

Annex 1 – Key categories

Description of methodology used

The key category analysis has been performed according to the provisions in Chapter 7 of IPCC GPG 2000 and to those in Chapter 5 of IPCC GPG 2003.

Distinct key category analysis was conducted taking into account both the exclusion and inclusion of LULUCF and also level and trend criteria.

The key category analysis followed a Tier 1 approach.

Reference to the key categories tables in the CRF

The same key categories analysis was done both for completing the CRF tables and the relevant section of National Inventory Report.

Information on level of disaggregation

All IPCC sectors and categories, sources and sinks (as suggested in Table 7.1 of IPCC GPG 2000 and in Table 5.4.1 of IPCC GPG 2003), and gases were considered.

Tables 7A1 – 7A3 of the IPCC GPG 2000

Tier 1 Analysis – Level Assessment, 2008, excluding LULUCF (Table 7A1 of IPCC GPG 2000)					
A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate (Mt CO₂ Equivalent)	D Current Year Estimate (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
Energy Industries-solid fuels	CO ₂	46.0	31.3	0.19	0.19
Residential-biomass	CO ₂	1.9	14.1	0.09	0.28
Road transport	CO ₂	4.6	13.9	0.09	0.37
Energy Industries-gaseous fuels	CO ₂	42.1	8.7	0.05	0.42
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	16.6	8.4	0.05	0.47
Fugitive emissions-oil and natural gas	CH ₄	21.8	7.9	0.05	0.52
CH ₄ from enteric fermentation	CH ₄	10.6	5.8	0.04	0.56
Direct N ₂ O emissions from agricultural soils	N ₂ O	11.2	5.7	0.04	0.59
CO ₂ emission from Iron and steel production	CO ₂	15.8	5.6	0.03	0.63
Energy Industries-liquid fuels	CO ₂	17.9	5.6	0.03	0.66
CH ₄ from solid waste disposal sites	CH ₄	2.3	5.4	0.03	0.70
Residential-gaseous fuels	CO ₂	2.8	5.2	0.03	0.73
Manufacturing Industries and Constructions-liquid fuels	CO ₂	10.2	5.1	0.03	0.76
Manufacturing Industries and Constructions-solid fuels	CO ₂	10.6	4.6	0.03	0.79
CO ₂ emissions from Cement production	CO ₂	5.6	4.1	0.03	0.81
Indirect N ₂ O emissions from agricultural soils	N ₂ O	7.5	3.6	0.02	0.83
Fugitive emissions-solid fuels	CH ₄	6.4	2.7	0.02	0.85
CO ₂ emissions from Lime production	CO ₂	3.8	2.7	0.02	0.87
N ₂ O emission from Nitric acid production	N ₂ O	5.5	2.5	0.02	0.88
CH ₄ from manure management	CH ₄	4.3	1.9	0.01	0.90
CO ₂ emission from Ammonia production	CO ₂	5.0	1.9	0.01	0.91
Commercial/Institutional-gaseous fuels	CO ₂	0.3	1.9	0.01	0.92
Agricultural soils : animal production	N ₂ O	3.0	1.7	0.01	0.93
N ₂ O from manure management	N ₂ O	3.2	1.6	0.01	0.94
Commercial/Institutional-liquid fuels	CO ₂	0.5	1.1	< 0.01	0.95
Residential-biomass	CH ₄	0.1	0.9	< 0.01	0.95
CH ₄ from waste water handling	CH ₄	0.4	0.9	< 0.01	0.96
Manufacturing Industries and Constructions-biomass	CO ₂	0.1	0.9	< 0.01	0.96
Residential-liquid fuels	CO ₂	0.6	0.8	< 0.01	0.97
CO ₂ emission from Limestone and dolomite use	CO ₂	1.7	0.7	< 0.01	0.97
PFC emission from Aluminium production	PFC	3.3	0.6	< 0.01	0.98

Tier 1 Analysis – Level Assessment, 2008, excluding LULUCF (Table 7A1 of IPCC GPG 2000)					
A IPCC Source Categories	B Direct Green house Gas	C Base Year Estimate (Mt CO₂ Equivalent)	D Current Year Estimate (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
Commercial/Institutional-biomass	CO ₂	0.4	0.6	< 0.01	0.98
Railways	CO ₂	0.9	0.5	< 0.01	0.98
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	3.6	0.5	< 0.01	0.99
CO ₂ emission from Aluminium production	CO ₂	0.4	0.4	< 0.01	0.99
N ₂ O from waste water handling	N ₂ O	0.2	0.3	< 0.01	0.99
Residential-solid fuels	CO ₂	1.7	0.2	< 0.01	0.99
Residential-biomass	N ₂ O	0.0	0.2	< 0.01	0.99
Energy Industries-solid fuels	N ₂ O	0.2	0.1	< 0.01	0.99
CO ₂ emission from Solvent and other product use	CO ₂	0.6	0.1	< 0.01	0.99
Energy Industries-biomass	CO ₂	0.1	0.1	< 0.01	0.99
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	0.1	0.1	< 0.01	1.00
Navigation	CO ₂	0.3	0.1	< 0.01	1.00
CO ₂ emission from Soda ash production and use	CO ₂	0.1	0.1	< 0.01	1.00
Other transports-pipeline	CO ₂	0.0	0.1	< 0.01	1.00
Agriculture/Forestry/Fisheries-biomass	CO ₂	0.1	0.1	< 0.01	1.00
Road transport	CH ₄	0.0	0.0	< 0.01	1.00
CO ₂ from waste incineration	CO ₂	0.0	0.0	< 0.01	1.00
Emission from Consumption of halocarbons	HFC, PFC, SF ₆	0.0	0.0	< 0.01	1.00
Road transport	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-biomass	CH ₄	0.0	0.0	< 0.01	1.00
CO ₂ emission from Mineral products - other	CO ₂	0.1	0.0	< 0.01	1.00
CO ₂ emission from Ferroalloys production	CO ₂	0.5	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
CH ₄ from rice production	CH ₄	0.1	0.0	< 0.01	1.00
Energy Industries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-solid fuels	CH ₄	0.1	0.0	< 0.01	1.00

