

Table 3.1.1 Summary table on emission trends by gases

GHG emissions	Base year (1989)	1990	1991	1992	1993	1994	1995	1996
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)
CO ₂ emissions (including net CO ₂ from LULUCF)	174,029.15	148,286.67	116,148.66	94,532.27	90,601.20	89,777.29	96,830.51	100,209.14
CO ₂ emissions (excluding net CO ₂ from LULUCF)	195,541.82	175,642.08	144,128.13	125,197.46	120,543.74	118,432.45	124,023.08	127,397.11
CH ₄ emissions (including net CH ₄ from LULUCF)	46,540.15	42,806.28	35,753.92	31,413.47	30,420.99	30,440.02	30,568.21	30,121.63
CH ₄ emissions (excluding net CH ₄ from LULUCF)	46,540.15	42,806.27	35,753.92	31,413.45	30,420.97	30,440.02	30,568.21	30,121.62
N ₂ O emissions (including net N ₂ O from LULUCF)	27,893.98	23,923.08	17,761.84	16,156.63	17,060.98	15,784.95	16,395.95	16,079.32
N ₂ O emissions (excluding net N ₂ O from LULUCF)	27,893.98	23,923.07	17,761.83	16,156.61	17,060.96	15,784.94	16,395.94	16,079.31
HFCs	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	95.04	97.64
PFCs	3,349.56	2,115.83	1,942.09	1,352.13	1,409.43	1,490.97	1,773.69	1,769.07
SF ₆	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	NA,NE,NO	0.06	0.06
TOTAL (including LULUCF)	251,812.84	217,131.87	171,606.51	143,454.50	139,492.58	137,493.25	145,663.46	148,276.85
TOTAL (excluding LULUCF)	273,325.51	244,487.26	199,585.96	174,119.66	169,435.10	166,148.38	172,856.02	175,464.81

Table 3.1.1 Summary table on emission trends by gases (continued)

GHG emissions	1997	1998	1999	2000	2001	2002	2003	2004
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)
CO ₂ emissions (including net CO ₂ from LULUCF)	87,570.32	74,322.27	60,721.57	63,201.72	66,224.99	74,686.60	86,892.71	78,222.27
CO ₂ emissions (excluding net CO ₂ from LULUCF)	116,201.08	102,626.08	89,398.20	92,422.16	95,242.46	97,056.19	103,292.16	101,167.11
CH ₄ emissions (including net CH ₄ from LULUCF)	28,663.95	26,693.07	25,861.08	26,397.62	26,410.51	27,191.21	27,281.31	26,377.81
CH ₄ emissions (excluding net CH ₄ from LULUCF)	28,663.94	26,693.07	25,861.07	26,397.54	26,410.49	27,191.13	27,281.29	26,377.81
N ₂ O emissions (including net N ₂ O from LULUCF)	15,245.30	14,307.66	13,796.25	13,283.14	13,379.20	13,042.37	13,958.54	14,261.09
N ₂ O emissions (excluding net N ₂ O from LULUCF)	15,245.29	14,307.56	13,796.09	13,282.36	13,378.22	13,041.31	13,956.81	14,258.94
HFCs	123.94	154.37	151.42	163.43	216.79	239.47	292.50	367.96
PFCs	1,786.59	1,753.54	1,603.62	1,292.37	1,044.49	717.86	261.51	132.60
SF ₆	0.02	0.01	0.05	0.00	0.00	0.01	17.83	22.64
TOTAL (including LULUCF)	133,390.12	117,230.93	102,133.98	104,338.29	107,275.98	115,877.51	128,704.39	119,384.38
TOTAL (excluding LULUCF)	162,020.87	145,534.63	130,810.44	133,557.88	136,292.45	138,245.97	145,102.10	142,327.06

Table 3.1.1 Summary table on emission trends by gases (continued)

