Other (NA)
1. Forest land remaining forest land					Other (NA)
2. Land converted to forest land					Other (NA)
3. Other ^g					Other (NA)
B. Cropland					Other (NA)
1. Cropland remaining cropland					Other (NA)
2. Land converted to cropland					Other (NA)
3. Other ^g					Other (NA)
C. Grassland					Other (NA)
1. Grassland remaining grassland					Other (NA)
2. Land converted to grassland					Other (NA)
3. Other ^g					Other (NA)
D. Wetlands					Other (NA)
1. Wetland remaining wetland					Other (NA)
2. Land converted to wetland					Other (NA)
3. Other ^g					Other (NA)
E. Settlements					Other (NA)
1. Settlements remaining settlements					Other (NA)
2. Land converted to settlements					Other (NA)
3. Other ^g					Other (NA)
F. Other land					Other (NA)
1. Other land remaining other land					Other (NA)
2. Land converted to other land					Other (NA)
3. Other ^g					Other (NA)
Harvested wood products					Other (NA)

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 prejudice 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

Table 4(a)II

RUS_BR1_v1.0
Source: RUS_CRF__v1.2**Progress in achievement of the quantified economy-wide emission reduction targets – further information on mitigation actions relevant to the counting of emissions and removals from the land use, land-use change and forestry sector in relation to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol^{a,b,c}**

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	Base year ^d	Net emissions/removals ^e					Accounting parameters ^h	Accounting quantity ⁱ
		2008	2009	2010	2011	Total ^f		
(kt CO ₂ eq)								
A. Article 3.3 activities								
A.1. Afforestation and Reforestation								-20'458.17
A.1.1. Units of land not harvested since the beginning of the commitment period ^j		-5,200.77	-5,165.63	-5,092.56	-4,999.21	-20,458.17		-20'458.17
A.1.2. Units of land harvested since the beginning of the commitment period ^j								
A.2. Deforestation		23,223.66	22,002.53	21,200.74	20,449.90	86,876.83		86876.83495
B. Article 3.4 activities								
B.1. Forest Management (if elected)		-478,536.89	-538,900.60	-548,411.21	-527,958.57	-		-
						2,093,807.27		671418.6623
3.3 offset ^k							66418.6623	-66418.6623
FM cap ^l							605000	-605000
B.2. Cropland Management (if elected)	0	NA	NA	NA	NA	NA	0	0
B.3. Grazing Land Management (if elected)	0	NA	NA	NA	NA	NA	0	0
B.4. Revegetation (if elected)	0	NA	NA	NA	NA	NA	0	0

Note: 1 kt CO₂ eq equals 1 Gg CO₂ eq.

Abbreviations: CRF = common reporting format, 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 prejudice 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 Developed country Parties with a quantified economy-wide emission reduction target as communicated to the secretariat and contained in document FCCC/SB/2011/INF.1/Rev.1 or any update to that document, that are Parties to the Kyoto Protocol, may use table 4(a)II for reporting of accounting quantities if LULUCF is contributing to the attainment of that target.^c Parties can include references to the relevant parts of the national inventory report, where accounting methodologies regarding LULUCF are further described in the documentation box or in the biennial^d Net emissions and removals in the Party's base year, as established by decision 9/CP.2.^e All values are reported in the information table on accounting for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, of the CRF for the relevant inventory year as reported in the current submission and are automatically entered in this table.^f Additional columns for relevant years should be added, if applicable.^g Cumulative net emissions and removals for all years of the commitment period reported in the current submission.^h The values in the cells "3.3 offset" and "Forest management cap" are absolute values.ⁱ The accounting quantity is the total quantity of units to be added to or subtracted from a Party's assigned amount for a particular activity in accordance with the provisions of Article 7, paragraph 4, of the Kyoto Protocol.^j In accordance with paragraph 4 of the annex to decision 16/CMP.1, debits resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than the credits accounted for on that unit of land.^k In accordance with paragraph 10 of the annex to decision 16/CMP.1, for the first commitment period a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3 paragraph 3, may account for anthropogenic greenhouse gas emissions by sources and removals by sinks in areas under forest management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 megatonnes of carbon times five, if the total anthropogenic greenhouse gas emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.^l In accordance with paragraph 11 of the annex to decision 16/CMP.1, for the first commitment period of the Kyoto Protocol only, additions to and subtractions from the assigned amount of a Party resulting from Forest management under Article 3, paragraph 4, after the application of paragraph 10 of the annex to decision 16/CMP.1 and resulting from forest management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix of the annex to decision 16/CMP.1, times five.**Custom Footnotes****Documentation Box:**

Reporting on progress^{a, b, c}

Units of market based mechanisms			Year	
			2011	2012
Kyoto Protocol units ^d	Kyoto Protocol units	(number of units)	16,501,174,714.00	16,336,061,402.00
		(kt CO ₂ eq)	16,501,174.72	16,336,061.40
	AAUs	(number of units)	16,497,081,029.00	16,290,488,012.00
		(kt CO ₂ eq)	16,497,081.03	16,290,488.01
	ERUs	(number of units)	NO	NO
		(kt CO ₂ eq)	NO	NO
	CERs	(number of units)	4,093,685.00	45,573,390.00
		(kt CO ₂ eq)	4,093.69	45,573.39
	tCERs	(number of units)	NO	NO
		(kt CO ₂ eq)	NO	NO
	iCERs	(number of units)	NO	NO
		(kt CO ₂ 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)	16,501,174,714.00	16,336,061,402.00	
	(kt CO ₂ eq)	16,501,174.72	16,336,061.40	

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

Note: 2011 is the latest reporting year.

