

BR CTF submission workbook

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Table 1

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

CRF: Submission 2014 v1.1, JAPAN

<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	1,071,525.7 4	1,073,291.8 8	1,082,060.7 4	1,072,004.4 1	1,130,319.2 4	1,143,035.0 0	1,151,379.0 2	1,145,963.0 2	1,110,596.4 7
CO ₂ emissions excluding net CO ₂ from LULUCF	1,141,137.7 4	1,150,071.4 6	1,158,544.4 1	1,150,877.1 5	1,210,660.4 4	1,223,687.3 3	1,236,581.8 4	1,231,477.5 3	1,195,870.1 5
CH ₄ emissions including CH ₄ from LULUCF	32,139.58	31,873.45	31,629.10	31,389.83	30,741.12	29,908.16	29,171.22	28,127.40	27,307.89
CH ₄ emissions excluding CH ₄ from LULUCF	32,131.07	31,867.09	31,624.71	31,365.60	30,723.24	29,899.43	29,142.54	28,092.88	27,297.16
N ₂ O emissions including N ₂ O from LULUCF	31,633.60	31,118.22	31,278.39	31,038.70	32,233.96	32,696.73	33,663.02	34,336.67	32,817.57
N ₂ O emissions excluding N ₂ O from LULUCF	31,562.46	31,051.76	31,215.67	30,978.09	32,178.04	32,646.83	33,616.36	34,294.89	32,781.36
HFCs	17,930.00	18,070.00	19,750.00	21,310.00	28,840.00	20,260.17	19,906.20	19,905.11	19,415.96
PFCs	5,670.00	6,370.00	6,370.00	8,860.00	12,274.00	14,271.14	14,772.09	16,187.61	13,401.73
SF ₆	38,240.00	43,498.00	47,800.00	45,410.00	45,410.00	16,961.45	17,535.35	14,998.12	13,624.11
Total (including LULUCF)	1,197,138.9 2	1,204,221.5 5	1,218,888.2 3	1,210,012.9 3	1,279,818.3 2	1,257,132.6 5	1,266,426.9 0	1,259,517.9 2	1,217,163.7 3
Total (excluding LULUCF)	1,266,671.2 6	1,280,928.3 2	1,295,304.7 9	1,288,800.8 4	1,360,085.7 3	1,337,726.3 5	1,351,554.3 8	1,344,956.1 4	1,302,390.4 8

<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	1,078,975.3 0	1,086,826.9 5	1,094,192.4 7	1,087,709.2 8	1,143,689.1 8	1,156,752.3 4	1,168,898.8 7	1,165,820.1 1	1,135,605.2 2
2. Industrial Processes	130,340.22	136,807.27	142,687.83	143,142.22	156,324.21	121,360.75	123,417.80	120,125.86	108,580.26
3. Solvent and Other Product Use	287.07	356.85	413.01	411.66	438.02	437.58	420.94	404.60	377.05
4. Agriculture	31,090.31	31,020.10	30,980.11	30,903.98	30,490.56	29,860.50	29,207.68	28,573.00	28,136.89
5. Land Use, Land-Use Change and Forestry ^b	-69,532.34	-76,706.77	-76,416.56	-78,787.90	-80,267.41	-80,593.70	-85,127.48	-85,438.22	-85,226.74
6. Waste	25,978.36	25,917.15	27,031.37	26,633.69	29,143.76	29,315.17	29,609.08	30,032.57	29,691.05
7. Other	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total (including LULUCF)	1,197,138.9 2	1,204,221.5 5	1,218,888.2 3	1,210,012.9 3	1,279,818.3 2	1,257,132.6 5	1,266,426.9 0	1,259,517.9 2	1,217,163.7 3

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

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

CRF: Submission 2014 v1.1, JAPAN

GREENHOUSE GAS EMISSIONS	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	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	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq
CO ₂ emissions including net CO ₂ from LULUCF	1,145,385.00	1,165,445.29	1,150,203.28	1,186,188.07	1,182,204.95	1,182,074.65	1,193,277.39	1,179,817.09	1,213,843.66	1,135,671.49
CO ₂ emissions excluding net CO ₂ from LULUCF	1,230,797.27	1,251,460.72	1,236,320.52	1,273,396.60	1,278,505.00	1,277,883.64	1,282,128.45	1,262,945.19	1,296,152.73	1,213,829.51
CH ₄ emissions including CH ₄ from LULUCF	26,716.35	26,141.51	25,228.20	24,297.72	23,785.76	23,370.18	23,024.28	22,664.47	22,287.55	21,771.94
CH ₄ emissions excluding CH ₄ from LULUCF	26,711.10	26,133.73	25,215.78	24,277.13	23,781.83	23,358.05	23,015.10	22,662.03	22,285.51	21,750.21
N ₂ O emissions including N ₂ O from LULUCF	26,392.80	28,950.52	25,531.30	24,795.27	24,442.48	24,455.04	23,960.37	23,939.81	22,712.09	22,675.35
N ₂ O emissions excluding N ₂ O from LULUCF	26,360.03	28,920.82	25,504.14	24,771.03	24,422.80	24,437.94	23,946.25	23,928.06	22,701.78	22,664.34
HFCs	19,934.46	18,800.43	16,168.06	13,693.03	13,761.68	10,552.49	10,518.22	11,742.22	13,279.24	15,298.30
PFCs	10,428.82	9,583.35	7,953.56	7,433.60	7,178.70	7,478.43	6,990.73	7,311.27	6,400.59	4,615.07
SF ₆	9,309.93	7,188.49	5,962.42	5,579.50	5,253.91	5,095.89	4,807.94	4,910.86	4,407.45	3,795.22
Total (including LULUCF)	1,238,167.35	1,256,109.60	1,231,046.82	1,261,987.19	1,256,627.49	1,253,026.67	1,262,578.93	1,250,385.72	1,282,930.60	1,203,827.35
Total (excluding LULUCF)	1,323,541.60	1,342,087.55	1,317,124.47	1,349,150.89	1,352,903.93	1,348,806.44	1,351,406.69	1,333,499.62	1,365,227.30	1,281,952.63

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	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	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq
1. Energy	1,170,956.27	1,190,844.26	1,177,931.02	1,217,675.74	1,223,343.11	1,223,134.90	1,226,821.16	1,208,187.18	1,242,243.25	1,161,564.51
2. Industrial Processes	95,230.36	94,345.18	84,303.51	77,927.50	76,598.04	73,765.51	73,653.35	75,697.33	74,294.39	70,705.36
3. Solvent and Other Product Use	362.53	340.99	343.60	334.05	320.83	297.54	266.41	242.34	159.95	129.10
4. Agriculture	27,728.48	27,464.89	27,197.75	26,956.20	26,728.44	26,542.15	26,366.07	26,316.30	26,006.16	25,814.79
5. Land Use, Land-Use Change and Forestry ^b	-85,374.25	-85,977.95	-86,077.66	-87,163.70	-96,276.44	-95,779.77	-88,827.76	-83,113.90	-82,296.70	-78,125.28
6. Waste	29,263.95	29,092.22	27,348.58	26,257.39	25,913.51	25,066.34	24,299.70	23,056.46	22,523.55	23,738.87
7. Other	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total (including LULUCF)	1,238,167.35	1,256,109.60	1,231,046.82	1,261,987.19	1,256,627.49	1,253,026.67	1,262,578.93	1,250,385.72	1,282,930.60	1,203,827.35

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

Table 1

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

CRF: Submission 2014 v1.1, JAPAN

GREENHOUSE GAS EMISSIONS	2009	2010	2011	Change from base to latest reported year
	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	(%)
CO ₂ emissions including net CO ₂ from LULUCF	1,067,360.25	1,115,286.51	1,165,239.66	8.75
CO ₂ emissions excluding net CO ₂ from LULUCF	1,141,465.31	1,191,068.27	1,240,684.47	8.72
CH ₄ emissions including CH ₄ from LULUCF	21,183.37	20,744.71	20,304.37	-36.82
CH ₄ emissions excluding CH ₄ from LULUCF	21,174.75	20,740.57	20,299.01	-36.82
N ₂ O emissions including N ₂ O from LULUCF	22,545.06	21,999.45	21,629.00	-31.63
N ₂ O emissions excluding N ₂ O from LULUCF	22,537.13	21,993.44	21,623.64	-31.49
HFCs	16,554.17	18,307.23	20,467.03	14.15
PFCs	3,265.25	3,408.71	3,016.35	-46.80
SF ₆	1,851.27	1,862.42	1,637.85	-95.72
Total (including LULUCF)	1,132,759.38	1,181,609.03	1,232,294.25	2.94
Total (excluding LULUCF)	1,206,847.89	1,257,380.64	1,307,728.35	3.24

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt CO ₂ eq	kt CO ₂ eq	kt CO ₂ eq	(%)
1. Energy	1,096,944.90	1,144,962.32	1,194,479.89	10.71
2. Industrial Processes	63,529.14	65,849.29	67,163.67	-48.47
3. Solvent and Other Product Use	120.50	98.95	97.15	-66.16
4. Agriculture	25,550.42	25,517.48	25,402.27	-18.30
5. Land Use, Land-Use Change and Forestry ^b	-74,088.51	-75,771.61	-75,434.10	8.49
6. Waste	20,702.93	20,952.60	20,585.38	-20.76
7. Other	NA, NO	NA, NO	NA, NO	0.00
Total (including LULUCF)	1,132,759.38	1,181,609.03	1,232,294.25	2.94

- 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

Table 1 (a)

Emission trends (CO₂)
(Sheet 1 of 3)

CRF: Submission 2014 v1.1, JAPAN

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	1,068,296.26	1,076,104.87	1,083,526.98	1,077,164.28	1,133,210.28	1,145,820.01	1,157,958.90	1,154,948.65	1,125,032.90
A. Fuel Combustion (Sectoral Approach)	1,068,259.64	1,076,051.20	1,083,470.03	1,077,111.06	1,133,159.13	1,145,769.09	1,157,909.53	1,154,900.68	1,124,990.17
1. Energy Industries	324,253.21	326,986.60	333,717.45	315,598.93	356,359.51	344,948.18	345,134.72	342,054.20	332,405.28
2. Manufacturing Industries and Construction	371,311.49	366,282.86	358,404.85	357,499.46	365,878.17	370,539.38	378,811.73	381,142.92	357,838.95
3. Transport	211,053.69	222,466.79	226,859.69	231,727.93	243,681.03	251,166.53	256,750.56	258,734.10	257,853.86
4. Other Sectors	161,641.24	160,314.95	164,488.04	172,284.75	167,240.42	179,115.00	177,212.53	172,969.46	176,892.07
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	36.62	53.67	56.95	53.21	51.15	50.92	49.37	47.97	42.73
1. Solid Fuels	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
2. Oil and Natural Gas	36.62	53.67	56.95	53.21	51.15	50.92	49.37	47.97	42.73
2. Industrial Processes	59,875.69	60,982.03	60,993.20	59,938.82	61,181.26	61,332.91	61,672.09	58,981.65	53,317.07
A. Mineral Products	55,310.54	56,474.62	56,567.06	55,713.23	56,690.40	56,756.12	57,088.67	54,452.99	49,384.13
B. Chemical Industry	4,209.07	4,184.37	4,101.09	3,894.83	4,145.10	4,219.57	4,203.43	4,144.19	3,639.82
C. Metal Production	356.09	323.04	325.05	330.76	345.76	357.22	379.99	384.48	293.11
D. Other Production	IE	IE	IE	IE	IE	IE	IE	IE	IE
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
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	-69,612.00	-76,779.59	-76,483.67	-78,872.74	-80,341.21	-80,652.33	-85,202.82	-85,514.51	-85,273.68
A. Forest Land	-78,590.05	-85,944.00	-86,300.29	-86,649.28	-86,994.43	-87,340.30	-91,312.63	-91,153.89	-90,992.66
B. Cropland	3,662.78	2,942.42	3,027.36	2,338.88	2,302.35	2,262.65	2,134.01	2,044.03	2,051.86
C. Grassland	-265.95	-340.12	-294.81	-359.25	-332.49	-309.05	-297.08	-276.82	-254.18
D. Wetlands	68.08	62.42	201.39	114.73	97.38	306.66	557.46	108.34	444.29
E. Settlements	3,532.05	4,371.38	5,049.82	3,535.61	2,692.36	2,665.61	2,048.38	1,747.08	1,779.53
F. Other Land	1,430.85	1,600.94	1,355.71	1,664.99	1,600.86	1,458.58	1,374.31	1,713.10	1,397.49
G. Other	550.24	527.37	477.14	481.58	292.76	303.53	292.74	303.65	300.00
6. Waste	12,965.78	12,984.57	14,024.24	13,774.05	16,268.90	16,534.40	16,950.85	17,547.22	17,520.19
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	12,262.95	12,298.12	13,325.34	13,093.30	15,566.99	15,866.57	16,310.38	16,891.99	16,911.07
D. Other	702.83	686.45	698.90	680.75	701.91	667.83	640.47	655.23	609.12
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total CO2 emissions including net CO2 from LULUCF	1,071,525.74	1,073,291.88	1,082,060.74	1,072,004.41	1,130,319.24	1,143,035.00	1,151,379.02	1,145,963.02	1,110,596.47
Total CO2 emissions excluding net CO2 from LULUCF	1,141,137.74	1,150,071.46	1,158,544.41	1,150,877.15	1,210,660.44	1,223,687.33	1,236,581.84	1,231,477.53	1,195,870.15
Memo Items:									
International Bunkers	30,829.18	32,531.98	32,937.28	34,935.20	36,093.69	38,179.77	30,958.25	35,432.29	37,361.08
Aviation	13,189.32	13,919.12	14,216.76	13,856.19	15,066.49	16,922.99	18,441.91	19,134.37	20,001.55
Marine	17,639.86	18,612.86	18,720.51	21,079.01	21,027.20	21,256.78	12,516.34	16,297.92	17,359.53
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass	18,747.30	18,870.94	18,419.27	17,568.73	17,803.39	18,487.35	18,547.51	19,107.10	17,556.58

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

Table 1 (a)

JPN_BR1_v1.0

Emission trends (CO₂)
(Sheet 2 of 3)

CRF: Submission 2014 v1.1, JAPAN

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	1,160,147.36	1,180,079.82	1,167,417.49	1,207,919.26	1,213,922.87	1,214,021.73	1,217,734.50	1,199,314.84	1,233,402.38	1,153,081.13
A. Fuel Combustion (Sectoral Approach)	1,160,109.30	1,180,043.79	1,167,385.05	1,207,888.33	1,213,888.39	1,213,986.74	1,217,696.90	1,199,278.95	1,233,364.86	1,153,043.28
1. Energy Industries	349,785.30	357,574.13	349,730.24	381,372.56	395,368.37	390,980.48	406,038.52	394,358.50	447,301.90	420,886.92
2. Manufacturing Industries and Construction	365,074.78	376,777.84	366,481.38	372,969.32	373,173.39	378,734.31	371,229.41	373,288.97	370,257.35	335,621.02
3. Transport	260,017.18	259,076.39	261,120.73	255,478.88	252,947.16	252,413.86	247,009.69	243,632.49	237,830.98	228,099.17
4. Other Sectors	185,232.04	186,615.43	190,052.70	198,067.58	192,399.48	191,858.09	193,419.28	187,998.99	177,974.62	168,436.17
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	38.06	36.03	32.44	30.94	34.48	34.99	37.60	35.89	37.53	37.85
1. Solid Fuels	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
2. Oil and Natural Gas	38.06	36.03	32.44	30.94	34.48	34.99	37.60	35.89	37.53	37.85
2. Industrial Processes	53,320.07	53,887.04	52,657.08	49,841.06	49,010.32	48,837.57	49,902.66	49,975.18	49,212.77	45,613.15
A. Mineral Products	49,100.52	49,745.61	48,847.78	46,234.63	45,640.14	45,407.93	46,773.88	46,878.88	46,010.32	42,883.28
B. Chemical Industry	3,965.06	3,893.01	3,598.60	3,385.48	3,128.60	3,171.80	2,886.85	2,918.74	2,990.43	2,574.10
C. Metal Production	254.49	248.42	210.71	220.95	241.57	257.84	241.93	177.55	212.02	155.77
D. Other Production	IE	IE	IE	IE	IE	IE	IE	IE	IE	IE
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
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	-85,412.27	-86,015.43	-86,117.23	-87,208.53	-96,300.05	-95,808.99	-88,851.06	-83,128.10	-82,309.06	-78,158.02
A. Forest Land	-90,833.07	-90,672.55	-90,514.55	-90,354.05	-99,126.97	-98,612.86	-92,050.35	-86,496.27	-85,282.04	-81,366.65
B. Cropland	2,014.59	1,867.60	1,808.08	1,772.68	1,769.11	1,731.24	1,772.62	1,786.68	1,745.27	1,724.76
C. Grassland	-240.91	-242.91	-232.92	-212.41	-194.33	-176.91	-159.99	-161.87	-146.49	-139.28
D. Wetlands	427.92	408.61	378.93	94.94	64.08	58.75	15.67	23.44	27.76	16.44
E. Settlements	1,444.69	1,120.73	928.60	67.33	-22.92	4.76	365.16	738.78	449.68	410.40
F. Other Land	1,480.94	1,170.19	1,267.28	1,153.05	964.57	949.74	974.54	750.79	571.76	890.58
G. Other	293.57	332.90	247.35	269.92	246.40	236.30	231.29	230.36	325.00	305.74
6. Waste	17,329.84	17,493.86	16,245.95	15,636.28	15,571.81	15,024.34	14,491.29	13,655.17	13,537.58	15,135.23
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	16,677.27	16,837.95	15,615.42	15,059.23	15,055.29	14,517.64	13,984.48	13,132.81	12,976.38	14,604.82
D. Other	652.58	655.91	630.53	577.05	516.53	506.70	506.81	522.36	561.20	530.41
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total CO2 emissions including net CO2 from LULUCF	1,145,385.00	1,165,445.29	1,150,203.28	1,186,188.07	1,182,204.95	1,182,074.65	1,193,277.39	1,179,817.09	1,213,843.66	1,135,671.49
Total CO2 emissions excluding net CO2 from LULUCF	1,230,797.27	1,251,460.72	1,236,320.52	1,273,396.60	1,278,505.00	1,277,883.64	1,282,128.45	1,262,945.19	1,296,152.73	1,213,829.51
Memo Items:										
International Bunkers	36,022.49	36,731.88	33,571.42	36,728.93	37,506.71	39,113.12	41,564.88	38,991.92	37,259.15	34,849.64
Aviation	19,576.46	19,542.61	18,721.34	21,149.32	20,387.64	21,190.20	21,336.33	19,964.61	18,358.58	17,517.99
Marine	16,446.03	17,189.28	14,850.08	15,579.61	17,119.07	17,922.92	20,228.55	19,027.31	18,900.57	17,331.65
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass	18,260.06	18,846.04	17,203.99	17,917.42	18,296.50	18,188.60	21,743.33	21,976.71	22,957.60	21,597.88