Tier 1 Analysis – Level Assessment, 2008, excluding LULUCF (Table 7A1 of IPCC GPG 2000)

A IPCC Source Categories	B Direct Greenh ouse Gas	C Base Year Estimate (Mt CO₂ Equivalent)	D Current Year Estimate (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
Manufacturing Industries and Constructions-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
CH ₄ emission from Chemical industry-other	CH ₄	0.0	0.0	< 0.01	1.00
Residential-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Energy Industries-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-biomass	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-biomass	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Residential-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Residential-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	CO ₂	0.4	0.0	< 0.01	1.00
Civil Aviation	CO ₂	0.0	0.0	< 0.01	1.00
Energy Industries-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Railways	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Energy Industries-biomass	CH ₄	0.0	0.0	< 0.01	1.00

Tier 1 Analysis – Level Assessment, 2008, excluding LULUCF (Table 7A1 of IPCC GPG 2000)

A IPCC Source Categories	B Direct Green house Gas	C Base Year Estimate (Mt CO₂ Equivalent)	D Current Year Estimate (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
Railways	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Navigation	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Navigation	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	0.1	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Civil Aviation	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Civil Aviation	CH ₄	0.0	0.0	< 0.01	1.00
CH ₄ from field burning of agricultural residues	CH ₄	0.1	0.0	< 0.01	1.00
CO ₂ emission from Carbide production	CO ₂	0.2	0.0	< 0.01	1.00
N ₂ O emission from Adipic acid production	N ₂ O	0.7	0.0	< 0.01	1.00
N ₂ O from field burning of agricultural residues	N ₂ O	0.0	0.0	< 0.01	1.00
TOTAL		277.4	161.7	1.00	

Tier 1 Analysis – Trend Assessment, 2008, excluding LULUCF (Table 7A2 of IPCC GPG 2000)

A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate (Mt CO ₂ Equivalent)	D Current Year Estimate (Mt CO ₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
Energy Industries-gaseous fuels	CO ₂	42.1	8.7	0.17	17.96	0.18
Residential-biomass	CO ₂	1.9	14.1	0.14	14.74	0.33
Road transport	CO ₂	4.6	13.9	0.12	12.75	0.45
Energy Industries-liquid fuels	CO ₂	17.9	5.6	0.05	5.45	0.51
Fugitive emissions-oil and natural gas	CH ₄	21.8	7.9	0.05	5.41	0.56
Energy Industries-solid fuels	CO ₂	46.0	31.3	0.05	5.04	0.61
CH ₄ from solid waste disposal sites	CH ₄	2.3	5.4	0.04	4.55	0.66
CO ₂ emission from Iron and steel production	CO ₂	15.8	5.6	0.04	4.08	0.70
Residential-gaseous fuels	CO ₂	2.8	5.2	0.04	3.99	0.74
Commercial/Institutional-gaseous fuels	CO ₂	0.3	1.9	0.02	1.95	0.76
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	3.6	0.5	0.02	1.87	0.78
Manufacturing Industries and Constructions-solid fuels	CO ₂	10.6	4.6	0.02	1.84	0.80
PFC emission from Aluminium production	PFC	3.3	0.6	0.01	1.50	0.81
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	16.6	8.4	0.01	1.46	0.83
Fugitive emissions-solid fuels	CH ₄	6.4	2.7	0.01	1.14	0.84
CO ₂ emission from Ammonia production	CO ₂	5.0	1.9	0.01	1.14	0.85
CO ₂ emissions from Cement production	CO ₂	5.6	4.1	< 0.01	1.01	0.86
Direct N ₂ O emissions from agricultural soils	N ₂ O	11.2	5.7	< 0.01	< 1	0.87
Residential-biomass	CH ₄	0.1	0.9	< 0.01	< 1	0.88
Manufacturing Industries and Constructions-liquid fuels	CO ₂	10.2	5.1	< 0.01	< 1	0.89
Indirect N ₂ O emissions from agricultural soils	N ₂ O	7.5	3.6	< 0.01	< 1	0.90
Residential-solid fuels	CO ₂	1.7	0.2	< 0.01	< 1	0.91
Manufacturing Industries and Constructions-biomass	CO ₂	0.1	0.9	< 0.01	< 1	0.91
Commercial/Institutional-liquid fuels	CO ₂	0.5	1.1	< 0.01	< 1	0.92
CH ₄ from waste water handling	CH ₄	0.4	0.9	< 0.01	< 1	0.93
N ₂ O emission from Nitric acid production	N ₂ O	5.5	2.5	< 0.01	< 1	0.94
CH ₄ from manure management	CH ₄	4.3	1.9	< 0.01	< 1	0.94
Residential-liquid fuels	CO ₂	0.6	0.8	< 0.01	< 1	0.95
CO ₂ emissions from Lime production	CO ₂	3.8	2.7	< 0.01	< 1	0.96
CH ₄ from enteric fermentation	CH ₄	10.6	5.8	< 0.01	< 1	0.96
N ₂ O emission from Adipic acid production	N ₂ O	0.7	0.0	< 0.01	< 1	0.96
Commercial/Institutional-biomass	CO ₂	0.4	0.6	< 0.01	< 1	0.97
CO ₂ emission from Limestone and dolomite use	CO ₂	1.7	0.7	< 0.01	< 1	0.97
CO ₂ emission from Ferroalloys production	CO ₂	0.5	0.0	< 0.01	< 1	0.97
CO ₂ emission from Solvent and other product use	CO ₂	0.6	0.1	< 0.01	< 1	0.98