^a Reporting by a developed country Party on the information specified in the common tabular format does not prejudice 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

RUS_BR1_v1.0

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

<i>Key underlying assumptions</i>		<i>Historical^b</i>						<i>Projected</i>			
<i>Assumption</i>	<i>Unit</i>	<i>1990</i>	<i>1995</i>	<i>2000</i>	<i>2005</i>	<i>2010</i>	<i>2011</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>2030</i>
<i>GDP growth rate</i>	%	NE	NE	10.00	6.40	4.50	4.30	3.10	3.10	2.50	1.80
<i>Population growth</i>	%	0.41	-0.11	-0.40	-0.39	0.02	0.13	0.08	-0.04	-0.16	-0.21

^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

Table 6(a)

RUS_BR1_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 (1990)	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	2,714,711.14	2,714,711.14	1,777,993.92	1,668,022.95	1,739,309.98	1,824,316.80	1,920,401.47	1,980,000.00	2,130,000.00
Transport									
Industry/industrial processes									
Agriculture									
Forestry/LULUCF									
Waste management/waste									
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF								NE	NE
CO ₂ emissions excluding net CO ₂ from LULUCF	2,498,542.30	2,498,542.30	1,572,597.26	1,471,337.44	1,524,789.87	1,598,210.91	1,684,432.63	1,730,000.00	1,870,000.00
CH ₄ emissions including CH ₄ from LULUCF								NE	NE
CH ₄ emissions excluding CH ₄ from LULUCF	593,579.00	593,579.00	461,177.22	434,627.80	473,756.25	491,083.84	506,637.22	530,000.00	570,000.00
N ₂ O emissions including N ₂ O from LULUCF								NE	NE
N ₂ O emissions excluding N ₂ O from LULUCF	218,530.20	218,530.20	142,593.71	112,038.81	108,690.50	113,771.17	117,568.82	120,000.00	130,000.00
HFCs	28,409.78	28,409.78	12,220.79	21,037.20	15,450.86	10,859.90	9,142.15	IE	IE
PFCs	11,680.24	11,680.24	10,019.27	7,298.60	4,722.14	2,677.57	2,544.15	20,000.00	20,000.00
SF ₆	1,202.49	1,202.49	416.27	696.52	1,340.04	667.52	509.42	IE	IE
Other (specify)									
Total with LULUCF^f	41,292.51	41,292.51	22,656.33	29,032.32	21,513.04	14,204.99	12,195.72	20,000.00	20,000.00
Total without LULUCF	3,351,944.01	3,351,944.01	2,199,024.52	2,047,036.37	2,128,749.66	2,217,270.91	2,320,834.39	2,400,000.00	2,590,000.00

Information on updated greenhouse gas projections under a ‘with measures’ scenario^a

	<i>GHG emissions and removals^b</i>							GHG emission projections	
	<i>(kt CO₂ eq)</i>							<i>(kt CO₂ eq)</i>	
	<i>Base year (1990)</i>	1990	1995	2000	2005	2010	2011	2020	2030

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.

^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)

RUS_BR1_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 (1990)	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	2,714,711.14	2,714,711.14	1,777,993.92	1,668,022.95	1,739,309.98	1,824,316.80	1,920,401.47	2,350,000.00	2,870,000.00
Transport									
Industry/industrial processes									
Agriculture									
Forestry/LULUCF									
Waste management/waste									
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF								NE	NE
CO ₂ emissions excluding net CO ₂ from LULUCF	2,498,542.30	2,498,542.30	1,572,597.26	1,471,337.44	1,524,789.87	1,598,210.91	1,684,432.63	2,060,000.00	2,520,000.00
CH ₄ emissions including CH ₄ from LULUCF								NE	NE
CH ₄ emissions excluding CH ₄ from LULUCF	593,579.00	593,579.00	461,177.22	434,627.80	473,756.25	491,083.84	506,637.22	630,000.00	770,000.00
N ₂ O emissions including N ₂ O from LULUCF								NE	NE
N ₂ O emissions excluding N ₂ O from LULUCF	218,530.20	218,530.20	142,593.71	112,038.81	108,690.50	113,771.17	117,568.82	150,000.00	180,000.00
HFCs	28,409.78	28,409.78	12,220.79	21,037.20	15,450.86	10,859.90	9,142.15	IE	IE
PFCs	11,680.24	11,680.24	10,019.27	7,298.60	4,722.14	2,677.57	2,544.15	20,000.00	20,000.00
SF ₆	1,202.49	1,202.49	416.27	696.52	1,340.04	667.52	509.42	IE	IE
Other (specify)									
Total with LULUCF^f	41,292.51	41,292.51	22,656.33	29,032.32	21,513.04	14,204.99	12,195.72	20,000.00	20,000.00
Total without LULUCF	3,351,944.01	3,351,944.01	2,199,024.52	2,047,036.37	2,128,749.66	2,217,270.91	2,320,834.39	2,860,000.00	3,490,000.00

Information on updated greenhouse gas projections under a ‘without measures’ scenario^a

	<i>GHG emissions and removals^b</i>							GHG emission projections	
	<i>(kt CO₂ eq)</i>							<i>(kt CO₂ eq)</i>	
	<i>Base year (1990)</i>	1990	1995	2000	2005	2010	2011	2020	2030

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.