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

Table 1(a)

JPN_BR1_v1.0

Emission trends (CO₂)
(Sheet 3 of 3)

CRF: Submission 2014 v1.1, JAPAN

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	1,088,839.82	1,137,014.96	1,186,637.01	11.08
A. Fuel Combustion (Sectoral Approach)	1,088,804.67	1,136,981.83	1,186,604.49	11.08
1. Energy Industries	385,493.23	405,372.36	466,617.15	43.91
2. Manufacturing Industries and Construction	319,043.12	342,744.16	335,186.40	-9.73
3. Transport	222,768.36	225,459.83	222,132.59	5.25
4. Other Sectors	161,499.96	163,405.47	162,668.34	0.64
5. Other	NO	NO	NO	0.00
B. Fugitive Emissions from Fuels	35.15	33.14	32.52	-11.19
1. Solid Fuels	NE, NO	NE, NO	NE, NO	0.00
2. Oil and Natural Gas	35.15	33.14	32.52	-11.19
2. Industrial Processes	40,189.35	41,074.34	41,134.67	-31.30
A. Mineral Products	37,589.16	38,177.25	38,343.73	-30.68
B. Chemical Industry	2,488.20	2,737.23	2,629.25	-37.53
C. Metal Production	111.99	159.86	161.70	-54.59
D. Other Production	IE	IE	IE	0.00
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6				
G. Other	NO	NO	NO	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	-74,105.06	-75,781.75	-75,444.81	8.38
A. Forest Land	-77,894.59	-81,313.62	-78,091.31	-0.63
B. Cropland	1,749.83	1,950.57	1,781.12	-51.37
C. Grassland	-117.97	-57.04	-90.21	-66.08
D. Wetlands	23.84	86.57	60.13	-11.68
E. Settlements	755.17	2,888.36	411.10	-88.36
F. Other Land	1,108.51	420.53	237.58	-83.40
G. Other	270.15	242.88	246.78	-55.15
6. Waste	12,436.14	12,978.96	12,912.79	-0.41
A. Solid Waste Disposal on Land	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00
B. Waste-water Handling				
C. Waste Incineration	11,922.45	12,452.05	12,390.51	1.04
D. Other	513.69	526.91	522.28	-25.69
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	0.00
Total CO2 emissions including net CO2 from LULUCF	1,067,360.25	1,115,286.51	1,165,239.66	8.75
Total CO2 emissions excluding net CO2 from LULUCF	1,141,465.31	1,191,068.27	1,240,684.47	8.72
Memo Items:				
International Bunkers	30,686.03	31,179.83	31,659.39	2.69
Aviation	15,372.73	16,295.33	18,272.72	38.54
Marine	15,313.30	14,884.50	13,386.66	-24.11
Multilateral Operations	NO	NO	NO	0.00
CO2 Emissions from Biomass	19,753.79	32,896.45	32,480.57	73.25

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

Emission trends (CH₄)
(Sheet 1 of 3)

CRF: Submission 2014 v1.1, JAPAN

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	187.01	175.77	163.74	155.68	138.49	126.09	120.11	106.11	98.06
A. Fuel Combustion (Sectoral Approach)	42.39	42.68	43.39	44.29	44.22	49.43	45.80	45.29	43.87
1. Energy Industries	1.42	1.48	1.52	1.51	1.61	1.64	1.72	1.81	1.90
2. Manufacturing Industries and Construction	16.93	16.96	16.77	16.81	17.23	20.84	18.13	17.24	15.44
3. Transport	14.17	14.28	14.43	14.09	14.17	14.71	14.98	15.04	14.51
4. Other Sectors	9.88	9.96	10.67	11.89	11.21	12.24	10.97	11.21	12.02
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	144.63	133.08	120.35	111.39	94.26	76.66	74.31	60.82	54.19
1. Solid Fuels	133.64	120.87	107.98	98.85	81.57	64.03	61.77	47.95	41.55
2. Oil and Natural Gas	10.99	12.21	12.37	12.55	12.69	12.63	12.54	12.88	12.64
2. Industrial Processes	17.03	16.55	15.34	15.26	15.28	15.35	14.86	12.42	11.60
A. Mineral Products	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
B. Chemical Industry	16.11	15.67	14.50	14.47	14.45	14.50	13.99	11.55	10.83
C. Metal Production	0.92	0.87	0.85	0.80	0.83	0.85	0.87	0.87	0.77
D. Other Production									
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Solvent and Other Product Use									
4. Agriculture	841.96	847.78	852.03	856.11	849.69	834.79	816.64	795.47	781.29
A. Enteric Fermentation	365.55	370.85	372.87	370.54	366.28	362.21	359.59	357.40	355.56
B. Manure Management	140.20	139.88	138.57	135.87	133.11	130.83	129.26	127.31	125.21
C. Rice Cultivation	331.41	332.27	336.14	345.12	345.88	337.27	323.51	306.68	296.63
D. Agricultural Soils	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	4.79	4.77	4.45	4.57	4.42	4.48	4.28	4.08	3.90
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	0.41	0.30	0.21	1.15	0.85	0.42	1.37	1.64	0.51
A. Forest Land	0.41	0.30	0.21	1.15	0.85	0.42	1.37	1.64	0.51
B. Cropland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
C. Grassland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Wetlands	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	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	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
6. Waste	484.05	477.39	474.83	466.54	459.56	447.55	436.13	423.75	408.91
A. Solid Waste Disposal on Land	363.68	360.27	358.55	352.22	346.86	336.67	327.13	316.26	303.35
B. Waste-water Handling	114.39	111.61	110.73	108.79	106.64	105.10	103.56	102.06	99.95
C. Waste Incineration	0.64	0.62	0.64	0.64	0.69	0.71	0.73	0.70	0.69
D. Other	5.33	4.89	4.90	4.90	5.36	5.07	4.71	4.73	4.92
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total CH4 emissions including CH4 from LULUCF	1,530.46	1,517.78	1,506.15	1,494.75	1,463.86	1,424.20	1,389.11	1,339.40	1,300.38
Total CH4 emissions excluding CH4 from LULUCF	1,530.05	1,517.48	1,505.94	1,493.60	1,463.01	1,423.78	1,387.74	1,337.76	1,299.86
Memo Items:									
International Bunkers	2.05	2.17	2.19	2.40	2.43	2.50	1.71	2.09	2.22
Aviation	0.37	0.39	0.40	0.39	0.43	0.48	0.52	0.54	0.57
Marine	1.68	1.77	1.78	2.01	2.00	2.03	1.19	1.55	1.65
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass									

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

Table 1(b)

Emission trends (CH₄)
(Sheet 2 of 3)

CRF: Submission 2014 v1.1, JAPAN

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	98.99	95.36	84.08	63.01	61.13	60.39	62.37	63.20	63.70	61.87
A. Fuel Combustion (Sectoral Approach)	45.26	45.68	44.16	43.66	42.58	42.63	43.53	43.76	43.88	42.43
1. Energy Industries	2.03	2.03	1.98	1.54	1.52	1.43	1.50	1.49	1.62	1.50
2. Manufacturing Industries and Construction	15.64	16.90	15.89	16.35	17.54	18.22	18.42	19.62	20.88	20.85
3. Transport	14.45	14.21	13.94	13.44	12.87	11.93	11.32	10.58	9.91	9.13
4. Other Sectors	13.13	12.55	12.36	12.32	10.65	11.05	12.29	12.06	11.46	10.95
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	53.73	49.67	39.91	19.35	18.54	17.76	18.84	19.44	19.82	19.44
1. Solid Fuels	41.22	36.63	27.16	5.64	4.47	3.17	3.50	3.24	2.45	2.18
2. Oil and Natural Gas	12.51	13.05	12.76	13.72	14.07	14.59	15.34	16.20	17.37	17.26
2. Industrial Processes	11.25	9.32	7.02	6.74	6.38	6.84	6.37	6.34	6.39	5.78
A. Mineral Products	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
B. Chemical Industry	10.48	8.52	6.27	5.95	5.59	6.03	5.57	5.52	5.56	5.07
C. Metal Production	0.77	0.80	0.75	0.79	0.79	0.81	0.80	0.82	0.82	0.72
D. Other Production										
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Solvent and Other Product Use										
4. Agriculture	766.18	757.49	748.90	739.93	732.50	726.71	722.84	719.36	713.36	705.28
A. Enteric Fermentation	352.75	350.95	348.82	346.48	341.11	336.37	333.42	333.33	332.10	329.18
B. Manure Management	122.78	120.97	119.81	118.90	117.17	115.17	113.01	111.14	109.08	106.57
C. Rice Cultivation	286.89	281.89	276.68	271.14	270.98	272.00	273.29	271.79	269.15	266.60
D. Agricultural Soils	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	3.75	3.67	3.59	3.40	3.25	3.17	3.12	3.10	3.03	2.93
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	0.25	0.37	0.59	0.98	0.19	0.58	0.44	0.12	0.10	1.03
A. Forest Land	0.25	0.37	0.59	0.98	0.19	0.58	0.44	0.12	0.10	1.03
B. Cropland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
C. Grassland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Wetlands	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	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	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
6. Waste	395.54	382.29	360.75	346.37	332.47	318.35	304.37	290.25	277.77	262.79
A. Solid Waste Disposal on Land	291.14	279.80	267.45	254.98	242.42	229.75	217.51	204.78	193.02	178.97
B. Waste-water Handling	98.78	97.27	88.06	85.77	84.09	82.48	80.18	78.67	76.72	75.79
C. Waste Incineration	0.67	0.63	0.60	0.93	0.80	0.73	0.68	0.63	0.58	0.56
D. Other	4.94	4.58	4.64	4.70	5.16	5.39	6.00	6.17	7.45	7.46
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total CH4 emissions including CH4 from LULUCF	1,272.21	1,244.83	1,201.34	1,157.03	1,132.66	1,112.87	1,096.39	1,079.26	1,061.31	1,036.76
Total CH4 emissions excluding CH4 from LULUCF	1,271.96	1,244.46	1,200.75	1,156.05	1,132.47	1,112.29	1,095.96	1,079.14	1,061.21	1,035.72
Memo Items:										
International Bunkers	2.12	2.19	1.94	2.08	2.21	2.31	2.53	2.38	2.32	2.15
Aviation	0.55	0.55	0.53	0.60	0.58	0.60	0.60	0.57	0.52	0.50
Marine	1.57	1.64	1.42	1.48	1.63	1.71	1.93	1.81	1.80	1.65
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass										

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

Emission trends (CH₄)
(Sheet 3 of 3)

CRF: Submission 2014 v1.1, JAPAN

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	59.97	61.13	58.73	-68.59
A. Fuel Combustion (Sectoral Approach)	41.20	43.24	40.91	-3.50
1. Energy Industries	1.41	1.55	1.76	24.18
2. Manufacturing Industries and Construction	20.78	22.52	22.04	30.21
3. Transport	8.57	8.08	7.70	-45.68
4. Other Sectors	10.43	11.09	9.41	-4.73
5. Other	NO	NO	NO	0.00
B. Fugitive Emissions from Fuels	18.77	17.89	17.83	-87.67
1. Solid Fuels	2.20	2.12	2.13	-98.41
2. Oil and Natural Gas	16.57	15.77	15.70	42.91
2. Industrial Processes	5.22	5.66	5.72	-66.38
A. Mineral Products	NA, NO	NA, NO	NA, NO	0.00
B. Chemical Industry	4.60	4.95	5.00	-68.95
C. Metal Production	0.62	0.71	0.72	-21.58
D. Other Production				
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6				
G. Other	NO	NO	NO	0.00
3. Solvent and Other Product Use				
4. Agriculture	693.37	682.59	675.46	-19.78
A. Enteric Fermentation	322.52	317.03	312.75	-14.44
B. Manure Management	104.02	102.09	101.31	-27.74
C. Rice Cultivation	264.04	260.82	258.75	-21.93
D. Agricultural Soils	NA	NA	NA	0.00
E. Prescribed Burning of Savannas	NO	NO	NO	0.00
F. Field Burning of Agricultural Residues	2.78	2.66	2.66	-44.61
G. Other	NO	NO	NO	0.00
5. Land Use, Land-Use Change and Forestry	0.41	0.20	0.25	-37.13
A. Forest Land	0.41	0.20	0.25	-37.13
B. Cropland	NE, NO	NE, NO	NE, NO	0.00
C. Grassland	NE, NO	NE, NO	NE, NO	0.00
D. Wetlands	NE, NO	NE, NO	NE, NO	0.00
E. Settlements	NE, NO	NE, NO	NE, NO	0.00
F. Other Land	NO	NO	NO	0.00
G. Other	NA, NE	NA, NE	NA, NE	0.00
6. Waste	249.76	238.26	226.70	-53.17
A. Solid Waste Disposal on Land	167.49	156.48	147.28	-59.50
B. Waste-water Handling	73.58	72.27	72.27	-36.83
C. Waste Incineration	0.50	0.46	0.46	-28.04
D. Other	8.20	9.05	6.69	25.66
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	0.00
Total CH4 emissions including CH4 from LULUCF	1,008.73	987.84	966.87	-36.82
Total CH4 emissions excluding CH4 from LULUCF	1,008.32	987.65	966.62	-36.82
Memo Items:				
International Bunkers	1.89	1.88	1.79	-12.76
Aviation	0.44	0.46	0.52	38.54
Marine	1.46	1.42	1.28	-24.14
Multilateral Operations	NO	NO	NO	0.00
CO2 Emissions from Biomass				

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

“ 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: Submission 2014 v1.1, JAPAN

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	21.78	22.68	23.31	23.47	24.42	26.72	27.15	27.88	27.46
A. Fuel Combustion (Sectoral Approach)	21.78	22.68	23.31	23.47	24.42	26.72	27.15	27.88	27.46
1. Energy Industries	2.98	3.08	3.00	3.03	3.26	4.56	4.66	4.81	4.89
2. Manufacturing Industries and Construction	4.36	4.60	4.97	5.10	5.54	6.04	6.23	6.65	6.40
3. Transport	13.57	14.09	14.39	14.30	14.56	15.01	15.29	15.44	15.12
4. Other Sectors	0.88	0.90	0.95	1.04	1.05	1.12	0.98	0.99	1.04
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. Solid Fuels	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
2. Oil and Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Industrial Processes	26.67	24.32	24.04	23.56	26.77	26.49	29.74	31.59	27.67
A. Mineral Products	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
B. Chemical Industry	26.67	24.32	24.04	23.56	26.77	26.49	29.74	31.59	27.67
C. Metal Production	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Other Production									
E. Production of Halocarbons and SF6									
F. Consumption of Halocarbons and SF6									
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Solvent and Other Product Use	0.93	1.15	1.33	1.33	1.41	1.41	1.36	1.31	1.22
4. Agriculture	43.26	42.63	42.22	41.70	40.80	39.77	38.90	38.28	37.84
A. Enteric Fermentation									
B. Manure Management	17.92	17.82	17.68	17.38	17.01	16.69	16.49	16.30	16.15
C. Rice Cultivation									
D. Agricultural Soils	25.25	24.73	24.46	24.23	23.70	23.00	22.33	21.91	21.61
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.07
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	0.23	0.21	0.20	0.20	0.18	0.16	0.15	0.13	0.12
A. Forest Land	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00
B. Cropland	0.23	0.21	0.20	0.19	0.17	0.16	0.14	0.12	0.11
C. Grassland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Wetlands	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	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	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
6. Waste	9.19	9.38	9.79	9.88	10.40	10.91	11.29	11.57	11.56
A. Solid Waste Disposal on Land									
B. Waste-water Handling	4.05	4.13	4.10	4.18	4.15	4.21	4.21	4.25	4.21
C. Waste Incineration	4.82	4.95	5.40	5.40	5.93	6.39	6.80	7.04	7.06
D. Other	0.32	0.29	0.29	0.29	0.32	0.30	0.28	0.28	0.29
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total N2O emissions including N2O from LULUCF	102.04	100.38	100.90	100.12	103.98	105.47	108.59	110.76	105.86
Total N2O emissions excluding N2O from LULUCF	101.81	100.17	100.70	99.93	103.80	105.31	108.44	110.63	105.75
Memo Items:									
International Bunkers	0.90	0.95	0.96	1.02	1.05	1.12	0.93	1.05	1.11
Aviation	0.42	0.44	0.45	0.44	0.48	0.54	0.59	0.61	0.64
Marine	0.48	0.51	0.51	0.57	0.57	0.58	0.34	0.44	0.47
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass									

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

Table 1(c)

Emission trends (N₂O)
(Sheet 2 of 3)