Tier 1 Analysis – Trend Assessment, 2008, excluding LULUCF (Table 7A2 of IPCC GPG 2000)

A IPCC Source Categories	B Direct Green house Gas	C Base Year Estimate (Mt CO ₂ Equivalent)	D Current Year Estimate (Mt CO ₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
Commercial/Institutional-solid fuels	CO ₂	0.4	0.0	< 0.01	< 1	0.98
N ₂ O from manure management	N ₂ O	3.2	1.6	< 0.01	< 1	0.98
N ₂ O from waste water handling	N ₂ O	0.2	0.3	< 0.01	< 1	0.98
CO ₂ emission from Aluminium production	CO ₂	0.4	0.4	< 0.01	< 1	0.99
Residential-biomass	N ₂ O	0.0	0.2	< 0.01	< 1	0.99
CO ₂ emission from Carbide production	CO ₂	0.2	0.0	< 0.01	< 1	0.99
Energy Industries-biomass	CO ₂	0.1	0.1	< 0.01	< 1	0.99
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	0.1	0.1	< 0.01	< 1	0.99
Navigation	CO ₂	0.3	0.1	< 0.01	< 1	0.99
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	0.1	0.0	< 0.01	< 1	0.99
CH ₄ from field burning of agricultural residues	CH ₄	0.1	0.0	< 0.01	< 1	0.99
Other transports-pipeline	CO ₂	0.0	0.1	< 0.01	< 1	0.99
Agricultural soils : animal production	N ₂ O	3.0	1.7	< 0.01	< 1	0.99
Residential-solid fuels	CH ₄	0.1	0.0	< 0.01	< 1	1.00
CO ₂ emission from Mineral products - other	CO ₂	0.1	0.0	< 0.01	< 1	1.00
CO ₂ from waste incineration	CO ₂	0.0	0.0	< 0.01	< 1	1.00
Emission from Consumption of halocarbons	HFC, PFC, SF ₆	0.0	0.0	< 0.01	< 1	1.00
Road transport	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Road transport	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-solid fuels	N ₂ O	0.2	0.1	< 0.01	< 1	1.00
N ₂ O from field burning of agricultural residues	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
CH ₄ from rice production	CH ₄	0.1	0.0	< 0.01	< 1	1.00
CH ₄ emission from Chemical industry-other	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	CO ₂	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Residential-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Railways	CO ₂	0.9	0.5	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00

Tier 1 Analysis – Trend Assessment, 2008, excluding LULUCF (Table 7A2 of IPCC GPG 2000)						
A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate (Mt CO₂ Equivalent)	D Current Year Estimate (Mt CO₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Residential-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Residential-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	CO ₂	0.1	0.1	< 0.01	< 1	1.00
Residential-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Residential-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
CO ₂ emission from Soda ash production and use	CO ₂	0.1	0.1	< 0.01	< 1	1.00
Commercial/Institutional-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Navigation	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Railways	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Navigation	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Railways	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	CH ₄	0.0	0.0	< 0.01	< 1	1.00
TOTAL		277.4	161.7	0.94	1.00	