^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)

RUS_BR1_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 (1990)	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	2,714,711.14	2,714,711.14	1,777,993.92	1,668,022.95	1,739,309.98	1,824,316.80	1,920,401.47	1,840,000.00	1,860,000.00
Transport									
Industry/industrial processes									
Agriculture									
Forestry/LULUCF									
Waste management/waste									
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF								NE	NE
CO ₂ emissions excluding net CO ₂ from LULUCF	2,498,542.30	2,498,542.30	1,572,597.26	1,471,337.44	1,524,789.87	1,598,210.91	1,684,432.63	1,620,000.00	1,630,000.00
CH ₄ emissions including CH ₄ from LULUCF								NE	NE
CH ₄ emissions excluding CH ₄ from LULUCF	593,579.00	593,579.00	461,177.22	434,627.80	473,756.25	491,083.84	506,637.22	500,000.00	500,000.00
N ₂ O emissions including N ₂ O from LULUCF								NE	NE
N ₂ O emissions excluding N ₂ O from LULUCF	218,530.20	218,530.20	142,593.71	112,038.81	108,690.50	113,771.17	117,568.82	120,000.00	120,000.00
HFCs	28,409.78	28,409.78	12,220.79	21,037.20	15,450.86	10,859.90	9,142.15	IE	IE
PFCs	11,680.24	11,680.24	10,019.27	7,298.60	4,722.14	2,677.57	2,544.15	10,000.00	10,000.00
SF ₆	1,202.49	1,202.49	416.27	696.52	1,340.04	667.52	509.42	IE	IE
Other (specify)									
Total with LULUCF^f	41,292.51	41,292.51	22,656.33	29,032.32	21,513.04	14,204.99	12,195.72	10,000.00	10,000.00
Total without LULUCF	3,351,944.01	3,351,944.01	2,199,024.52	2,047,036.37	2,128,749.66	2,217,270.91	2,320,834.39	2,250,000.00	2,260,000.00

Information on updated greenhouse gas projections under a ‘with additional measures’ scenario^a

	<i>GHG emissions and removals^b</i>							GHG emission projections	
	<i>(kt CO₂ eq)</i>							<i>(kt CO₂ eq)</i>	
	<i>Base year (1990)</i>	1990	1995	2000	2005	2010	2011	2020	2030

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.

^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

RUS_BR1_v1.0

Provision of public financial support: summary information in 2011^a

Allocation channels	Year									
	Russian ruble - RUB					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

RUS_BR1_v1.0

Provision of public financial support: summary information in 2012^a

Allocation channels	Year									
	Russian ruble - RUB					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:

Provision of public financial support: contribution through multilateral channels in 2011^a

<i>Donor funding</i>	<i>Total amount</i>				<i>Status^b</i>	<i>Funding source^f</i>	<i>Financial instrument^f</i>	<i>Type of support^{f,8}</i>	<i>Sector^c</i>
	<i>Core/general^d</i>		<i>Climate-specific^e</i>						
	<i>Russian ruble - RUB</i>	<i>USD</i>	<i>Russian ruble - RUB</i>	<i>USD</i>					
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

Provision of public financial support: contribution through multilateral channels in 2012^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						
	Russian ruble - RUB	USD	Russian ruble - RUB	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

Provision of public financial support: contribution through bilateral, regional and other channels in 2011^a

<i>Recipient country/ region/project/programme^b</i>	<i>Total amount</i>		<i>Status^c</i>	<i>Funding source^g</i>	<i>Financial instrument^g</i>	<i>Type of support^{g, h}</i>	<i>Sector^d</i>	<i>Additional information^e</i>
	<i>Climate-specific^f</i>							
	<i>Russian ruble - RUB</i>	<i>USD</i>						
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

Provision of public financial support: contribution through bilateral, regional and other channels in 2012^a

<i>Recipient country/ region/project/programme^b</i>	<i>Total amount</i>		<i>Status^c</i>	<i>Funding source^g</i>	<i>Financial instrument^g</i>	<i>Type of support^{g, h}</i>	<i>Sector^d</i>	<i>Additional information^e</i>
	<i>Climate-specific^f</i>							
	<i>Russian ruble - RUB</i>	<i>USD</i>						
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

Provision of technology development and transfer support^{a,b}

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

^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

Provision of capacity-building support^a

<i>Recipient country/region</i>	<i>Targeted area</i>	<i>Programme or project title</i>	<i>Description of programme or project^{b,c}</i>

^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