CRF: Submission 2014 v1.1, JAPAN

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	28.16	28.26	28.22	27.20	26.25	25.31	25.09	24.34	24.20	23.17
A. Fuel Combustion (Sectoral Approach)	28.16	28.26	28.22	27.20	26.25	25.31	25.09	24.34	24.20	23.17
1. Energy Industries	5.21	5.48	6.17	5.93	6.01	5.98	6.67	6.60	6.76	6.52
2. Manufacturing Industries and Construction	6.69	6.83	6.67	6.72	6.61	6.68	6.57	6.48	6.65	6.41
3. Transport	15.10	14.80	14.23	13.39	12.52	11.53	10.71	10.14	9.70	9.20
4. Other Sectors	1.16	1.15	1.15	1.17	1.11	1.12	1.14	1.12	1.08	1.04
5. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
B. Fugitive Emissions from Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1. Solid Fuels	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
2. Oil and Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Industrial Processes	6.45	15.13	4.56	4.00	4.06	5.35	4.19	5.24	2.77	4.07
A. Mineral Products	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
B. Chemical Industry	6.45	15.13	4.56	4.00	4.06	5.35	4.19	5.24	2.77	4.07
C. Metal Production	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
D. Other Production										
E. Production of Halocarbons and SF6										
F. Consumption of Halocarbons and SF6										
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
3. Solvent and Other Product Use	1.17	1.10	1.11	1.08	1.03	0.96	0.86	0.78	0.52	0.42
4. Agriculture	37.54	37.28	37.00	36.83	36.60	36.39	36.09	36.16	35.57	35.50
A. Enteric Fermentation										
B. Manure Management	15.98	15.82	15.68	15.59	15.48	15.39	15.38	15.44	15.51	16.27
C. Rice Cultivation										
D. Agricultural Soils	21.49	21.39	21.26	21.18	21.06	20.94	20.64	20.66	20.00	19.17
E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
F. Field Burning of Agricultural Residues	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
G. Other	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
5. Land Use, Land-Use Change and Forestry	0.11	0.10	0.09	0.08	0.06	0.06	0.05	0.04	0.03	0.04
A. Forest Land	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
B. Cropland	0.10	0.09	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03
C. Grassland	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO
D. Wetlands	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	NE, NO	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	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
G. Other	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE	NA, NE
6. Waste	11.70	11.52	11.38	10.80	10.84	10.83	11.02	10.66	10.17	9.95
A. Solid Waste Disposal on Land										
B. Waste-water Handling	4.11	4.01	4.10	4.10	4.13	4.13	4.07	4.11	4.04	4.04
C. Waste Incineration	7.29	7.23	7.00	6.41	6.40	6.37	6.59	6.19	5.68	5.46
D. Other	0.30	0.27	0.28	0.28	0.31	0.32	0.36	0.37	0.45	0.45
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO
Total N2O emissions including N2O from LULUCF	85.14	93.39	82.36	79.98	78.85	78.89	77.29	77.23	73.26	73.15
Total N2O emissions excluding N2O from LULUCF	85.03	93.29	82.27	79.91	78.78	78.83	77.25	77.19	73.23	73.11
Memo Items:										
International Bunkers	1.07	1.09	1.00	1.09	1.11	1.16	1.23	1.15	1.10	1.03
Aviation	0.62	0.62	0.59	0.67	0.65	0.67	0.68	0.63	0.58	0.55
Marine	0.45	0.47	0.40	0.42	0.47	0.49	0.55	0.52	0.51	0.47
Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
CO2 Emissions from Biomass										

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

Emission trends (N₂O)
(Sheet 3 of 3)

CRF: Submission 2014 v1.1, JAPAN

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	2009	2010	2011	Change from base to latest reported year
	kt	kt	kt	%
1. Energy	22.08	21.50	21.32	-2.11
A. Fuel Combustion (Sectoral Approach)	22.08	21.50	21.32	-2.11
1. Energy Industries	6.24	6.14	6.42	115.80
2. Manufacturing Industries and Construction	6.18	6.14	6.08	39.55
3. Transport	8.65	8.17	7.78	-42.66
4. Other Sectors	1.01	1.05	1.04	18.28
5. Other	NO	NO	NO	0.00
B. Fugitive Emissions from Fuels	0.00	0.00	0.00	-8.02
1. Solid Fuels	NE, NO	NE, NO	NE, NO	0.00
2. Oil and Natural Gas	0.00	0.00	0.00	-8.02
2. Industrial Processes	5.03	3.48	2.54	-90.47
A. Mineral Products	NA, NO	NA, NO	NA, NO	0.00
B. Chemical Industry	5.03	3.48	2.54	-90.47
C. Metal Production	NO	NO	NO	0.00
D. Other Production				
E. Production of Halocarbons and SF6				
F. Consumption of Halocarbons and SF6				
G. Other	NO	NO	NO	0.00
3. Solvent and Other Product Use	0.39	0.32	0.31	-66.16
4. Agriculture	35.45	36.07	36.19	-16.34
A. Enteric Fermentation				
B. Manure Management	16.94	17.58	17.45	-2.62
C. Rice Cultivation				
D. Agricultural Soils	18.46	18.44	18.68	-25.99
E. Prescribed Burning of Savannas	NO	NO	NO	0.00
F. Field Burning of Agricultural Residues	0.05	0.05	0.05	-43.52
G. Other	NO	NO	NO	0.00
5. Land Use, Land-Use Change and Forestry	0.03	0.02	0.02	-92.47
A. Forest Land	0.00	0.00	0.00	-37.13
B. Cropland	0.02	0.02	0.02	-93.15
C. Grassland	NE, NO	NE, NO	NE, NO	0.00
D. Wetlands	NE, NO	NE, NO	NE, NO	0.00
E. Settlements	NE, NO	NE, NO	NE, NO	0.00
F. Other Land	NO	NO	NO	0.00
G. Other	NA, NE	NA, NE	NA, NE	0.00
6. Waste	9.75	9.58	9.39	2.26
A. Solid Waste Disposal on Land				
B. Waste-water Handling	3.99	3.94	3.94	-2.71
C. Waste Incineration	5.27	5.10	5.05	4.88
D. Other	0.49	0.54	0.40	25.66
7. Other (as specified in the summary table in CRF)	NA, NO	NA, NO	NA, NO	0.00
Total N2O emissions including N2O from LULUCF	72.73	70.97	69.77	-31.63
Total N2O emissions excluding N2O from LULUCF	72.70	70.95	69.75	-31.49
Memo Items:				
International Bunkers	0.90	0.92	0.94	4.63
Aviation	0.49	0.52	0.58	37.48
Marine	0.42	0.41	0.36	-24.14
Multilateral Operations	NO	NO	NO	0.00
CO2 Emissions from Biomass				

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

“ 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 (HFCs, PFCs and SF₆)
(Sheet 1 of 3)

CRF: Submission 2014 v1.1, JAPAN

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)	17,930.00	18,070.00	19,750.00	21,310.00	28,840.00	20,260.17	19,906.20	19,905.11	19,415.96
HFC-23	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	1.45	1.33	1.26	1.18
HFC-32	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-41	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-43-10mee	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-125	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-134	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-134a	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	2.01	2.79	3.49	3.87
HFC-152a	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.01	0.01	0.00	IE, NA, NE, NO
HFC-143	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-143a	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-227ea	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	0.00	0.00	0.00
HFC-236fa	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
HFC-245ca	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	680.48	681.88	671.84	595.75
Emissions of PFCsc - (kt CO2 eq)	5,670.00	6,370.00	6,370.00	8,860.00	12,274.00	14,271.14	14,772.09	16,187.61	13,401.73
CF ₄	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.01	0.01	0.01	0.01
C ₂ F ₆	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.00	0.00	0.00	0.00
C 3F8	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
C ₄ F ₁₀	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
c-C ₄ F ₈	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
C ₅ F ₁₂	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO
C ₆ F ₁₄	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	IE, 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	14,201.41	14,706.21	16,128.18	13,352.33
Emissions of SF6(3) - (Gg CO2 equivalent)	38,240.00	43,498.00	47,800.00	45,410.00	45,410.00	16,961.45	17,535.35	14,998.12	13,624.11
SF ₆	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	NA, NE, NO	0.71	0.73	0.63	0.57

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

Table 1(d)

JPN_BR1_v1.0

Emission trends (HFCs, PFCs and SF₆)**(Sheet 2 of 3)**

CRF: Submission 2014 v1.1, JAPAN

<i>GREENHOUSE GAS SOURCE AND SINK CATEGORIES</i>	<i>1999</i>	2000	2001	2002	2003	2004	2005	2006	2007	2008
	<i>kt</i>	kt	kt	kt	kt	kt	kt	kt	kt	kt
Emissions of HFCsc - (kt CO₂ eq)	19,934.46	18,800.43	16,168.06	13,693.03	13,761.68	10,552.49	10,518.22	11,742.22	13,279.24	15,298.30
HFC-23	1.21	1.06	0.80	0.52	0.43	0.09	0.04	0.06	0.02	0.04
HFC-32	0.01	0.02	0.05	0.08	0.14	0.21	0.30	0.39	0.49	0.61
HFC-41	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
HFC-43-10mee	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
HFC-125	0.01	0.02	0.05	0.08	0.14	0.21	0.30	0.39	0.49	0.61
HFC-134	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
HFC-134a	4.05	4.31	4.38	4.61	4.76	4.32	3.61	2.92	2.86	2.87
HFC-152a	IE, NA, NE, NO	0.02	0.08	0.16	0.40	0.84	1.22	1.41	1.44	1.68
HFC-143	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
HFC-143a	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
HFC-227ea	0.00	0.00	0.01	0.01	0.02	0.04	0.05	0.04	0.04	0.05
HFC-236fa	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
HFC-245ca	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
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	542.31	714.61	937.16	1,261.10	1,965.94	2,942.83	4,020.51	5,607.42	7,330.76	8,635.51
Emissions of PFCsc - (kt CO₂ eq)	10,428.82	9,583.35	7,953.56	7,433.60	7,178.70	7,478.43	6,990.73	7,311.27	6,400.59	4,615.07
CF ₄	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C ₂ F ₆	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C 3F8	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
C ₄ F ₁₀	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
c-C ₄ F ₈	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
C ₅ F ₁₂	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
C ₆ F ₁₄	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unspecified mix of listed PFCs(4) - (Gg CO ₂ equivalent)	10,399.69	9,565.56	7,937.84	7,418.74	7,163.42	7,463.49	6,975.70	7,295.94	6,384.79	4,598.55
Emissions of SF₆(3) - (Gg CO₂ equivalent)	9,309.93	7,188.49	5,962.42	5,579.50	5,253.91	5,095.89	4,807.94	4,910.86	4,407.45	3,795.22
SF ₆	0.39	0.30	0.25	0.23	0.22	0.21	0.20	0.21	0.18	0.16

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

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

CRF: Submission 2014 v1.1, JAPAN

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)	16,554.17	18,307.23	20,467.03	14.15
HFC-23	0.00	0.00	0.00	100.00
HFC-32	0.72	0.84	1.01	100.00
HFC-41	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-43-10mee	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-125	0.72	0.84	1.01	100.00
HFC-134	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-134a	2.82	2.75	2.60	100.00
HFC-152a	1.58	1.30	1.26	100.00
HFC-143	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-143a	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-227ea	0.04	0.03	0.03	100.00
HFC-236fa	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
HFC-245ca	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
Unspecified mix of listed HFCsd - (kt CO ₂ eq)	10,020.30	11,499.81	13,314.77	100.00
Emissions of PFCsc - (kt CO2 eq)	3,265.25	3,408.71	3,016.35	-46.80
CF ₄	0.00	0.00	0.00	100.00
C ₂ F ₆	0.00	0.00	0.00	100.00
C 3F8	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
C ₄ F ₁₀	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
c-C ₄ F ₈	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
C ₅ F ₁₂	IE, NA, NE, NO	IE, NA, NE, NO	IE, NA, NE, NO	0.00
C ₆ F ₁₄	0.00	0.00	0.00	100.00
Unspecified mix of listed PFCs(4) - (Gg CO ₂ equivalent)	3,251.74	3,394.87	3,001.27	100.00
Emissions of SF6(3) - (Gg CO2 equivalent)	1,851.27	1,862.42	1,637.85	-95.72
SF ₆	0.08	0.08	0.07	100.00

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)

JPN_BR1_v1.0

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

<i>Party</i>	<i>Japan</i>	
Base year /base period	2005	
Emission reduction target	% of base year/base period	% of 1990 ^b
	-3.80	
Period for reaching target	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.

Table 2(b)

JPN_BR1_v1.0

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		2005
CH ₄		2005
N ₂ O		2005
HFCs		2005
PFCs		2005
SF ₆		2005
NF ₃		2005
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	2nd AR
CH ₄	2nd AR
N ₂ O	2nd AR
HFCs	2nd AR
PFCs	2nd AR
SF ₆	2nd 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	Included
	Contribution of LULUCF is calculated using	Activity-based approach

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 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: 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	
ERUs	
AAUs ⁱ	
Carry-over units ^j	
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>
JCM	

^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}

This is a target at this point, which has not yet taken into account the emission reduction effect resulting from nuclear power, given that the energy policy and energy mix, including the utilization of nuclear power, are still under consideration. A firm target, based on further review of the energy policy and energy mix will eventually be set.

^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

The target for the LULUCF sector is to ensure that the amount of removals by forest management for the period between FY2013 and FY2020 will be, on average, 3.5% of the total GHG emissions in FY1990 (approximately 44 million t-CO₂), which is the agreed upper limit of removals by forest management for the second commitment period of the Kyoto Protocol. To this end, the government envisages to continually implement necessary policies and measures. Based on certain assumptions, for the year FY2020, the level of removals will correspond with approximately 2.8% or more of the total GHG emissions in FY2005 (approximately 38 million t-CO₂).

Table 3

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

Name of mitigation action ^a		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)	
Promotion of Global Warming Countermeasures Based on the Action Plan of Each Local Government (Note 1)		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Support development of low-carbon communities which is coordinated with local city plans and led by local governments	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	Local governments will formulate and implement the local action plans based on the Act on Promotion of Global Warming Countermeasures (come in effect since 1998) which are expected to be coordinated with local city plans. The Government will provide guidelines for developing plans as well as support implementing actions based on their plans.	2008	MOE		
Promotion of Developing Low-Carbon Community (Note 1)		Other (Cross-Sectoral)	CO ₂	Encourage low-carbonization of communities through concentrating city functions and low-carbonization of transport systems	Other (Law/Standard,Taxation,Budget/Subsidy)	Implemented	The Government will facilitate the formulation of low carbon city plans led by the local government based on "Low Carbon City Act (come in effect since December 2010)" as well as facilitate actions to integrate various urban functions, to promote the use of public transportation, to enhance efficiency of energy use, to preserve urban green areas, and to promote urban greening, based on the plans.	2012	MLIT, METI, MOE		
Holistic and Efficient Use of Energy (Note 1)		Energy	CO ₂	Support the installation of, and promote the diffusion and extended usage of, innovative and cutting-edge system which utilizes area-wide energy use at block and district.	Other (Budget/Subsidy, Awareness Raising)	Implemented	The Government will provide support to develop facilities which contribute to area-wide energy use with utilization possibility, innovativeness and leadership in multiple districts on the project areas.	2008	MLIT, METI		

Table 3

JPN_BR1_v1.0

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

<i>Name of mitigation action^a</i>		<i>Sector(s) affected^b</i>	<i>GHG(s) affected</i>	<i>Objective and/or activity affected</i>	<i>Type of instrument^c</i>	<i>Status of implementation^d</i>	<i>Brief description^e</i>	<i>Start year of implementation</i>	<i>Implementing entity or entities</i>	<i>Estimate of mitigation impact (not cumulative, in kt CO₂ eq)</i>	
Promotion and Reinforcement of Voluntary Action Plans of Industry (Note 1)		Energy, Industry/industrial processes	CO ₂	Reduce CO ₂ emissions from the industry, commercial, transport, and energy conversion sector by promoting voluntary and active activities of business operators to actively implement environmentally-friendly business actions on a voluntary basis with respect to the environment conservation.	Voluntary Agreement	Implemented	In industry sector, each industry group formulates and implements GHG emissions reduction plan (the Commitment to a Low Carbon Society) including 2020 emissions reduction target with an assumption of maximum use of world most-advanced low-carbon technologies (best available technologies, BAT). And the government will strictly assess and verify such initiatives.	Since 1997 (Depends on a group)	METI, MOE, Industry Group, Related Ministries and Agencies (for Assessment and Verification)		NE
Promotion of Introduction of Highly Energy-efficient Equipment and Devices (Note 1)		Energy	CO ₂	Reduce CO ₂ emissions from energy consumption in the manufacturing sector by promoting the diffusion of energy-saving equipment in the sector.	Other (Budget/Subsidy, Financing)	Implemented	On the top of the introduction of various energy-efficient equipment and devices based on the Commitment to a Low Carbon Society, the Government will implement supporting programs to promote the diffusion of low-carbon industrial furnaces which lead to massive improvement of energy efficiency compared to conventional equipment and devices.	2008	METI		NE
Promotion of Introduction of Highly Energy-efficient Equipment and Devices (Note 1)		Energy	CO ₂	Reduce CO ₂ emissions from energy consumption by construction work by promoting the diffusion of low-fuel or low-carbon construction machinery.	Other (Budget/Subsidy, Financing, Other)	Implemented	The Government will certify, and support the introduction of, construction machinery which passes the given criteria of fuel efficiency and the machinery using leading technologies such as hybrid or electrically geared system.	2010	MLIT		NE

Table 3

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

Name of mitigation action ^a		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)	
Promotion of Introduction of Highly Energy-efficient Equipment and Devices (Note 1)		Energy	CO ₂	Reduce CO2 emissions associated with energy consumption in agriculture and fishery sector by diffusing energy saving facilities/devices in greenhouse horticulture, appliances for agriculture, and fishing vessels.	Other (Budget/Subsidy, Awareness Raising, Technolo gy Development)	Implemented	The Government will support the introduction of, and develop further technologies of, heat pump units to greenhouse horticulture, appliances for agriculture such as heating equipment using woody biomass, high-speed pudding machines, energy-efficient outboard motors for fishing vessels, and fish-luring lights using LED etc.	2007	MAFF		NE
Improving the Energy Efficiency of Equipment and Devices based on the Top Runner Program (Note 1)		Energy	CO ₂	Improve energy consumption when devices are used, through the continuous improvements in device quality by the Top Runner standard. (Devices currently subject to the program: industrial air conditioners, industrial electronic refrigerators, industrial electronic freezers, energy converters, multi- functional printers and electric water heaters)	Other (Law/Standard,Bu dget/Subsidy)	Implemented	The Government will continue to reconsider about target devices for the Top Runner Programme that requires manufacturers and importers of products to meet criteria which is in line with standards for currently most- advanced devices and assumed technological advances in about 3 to 10 years. (LED light bulbs and other devices are already added on the list in 2013.) At the same time, consideration will be carried out in order to revise the standards on devices which reaches their target year.	1998	METI		NE