Key Category Analysis Summary, 2008, excluding LULUCF (Table 7A3 of IPCC GPG 2000)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Greenhouse Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Energy				
Agriculture/Forestry/Fisheries-biomass	CH ₄	No		
Agriculture/Forestry/Fisheries-biomass	CO ₂	No		
Agriculture/Forestry/Fisheries-biomass	N ₂ O	No		
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	No		
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	No		
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	Yes	Trend	
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	No		
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	No		
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	No		
Civil Aviation	CH ₄	No		
Civil Aviation	CO ₂	No		
Civil Aviation	N ₂ O	No		
Commercial/Institutional-biomass	CH ₄	No		
Commercial/Institutional-biomass	CO ₂	No		
Commercial/Institutional-biomass	N ₂ O	No		
Commercial/Institutional-gaseous fuels	CH ₄	No		
Commercial/Institutional-gaseous fuels	CO ₂	Yes	Level, Trend	
Commercial/Institutional-gaseous fuels	N ₂ O	No		
Commercial/Institutional-liquid fuels	CH ₄	No		
Commercial/Institutional-liquid fuels	CO ₂	Yes	Level, Trend	
Commercial/Institutional-liquid fuels	N ₂ O	No		
Commercial/Institutional-solid fuels	CH ₄	No		
Commercial/Institutional-solid fuels	CO ₂	No		
Commercial/Institutional-solid fuels	N ₂ O	No		
Energy Industries-biomass	CH ₄	No		
Energy Industries-biomass	CO ₂	No		
Energy Industries-biomass	N ₂ O	No		
Energy Industries-gaseous fuels	CH ₄	No		
Energy Industries-gaseous fuels	CO ₂	Yes	Level, Trend	
Energy Industries-gaseous fuels	N ₂ O	No		
Energy Industries-liquid fuels	CH ₄	No		
Energy Industries-liquid fuels	CO ₂	Yes	Level, Trend	
Energy Industries-liquid fuels	N ₂ O	No		
Energy Industries-solid fuels	CH ₄	No		
Energy Industries-solid fuels	CO ₂	Yes	Level, Trend	
Energy Industries-solid fuels	N ₂ O	No		
Fugitive emissions-oil and natural gas	CH ₄	Yes	Level, Trend	
Fugitive emissions-solid fuels	CH ₄	Yes	Level, Trend	

Key Category Analysis Summary, 2008, excluding LULUCF (Table 7A3 of IPCC GPG 2000)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Energy				
Manufacturing Industries and Constructions-biomass	CH ₄	No		
Manufacturing Industries and Constructions-biomass	CO ₂	Yes	Trend	
Manufacturing Industries and Constructions-biomass	N ₂ O	No		
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	No		
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	No		
Manufacturing Industries and Constructions-liquid fuels	CH ₄	No		
Manufacturing Industries and Constructions-liquid fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	No		
Manufacturing Industries and Constructions-solid fuels	CH ₄	No		
Manufacturing Industries and Constructions-solid fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-solid fuels	N ₂ O	No		
Navigation	CH ₄	No		
Navigation	CO ₂	No		
Navigation	N ₂ O	No		
Other transports-pipeline	CO ₂	No		
Railways	CH ₄	No		
Railways	CO ₂	No		
Railways	N ₂ O	No		
Residential-biomass	CH ₄	Yes	Level, Trend	
Residential-biomass	CO ₂	Yes	Level, Trend	
Residential-biomass	N ₂ O	No		
Residential-gaseous fuels	CH ₄	No		
Residential-gaseous fuels	CO ₂	Yes	Level, Trend	
Residential-gaseous fuels	N ₂ O	No		
Residential-liquid fuels	CH ₄	No		
Residential-liquid fuels	CO ₂	Yes	Trend	
Residential-liquid fuels	N ₂ O	No		
Residential-solid fuels	CH ₄	No		
Residential-solid fuels	CO ₂	Yes	Trend	
Residential-solid fuels	N ₂ O	No		
Road transport	CH ₄	No		
Road transport	CO ₂	Yes	Level, Trend	
Road transport	N ₂ O	No		

Key Category Analysis Summary, 2008, excluding LULUCF (Table 7A3 of IPCC GPG 2000)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Industrial Processes				
CH ₄ emission from Chemical industry-other	CH ₄	No		
CO ₂ emission from Aluminium production	CO ₂	No		
CO ₂ emission from Ammonia production	CO ₂	Yes	Level, Trend	
CO ₂ emission from Carbide production	CO ₂	No		
CO ₂ emission from Ferroalloys production	CO ₂	No		
CO ₂ emission from Iron and steel production	CO ₂	Yes	Level, Trend	
CO ₂ emission from Limestone and dolomite use	CO ₂	No		
CO ₂ emission from Mineral products - other	CO ₂	No		
CO ₂ emission from Soda ash production and use	CO ₂	No		
CO ₂ emissions from Cement production	CO ₂	Yes	Level, Trend	
CO ₂ emissions from Lime production	CO ₂	Yes	Level	
Emission from Consumption of halocarbons	PFC, HFC and SF ₆	No		
N ₂ O emission from Nitric acid production	N ₂ O	Yes	Level, Trend	
N ₂ O emission from Adipic acid production	N ₂ O	No		
PFC emission from Aluminium production	PFC	Yes	Trend	
Solvents and other product use				
CO ₂ emission from Solvent and other product use	CO ₂	No		
Agriculture				
Agricultural soils: animal production	N ₂ O	Yes	Level	
CH ₄ from enteric fermentation	CH ₄	Yes	Level	
CH ₄ from field burning of agricultural residues	CH ₄	No		
CH ₄ from manure management	CH ₄	Yes	Level, Trend	
CH ₄ from rice production	CH ₄			
Direct N ₂ O emissions from agricultural soils	N ₂ O	Yes	Level, Trend	
Indirect N ₂ O emissions from agricultural soils	N ₂ O	Yes	Level, Trend	
N ₂ O from field burning of agricultural residues	N ₂ O	No		
N ₂ O from manure management	N ₂ O	Yes	Level	