GHG emissions	2005	2006	2007	2008	2009	2010	2011	Change from base year
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	(%)
CO ₂ emissions (including net CO ₂ from LULUCF)	71,350.77	77,048.62	77,720.59	75,779.02	55,114.32	55,104.96	62,654.48	-64.00
CO ₂ emissions (excluding net CO ₂ from LULUCF)	99,415.84	104,914.41	102,942.53	100,093.99	83,372.26	80,939.05	87,962.88	-55.02
CH ₄ emissions (including net CH ₄ from LULUCF)	26,334.77	25,999.79	24,949.24	25,088.22	24,057.28	22,584.36	22,258.20	-52.17
CH ₄ emissions (excluding net CH ₄ from LULUCF)	26,334.77	25,999.77	24,949.18	25,088.20	24,057.26	22,584.36	22,258.13	-52.17
N ₂ O emissions (including net N ₂ O from LULUCF)	15,217.23	14,225.96	13,913.53	14,376.23	12,166.52	12,411.35	12,682.85	-54.53
N ₂ O emissions (excluding net N ₂ O from LULUCF)	15,215.04	14,223.03	13,910.54	14,373.27	12,163.21	12,408.07	12,679.45	-54.54
HFCs	487.21	641.10	840.45	890.27	703.10	695.05	440.55	100.00
PFCs	81.90	55.03	24.23	15.34	7.00	7.93	10.92	-99.67
SF ₆	49.56	67.76	58.39	16.33	7.38	5.09	7.21	100.00
TOTAL (including LULUCF)	113,521.44	118,038.25	117,506.44	116,165.41	92,055.61	90,808.74	98,054.21	-61.06
TOTAL (excluding LULUCF)	141,584.31	145,901.09	142,725.32	140,477.41	120,310.22	116,639.55	123,359.15	-54.87

Table 3.1.2 Summary table on emission trends by sectors

GHG emissions	Base year (1989)	1990	1991	1992	1993	1994	1995	1996
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)
1. Energy	191,809.14	177,768.20	147,408.26	125,769.01	120,888.33	118,709.29	122,320.62	126,435.38
2. Industrial Processes	35,466.12	24,890.14	17,617.05	18,403.43	18,267.72	18,573.64	21,405.55	20,838.64
3. Solvent use and other product use	645.80	540.50	448.20	237.60	237.50	225.40	229.40	225.30
4. Agriculture	40,734.14	36,708.34	29,601.60	25,251.76	25,563.86	24,130.83	24,135.56	23,153.24
5. Land Use, Land Use Change and Forestry	-21,512.67	-27,355.39	-27,979.45	-30,665.16	-29,942.52	-28,655.14	-27,192.55	-27,187.96
6. Waste	4,670.31	4,580.08	4,510.85	4,457.86	4,477.69	4,509.23	4,764.89	4,812.25
7. Other	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL (including LULUCF)	251,812.84	217,131.87	171,606.51	143,454.50	139,492.58	137,493.25	145,663.46	148,276.85

Table 3.1.2 Summary table on emission trends by sectors (continued)

GHG emissions	1997	1998	1999	2000	2001	2002	2003	2004
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)
1. Energy	115,861.25	101,250.83	90,082.38	92,894.36	95,810.37	96,617.33	102,850.19	98,959.43
2. Industrial Processes	19,093.02	17,953.45	15,146.30	16,826.43	15,963.40	16,576.81	16,490.95	17,557.95
3. Solvent use and other product use	219.00	221.90	222.40	224.30	200.50	222.30	279.90	277.40
4. Agriculture	22,027.13	21,241.10	20,380.37	18,455.10	19,096.83	19,552.24	20,073.19	20,070.58
5. Land Use, Land Use Change and Forestry	-28,630.74	-28,303.70	-28,676.46	-29,219.59	-29,016.47	-22,368.45	-16,397.72	-22,942.68
6. Waste	4,820.47	4,867.34	4,978.99	5,157.70	5,221.35	5,277.29	5,407.87	5,461.70
7. Other	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL (including LULUCF)	133,390.12	117,230.93	102,133.98	104,338.29	107,275.98	115,877.51	128,704.39	119,384.38

Table 3.1.2 Summary table on emission trends by sectors (continued)

GHG emissions	2005	2006	2007	2008	2009	2010	2011	Change from base year
	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)	CO ₂ equiv. (Gg)
1. Energy	96,602.11	99,709.24	96,123.48	95,965.23	82,877.82	79,624.01	86,320.46	-55.00
2. Industrial Processes	18,223.69	19,355.61	20,624.73	17,945.58	11,253.06	12,414.25	12,605.14	-64.46
3. Solvent use and other product use	269.65	208.50	137.82	135.14	122.33	124.74	125.61	-80.55
4. Agriculture	20,949.57	20,862.19	20,236.92	20,753.53	20,353.84	18,760.94	18,941.46	-53.50
5. Land Use, Land Use Change and Forestry	-28,062.87	-27,862.84	-25,218.88	-24,312.00	-28,254.61	-25,830.81	-25,304.94	17.63
6. Waste	5,539.28	5,765.54	5,602.38	5,677.92	5,703.17	5,715.62	5,366.48	14.91
7. Other	NA	NA	NA	NA	NA	NA	NA	0.00
TOTAL (including LULUCF)	113,521.44	118,038.25	117,506.44	116,165.41	92,055.61	90,808.74	98,054.21	-61.06