Table 3

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

Name of mitigation action ^a		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)	
Improvement of the Energy Efficiency Performance and Low-Carbonization of Buildings (Note 1)		Energy	CO ₂	Reduce CO2 emissions from energy consumption in buildings by promoting their energy saving through "regulations," "assessment and display" and "providing incentives."	Other (Law/Standard,Budget/Subsidy,Other)	Implemented	Regarding newly constructed houses, the Government will implement support to raise public awareness to encourage diffusion of the revised energy saving standard. The Government will make it mandatory in stages to comply with energy conservation standards for newly constructed houses by 2020. In order to develop an enabling environment for such measures, the Government will support the improvement of the energy-saving design and construction techniques of small- and medium-sized builders and carpenters who are the main player for house supply, as well as the arrangement of evaluation system of energy saving performance. To promote diffusion of low carbon houses with a higher energy-efficiency, and for implementing pilot projects which will lead to low CO2 emissions. The Top-Runner Program was introduced on construction materials, and thermal insulation material was added. And regarding existing houses, the Government will pursue retrofits to improve energy efficiency, improvement of the use of equipment and devices, provision of consultation on potential capacity of GHG emissions reduction, promoted use of data of energy consumption and so on in order to improve the energy efficiency of the entire house stocks. Also the Government will discuss multilateral measures which are expected to be in need in the future specifically for replacing equipment with high-performed one. The Government will encourage the enhancement and diffusion of information and	2003 (When the reporting period of energy-saving performance started, based on the Energy Saving Law)	MLIT, METI, MOE		NE

Table 3

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

Name of mitigation action ^a		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)	
Smart Consumption of Energy by Using Energy Management etc. (Note 1)		Energy	CO ₂	Support the introduction of Energy Management Systems such as BEMS, HEMS and MEMS in order to promote wider diffusion of those systems.	Other (Taxation,Budget/ Subsidy,Other)	Implemented	The Government will promote the introduction of smart-meter as infrastructure and install them in all households and plants in the early 2020s. At the same time, the Government will promote the introduction of Energy Management Systems (HEMS, BEMS, etc.) and the utilization of energy consumption data with the aim of optimizing energy consumption. Efficient energy management system will be introduced such as 'demand response', which adjusts energy demand in response to the energy supply condition. Also, the Government will support the introduction of technologies etc. for CO2 emissions reduction when developing social system such as water supply, sewage system, waste management and ICT.	1998 (Supporting programmes for business operators to enhance energy efficiency etc.)	METI, MOE, MIC, Related Ministries and Agencies		NE

Table 3

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

Name of mitigation action ^a		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)	
Initiatives by Public Organizations (Note 1)		Energy	CO ₂	Implement necessary actions to achieve targets based on the commitment plans of each ministry and agency in accordance with the national commitment plan. In order to spur demands for products that contribute to greenhouse gas emissions reduction and other eco-friendly goods and services, the Government and independent administrative agencies etc. will promote the conversion of demand and they will make environmentally- conscious contracts which will contribute to GHG emissions reduction.	Other (Law/Standard)	Implemented	The Government will reduce greenhouse gas emissions with regard to its own administration and undertakings at a level which is equivalent or superior to initiatives in the current national commitment plan, even during the period before the new national commitment plan is formulated in line with the new plan for global warming prevention. The Government and independent administrative agencies etc. will take the initiative in procuring such goods and services that contribute to GHG emissions reduction as well as will make environmentally-conscious contracts which will contribute to GHG emissions reduction, mainly in six areas (namely supply of electricity, automobiles, vessels, ESCO, buildings, and industrial waste).	2001	All Ministries and Agencies		NE

Table 3

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

Name of mitigation action ^a		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)	
Improving the Energy Efficiency of Equipment and Devices based on the Top Runner Program [reprinted] (Note 1)		Energy	CO ₂	Improve energy consumption when devices are used, through the continuous improvements in device quality by the Top Runner standard. (Devices currently subject to the program: industrial air conditioners, industrial electronic refrigerators, industrial electronic freezers, energy converters, multi- functional printers and electric water heaters)	Other (Law/Standard,Bu dget/Subsidy)	Implemented	The Government will continue to reconsider about target devices for the Top Runner Programme that requires manufacturers and importers of products to meet criteria which is in line with standards for currently most- advanced devices and assumed technological advances in about 3 to 10 years. (LED light bulbs and other devices are already added on the list in 2013.) At the same time, consideration will be carried out in order to revise the standards on devices which reaches their target year.	1998	METI		NE

Table 3

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

Name of mitigation action ^a		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)	
Improvement of the Energy Efficiency Performance and Low-Carbonization of Housing (Note 1)		Energy	CO ₂	Reduce CO2 emissions from energy consumption in houses by promoting energy saving in housing through "regulations," "assessment and display" and "providing incentives."	Other (Law/Standard,Taxation,Budget/Subsidy,Financing,Technology Development,Awareness Raising,Other)	Implemented	Regarding newly constructed houses, the Government will implement support to raise public awareness to encourage diffusion of the revised energy saving standard. The Government will make it mandatory in stages to comply with energy conservation standards for newly constructed houses by 2020. In order to develop an enabling environment for such measures, the Government will support the improvement of the energy-saving design and construction techniques of small- and medium-sized builders and carpenters who are the main player for house supply, as well as the arrangement of evaluation system of energy saving performance. To promote diffusion of low carbon houses with a higher energy-efficiency, and for implementing pilot projects which will lead to low CO2 emissions. The Top-Runner Program was introduced on construction materials, and thermal insulation material was added. And regarding existing houses, the Government will pursue retrofits to improve energy efficiency, improvement of the use of equipment and devices, provision of consultation on potential capacity of GHG emissions reduction, promoted use of data of energy consumption and so on in order to improve the energy efficiency of the entire house stocks. Also the Government will discuss multilateral measures which are expected to be in need in the future specifically for replacing equipment with high-performed one. The Government will encourage the improvement and diffusion of building and	2003 (When the reporting period of energy-saving performance started, based on the Energy Saving Law)	MLIT, METI, MOE		NE
Promotion of Combined Heat and Power and Household Fuel Cells (Note 1)		Energy	CO ₂	Reduce CO2 emissions from energy consumption in houses by promoting the introduction of combined heat and power such as fuel cells for household use.	Other (Budget/Subsidy, Technology Development)	Implemented	Since simultaneous generation and use of electricity and heat enables effective consumption of energy, the Government promotes the diffusion of combined heat and power such as household fuel cells.	2009	METI		NE

Table 3

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

Name of mitigation action ^a		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)	
Other Supportive Measures (Note 1)		Energy	CO ₂	Promote innovative changes towards low-carbon lifestyle by providing information, “visualization” of CO2 emissions as well as promoting low-carbon activities.	Other (Budget)	Implemented	The Government will work on the “visualization” of CO2 emissions by various product type by displaying information on emissions and other items during the product’s life cycle. Moreover, the Government will work to promote innovative changes towards low-carbon lifestyle through the introduction of Home Energy Management Systems (HEMS), which operates lighting, air conditioners and other devices to optimally adjust to interior conditions, promotion of the use of HEMS data, and promotion of “Home CO2 advisor service”.	2010	MOE, METI		NE
Improvement in the Fuel Efficiency of Vehicles and Diffusion of Them (Measures for each vehicle as a unit) (Note 1)		Transport	CO ₂	Reduce CO2 emissions from energy consumption in the transport sector by supporting the introduction of highly energy-efficient next-generation automobiles (hybrid vehicles (HEV), plug-in hybrid vehicles (PHEV), fuel-cell vehicles (FCV), clean diesel vehicles (CDV) and promoting the extensive diffusion of those automobiles, while continuing to improve the performance of vehicles according to fuel efficiency standards.	Other (Law/Standard, Taxation, Budget/ Subsidy, Technology Development)	Implemented	For electric vehicles, the Government will promote the development of recharging infrastructure, support the purchase of vehicles to create mass production effects and to promote price reduction, and also support research and development to extend a cruising range and reduce the production costs. In order to enable the release of fuel-cell vehicles to the market in 2015, the Government will review regulations on fuel-cell vehicles and hydrogen infrastructure and support the introduction of hydrogen stations. And the Government will promote further improvement of performance of automobiles through fuel efficiency standards (as the "Top Runner Standard") and take preferential tax treatment measures targeted at gasoline-based vehicles in accordance with their fuel efficiency.	1979 (When the Fuel Efficiency Standards were determined based on the Energy Saving Law)	MLIT, METI		NE

Table 3

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

Name of mitigation action ^a		Sector(s) affected ^b	GHG(s) affected	Objective and/or activity affected	Type of instrument ^c	Status of implementation ^d	Brief description ^e	Start year of implementation	Implementing entity or entities	Estimate of mitigation impact (not cumulative, in kt CO ₂ eq)	
Promotion of Traffic Flow Management/Promotion of the Environmentally-friendly Usages of Vehicles (Note 1)		Transport	CO ₂	Reduce CO2 emissions from energy consumption in the transport sector through the following measures: improving the main traffic network using loop roads, and promoting the development of Intelligent Transport Systems (ITS) and roads for bike.	Other (Budget/Subsidy, Awareness Raising)	Implemented	The Government will improve the main traffic network using loop roads which is effective to reduce CO2 emissions and will provide information which is effective for drivers to select the best routes to their destinations, such as information on traffic congestions, by utilizing Intelligent Transport System (ITS) spots set on highways. The Government will also rearrange the traffic environment for bike users.	2012 (Priority Plan for Social Infrastructure Development)	MLIT		NE
Promotion of the Use of Public Transports (Note 1)		Transport	CO ₂	Reduce CO2 emissions from energy consumption in the transport sector by improving the service and convenience of trains and buses as well as promoting eco-commuting.	Other (Taxation,Budget/Subsidy,Awareness Raising)	Implemented	The Government will reconstruct the public transport networks in communities and improve their convenience by installing BRT and LRT, developing new line railroad, installing transport connection information system and location system for buses etc.	1992	MLIT		NE
Promoting Low-Carbonization of Railway, Vessel and Aviation) (Note 1)		Transport	CO ₂	Reduce CO2 emissions from energy consumption in the transport sector by promoting the development and introduction of energy-efficient railways, vessels and aircraft.	Other (Taxation,Budget/Subsidy,Financing,Technology Development)	Implemented	The Eco-Rail Line project, which will implement the introduction of highly energy efficient vehicles and renewable energy to railway facilities etc. will be promoted. Manufacturing of "super-eco ships" and alternation to the manufacturing of vessels with energy-efficient equipment will be promoted. The Government will promote efficient operating method for aircrafts and low-carbonization of airport facilities including increased use of ground power unit (GPU) etc.	2005	MLIT		NE

Table 3

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

Name of mitigation action ^a		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)	
More Efficient Logistics/Modal shifts etc. (Note 1)		Transport	CO ₂	Reduce CO2 emissions from energy consumption in the transport sector by improving the efficiency of truck transport and promoting modal shifts to trains and coastal shipping.	Other (Taxation,Budget/ Subsidy,Financin g,Awareness Raising)	Implemented	The Government will improve the efficiency of truck transport by encouraging the use of larger trucks such as large CNG trucks and promoting cooperative transport and delivery by logistics operators etc. within regions. Introduction of large containers (over 31ft), which is efficient to promote phasing out from larger trucks use and promotion of the "Eco-Rail Mark" etc. will be promoted to achieve the modal shift to rail freight transport and introduction of trucks with separable trailers and promotion of the "Eco-Ship Mark" etc. will be promoted to achieve the modal shift to coastal shipping. The Government will aim at further reduction of environmental load by strengthening a partnership between owners of goods and operators of logistics.	2001	MLIT, MOE, METI		NE

Table 3

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

Name of mitigation action ^a		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)	
Promotion of Power from Renewable Energy Sources (Note 1)		Energy	CO ₂	Reduce CO2 emissions from energy supply by promoting the thorough use of renewable energies such as onshore/offshore wind power, solar power, small-scale hydro power, geothermal power and biomass.	Other (Law,Budget/Subsidy,Taxation,Technology Development)	Implemented	The Government will steadily and stably operate feed-in-tariff scheme on renewable energies. In terms of wind power generation, the Government will promote its introduction by regulatory and institutional reform including the streamlining the procedure of environmental impact assessment and rationalization of safety regulations urgent introduction of large storage batteries for the power system, creating a condition for early strengthening of Hokkaido-Honshu Electric Power Interconnection Facility, and the rearrangement and operation tests for the power grid. For the promotion of geothermal power generation, the Government will work on the regulatory and institutional reform including streamlining the procedure of environmental impact assessment and rationalization of the safety regulations to enhance the use of small-scale geothermal power generation using the existing wells at hot springs, and promote understanding of people in the local level. For biomass energy, the Government will focus on the promotion of industrialization and introduction of biomass energy by establishing the framework to promote actions aiming at developing the primary sector with using the renewable energy and achieving the use of local biomass energy in approximately 100 regions in 5 years. The Government will support arrangement of infrastructure and conduct technological demonstration etc. for the energy use of urban biomass use such as sewage sludge.	n/a	METI, MOE, Related Ministries and Agencies		NE

Table 3

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

Name of mitigation action ^a		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)	
More Efficient Thermal Power Generation (Note 1)		Energy	CO ₂	Advance introduction of highly efficient thermal power generation (coal/LNG) with environmental considerations, and make efforts to improve power generation efficiency further by advancing technology development with regard to the clarified and accelerated environmental assessment agreed by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.	Other (Law/Standard,Bu dget/Subsidy,Tec hnology Development)	Implemented	The Government will promote development of framework for managing CO2 emissions with participation of the whole stakeholders of power generation, which should be consistent with the national GHG emissions reduction target based on the review of energy policies and energy- mix. And environmental assessments will be implemented with the focus of applying most- advanced technologies of electricity generations etc. which have already been commercialized and under operation. Speeding-up the process of environmental assessment on replacements and introduction/expansion of thermal power plants will also be promoted. The Government will promote technology development of the Advanced Ultra- Supercritical pressure steam power plants, the Integrated Coal Gasification Fuel Cell Combined Cycle (IGFC) , and LNG gas turbines of 1700°C, which aims at commercialization of the technologies. Concerning carbon dioxide capture and storage (CCS), the Government will accelerate technological development for practical use around 2020s and conduct survey on potential CO2 storage sites for CCS precondition in order to obtain outcomes at an early date. Also the Government will consider the possibility of coal thermal power plants being equipped with CCS by 2030 on the precondition of commercialization, make it clear what to expect on CCS Ready along with considerations about the progress of survey on the sites and commercialization, and consider the possibility of the introduction of CCS Ready power plants	n/a	METI, MOE		NE

Table 3

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

Name of mitigation action ^a		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)	
Increased Use of Blended Cement		Industry/industrial processes	CO ₂	Reduce CO2 emissions in the cement production process by reducing the production volume of clinker through increased production proportion and expanded use of blended cement, which is made by mixing blast-furnace slag with clinker, an intermediate cement product.	Other (Law/Standard,Awareness Raising)	Implemented	Based on the Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities (Green Purchasing Law), the Government will encourage the use of blended cement in public construction. Buildings using blended cement will be certificated as low-carbon buildings based on the "Low Carbon City Act".	Year 2001 (Based on the Green Purchasing Law, blended cement is designated as the eco-friendly goods.)	MOE, METI		660.00
Promotion of Waste Reduction and Recycling (Note 2)		Waste management/waste	CO ₂	Reduce CO2 emissions from waste incineration by promoting the waste reduction and recycling.	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	The Government will promote 3 Rs initiatives for achieving the targets set out in the "Basic Plan for Establishing a Recycling-Based Society", formulated in accordance with the "Basic Act on Establishing a Sound Material-Cycle Society"(Basic Recycling Law) as well as the waste reduction targets set out in the "Waste Management and Public Cleansing Law" in line with the target set in Basic Recycling Law. Specifically, the Government will promote waste reduction and recycling by thorough waste sorting and collection as well as imposition of charges for waste collection by municipal governments, actions complying with individual Recycling Laws and actions based on the Guidelines for Controlling Greenhouse Gas Emissions. Also, the amount of incinerated wastes will be reduced by promoting the arrangement of waste disposal facilities which contribute to the realization of 3Rs in line with the waste disposal facilities development plan based on the "Waste Management and Public Cleansing Law".	2013	MOE		200.00

Table 3

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

Name of mitigation action ^a		Sector(s) affected ^b	GHG(s) affected	Objective and/or activity affected	Type of instrument ^c	Status of implementation ^d	Brief description ^e	Start year of implementation	Implementing entity or entities	Estimate of mitigation impact (not cumulative, in kt CO ₂ eq)	
Reducing direct landfill disposal of organic waste (Note 2)		Waste management/waste	CH ₄	Reduce methane emissions associated with waste landfill, by promoting the reduction of organic waste such as garbage going directly to landfill.	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	The Government will promote 3 Rs initiatives for achieving the targets set out in the "Basic Plan for Establishing a Recycling-Based Society", formulated in accordance with the “Basic Act on Establishing a Sound Material-Cycle Society” (Basic Recycling Law) as well as the waste reduction targets set out in the “Waste Management and Public Cleansing Law” in line with the target set in Basic Recycling Law. Specifically, the Government will promote waste reduction and recycling by thorough waste sorting and collection as well as imposition of charges for waste collection by municipal governments, reducing illegal dumping of industrial wastes through more strict waste disposal systems and the development of model disposal operators, and actions complying with individual Recycling Laws and actions based on the Guidelines for Controlling Greenhouse Gas Emissions. At the same time, the Government will reduce the amount of direct landfill of organic waste by promoting the improvement of the systems for waste disposal facilities of municipalities, including through banning the direct disposal to landfill of organic wastes in principle, in accordance with the waste disposal facilities development plan based on the "Waste Management and Public Cleansing Law".	2013	MOE		400.00
Improvement of the Management of Organic Matter and Water		Agriculture	CH ₄	Reduce methane emissions associated with rice cultivation by promoting the replacement from plowing in rice straw which has relatively higher methane emission intensity with application of compost which has lower emission intensity.	Other (Law/Standard,Budget/Subsidy)	Implemented	The Government will support the initiatives to enable replacing the conventional approach of plowing in rice straw with application of compost such as installing compost generating facilities and converting agricultural activities into ones which are effective for global warming mitigation. Through the reduction of methane emissions, the Government will contribute to sustainable agricultural production harmonized with the environment.	2007	MAFF		NE