Key Category Analysis Summary, 2007, excluding LULUCF (Table 7A3 of IPCC GPG 2000)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Waste				
CH ₄ from solid waste disposal sites	CH ₄	Yes	Level, Trend	
CH ₄ from waste water handling	CH ₄	Yes	Trend	
CO ₂ from waste incineration	CO ₂	No		
N ₂ O from waste water handling	N ₂ O	No		

Tables 5.4.7, 5.4.8 and 5.4.5 of the IPCC GPG 2003

Tier 1 Analysis – Level Assessment, 2008, including LULUCF (Table 5.4.7 of IPCC GPG 2003)					
A IPCC Source Categories	B Direct Green house Gas	C Base Year Estimate Absolute Value (Mt CO₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
CO ₂ from Forest Land remaining Forest Land	CO ₂	32.4	36.4	0.18	0.18
Energy Industries-solid fuels	CO ₂	46.0	31.3	0.16	0.34
Residential-biomass	CO ₂	1.9	14.1	0.07	0.41
Road transport	CO ₂	4.6	13.9	0.07	0.48
Energy Industries-gaseous fuels	CO ₂	42.1	8.7	0.04	0.53
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	16.6	8.4	0.04	0.57
Fugitive emissions-oil and natural gas	CH ₄	21.8	7.9	0.04	0.61
CH ₄ from enteric fermentation	CH ₄	10.6	5.8	0.03	0.64
Direct N ₂ O emissions from agricultural soils	N ₂ O	11.2	5.7	0.03	0.67
CO ₂ emission from Iron and steel production	CO ₂	15.8	5.6	0.03	0.70
Energy Industries-liquid fuels	CO ₂	17.9	5.6	0.03	0.72
CH ₄ from solid waste disposal sites	CH ₄	2.3	5.4	0.03	0.75
Residential-gaseous fuels	CO ₂	2.8	5.2	0.03	0.78
Manufacturing Industries and Constructions-liquid fuels	CO ₂	10.2	5.1	0.03	0.80
Manufacturing Industries and Constructions-solid fuels	CO ₂	10.6	4.6	0.02	0.83
CO ₂ emissions from Cement production	CO ₂	5.6	4.1	0.02	0.85
Indirect N ₂ O emissions from agricultural soils	N ₂ O	7.5	3.6	0.02	0.87
Fugitive emissions-solid fuels	CH ₄	6.4	2.7	0.01	0.88
CO ₂ emissions from Lime production	CO ₂	3.8	2.7	0.01	0.89
N ₂ O emission from Nitric acid production	N ₂ O	5.5	2.5	0.01	0.91
CH ₄ from manure management	CH ₄	4.3	1.9	< 0.01	0.91
CO ₂ emission from Ammonia production	CO ₂	5.0	1.9	< 0.01	0.92
Commercial/Institutional-gaseous fuels	CO ₂	0.3	1.9	< 0.01	0.93
Agricultural soils : animal production	N ₂ O	3.0	1.7	< 0.01	0.94
N ₂ O from manure management	N ₂ O	3.2	1.6	< 0.01	0.95
Commercial/Institutional-liquid fuels	CO ₂	0.5	1.1	< 0.01	0.96
Residential-biomass	CH ₄	0.1	0.9	< 0.01	0.96
CH ₄ from waste water handling	CH ₄	0.4	0.9	< 0.01	0.97
Manufacturing Industries and Constructions-biomass	CO ₂	0.1	0.9	< 0.01	0.97
Residential-liquid fuels	CO ₂	0.6	0.8	< 0.01	0.97
CO ₂ emission from Limestone and dolomite use	CO ₂	1.7	0.7	< 0.01	0.98
PFC emission from Aluminium production	PFC	3.3	0.6	< 0.01	0.98
Commercial/Institutional-biomass	CO ₂	0.4	0.6	< 0.01	0.98
Railways	CO ₂	0.9	0.5	< 0.01	0.99
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	3.6	0.5	< 0.01	0.99

Tier 1 Analysis – Level Assessment, 2008, including LULUCF (Table 5.4.7 of IPCC GPG 2003)

A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate Absolute Value (Mt CO₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
CO ₂ emission from Aluminium production	CO ₂	0.4	0.4	< 0.01	0.99
N ₂ O from waste water handling	N ₂ O	0.2	0.3	< 0.01	0.99
Residential-solid fuels	CO ₂	1.7	0.2	< 0.01	0.99
Residential-biomass	N ₂ O	0.0	0.2	< 0.01	0.99
Energy Industries-solid fuels	N ₂ O	0.2	0.1	< 0.01	0.99
CO ₂ emission from Solvent and other product use	CO ₂	0.6	0.1	< 0.01	1.00
Energy Industries-biomass	CO ₂	0.1	0.1	< 0.01	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	0.1	0.1	< 0.01	1.00
Navigation	CO ₂	0.3	0.1	< 0.01	1.00
CO ₂ emission from Soda ash production and use	CO ₂	0.1	0.1	< 0.01	1.00
Other transports-pipeline	CO ₂	0.0	0.1	< 0.01	1.00
Agriculture/Forestry/Fisheries-biomass	CO ₂	0.1	0.1	< 0.01	1.00
Road transport	CH ₄	0.0	0.0	< 0.01	1.00
CO ₂ from waste incineration	CO ₂	0.0	0.0	< 0.01	1.00
Emission from Consumption of halocarbons	HFC, PFC, SF ₆	0.0	0.0	< 0.01	1.00
Road transport	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-biomass	CH ₄	0.0	0.0	< 0.01	1.00
CO ₂ emission from Mineral products - other	CO ₂	0.1	0.0	< 0.01	1.00
CO ₂ emission from Ferroalloys production	CO ₂	0.5	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
CH ₄ from rice production	CH ₄	0.1	0.0	< 0.01	1.00
Energy Industries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-solid fuels	CH ₄	0.1	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
CH ₄ emission from Chemical industry-other	CH ₄	0.0	0.0	< 0.01	1.00
Residential-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Energy Industries-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-biomass	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00

Tier 1 Analysis – Level Assessment, 2008, including LULUCF (Table 5.4.7 of IPCC GPG 2003)

A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate Absolute Value (Mt CO₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO₂ Equivalent)	E Level Assessment	F Cumulative Total of Column E
Agriculture/Forestry/Fisheries-biomass	CH ₄	0.0	0.0	< 0.01	1.00
Energy Industries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Manufacturing Industries and Constructions-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Residential-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Residential-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
CH ₄ from Forest Land remaining Forest Land	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	CO ₂	0.4	0.0	< 0.01	1.00
Civil Aviation	CO ₂	0.0	0.0	< 0.01	1.00
Energy Industries-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Railways	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Residential-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Energy Industries-biomass	CH ₄	0.0	0.0	< 0.01	1.00
Railways	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-biomass	N ₂ O	0.0	0.0	< 0.01	1.00
Navigation	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	1.00
N ₂ O from Forest Land remaining Forest Land	N ₂ O	0.0	0.0	< 0.01	1.00
Navigation	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	0.1	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Civil Aviation	N ₂ O	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Commercial/Institutional-solid fuels	CH ₄	0.0	0.0	< 0.01	1.00
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	0.0	0.0	< 0.01	1.00
Civil Aviation	CH ₄	0.0	0.0	< 0.01	1.00
CH ₄ from field burning of agricultural residues	CH ₄	0.1	0.0	< 0.01	1.00
CO ₂ emission from Carbide production	CO ₂	0.2	0.0	< 0.01	1.00
N ₂ O emission from Adipic acid production	N ₂ O	0.7	0.0	< 0.01	1.00
N ₂ O from field burning of agricultural residues	N ₂ O	0.0	0.0	< 0.01	1.00
TOTAL		309.8	198.1	1.00	

Tier 1 Analysis – Trend Assessment, 2008, including LULUCF (Table 5.4.8 of IPCC GPG 2003)						
A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate Absolute Value (Mt CO₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
Energy Industries-gaseous fuels	CO ₂	42.1	8.7	0.14	16.33	0.16
CO ₂ from Forest Land remaining Forest Land	CO ₂	32.4	36.4	0.12	14.03	0.30
Residential-biomass	CO ₂	1.9	14.1	0.10	11.56	0.42
Road transport	CO ₂	4.6	13.9	0.09	9.85	0.52
Fugitive emissions-oil and natural gas	CH ₄	21.8	7.9	0.05	5.38	0.57
Energy Industries-liquid fuels	CO ₂	17.9	5.6	0.05	5.22	0.62
CO ₂ emission from Iron and steel production	CO ₂	15.8	5.6	0.04	4.03	0.66
CH ₄ from solid waste disposal sites	CH ₄	2.3	5.4	0.03	3.48	0.70
Residential-gaseous fuels	CO ₂	2.8	5.2	0.03	3.01	0.73
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	16.6	8.4	0.02	2.00	0.75
Manufacturing Industries and Constructions-solid fuels	CO ₂	10.6	4.6	0.02	1.99	0.77
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	3.6	0.5	0.01	1.66	0.79
Energy Industries-solid fuels	CO ₂	46.0	31.3	0.01	1.66	0.80
Commercial/Institutional-gaseous fuels	CO ₂	0.3	1.9	0.01	1.53	0.82
PFC emission from Aluminium production	PFC	3.3	0.6	0.01	1.35	0.83
Direct N ₂ O emissions from agricultural soils	N ₂ O	11.2	5.7	0.01	1.35	0.84
Manufacturing Industries and Constructions-liquid fuels	CO ₂	10.2	5.1	0.01	1.24	0.86
Fugitive emissions-solid fuels	CH ₄	6.4	2.7	0.01	1.23	0.87
CO ₂ emission from Ammonia production	CO ₂	5.0	1.9	0.01	1.15	0.88
Indirect N ₂ O emissions from agricultural soils	N ₂ O	7.5	3.6	< 0.01	1.11	0.89
CH ₄ from enteric fermentation	CH ₄	10.6	5.8	< 0.01	< 1	0.90
N ₂ O emission from Nitric acid production	N ₂ O	5.5	2.5	< 0.01	< 1	0.91
Residential-solid fuels	CO ₂	1.7	0.2	< 0.01	< 1	0.92
Residential-biomass	CH ₄	0.1	0.9	< 0.01	< 1	0.92
CH ₄ from manure management	CH ₄	4.3	1.9	< 0.01	< 1	0.93
Manufacturing Industries and Constructions-biomass	CO ₂	0.1	0.9	< 0.01	< 1	0.94
Commercial/Institutional-liquid fuels	CO ₂	0.5	1.1	< 0.01	< 1	0.95
CH ₄ from waste water handling	CH ₄	0.4	0.9	< 0.01	< 1	0.95
CO ₂ emissions from Cement production	CO ₂	5.6	4.1	< 0.01	< 1	0.96
Residential-liquid fuels	CO ₂	0.6	0.8	< 0.01	< 1	0.96
N ₂ O emission from Adipic acid production	N ₂ O	0.7	0.0	< 0.01	< 1	0.96
CO ₂ emission from Limestone and dolomite use	CO ₂	1.7	0.7	< 0.01	< 1	0.97
N ₂ O from manure management	N ₂ O	3.2	1.6	< 0.01	< 1	0.97
Commercial/Institutional-biomass	CO ₂	0.4	0.6	< 0.01	< 1	0.97
CO ₂ emission from Ferroalloys production	CO ₂	0.5	0.0	< 0.01	< 1	0.98