Table 3

JPN_BR1_v1.0

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

<i>Name of mitigation action^a</i>		<i>Sector(s) affected^b</i>	<i>GHG(s) affected</i>	<i>Objective and/or activity affected</i>	<i>Type of instrument^c</i>	<i>Status of implementation^d</i>	<i>Brief description^e</i>	<i>Start year of implementation</i>	<i>Implementing entity or entities</i>	<i>Estimate of mitigation impact (not cumulative, in kt CO₂ eq)</i>	
Upgrading combustion technology at sewage sludge incineration facilities		Waste management/waste	N ₂ O	Reduce nitrous oxide from the incineration of sewage sludge by improving the incineration technology of facilities for sewage sludge and converting it into solid fuel.	Other (Taxation,Budget/Subsidy,Technology Development)	Implemented	The Government will support the development of turbo incinerators and will support construction and update of high-temperature incinerators. The Government will also conduct practical research of technologies of solid fuel power generator which uses waste heat, and will provide tax exemption on investing in obtaining facilities for storing solid fuel derived from sewage mire.	2001 (the level of sophistication of combusting sewage sludge at sewage treatment facilities was standardized)	MLIT		NE
Upgrading combustion technology at general waste incineration facilities		Waste management/waste	N ₂ O	Reduce nitrous oxide from waste incineration by promoting more advanced incineration technology for facilities for general waste and the 3Rs for waste products.	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	The Government will promote the upgrade of combustion technology at general waste incineration facilities such as implementing consecutive operation of consecutive incinerator. The Government will reduce the amount of waste incineration by promoting the 3Rs initiatives for achieving the targets set out in the "Basic Plan for Establishing a Recycling-Based Society", formulated in accordance with the "Basic Act on Establishing a Sound Material-Cycle Society" (Basic Recycling Law) as well as the waste reduction targets set out in the "Waste Management and Public Cleansing Law" in line with the target set in Basic Recycling Law, and by promoting the arrangement of waste disposal facilities which contribute to the realization of 3Rs in line with the waste disposal facilities development plan based on the "Waste Management and Public Cleansing Law".	2013	MOE		NE
Appropriation and Reduction of the Amount of Fertilizer Used		Agriculture	N ₂ O	Reduce nitrous oxide emissions associated with the application of fertilizers through the use of lower fertilizer application rates, split-application regimes and slow-release fertilizers.	Other (Law/Standard,Budget/Subsidy)	Implemented	For nitrous oxide associated with the application of fertilizers, the Government will provide support for fertilization plan revision to reduce amount of fertilizer as well as agricultural activities which are effective for the global warming mitigation. Through the reduction of nitrous oxide, the Government will contribute to sustainable agriculture production harmonized with the environment.	2007	MAFF		NE

Table 3

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

Name of mitigation action ^a		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)	
Holistic policies to reduce the emissions of fluorinated gases (Note 3)		Industry/industrial processes	HFCs	Control the emission volume of fluorocarbons by promoting the rational use of fluorocarbons by the person concerned at each stage of the life cycle of fluorocarbons and also by promoting the proper management of fluorocarbons.	Other (Law/Standard,Taxation,Budget/Subsidy,Technology Development,Awareness Raising) Education Voluntary Agreement	Implemented	According to the Act on Rational Use and Proper Management of Fluorocarbons (June 2013), the Government will work on the following: practically phasing down fluorocarbons by gas suppliers, eliminating fluorocarbons from products and lowering GWP of products by manufacturers of equipment and products, preventing leakage of fluorocarbons from refrigeration and air conditioning equipment for business use during normal operation period by end-users, and enhancing and strengthening regulations on recycling and destruction programs. In addition, the Government will promote the technological development of fluorocarbon-free equipment and support for the introduction of such equipment as well as the promotion of the Voluntary Action Plan in industry.	2001 (Fluorocarbons Recovery and Destruction Law was adopted)	MOE, METI		9,700.00
Forest Sink Strategies (Note 4)		Forestry/LULUCF	CO ₂	Maintain and strengthen the CO2 absorption functions of forests through appropriate management of forests such as thinning.	Other (Law/Standard,Budget/Subsidy,Technology Development,Awareness Raising)	Implemented	In accordance with "Basic Plan for Forest and Forestry" and "Act on Special Measures concerning Advancement of Implementation of Forest Thinning, etc." (2013), the Government will aim to secure the upper forest absorption level agreed in COP17, 3.5% (average of the period from 2013 to 2020) and contribute to the forest sector in the future. In order to achieve these objectives, the Government will work on the following through a variety of policy approaches: appropriate forest development such as thinning and afforestation, the proper management and preservation of protected and other forests, promoting the use of timber and woody biomass, promoting forest development programs where people participate in, accelerated implementation of initiatives to establish sustainable forest management practices, and promoting measures to diffuse seeds and seedlings that grow well.	2007	MAFF		38,000.00

Table 3

JPN_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)	
Measurement for Sink Source in Agricultural Soil		Forestry/LULUCF	CO ₂	Improve the carbon storage in both agricultural lands and pasture soils to enhance carbon sink.	Other (Law/Standard,Budget/Subsidy,Technology Development,Awareness Raising)	Implemented	It is proven that the carbon storage in Japanese agricultural lands and pasture soils can be increased by continuous usage of organic matter in fertilizers and green manures. By promoting these methods, it contributes to the increased carbon storage in both agricultural lands and pasture soils.	2008	MAFF		NE
Promotion of Urban Greening		Forestry/LULUCF	CO ₂	Promote urban greening to preserve and strengthen their carbon sink capacity.	Other (Law/Standard,Budget/Subsidy,Technology Development,Awareness Raising)	Implemented	Actions will be promoted such as park maintenance, greening in roads and bays, and creation of the new greening spaces at buildings. Improvement in report and verification system for the urban greening will also be strategically carried out.	2006	MLIT		NE
GHG Emissions Accounting, Reporting and Disclosure Program		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Make it mandatory for those who exceed more than a certain amount of greenhouse gas emissions to calculate emission volume and report it to the Government. The reported data is collected and published by the Government.	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	The Government will further enhance and strengthen a system for accounting, reporting and disclosing greenhouse gas emissions data while steadily operating it in accordance with the Act on Promotion of Global Warming Countermeasures.	2006	MOE, METI		
Making the Tax System Greener		Other (Cross-Sectoral)	CO ₂	The Government will pursue greening of the entire tax system including energy and vehicle taxes.	Other (Taxation)	Implemented	The Government will utilize the tax revenue of “Tax for Climate Change Mitigation”, designed to add an extra tax multiplier commensurate with CO2 emission levels from the all fossil fuel combustion and will firmly implement the various policies to curb energy-originated CO2 emissions. Additionally, the Government will also strengthen greener taxation system on vehicle taxes by ensuring the concept of “Reducing taxes for Goods, Increasing taxes for Bads” according to the environmental impact.	n/a	MOE		

Table 3

JPN_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)	
Promotion of Environmentally-conscious business activities		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Formulate and publish the guidelines for measures to be taken by business operators in controlling greenhouse gas emissions generating from their business activities.	Other (Law/Standard,Budget/Subsidy,Awareness Raising)	Implemented	The Government will promote voluntary and active actions by business operators to implement environmentally-conscious business activities through the formulation of ‘Guidelines for Controlling Greenhouse Gas Emissions’ based on the Law for Promotion of Global Warming Countermeasures. In addition, the Government will review the guidelines based on the trends of available cutting-edge technologies in the fields.	2008	MOE, METI, MAFF		
Greening Finance		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Develop support measures to stimulate private investments in greenhouse gas reduction measures by supporting low-carbon projects through investments and promoting the use of lease methods. The Government will promote loans based on environmental responsibility ratings and socially responsible investments (SRI).	Other (Budget/Subsidy, Awareness Raising)	Implemented	The Government will establish a fund for promoting regional low-carbon investments that invests in low-carbon projects in order to stimulate private investment. To reduce the burdens of a large amount of initial investment costs for households and business operators, the Government will subsidize them when they lease low-carbon equipment. The Government will promote environmental finance by providing interst subsidies and support the principles for financial action towards a sustainable society, etc.	2007	MOE		
Promoting J-Credit system		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Certify greenhouse gas emission reductions and absorptions in Japan.	Other (Budget/Subsidy)	Implemented	The Government will operate a system that certifies emission reductions and absorptions in Japan as J-credits, which can be used for various purposes such as achieving the goals of the Commitment to a Low-Carbon Society as well as carbon offsets.	2013	MOE, METI, MAFF		

Table 3

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

Name of mitigation action ^a		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)	
Developing Public Campaigns		Other (Cross-Sectoral)	CH ₄ , CO ₂ , HFCs, N ₂ O, PFCs, SF ₆	Foster the understanding of global warming countermeasures and promote the transformation of lifestyle habits into one that are appropriate for a low carbon society as well as the penetration of its effects.	Other (Budget/Subsidy, Awareness Raising)	Implemented	The Government will enhance public understanding of global warming issues by providing clear information on adverse impacts of global warming. In addition, the Government will aim to transform the current lifestyle of people into the one appropriate for a low carbon society, by promoting “Cool Biz,” “Warm Biz,” and carbon offsets as well as the diffusion of eco-drive and car sharing.	2005	MOE		

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

*1: Targets will be reviewed based on the progress of discussions about forthcoming energy policy and energy mix etc., and emissions reduction effect of energy-originated CO2 through each policy will also be scrutinised.

*2: Estimated figures of mitigation impacts of 'Reducing waste output and promoting reuse and recycling' in 'Emissions Reduction of Non Energy-originated CO2' and 'Reducing direct landfill disposal of organic waste' in 'Emissions Reduction of Methane' are under scrutiny.Mitigation impacts of other policies for emissions control of non energy-originated CO2, methane and nitrous oxide as well as greenhouse gas sink will also be scrutinised.

*3: Mitigation impact of 'Holistic policies to reduce the emissions of fluorinated gases' is estimated to be 9,700-15,600 ktCO2.

*4: Mitigation impact of 'Forest Sink Strategies' is estimated to be more than 38,000 ktCO2.

Table 4

JPN_BR1_v1.0

Reporting on progress^{a, b}

	<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>Year^c</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>
(2005)	1,351,406.69	NA		NA		NA
2010	1,257,380.64	49,802.91		0.00		0.00
2011	1,307,728.35	52,187.72	0.00	0.00	0.00	0.00
2012	NE	NE	0.00	0.00	0.00	0.00

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

Table 4(a)I

JPN_BR1_v1.0

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

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

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)I

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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}

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

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.

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 ^g		
	(kt CO ₂ eq)							
A. Article 3.3 activities								
A.1. Afforestation and Reforestation								-1'786.15
A.1.1. Units of land not harvested since the beginning of the commitment periodj		-426.83	-441.27	-456.02	-462.04	-1,786.15		-1'786.15
A.1.2. Units of land harvested since the beginning of the commitment periodj								
A.2. Deforestation		2,644.68	3,277.13	5,067.44	2,021.92	13,011.18		13011.17752
B. Article 3.4 activities								
B.1. Forest Management (if elected)		-46,917.90	-48,732.58	-53,286.10	-52,606.06	-201,542.65		- 201542.64919
3.3 offset ^k							11225.02809	- 11225.02809
FM cap ^l							238333.33333	- 190317.6211
B.2. Cropland Management (if elected)	NA	NA	NA	NA	NA	NA	NA	NA
B.3. Grazing Land Management (if elected)	NA	NA	NA	NA	NA	NA	NA	NA
B.4. Revegetation (if elected)	-77.87198	-1,080.00	-1,110.44	-1,128.23	-1,141.54	-4,460.21	-311.48793	-4148.72385

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:

Table 4(b)

JPN_BR1_v1.0

Reporting on progress^{a, b, c}

Units of market based mechanisms			Year	
			2011	2012
Kyoto Protocol units ^d	Kyoto Protocol units	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	AAUs	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	ERUs	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	CERs	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	tCERs	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	ICERs	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
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)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
	JCM	(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00
Total		(number of units)	0.00	0.00
		(kt CO ₂ eq)	0.00	0.00

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

JPN_BR1_v1.0

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

<i>Key underlying assumptions</i>		<i>Historical^b</i>						Projected			
<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>Actual GDP</i>	<i>trillion JPY (at chained 2005 prices)</i>			476.72	507.16	510.99			610.60		
Nominal GDP	trillion JPY			510.83	505.35	479.20			620.70		
Total Population	thousands	123,611.00		126,926.00	127,768.00	128,057.00			124,100.00		
Private households	thousands	40,670.00		46,782.00	49,063.00	51,842.00			53,053.00		

^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)

JPN_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 (2005)	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	976,252.65	863,418.34	900,625.35	926,880.11	976,252.65	916,799.27	969,774.14	NE	NE
Transport	250,568.51	215,556.95	256,126.99	263,964.14	250,568.51	228,163.05	224,705.75	NE	NE
Industry/industrial processes	73,919.77	130,627.29	121,798.33	94,686.17	73,919.77	65,948.24	67,260.82	NE	NE
Agriculture	26,366.07	31,090.31	29,860.50	27,464.89	26,366.07	25,517.48	25,402.27	NE	NE
Forestry/LULUCF	-88,827.76	-69,532.34	-80,593.70	-85,977.95	-88,827.76	-75,771.61	-75,434.10	NE	NE
Waste management/waste	24,299.70	25,978.36	29,315.17	29,092.22	24,299.70	20,952.60	20,585.38	NE	NE
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF	1,193,277.39	1,071,525.74	1,143,035.00	1,165,445.29	1,193,277.39	1,115,286.51	1,165,239.66	NE	NE
CO ₂ emissions excluding net CO ₂ from LULUCF	1,282,128.45	1,141,137.74	1,223,687.33	1,251,460.72	1,282,128.45	1,191,068.27	1,240,684.47	1,278,000.00	NE
CH ₄ emissions including CH ₄ from LULUCF	23,024.28	32,139.58	29,908.16	26,141.51	23,024.28	20,744.71	20,304.37	NE	NE
CH ₄ emissions excluding CH ₄ from LULUCF	23,015.10	32,131.07	29,899.43	26,133.73	23,015.10	20,740.57	20,299.01	18,000.00	NE
N ₂ O emissions including N ₂ O from LULUCF	23,960.37	31,633.60	32,696.73	28,950.52	23,960.37	21,999.45	21,629.00	NE	NE
N ₂ O emissions excluding N ₂ O from LULUCF	23,946.25	31,562.46	32,646.83	28,920.82	23,946.25	21,993.44	21,623.64	22,000.00	NE
HFCs	10,518.22	17,930.00	20,260.17	18,800.43	10,518.22	18,307.23	20,467.03	41,000.00	NE
PFCs	6,990.73	5,670.00	14,271.14	9,583.35	6,990.73	3,408.71	3,016.35	3,000.00	NE
SF ₆	4,807.94	38,240.00	16,961.45	7,188.49	4,807.94	1,862.42	1,637.85	2,000.00	NE
Other (specify)									
Total with LULUCF^f	1,262,578.93	1,197,138.92	1,257,132.65	1,256,109.59	1,262,578.93	1,181,609.03	1,232,294.26	46,000.00	NE
Total without LULUCF	1,351,406.69	1,266,671.27	1,337,726.35	1,342,087.54	1,351,406.69	1,257,380.64	1,307,728.35	1,364,000.00	NE

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

Table 6(a)

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 (2005)	1990	1995	2000	2005	2010	2011	2020	2030

^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

^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

with LULUCF" for 2020 is just only the total amount of HFC, PFC and SF6 emissions.The emission intensity for FY2012 is used to project energy-originated CO2 in the estimation for "Total without LULUCF" for 2020. Also, the emission reduction impact from measures such as refrigerant management is not reflected in the emissions from the fluorinated gases.