Tier 1 Analysis – Trend Assessment, 2008, including LULUCF (Table 5.4.8 of IPCC GPG 2003)

A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate Absolute Value (Mt CO ₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO ₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
CO ₂ emission from Solvent and other product use	CO ₂	0.6	0.1	< 0.01	< 1	0.98
Commercial/Institutional-solid fuels	CO ₂	0.4	0.0	< 0.01	< 1	0.98
CO ₂ emissions from Lime production	CO ₂	3.8	2.7	< 0.01	< 1	0.98
Agricultural soils : animal production	N ₂ O	3.0	1.7	< 0.01	< 1	0.99
N ₂ O from waste water handling	N ₂ O	0.2	0.3	< 0.01	< 1	0.99
Residential-biomass	N ₂ O	0.0	0.2	< 0.01	< 1	0.99
CO ₂ emission from Aluminium production	CO ₂	0.4	0.4	< 0.01	< 1	0.99
CO ₂ emission from Carbide production	CO ₂	0.2	0.0	< 0.01	< 1	0.99
Navigation	CO ₂	0.3	0.1	< 0.01	< 1	0.99
Energy Industries-biomass	CO ₂	0.1	0.1	< 0.01	< 1	0.99
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	0.1	0.0	< 0.01	< 1	0.99
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	0.1	0.1	< 0.01	< 1	0.99
CH ₄ from field burning of agricultural residues	CH ₄	0.1	0.0	< 0.01	< 1	0.99
Other transports-pipeline	CO ₂	0.0	0.1	< 0.01	< 1	1.00
Residential-solid fuels	CH ₄	0.1	0.0	< 0.01	< 1	1.00
Railways	CO ₂	0.9	0.5	< 0.01	< 1	1.00
CO ₂ emission from Mineral products - other	CO ₂	0.1	0.0	< 0.01	< 1	1.00
CO ₂ from waste incineration	CO ₂	0.0	0.0	< 0.01	< 1	1.00
Emission from Consumption of halocarbons	HFC, PFC, SF ₆	0.0	0.0	< 0.01	< 1	1.00
Road transport	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Road transport	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
CH ₄ from rice production	CH ₄	0.1	0.0	< 0.01	< 1	1.00
N ₂ O from field burning of agricultural residues	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-solid fuels	N ₂ O	0.2	0.1	< 0.01	< 1	1.00
CH ₄ emission from Chemical industry-other	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	CO ₂	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	CO ₂	0.1	0.1	< 0.01	< 1	1.00
Energy Industries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
CO ₂ emission from Soda ash production and use	CO ₂	0.1	0.1	< 0.01	< 1	1.00
Residential-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00

Tier 1 Analysis – Trend Assessment, 2008, including LULUCF (Table 5.4.8 of IPCC GPG 2003)

A IPCC Source Categories	B Direct Greenhouse Gas	C Base Year Estimate Absolute Value (Mt CO₂ Equivalent)	D Current Year Estimate Absolute Value (Mt CO₂ Equivalent)	E Trend Assessment	F % Contribution to trend	G Cumulative Total of Column F
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Residential-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Residential-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
CH ₄ from Forest Land remaining Forest Land	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Residential-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Residential-liquid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Manufacturing Industries and Constructions-liquid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Commercial/Institutional-solid fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Energy Industries-biomass	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Railways	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Navigation	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
N ₂ O from Forest Land remaining Forest Land	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Railways	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Navigation	CH ₄	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-biomass	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	0.0	0.0	< 0.01	< 1	1.00
Civil Aviation	CH ₄	0.0	0.0	< 0.01	< 1	1.00
TOTAL		309.8	198.1	0.88	1.00	