Table 6(b)

JPN_BR1_v1.0

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>							(kt CO ₂ eq)	
	<i>Base year (2005)</i>	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	976,252.65	863,418.34	900,625.35	926,880.11	976,252.65	916,799.27	969,774.14		
Transport	250,568.51	215,556.95	256,126.99	263,964.14	250,568.51	228,163.05	224,705.75		
Industry/industrial processes	73,919.77	130,627.29	121,798.33	94,686.17	73,919.77	65,948.24	67,260.82		
Agriculture	26,366.07	31,090.31	29,860.50	27,464.89	26,366.07	25,517.48	25,402.27		
Forestry/LULUCF	-88,827.76	-69,532.34	-80,593.70	-85,977.95	-88,827.76	-75,771.61	-75,434.10		
Waste management/waste	24,299.70	25,978.36	29,315.17	29,092.22	24,299.70	20,952.60	20,585.38		
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF	1,193,277.39	1,071,525.74	1,143,035.00	1,165,445.29	1,193,277.39	1,115,286.51	1,165,239.66		
CO ₂ emissions excluding net CO ₂ from LULUCF	1,282,128.45	1,141,137.74	1,223,687.33	1,251,460.72	1,282,128.45	1,191,068.27	1,240,684.47		
CH ₄ emissions including CH ₄ from LULUCF	23,024.28	32,139.58	29,908.16	26,141.51	23,024.28	20,744.71	20,304.37		
CH ₄ emissions excluding CH ₄ from LULUCF	23,015.10	32,131.07	29,899.43	26,133.73	23,015.10	20,740.57	20,299.01		
N ₂ O emissions including N ₂ O from LULUCF	23,960.37	31,633.60	32,696.73	28,950.52	23,960.37	21,999.45	21,629.00		
N ₂ O emissions excluding N ₂ O from LULUCF	23,946.25	31,562.46	32,646.83	28,920.82	23,946.25	21,993.44	21,623.64		
HFCs	10,518.22	17,930.00	20,260.17	18,800.43	10,518.22	18,307.23	20,467.03		
PFCs	6,990.73	5,670.00	14,271.14	9,583.35	6,990.73	3,408.71	3,016.35		
SF ₆	4,807.94	38,240.00	16,961.45	7,188.49	4,807.94	1,862.42	1,637.85		
Other (specify)									
Total with LULUCF^f	1,262,578.93	1,197,138.92	1,257,132.65	1,256,109.59	1,262,578.93	1,181,609.03	1,232,294.26		
Total without LULUCF	1,351,406.69	1,266,671.27	1,337,726.35	1,342,087.54	1,351,406.69	1,257,380.64	1,307,728.35		

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

Table 6(b)

JPN_BR1_v1.0

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>							(kt CO ₂ eq)	
	<i>Base year (2005)</i>	1990	1995	2000	2005	2010	2011	2020	2030

^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)

JPN_BR1_v1.0

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>							(kt CO ₂ eq)	
	<i>Base year (2005)</i>	1990	1995	2000	2005	2010	2011	2020	2030
Sector^{d,e}									
Energy	976,252.65	863,418.34	900,625.35	926,880.11	976,252.65	916,799.27	969,774.14		
Transport	250,568.51	215,556.95	256,126.99	263,964.14	250,568.51	228,163.05	224,705.75		
Industry/industrial processes	73,919.77	130,627.29	121,798.33	94,686.17	73,919.77	65,948.24	67,260.82		
Agriculture	26,366.07	31,090.31	29,860.50	27,464.89	26,366.07	25,517.48	25,402.27		
Forestry/LULUCF	-88,827.76	-69,532.34	-80,593.70	-85,977.95	-88,827.76	-75,771.61	-75,434.10		
Waste management/waste	24,299.70	25,978.36	29,315.17	29,092.22	24,299.70	20,952.60	20,585.38		
Other (specify)									
Gas									
CO ₂ emissions including net CO ₂ from LULUCF	1,193,277.39	1,071,525.74	1,143,035.00	1,165,445.29	1,193,277.39	1,115,286.51	1,165,239.66		
CO ₂ emissions excluding net CO ₂ from LULUCF	1,282,128.45	1,141,137.74	1,223,687.33	1,251,460.72	1,282,128.45	1,191,068.27	1,240,684.47		
CH ₄ emissions including CH ₄ from LULUCF	23,024.28	32,139.58	29,908.16	26,141.51	23,024.28	20,744.71	20,304.37		
CH ₄ emissions excluding CH ₄ from LULUCF	23,015.10	32,131.07	29,899.43	26,133.73	23,015.10	20,740.57	20,299.01		
N ₂ O emissions including N ₂ O from LULUCF	23,960.37	31,633.60	32,696.73	28,950.52	23,960.37	21,999.45	21,629.00		
N ₂ O emissions excluding N ₂ O from LULUCF	23,946.25	31,562.46	32,646.83	28,920.82	23,946.25	21,993.44	21,623.64		
HFCs	10,518.22	17,930.00	20,260.17	18,800.43	10,518.22	18,307.23	20,467.03		
PFCs	6,990.73	5,670.00	14,271.14	9,583.35	6,990.73	3,408.71	3,016.35		
SF ₆	4,807.94	38,240.00	16,961.45	7,188.49	4,807.94	1,862.42	1,637.85		
Other (specify)									
Total with LULUCF^f	1,262,578.93	1,197,138.92	1,257,132.65	1,256,109.59	1,262,578.93	1,181,609.03	1,232,294.26		
Total without LULUCF	1,351,406.69	1,266,671.27	1,337,726.35	1,342,087.54	1,351,406.69	1,257,380.64	1,307,728.35		

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

Table 6(c)

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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>							(kt CO ₂ eq)	
	<i>Base year (2005)</i>	1990	1995	2000	2005	2010	2011	2020	2030

^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

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

Allocation channels	Year									
	Japanese yen - JPY					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:	75,639.89			37,174.70	0.00	657.77			323.28	0.00
Multilateral climate change funds ^g	49,268.97			37,174.70	0.00	428.45			323.28	0.00
Other multilateral climate change funds ^h	37,062.00			37,062.00		322.30			322.30	
Multilateral financial institutions, including regional development banks	16,535.86			NE		143.80			NE	
Specialized United Nations bodies	9,835.06			NE		85.52			NE	
Total contributions through bilateral, regional and other channels		117,622.17	12,048.17	3,008.00	352,421.75		702.16	104.77	26.15	2,984.54
Total	75,639.89	117,622.17	12,048.17	40,182.70	352,421.75	657.77	702.16	104.77	349.43	2,984.54

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:

New and Additional Climate Finance

Japan defines new and additional climate finance as newly committed or disbursed finance which contributes to climate change measures in developing countries.

International assistance for climate change is essential to strengthening momentum for greenhouse gas emission reductions all over the globe, and continues to be a major priority for Japan. Japan seeks new funding from Diet on an annual basis. Our reported climate finance is newly committed or disbursed finance during a given period. In other words, we do not include previously committed or disbursed climate finance.

Table 7

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

Allocation channels	Year									
	Japanese yen - JPY					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:	81,024.21			37,229.90	575.00	704.57			323.76	5.00
Multilateral climate change funds ^g	49,899.17			37,229.90	575.00	433.93			323.76	5.00
Other multilateral climate change funds ^h	37,062.00			37,062.00		322.30			322.30	
Multilateral financial institutions, including regional development banks	21,172.91			NE		184.10			NE	
Specialized United Nations bodies	9,952.13			NE		86.54			NE	
Total contributions through bilateral, regional and other channels		19,662.17	8,940.80	785.00	463,794.40		171.14	79.17	6.95	3,509.92
Total	81,024.21	19,662.17	8,940.80	38,014.90	464,369.40	704.57	171.14	79.17	330.71	3,514.92

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:

New and Additional Climate Finance

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International assistance for climate change is essential to strengthening momentum for greenhouse gas emission reductions all over the globe, and continues to be a major priority for Japan. Japan seeks new funding from Diet on an annual basis. Our reported climate finance is newly committed or disbursed finance during a given period. In other words, we do not include previously committed or disbursed climate finance.

Table 7(a)

Provision of public financial support: contribution through multilateral channels in 2011^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						
	Japanese yen - JPY	USD	Japanese yen - JPY	USD					
Total contributions through multilateral channels	75,639.89	657.77	37,174.70	323.28					
Multilateral climate change funds ^g	49,268.97	428.45	37,174.70	323.28					
1. Global Environment Facility	12,094.27	105.17	NE	NE	Committed	ODA	Grant	Cross-cutting	Cross-cutting
2. Least Developed Countries Fund	0.00	0.00	0.00	0.00	Provided				
3. Special Climate Change Fund	0.00	0.00	0.00	0.00	Provided				
4. Adaptation Fund	0.00	0.00	0.00	0.00	Provided				
5. Green Climate Fund	NA	NA	NA	NA	Provided				
6. UNFCCC Trust Fund for Supplementary Activities	112.70	0.98	112.70	0.98	Provided	ODA	Grant	Cross-cutting	Cross-cutting
7. Other multilateral climate change funds	37,062.00	322.30	37,062.00	322.30					
Climate Investment Fund	37,062.00	322.30	37,062.00	322.30	Provided	ODA	Grant	Cross-cutting	Cross-cutting
Multilateral financial institutions, including regional development banks	16,535.86	143.80	NE	NE					
1. World Bank	8,527.70	74.15	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
2. International Finance Corporation	747.60	6.50	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
3. African Development Bank	142.40	1.24	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
4. Asian Development Bank	6,601.58	57.41	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
5. European Bank for Reconstruction and Development	30.64	0.27	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
6. Inter-American Development Bank	485.94	4.23	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
7. Other									
Specialized United Nations bodies	9,835.06	85.52	NE	NE					
1. United Nations Development Programme	9,254.05	80.47	NE	NE					
Total	9,254.05	80.47	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
2. United Nations Environment Programme	581.01	5.05	NE	NE					
Total	581.01	5.05	NE	NE	Provided	Other (ODA, Other)	Grant	Cross-cutting	Cross-cutting
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

The unit of JPY is "million Japanese Yen", and the unit of USD is "million US dollars".The exchange rate is 115JPY/USD.It is difficult to quantitatively specify the amount of contributions for climate-specific purpose because whether the funds provided to each institutions are used for climate change related sectors or not depends on the judgement of each institution. Therefore, the amount of contribution for "Climate-specific" are reported as "NE".

Table 7(a)

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						
	Japanese yen - JPY	USD	Japanese yen - JPY	USD					
Total contributions through multilateral channels	81,024.21	704.57	37,804.90	328.76					
Multilateral climate change funds ^g	49,899.17	433.93	37,804.90	328.76					
1. Global Environment Facility	12,094.27	105.17	NE	NE	Committed	ODA	Grant	Cross-cutting	Cross-cutting
2. Least Developed Countries Fund	0.00	0.00	0.00	0.00	Provided				
3. Special Climate Change Fund	0.00	0.00	0.00	0.00	Provided				
4. Adaptation Fund	0.00	0.00	0.00	0.00	Provided				
5. Green Climate Fund	575.00	5.00	575.00	5.00	Provided	ODA	Grant	Other ()	Other (Other)
6. UNFCCC Trust Fund for Supplementary Activities	167.90	1.46	167.90	1.46	Provided	ODA	Grant	Cross-cutting	Cross-cutting
7. Other multilateral climate change funds	37,062.00	322.30	37,062.00	322.30					
Climate Investment Fund	37,062.00	322.30	37,062.00	322.30	Provided	ODA	Grant	Cross-cutting	Cross-cutting
Multilateral financial institutions, including regional development banks	21,172.91	184.10	NE	NE					
1. World Bank	12,331.59	107.23	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
2. International Finance Corporation	700.40	6.09	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
3. African Development Bank	372.60	3.24	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
4. Asian Development Bank	6,936.13	60.31	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
5. European Bank for Reconstruction and Development	36.12	0.31	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
6. Inter-American Development Bank	796.07	6.92	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
7. Other									
Specialized United Nations bodies	9,952.13	86.54	NE	NE					
1. United Nations Development Programme	9,442.65	82.11	NE	NE					
Total	9,442.65	82.11	NE	NE	Provided	ODA	Grant	Cross-cutting	Cross-cutting
2. United Nations Environment Programme	509.48	4.43	NE	NE					
Total	509.48	4.43	NE	NE	Provided	Other (ODA, Other)	Grant	Cross-cutting	Cross-cutting
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

The unit of JPY is "million Japanese Yen", and the unit of USD is "million US dollars". The exchange rate is 115JPY/USD. It is difficult to quantitatively specify the amount of contributions for climate-specific purpose because whether the funds provided to each institutions are used for climate change related sectors or not depends on the judgement of each institution. Therefore, the amount of contribution for "Climate-specific" are reported as "NE".

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Total contributions through bilateral, regional and other channels	485,100.09	3,817.62						
Afghanistan /	1,425.00	12.39	Committed	ODA	Grant	Adaptation	Water and sanitation	
Africa /	358.50	3.12	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Cross-cutting, Other (Others)	
Albania /	175.00	1.52	Provided	ODA	Grant	Cross-cutting	Other (Others)	
Angola /	52.00	0.45	Provided	ODA	Grant	Mitigation	Forestry	
Asia /	448.00	3.90	Provided	ODA	Grant	Other (Adaptation, Mitigation)	Agriculture, Cross- cutting	
Asia, Africa /	137.00	1.19	Committed	ODA	Grant	Mitigation	Forestry	
Asia, Latin America /	270.00	2.35	Committed	OOF	Grant	Mitigation	Forestry	
Asia, Pacific /	747.00	6.50	Committed	ODA	Grant	Mitigation	Energy	
Bangladesh /	15,988.30	139.03	Committed	Other (ODA, OOF)	Other (Concessional Loan, Grant)	Other (Adaptation, Mitigation)	Water and sanitation, Energy, Other (Others)	
Bangladesh, Bhutan, Nepal /	95.00	0.13	Provided	ODA	Grant	Mitigation	Cross-cutting	
Benin /	115.00	1.00	Committed	ODA	Grant	Adaptation	Other (Others)	
Bhutan /	3,212.00	27.93	Committed	ODA	Other (Concessional Loan, Grant)	Other (Mitigation, Adaptation)	Energy, Water and sanitation, Other (Others)	
Botswana /	6.00	0.13	Provided	ODA	Grant	Mitigation	Energy	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Brazil /	50,978.00	323.29	Committed	Other (ODA, OOF)	Other (Concessional Loan, Grant, Non-Concessional Loan)	Mitigation	Energy, Water and sanitation, Forestry, Other (Others)	
Cambodia /	3,847.00	33.45	Committed	ODA	Grant	Other (Adaptation, Mitigation)	Agriculture, Forestry, Energy, Other (Others)	
Colombia, Indonesia, Lao People's Democratic Republic, Thailand, Viet Nam /	145.00	1.26	Provided	ODA	Grant	Adaptation	Agriculture	
Cambodia, Lao People's Democratic Republic, Thailand, Viet Nam /	86.00	0.75	Committed	ODA	Grant	Adaptation	Agriculture	
Cameroon /	3,321.00	28.88	Committed	ODA	Other (Concessional Loan, Grant)	Other (Mitigation, Adaptation)	Energy, Forestry, Agriculture	
Central America /	11,500.00	60.00	Committed	OOF	Non-Concessional Loan	Mitigation	Energy	
China /	1,663.00	14.46	Committed	Other (ODA, OOF)	Grant	Mitigation	Other (Others), Energy	
China, Viet Nam /	69.90	0.61	Committed	OOF	Grant	Mitigation	Energy	
Colombia /	81.00	0.70	Committed	ODA	Grant	Mitigation	Other (Others), Energy, Forestry	
Côte d'Ivoire /	470.00	4.09	Committed	ODA	Grant	Adaptation	Other (Others)	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Developing Countries /	192.14	1.67	Committed	Other (ODA, OOF)	Grant	Other (Adaptation, Cross-cutting, Mitigation)	Cross-cutting, Other (Others), Forestry, Agriculture	
Djibouti /	489.00	4.25	Committed	ODA	Grant	Adaptation	Water and sanitation	
Egypt /	310.00	2.70	Provided	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Water and sanitation	
El Salvador /	28.00	0.24	Provided	ODA	Grant	Mitigation	Energy	
Ethiopia /	1,274.00	11.08	Committed	ODA	Grant	Other (Cross-cutting, Adaptation)	Forestry, Other (Others)	
Fiji /	38.00	0.33	Provided	ODA	Grant	Cross-cutting	Forestry	
Gabon /	52.00	0.45	Provided	ODA	Grant	Mitigation	Forestry	
Ghana /	51.00	0.44	Committed	ODA	Grant	Mitigation	Forestry	
Great Rift Valley Area (Djibouti, Ethiopia, Rwanda) /	59.70	0.52	Committed	OOF	Grant	Mitigation	Energy	
Guatemala /	27.49	0.24	Committed	ODA	Grant	Mitigation	Forestry	
Guyana /	591.00	5.14	Committed	ODA	Grant	Adaptation	Other (Others)	
Honduras /	1,098.00	9.55	Committed	ODA	Grant	Adaptation	Other (Others)	
India /	198,274.70	1,644.13	Committed	Other (ODA, OOF)	Other (Concessional Loan, Grant)	Other (Cross-cutting, Mitigation, Adaptation)	Forestry, Water and sanitation, Energy	
India, Turkey /	45.30	0.39	Committed	OOF	Grant	Mitigation	Energy	
Indochina countries /	50.00	0.43	Provided	ODA	Grant	Mitigation	Forestry	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Indonesia /	63,826.25	555.01	Committed	Other (ODA, OOF)	Other (Concessional Loan, Grant)	Other (Mitigation, Adaptation, Cross-cutting)	Energy, Other (Others), Forestry, Water and sanitation	
Indonesia, Viet Nam /	45.00	0.39	Provided	ODA	Grant	Mitigation	Other (Others)	
Jordan /	1,958.00	17.03	Committed	ODA	Grant	Other (Cross-cutting, Adaptation)	Water and sanitation	
Kazakhstan /	15.00	0.13	Provided	ODA	Grant	Mitigation	Other (Others)	
Kenya /	1,306.70	11.36	Committed	Other (ODA, OOF)	Grant	Other (Adaptation, Mitigation)	Water and sanitation, Forestry, Agriculture, Energy, Other (Others)	
Kosovo /	674.00	5.86	Committed	ODA	Grant	Mitigation	Water and sanitation	
Kyrgyz /	220.00	1.91	Provided	ODA	Grant	Mitigation	Other (Others)	
Lao People's Democratic Republic /	50.00	0.43	Committed	ODA	Grant	Other (Cross-cutting, Mitigation)	Forestry, Other (Others)	
Latin America /	34,500.00	180.00	Committed	OOF	Non-Concessional Loan	Mitigation	Energy	
Latin America, Middle Eastern Europe and Central Asia /	290.00	2.52	Provided	ODA	Grant	Mitigation	Cross-cutting	
Lesotho /	506.30	4.40	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Other (Others)	
Macedonia /	181.00	1.57	Provided	ODA	Grant	Mitigation	Forestry, Other (Others)	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Malawi /	415.00	3.61	Committed	ODA	Grant	Adaptation	Agriculture, Water and sanitation	
Malaysia /	301.40	2.62	Provided	Other (ODA, OOF)	Grant	Other (Mitigation, Adaptation)	Energy, Other (Others), Water and sanitation	
Maldives /	88.10	0.77	Committed	OOF	Grant	Mitigation	Energy	
Mexico /	11,614.90	61.00	Committed	Other (ODA, OOF)	Other (Grant, Non- Concessional Loan)	Mitigation	Energy	
Moldova /	417.00	3.63	Committed	ODA	Grant	Mitigation	Energy	
Mongolia /	199.00	1.73	Committed	Other (ODA, OOF)	Grant	Mitigation	Energy	
Morocco /	702.00	6.10	Committed	ODA	Grant	Adaptation	Agriculture, Other (Others)	
Mozambique /	174.00	1.51	Committed	Other (ODA, OOF)	Grant	Mitigation	Energy	
Myanmar /	18.00	0.16	Committed	ODA	Grant	Adaptation	Other (Ohters)	
Nepal /	10.00	0.09	Committed	ODA	Grant	Adaptation	Other (Others)	
Niger /	815.00	7.09	Committed	ODA	Grant	Adaptation	Other (Others)	
Nigeria /	3,247.00	28.23	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Water and sanitation, Agriculture, Other (Others)	
Pacific Region /	296.00	2.57	Provided	ODA	Grant	Mitigation	Water and sanitation	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Pakistan /	8,798.00	76.50	Committed	ODA	Grant	Other (Adaptation, Cross-cutting)	Water and sanitation, Other (Others)	
Palestine /	2,650.00	23.04	Committed	ODA	Grant	Cross-cutting	Energy, Agriculture	
Papua New Guinea /	104.00	0.90	Provided	ODA	Grant	Cross-cutting	Forestry	
Paraguay /	207.00	1.80	Provided	ODA	Grant	Adaptation	Water and sanitation	
Peru /	29.00	0.25	Committed	ODA	Grant	Mitigation	Forestry	
Philippines /	10,089.74	87.74	Committed	ODA	Other (Concessional Loan, Grant)	Other (Cross- cutting, Adaptation, Mitigation)	Forestry, Other (Others)	
Philippines, Peru /	73.17	0.64	Committed	ODA	Grant	Adaptation	Other (Others)	
Rwanda /	2,731.00	23.75	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Agriculture	
Senegal /	79.00	0.69	Provided	ODA	Grant	Mitigation	Water and sanitation	
Serbia /	10.00	0.09	Provided	ODA	Grant	Mitigation	Energy	
Seychelles /	189.00	1.64	Provided	ODA	Grant	Adaptation	Other (Others)	
Sierra Leone /	115.00	1.00	Committed	ODA	Grant	Adaptation	Other (Others)	
Solomon Islands /	504.00	4.38	Committed	ODA	Grant	Adaptation	Other (Others)	
Somalia /	2,090.00	18.17	Committed	ODA	Grant	Adaptation	Other (Others)	
South Africa /	161.90	1.41	Committed	Other (ODA, OOF)	Grant	Mitigation	Energy	
South Asia /	2,300.00	20.00	Committed	OOF	Non- Concessional Loan	Mitigation	Energy	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
South Sudan /	99.00	0.86	Provided	ODA	Grant	Mitigation	Water and sanitation	
Sri Lanka /	218.80	1.90	Provided	ODA	Grant	Mitigation	Water and sanitation, Other (Others), Energy	
Sudan /	2,051.00	17.83	Committed	ODA	Grant	Adaptation	Water and sanitation, Other (Others)	
Sultanate of Oman /	41.00	0.36	Provided	ODA	Grant	Cross-cutting	Forestry	
Tanzania /	5,741.00	49.92	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Water and sanitation	
Thailand /	4,224.90	36.74	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Adaptation)	Other (Others), Energy, Water and sanitation	
Thailand, Viet Nam /	40.70	0.35	Committed	OOF	Grant	Mitigation	Energy	
Togo /	12.78	0.11	Committed	ODA	Grant	Mitigation	Forestry	
Turkey /	4,274.00	37.17	Committed	ODA	Other (Concessional Loan, Grant)	Other (Cross- cutting, Mitigation)	Forestry, Water and sanitation, Energy	
Viet Nam /	18,141.82	157.75	Committed	Other (ODA, OOF)	Other (Concessional Loan, Grant)	Other (Cross- cutting, Mitigation, Adaptation)	Cross-cutting, Other (Others), Agriculture, Energy, Forestry	
Viet Nam, Indonesia, South Africa /	44.60	0.39	Committed	OOF	Grant	Mitigation	Energy	
Zambia /	210.00	1.83	Provided	ODA	Grant	Adaptation	Water and sanitation	
Zimbabwe /	230.00	2.00	Committed	ODA	Grant	Adaptation	Other (Others)	

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

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						

^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

The unit of JPY is "million Japanese Yen", and the unit of USD is "million US dollars".

The exchange rate is 115JPY/USD.

For the countries below, in the years 2011 and 2012, the values include projects for which the funds have been provided.

2011: Afghanistan/ Africa/Asia, Africa/ Bangladesh/ Brazil/ Cambodia/ Cameroon/ China/ Colombia/ Developing Countries/ Ethiopia/ India/ Indonesia/ Kenya/Kosovo/ Lao People's Democratic Republic/ Malawi/ Malaysia/ Mexico/ Mongolia/ Morocco/ Mozambique/ Nigeria/ Pakistan/ Rwanda/ South Africa/ Tanzania/ Thailand/ Turkey/ Viet Nam

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						

2012: Asia, Africa/ Bangladesh/ Brazil/ Cambodia/ China/ Djibouti/ Ethiopia/ Ghana/ India/ Indonesia/ Kenya/ Lao People's Democratic Republic/ Madagascar/ Malawi/ Mexico/ Mongolia/ Mozambique/ Myanmar/ Nepal/ Niger/ Palestine/ Peru/ Philippines/ Sri Lanka/ Tanzania/ Thailand/ Viet Nam/ Zimbabwe

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Total contributions through bilateral, regional and other channels	493,182.37	3,767.18						
Afghanistan /	37.00	0.32	Provided	ODA	Grant	Adaptation	Agriculture	
Africa /	220.00	1.91	Provided	ODA	Grant	Mitigation	Cross-cutting	
Angola /	29.00	0.25	Provided	ODA	Grant	Adaptation	Agriculture	
Asia /	500.00	4.35	Provided	ODA	Grant	Mitigation	Cross-cutting	
Asia, Africa /	122.00	1.06	Committed	ODA	Grant	Mitigation	Forestry	
Asia, Latin America /	176.00	1.53	Committed	OOF	Grant	Mitigation	Forestry	
Asia, South America /	9.00	0.08	Provided	ODA	Grant	Adaptation	Forestry	
Bangladesh /	110.00	0.99	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Adaptation)	Energy, Water and sanitation, Other (Others)	
Benin /	33.00	0.29	Committed	ODA	Grant	Other (Mitigation, Cross-cutting)	Forestry	
Bhutan /	24.00	0.21	Provided	ODA	Grant	Mitigation	Energy	
Bolivia /	0.00	0.10	Provided	ODA	Grant	Adaptation	Agriculture	
Bosnia and Herzegovina /	115.00	1.00	Committed	OOF	Grant	Mitigation	Energy	
Botswana /	69.00	0.60	Provided	ODA	Grant	Other (Cross- cutting, Mitigation)	Energy, Forestry	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Brazil /	115,060.00	600.52	Committed	Other (ODA, OOF)	Other (Grant, Non- Concessional Loan)	Other (Mitigation, Adaptation)	Energy, Other (Others)	
Burkina Faso /	47.00	0.41	Committed	ODA	Grant	Adaptation	Water and sanitation	
Cambodia /	421.00	3.66	Committed	ODA	Grant	Mitigation	Energy, Water and sanitation, Forestry	
Cameroon, Central African Republic, Democratic Republic of the Congo /	278.00	2.42	Committed	ODA	Grant	Cross-cutting	Forestry	
Cameroon, Central African Republic, Democratic Republic of the Congo /	18.00	0.16	Committed	ODA	Grant	Cross-cutting	Forestry	
Cape Verde /	6,186.00	53.79	Committed	ODA	Concessional Loan	Mitigation	Energy	
China /	50.00	0.43	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Cross-cutting)	Forestry, Energy, Other (Others)	
Colombia /	92.00	0.80	Provided	ODA	Grant	Mitigation	Water and sanitation, Energy	
Côte d'Ivoire /	20.00	0.17	Committed	OOF	Grant	Adaptation	Other (Others)	
Democratic Republic of the Congo /	53.00	0.46	Provided	ODA	Grant	Cross-cutting	Forestry	
Developing Countries /	572.00	4.98	Committed	ODA	Grant	Other (Mitigation, Cross-cutting, Adaptation)	Forestry, Agriculture, Energy, Other (Others)	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Djibouti /	354.50	3.08	Committed	ODA	Grant	Adaptation	Agriculture, Water and sanitation, Other (Others)	
Djibouti, Ethiopia /	130.80	1.14	Committed	OOF	Grant	Mitigation	Energy	
Dominican Republic /	281.00	2.57	Committed	ODA	Grant	Cross-cutting	Other (Others)	
Ecuador /	48.00	0.42	Provided	ODA	Grant	Adaptation	Other (Others)	
Egypt /	119.00	1.17	Provided	ODA	Grant	Adaptation	Agriculture	
Ethiopia /	1,690.10	14.81	Committed	ODA	Grant	Adaptation	Water and sanitation, Energy, Other (Others)	
Fiji /	29.00	0.25	Provided	ODA	Grant	Adaptation	Water and sanitation	
Gabon /	52.00	0.45	Provided	ODA	Grant	Cross-cutting	Forestry	
Ghana /	66.00	0.57	Committed	ODA	Grant	Other (Adaptation, Mitigation)	Agriculture, Forestry	
Guatemala /	36.00	0.31	Committed	ODA	Grant	Cross-cutting	Forestry	
Haiti /	138.00	1.20	Committed	ODA	Grant	Adaptation	Water and sanitation, Other (Others)	
Honduras /	34.00	0.30	Provided	ODA	Grant	Other (Mitigation, Cross-cutting)	Energy, Cross- cutting	
India /	233,125.70	1,905.41	Committed	Other (ODA, OOF)	Other (Concession al Loan, Grant)	Other (Cross- cutting, Mitigation, Adaptation)	Forestry, Energy, Agriculture, Water and sanitation	
Indochina countries /	45.00	0.39	Provided	ODA	Grant	Mitigation	Forestry	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Indonesia /	1,222.86	10.74	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Cross-cutting)	Energy, Water and sanitation, Cross- cutting, Forestry, Other (Others)	
Indonesia, Malaysia /	15.00	0.13	Committed	OOF	Grant	Mitigation	Other (Others)	
Iraq /	104.00	0.90	Provided	ODA	Grant	Other (Mitigation, Adaptation)	Water and sanitation, Agriculture	
Kazakhstan /	49.87	0.43	Committed	OOF	Grant	Mitigation	Energy	
Kenya /	2,187.00	19.02	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Adaptation)	Agriculture, Water and sanitation, Energy, Forestry, Other (Others)	
Lao People's Democratic Republic /	159.00	1.38	Committed	ODA	Grant	Other (Cross- cutting, Mitigation, Adaptation)	Forestry, Energy, Water and sanitation	
Latin America /	290.00	2.52	Provided	ODA	Grant	Mitigation	Cross-cutting	
Madagascar /	375.70	3.27	Committed	ODA	Grant	Adaptation	Cross-cutting, Agriculture, Other (Others)	
Malawi /	763.00	6.63	Committed	ODA	Grant	Adaptation	Water and sanitation, Agriculture	
Malaysia /	55.00	0.48	Committed	Other (ODA, OOF)	Grant	Other (Cross- cutting, Mitigation)	Forestry, Energy	
Maldives /	35.00	0.30	Committed	OOF	Grant	Mitigation	Energy	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Mauritius /	275.00	2.39	Provided	ODA	Grant	Adaptation	Other (Others)	
Mexico /	56.00	0.49	Committed	Other (ODA, OOF)	Grant	Mitigation	Energy	
Moldova /	75.00	0.65	Provided	ODA	Grant	Mitigation	Energy	
Mongolia /	249.00	2.17	Committed	Other (ODA, OOF)	Grant	Other (Cross-cutting, Mitigation)	Water and sanitation, Energy	
Morocco /	10,790.00	93.83	Committed	ODA	Concessional Loan	Mitigation	Water and sanitation	
Mozambique /	226.50	1.97	Committed	Other (ODA, OOF)	Grant	Other (Mitigation, Adaptation)	Energy, Agriculture	
Myanmar /	1,844.65	16.04	Committed	Other (ODA, OOF)	Grant	Other (Adaptation, Cross-cutting, Mitigation)	Forestry, Water and sanitation, Other (Others)	
Namibia /	114.00	0.99	Provided	ODA	Grant	Adaptation	Agriculture	
Nepal /	35.00	0.30	Committed	ODA	Grant	Other (Mitigation, Adaptation)	Agriculture, Energy	
Nicaragua /	299.00	3.69	Committed	ODA	Grant	Adaptation	Other (Others)	
Niger /	889.00	7.73	Committed	ODA	Grant	Adaptation	Water and sanitation, Other (Others)	
Nigeria /	2,143.00	18.63	Committed	ODA	Grant	Other (Adaptation, Mitigation)	Water and sanitation, Energy	
North America, Central and South America /	20.00	0.17	Provided	ODA	Grant	Other (Mitigation, Adaptation)	Energy, Other (Others)	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
North and Latin America /	0.00	0.17	Provided	ODA	Grant	Mitigation	Energy	
Pakistan /	1,223.50	10.64	Committed	ODA	Grant	Adaptation	Water and sanitation, Other (Others)	
Palestine /	103.00	0.90	Committed	ODA	Grant	Other (Adaptation, Mitigation)	Water and sanitation, Energy	
Peru /	8,897.00	77.37	Committed	ODA	Other (Concession al Loan, Grant)	Other (Mitigation, Adaptation)	Water and sanitation, Other (Others)	
Philippines /	11,499.09	100.03	Committed	Other (ODA, OOF)	Other (Concession al Loan, Grant)	Other (Adaptation, Mitigation)	Agriculture, Energy, Water and sanitation, Other (Others)	
Senegal /	66.00	0.57	Provided	ODA	Grant	Cross-cutting	Other (Others)	
Sierra Leone /	23.00	0.20	Provided	ODA	Grant	Adaptation	Water and sanitation	
Small Island and maritime nations /	40.80	0.35	Committed	OOF	Grant	Mitigation	Energy	
Solomon Islands /	16.00	0.14	Provided	ODA	Grant	Adaptation	Water and sanitation	
Somalia /	20.00	0.17	Committed	Other (ODA, OOF)	Grant	Adaptation	Other (Others)	
South Africa /	26.00	0.23	Committed	OOF	Grant	Mitigation	Energy	
South America /	20.00	0.17	Committed	OOF	Grant	Adaptation	Other (Others)	
South Sudan /	212.00	1.84	Provided	ODA	Grant	Adaptation	Agriculture	
Sri Lanka /	9,866.00	85.79	Committed	ODA	Other (Concession al Loan, Grant)	Other (Mitigation, Adaptation)	Energy, Agriculture	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Tajikistan /	3.00	0.03	Provided	ODA	Grant	Adaptation	Water and sanitation	
United Republic of Tanzania /	255.00	2.22	Committed	Other (ODA, OOF)	Grant	Adaptation	Water and sanitation, Agriculture, Other (Others)	
Thailand /	592.10	5.18	Committed	Other (ODA, OOF)	Grant	Other (Adaptation, Mitigation, Cross-cutting)	Agriculture, Cross- cutting, Energy, Other (Others)	
Thailand, Viet Nam /	93.90	0.82	Committed	OOF	Grant	Mitigation	Energy	
Thailand, Viet Nam, Malaysia /	71.80	0.62	Committed	OOF	Grant	Mitigation	Energy	
Timor-Leste /	11.00	0.10	Provided	ODA	Grant	Adaptation	Water and sanitation	
Togo /	899.00	7.82	Committed	ODA	Grant	Adaptation	Water and sanitation	
Tunisia /	1.00	0.01	Provided	ODA	Grant	Cross-cutting	Water and sanitation	
Tuvalu /	51.00	0.44	Provided	ODA	Grant	Adaptation	Other (Others)	
Uganda /	943.00	8.20	Committed	ODA	Grant	Adaptation	Water and sanitation, Other (Others)	
Viet Nam /	75,192.00	652.33	Committed	Other (ODA, OOF)	Other (Concession al Loan, Grant)	Other (Cross- cutting, Adaptation, Mitigation)	Forestry, Water and sanitation, Energy, Cross- cutting, Other (Others)	
Viet Nam, Indonesia /	49.00	0.43	Provided	ODA	Grant	Mitigation	Energy	
Viet Nam, Myanmar, Cambodia /	38.00	0.33	Committed	OOF	Grant	Mitigation	Energy	
Zambia /	28.00	0.24	Provided	ODA	Grant	Adaptation	Agriculture	

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						
Zimbabwe /	279.50	2.43	Committed	ODA	Grant	Other (Cross-cutting, Adaptation)	Water and sanitation, Agriculture	

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

The unit of JPY is "million Japanese Yen", and the unit of USD is "million US dollars".

The exchange rate is 115JPY/USD.

For the countries below, in the years 2011 and 2012, the values include projects for which the funds have been provided.

Table 7(b)

JPN_BR1_v1.0

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

Recipient country/ region/project/programme ^b	Total amount		Status ^c	Funding source ^g	Financial instrument ^g	Type of support ^{g, h}	Sector ^d	Additional information ^e
	Climate-specific ^f							
	Japanese yen - JPY	USD						

2011: Afghanistan/ Africa/Asia, Africa/ Bangladesh/ Brazil/ Cambodia/ Cameroon/ China/ Colombia/ Developing Countries/ Ethiopia/ India/ Indonesia/ Kenya/Kosovo/ Lao People's Democratic Republic/ Malawi/ Malaysia/ Mexico/ Mongolia/ Morocco/ Mozambique/ Nigeria/ Pakistan/ Rwanda/ South Africa/ Tanzania/ Thailand/ Turkey/ Viet Nam

2012: Asia, Africa/ Bangladesh/ Brazil/ Cambodia/ China/ Djibouti/ Ethiopia/ Ghana/ India/ Indonesia/ Kenya/ Lao People's Democratic Republic/ Madagascar/ Malawi/ Mexico/ Mongolia/ Mozambique/ Myanmar/ Nepal/ Niger/ Palestine/ Peru/ Philippines/ Sri Lanka/ Tanzania/ Thailand/ Viet Nam/ Zimbabwe

Table 8

JPN_BR1_v1.0

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>
Global	Mitigation	Demonstration Project of technology and System for International Energy Consumption Efficiency	Energy	Private and Public	Private and Public	Implemented	
Philippines	Adaptation	Project for development of the Meteorological Radar System in the Philippines	Other (Prevention and restoration of disaster)	Public	Private and Public	Planned	
Tunisia	Adaptation	Desalination plan of groundwater in Southern Region of Tunisia	Water and sanitation	Private	Private and Public	Implemented	
China	Mitigation	Project for Total Emission Control of Nitrogen Oxide in Atmosphere in China	Industry	Public	Private and Public	Planned	
Indonesia	Adaptation	Project for impact assessment of Climate Change in Brantas and Musi River and integrating into the Water Resources Management Plans	Water and sanitation	Public	Private and Public	Planned	
Asia Pacific	Mitigation	CTI Private Financing Advisory Network(CTI PFAN) Program (AFCEF3)	Energy	Private and Public	Private	Implemented	GHG emission reduction is not achieved by only Japanese contribution because this GHG emission reduction was result from the project established under CTI-PFAN which was a multilateral public-private partnership.
Africa	Mitigation	CTI Private Financing Advisory Network(CTI PFAN) Program (AFCEF1,2)	Energy	Private and Public	Private	Implemented	GHG emission reduction is not achieved by only Japanese contribution because this GHG emission reduction was result from the project established under CTI-PFAN which was a multilateral public-private partnership.
Asia Pacific	Mitigation	Greenhouse gas emission reduction support project	Energy	Private and Public	Private	Planned	
Asia Pacific	Mitigation	Global environment international cooperation project	Energy	Private and Public	Private	Planned	
Global	Mitigation	Global Superior Energy Performance Partnership : GSEP	Energy, Industry	Private and Public	Private and Public	Implemented	

Table 8

JPN_BR1_v1.0

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>
Peru, Indonesia, Togo	Mitigation	Project for promoting new system of measures against illegal logging of tropical forest	Other (Forestry)	Public	Public	Implemented	
Philippines, Guatemala	Mitigation	Project for promoting measures against illegal logging to prevent deforestation and rain forest degradation	Other (Forestry)	Public	Public	Implemented	
Asia Pacific	Mitigation	Project for promoting prevention of deforestation and forest degradation in developing countries	Other (Forestry)	Public	Private	Implemented	
Africa	Mitigation	Project for promoting sustainable forest management in developing countries	Other (Forestry)	Public	Private	Implemented	
Asia Pacific	Mitigation	Program for supporting process of United Nations forests forum	Other (Forestry)	Public	Public	Implemented	

^a To be reported to the extent possible.

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

^c Parties may report sectoral disaggregation, as appropriate.

^d Additional information may include, for example, funding for technology development and transfer provided, a short description of the measure or activity and co-financing arrangements.

Custom Footnotes

Table 9

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</i> ^{b,c}
Asia Pacific, SIDS	Mitigation	Project to support the large-scale formation of Joint Crediting Mechanism programs to realize Low Carbon Societies in Asia	<ul style="list-style-type: none">• Formulate large-scaled projects with utilizing JCM (Joint Crediting Mechanism) and hold workshops for the policy makers of host countries to promote low carbonization of cities and regions in Asia.• Prepare the NAMAs Guidebook for developing countries and MRV handbook for implementing JCM.• Invite interested persons of countries and cities to Japan and hold seminar to promote partnerships between cities to promote the construction of low carbon society, and share information on Japanese advanced environmental technologies between interested persons.
Asia Pacific	Multiple Areas	Asia-Pacific joint research /observation work of the Global Environment	Supports the Asia-Pacific Network for Global Change Research (APN) which is an intergovernmental network in the Asia-Pacific region to foster global change research, increase developing country participation in that research, and strengthen interactions between the science community and policy-makers.
Asia Pacific	Adaptation	Asia-Pacific Regional Assessment of the Climate Change Impacts and Promotion of Adaptation	Supports UNEP lead the Asia-Pacific Adaptation Network (APAN), under the Global Adaptation Network (GAN), to enhance capacity of policy-makers and practitioners in the Asia-Pacific region by sharing knowledge on climate change adaptation.
Asia Pacific	Mitigation	International Research Network for Low Carbon Societies	Supports the International Research Network for Low Carbon Societies in Asia to develop capacity of researchers and others for building low carbon societies.
Asia Pacific	Multiple Areas	Asia-Pacific Seminar on Climate Change	Every year since 1991, the Ministry of the Environment, Japan has been convening the Asia-Pacific Seminar on Climate Change which has served as an important vehicle for countries in the region to exchange views and information on their respective efforts to mitigate and adapt to climate change in a practical manner, thereby contributing to capacity and confidence building among them.
Asia Pacific	Technology Development and Transfer	Acid Deposition Monitoring Network in East Asia	EANET started in 1998 as an intergovernmental initiative to create a common understanding on the state of acid deposition problems in East Asia, provide useful inputs for decision making at various levels with the aim of preventing or reducing the adverse impacts on the environment, and promote cooperation among countries. Thirteen countries in East Asia are participating in EANET at present.
South Africa	Adaptation	Japan-South Africa water resources management workshop	Hold workshops on Japanese activities related to water resource management through introducing adaptation to climate change, maintenance and management of infrastructure and activities for water quality improvement.
Viet Nam	Adaptation	Activities under "Memorandum of Cooperation Flood control and Adaptation of Climate change" executed between Ministry of Land, Infrastructure and Transportation (MLIT) Japan and Ministry of Agriculture and Rural Development (MARD) Vietnam	Hold workshops to provide case study of Japanese flood control measures based on the memorandum.
Asia Pacific	Adaptation	Japan Practical Guidelines on Strategic Climate Change Adaptation Planning — Flood Disasters —	Develop a guideline including basic procedures for developing adaptation measures to damage of floods which become increasingly severe by climate change and publish it on the web for Asia and Pacific regions. This manual is based on experiences, strategies and technologies accumulated in Japan over the years.

Table 9

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</i> ^{b,c}
Asia Pacific, Middle East	Adaptation	Flood forecasting utilizing satellite data etc	Make available Integrated Flood Analysis System (IFAS) utilizing satellite developed by International Center for water Hazard and Risk Management (ICHARM) for free of charge via the internet, and execute seminars about the use of IFAS specifically designed to officials of the government in Indonesia, Philippines, Myanmar, Vietnam and Iran.
Asia Pacific, Middle East and North Africa, Latin America and the Caribbean	Adaptation	Various trainings on the flood control measures for countering the effects of climate change	Provide various trainings on the flood control measures for countering the effects of climate change to officials of the government in developing countries that are facing with flood damages in collaboration with the Japan International Cooperation Agency (JICA) and the National Graduate Institute for Policy Studies (GRIPS).
Global	Adaptation	The 5th International Conference on Flood Management	ICHARM, ICFM5 Secretariat organized the 5th International Conference on Flood Management from 27 to 29 September 2011. More than 450 participants participated on some sessions and verbal presentations on realistic methods for adaptation to climate change.
India, Viet Nam, Mongolia, South Africa	Mitigation	Research project for developing infrastructure for obtaining Joint Credit (Human resource development related to MRV)	Provide the following training and expert sending for the purpose of disseminating Japanese low carbon technologies and products for countries which have agreed Joint Crediting Mechanism (JCM) and are possible to agree to develop system of JCM in accordance with the situation of international negotiation of Japanese government. - Accept trainee such as decision makers of business, engineer and policy makers from partner countries, and provide training including seminar on MRV and low carbon technology and products, study tour of facilities and introduction of technology. - Send experts to partner countries, and provide training including seminar on MRV and low carbon technology and products, and lecture on technology for decision makers of business, engineer and policy makers.
Asia Pacific, Middle East and North Africa, Africa, Latin America and the Caribbean	Mitigation	Project for rationalization of international energy use	Mitigate the shortage of international energy demand by promoting the introduction of energy conservation measures and renewable energy in foreign countries through institutional building support by the project of accepting trainees and dispatching experts.
Peru, Indonesia, Togo	Mitigation	Project for promoting new systems of measures against illegal logging of tropical forest	<ul style="list-style-type: none">• Enhance the traceability capacity of small and medium-sized enterprises, which ensures sustainable and legitimate timber production and processing.• Providing and planting nursery trees of native tree species• Systematizing information in forest sector and improving reliability through the development of human resources to perform the maintenance of the information on forest and GIS
Philippines, Guatemala, etc.	Mitigation	Project for promoting measures against illegal logging to prevent deforestation and rain forest degradation	<ul style="list-style-type: none">• Institutional improvements and human resources development such as amplifying information of CoC certification, legality and proof of origin• Development of human resources in accordance with the continuous building forest information system using such as GIS and the development of technical data package necessary for decision-making
Asia Pacific	Mitigation	Project for promoting prevention of deforestation and forest degradation in developing countries	Training of personnel for expertise in monitoring deforestation and forest degradation by using satellite images, identifying drivers of deforestation and forest degradation, and estimation of future forest cover change
Africa	Mitigation	Project for promoting sustainable forest management in developing countries	Organize workshops and training for stakeholders in order to develop measures for forestation and forest management for promoting sustainable forest management in developing countries
Latin America and the Caribbean	Adaptation	Caribbean Disaster Management Project	Build capacity and strengthen institutional mechanisms to mitigate dangers in the Caribbean Disaster Emergency Response Agency (CDERA) participating states, particularly regarding flood hazards.

Table 9

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<i>Recipient country/region</i>	<i>Targeted area</i>	<i>Programme or project title</i>	<i>Description of programme or project</i> ^{b,c}
Ethiopia	Adaptation	Developing countermeasures against landslide	Enhance capacity for adaptation to heavy rain affected by climate change through developing disaster reduction capacity, implementing inspections and analyzing the landslide generation mechanism in the Abai Valley in Ethiopia.
Guatemala	Adaptation	Expert on disaster prevention	Enhance capacity for adaptation to climate change by developing disaster reduction policy making capacity in Guatemala.
Sri Lanka	Adaptation	Disaster management capacity enhancement project adaptable to climate change	Enhance capacity for adaptation to climate change through developing disaster reduction capacity by establishing a disaster reduction framework model that includes disaster observation and forecasting, disaster reduction activity and evacuation of residences.
Senegal	Adaptation	Training for the countermeasures against littoral erosion	Plan and establish effective countermeasures for shore erosion.
Thailand	Adaptation	Capacity development for disaster management	Enhance climate change adaptation capacity by developing DDPM's capacity for diffusing disaster reduction activities, community disaster reduction and school education on disaster reduction.
Fiji	Adaptation	Strengthening Community Disaster Risk Management Project in the Pacific Region	Enhance an appropriate framework for appropriate evacuation when flooding occurs outside targeted areas.
Philippines	Adaptation	Disaster Risk Management	Enhance disaster reduction capacity at NDRRMC–OCD in the Philippines.
Viet Nam	Adaptation	Project for Building Disaster Resilient Societies in Vietnam (Phase 2)	Develop capacity for adaptation to climate change, especially water-related disasters, by implementing structural and non-structural measures at the central and local levels.
North, Central and South America	Adaptation	Project on Capacity Development for Disaster Risk Management in Central America "Bosai", Phase 2	Establish a sustainable framework for diffusing community disaster reduction in accordance with the PCGIR, which was determined as a regional activity for natural disaster risk reduction and prevention of natural disaster risks.
Tanzania	Adaptation	Groundwater Development and Management Capacity Development Project in Tanzania	Enhance capacity for ground water development in government cooperation or by the private sector of wells and dams in order to implement one of the components of the national water development program, the "water supply and sanitation" program.
Indonesia	Adaptation	Advisor on water resources policy	Develop capacity for studying measures in response to variation of precipitation patterns, promoting integrated water resource management in Indonesia.
Uzbekistan	Adaptation	Project for water management improvement	Enhance capacity to address precipitation pattern change affected by climate change through developing WUA water management methods in the region under the jurisdiction of BISM.
Kenya	Adaptation	Project for management of non-revenue water	Enhance capacity to address precipitation pattern change affected by climate change through promoting the effective use of water resources by implementing a reduction in the proportion of non-revenue water in Kenya.
Singapore	Adaptation	Training for water resources and environmental management	Enhance capacity to address precipitation pattern change affected by climate change through promoting effective water utilization via non-traditional water resource and environment control knowledge and technology in water-poor areas.
Nigeria	Adaptation	Project for enhancing the function of the national water resources institute	Enhance capacity to address precipitation pattern change affected by climate change through developing capacity of local water supply and health staff by improving water supply services.
Niger	Adaptation	Project on Effective Utilization of Reservoirs and Auto-Promotion of Local Communities in the Sahel	Promote sustainable village development and alleviate the vulnerability of farm production to decreasing precipitation through organized capacity development for diffusion staff for the effective utilization of reservoirs in Tahoua Region and Maradi Region.
Bangladesh	Adaptation	Training for water supply system	Enhance capacity to address precipitation pattern change affected by climate change by promoting a clean water supply system in Khulna city.
Burkina Faso	Adaptation	Improving sustainable water and sanitation system	Enhance capacity to address precipitation pattern change affected by climate change by promoting development, verification and preparation for a water and sanitation system appropriate for the African Sahel region.

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<i>Recipient country/region</i>	<i>Targeted area</i>	<i>Programme or project title</i>	<i>Description of programme or project</i> ^{b,c}
Mexico	Adaptation	Advisor on water sector	Enhance capacity to address precipitation pattern change affected by climate change by promoting effective utilization of water and developing capacity for water quality conservation in CONAGUA.
Morocco	Adaptation	Enhancement of Water Resources Management in Haouz Plain	Enhance capacity to address precipitation pattern change affected by climate change by developing administrative capacity for water resource management in ABHT.
Serbia	Mitigation	Capacity Development Project on Nationally Appropriate Mitigation Actions (NAMAs)	Develop capacity for planning nationally appropriate mitigation actions.
Indonesia	Mitigation	Project for Capacity Development for the National Focal Point on Climate Change to Enhance the Implementation of Climate Change Policies in Indonesia	Develop the DNPI's institutional capacity to coordinate and evaluate climate change policy as a focal point on climate change.
Thailand	Mitigation	Capacity Development and Institutional Strengthening for GHG Mitigation	Develop capacity and strengthen institutional power for GHG mitigation.
Viet Nam	Mitigation	Project for Capacity Building for National Greenhouse Gas Inventory	Develop capacity to compile periodic national GHG inventories which have time-series consistent, accurate and a clear estimation method for GHG emissions and removals.
Malaysia	Mitigation	Project for Development of Low Carbon Society Scenarios for Asian Regions	Develop and apply a structural method for a low carbon society scenario and dispatch the results in the Asian region.
Africa, Asia	Mitigation	Capacity Development for NAMA/MRV	Develop capacity to make NAMAs and understand international trends, concrete policies, and effective measures and measurement methods of GHG gas reduction.
Africa	Mitigation	Strengthening capacity of electric power pool in Eastern and Southern Africa	Strengthen capacity of electric power pool by establishing a solution policy for electricity shortages and improving energy efficiency in Eastern and Southern Africa.
Argentina	Mitigation	Promotion of cleaner production	Promote diffusion of cleaner production technology, mainly energy saving technology, particularly held in small- and medium-sized companies.
Indonesia	Mitigation	Training for mass rapid transit	Improve civic facilities and the urban environment by reducing traffic pollution by reinforcing mass rapid transit.
Serbia	Mitigation	The training for promotion of energy efficiency and conservation	Make an action plan in order to establish an energy management institution in Serbia through utilizing information collected by Japanese energy management institutions.
Turkey	Mitigation	Workshop on Promotion of Energy Efficiency for Black Sea Economic Cooperation (BSEC) Countries	Promote energy saving policy through a workshop on the Promotion of Energy Efficiency for the Black Sea Economic Cooperation (BSEC) countries.
Bangladesh	Mitigation	Power Sector Adviser	Support reform of the electric power sector and improve efficiency in electric facilities.
Brazil	Mitigation	Training program on smart grid/smart community in Brazil	Strengthen recognition and initiative for smart grid/smart community introduction and promote smart grid/smart community enterprises through Japanese technology in Brazil.
Maldives	Mitigation	Expert on demand-side management and energy conservation	Establish institutions and develop capacity for promoting Demand Side Management (DSM) and energy saving.
Mongolia	Mitigation	Expert for Urban Transportation System Improvement in Ulaanbaatar city, Mongolia	Promote deployment and control capacity of irrigation facilities, promote water management capacity and strengthen water usage alliance for Ministry of Food, Agriculture and Light Industry in Mongolia.
Rwanda	Mitigation	Project for RECO's Capacity Building for Efficient Power System Development	Develop efficiency and stability of the electric power system.

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Democratic Republic of the Congo	Mitigation	Project for Strengthening National Forest Resources Monitoring System for Promoting Sustainable Forest Management and REDD+ in the Democratic Republic of the Congo	Promote REDD+ by implementing natural forest monitoring appropriately based on the operating plan of the national forest resource inventory system.
Papua New Guinea	Mitigation	Capacity Development on Forest Resource Monitoring for Addressing Climate Change in Papua New Guinea	Conserve and manage sustainable forestland in PNG as an important climate mitigation and adaptation measure.
Kenya	Mitigation	Training on mitigating climate change through social forestry	Implement countermeasures against climate change through social forestry in order to develop capacity in training on mitigating climate change.
Tajikistan	Mitigation	Research on reforestation for reducing GHGs	Propose forest preservation and reforestation in pilot area in order to reduce GHGs, preserve forest and conduct reforestation.
Viet Nam	Mitigation	Afforestation Planning and Implementation Capacity Strengthening Project	Develop afforestation planning capacity of people related to the forest industry to mitigate GHGs through CO2 absorption and soil conservation.
China	Mitigation	Human resource development on forestry	Promote forest preservation through training for the forest industry to promote reform in the industry in western China.
Gabon	Mitigation	Development of a System of National Forest Resources Inventory contributing to national REDD activities	1. Promote maintenance, management and solid policy for forest resources in accordance with the REDD framework. 2. Realize a periodic resource evaluation framework and promote forest resource management. 3. Support REDD related policy. 4. Promote management by people who benefit from forest resources. 5. Strengthen the exchange of forest policy information among countries in the Congo Basin.
Cameroon	Mitigation	Advisor: Sustainable Forest Management in the Congo Basin	Promote sustainable forest management in the COMIFAC (Central African Forest Commission) countries.
Colombia	Mitigation	Project for Facilitating the Implementation of REDD+ Strategy and Policy	Promote sustainable forest management as climate change mitigation based on the experience of REDD+ strategy and policy.

^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