Key Category Analysis Summary, 2008, including LULUCF (Table 5.4.5 of IPCC GPG 2003)				
Quantitative Method Used: <input checked="" type="checkbox"/> Tier 1 <input type="checkbox"/> Tier 2				
A IPCC Source Categories	B Direct Greenhouse Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Energy				
Agriculture/Forestry/Fisheries-biomass	CH ₄	No		
Agriculture/Forestry/Fisheries-biomass	CO ₂	No		
Agriculture/Forestry/Fisheries-biomass	N ₂ O	No		
Agriculture/Forestry/Fisheries-gaseous fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-gaseous fuels	CO ₂	No		
Agriculture/Forestry/Fisheries-gaseous fuels	N ₂ O	No		
Agriculture/Forestry/Fisheries-liquid fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-liquid fuels	CO ₂	Yes	Trend	
Agriculture/Forestry/Fisheries-liquid fuels	N ₂ O	No		
Agriculture/Forestry/Fisheries-solid fuels	CH ₄	No		
Agriculture/Forestry/Fisheries-solid fuels	CO ₂	No		
Agriculture/Forestry/Fisheries-solid fuels	N ₂ O	No		
Civil Aviation	CH ₄	No		
Civil Aviation	CO ₂	No		
Civil Aviation	N ₂ O	No		
Commercial/Institutional-biomass	CH ₄	No		
Commercial/Institutional-biomass	CO ₂	No		
Commercial/Institutional-biomass	N ₂ O	No		
Commercial/Institutional-gaseous fuels	CH ₄	No		
Commercial/Institutional-gaseous fuels	CO ₂	Yes	Level, Trend	
Commercial/Institutional-gaseous fuels	N ₂ O	No		
Commercial/Institutional-liquid fuels	CH ₄	No		
Commercial/Institutional-liquid fuels	CO ₂	Yes	Trend	
Commercial/Institutional-liquid fuels	N ₂ O	No		
Commercial/Institutional-solid fuels	CH ₄	No		
Commercial/Institutional-solid fuels	CO ₂	No		
Commercial/Institutional-solid fuels	N ₂ O	No		
Energy Industries-biomass	CH ₄	No		
Energy Industries-biomass	CO ₂	No		
Energy Industries-biomass	N ₂ O	No		
Energy Industries-gaseous fuels	CH ₄	No		
Energy Industries-gaseous fuels	CO ₂	Yes	Level, Trend	
Energy Industries-gaseous fuels	N ₂ O	No		
Energy Industries-liquid fuels	CH ₄	No		
Energy Industries-liquid fuels	CO ₂	Yes	Level, Trend	
Energy Industries-liquid fuels	N ₂ O	No		
Energy Industries-solid fuels	CH ₄	No		
Energy Industries-solid fuels	CO ₂	Yes	Level, Trend	

Key Category Analysis Summary, 2008, including LULUCF (Table 5.4.5 of IPCC GPG 2003)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Energy				
Energy Industries-solid fuels	N ₂ O	No		
Fugitive emissions-oil and natural gas	CH ₄	Yes	Level, Trend	
Fugitive emissions-solid fuels	CH ₄	Yes	Level, Trend	
Manufacturing Industries and Constructions-biomass	CH ₄	No		
Manufacturing Industries and Constructions-biomass	CO ₂	Yes	Trend	
Manufacturing Industries and Constructions-biomass	N ₂ O	No		
Manufacturing Industries and Constructions-gaseous fuels	CH ₄	No		
Manufacturing Industries and Constructions-gaseous fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-gaseous fuels	N ₂ O	No		
Manufacturing Industries and Constructions-liquid fuels	CH ₄	No		
Manufacturing Industries and Constructions-liquid fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-liquid fuels	N ₂ O	No		
Manufacturing Industries and Constructions-solid fuels	CH ₄	No		
Manufacturing Industries and Constructions-solid fuels	CO ₂	Yes	Level, Trend	
Manufacturing Industries and Constructions-solid fuels	N ₂ O	No		
Navigation	CH ₄	No		
Navigation	CO ₂	No		
Navigation	N ₂ O	No		
Other transports-pipeline	CO ₂	No		
Railways	CH ₄	No		
Railways	CO ₂	No		
Railways	N ₂ O	No		
Residential-biomass	CH ₄	Yes	Trend	
Residential-biomass	CO ₂	Yes	Level, Trend	
Residential-biomass	N ₂ O	No		
Residential-gaseous fuels	CH ₄	No		
Residential-gaseous fuels	CO ₂	Yes	Level, Trend	
Residential-gaseous fuels	N ₂ O	No		
Residential-liquid fuels	CH ₄	No		
Residential-liquid fuels	CO ₂	Yes	Level, Trend	
Residential-liquid fuels	N ₂ O	No		
Residential-solid fuels	CH ₄	No		
Residential-solid fuels	CO ₂	Yes	Trend	
Residential-solid fuels	N ₂ O	No		

Key Category Analysis Summary, 2008, including LULUCF (Table 5.4.5 of IPCC GPG 2003)

Quantitative Method Used: Tier 1 Tier 2

A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
Energy				
Road transport	CH ₄	No		
Road transport	CO ₂	Yes	Level, Trend	
Road transport	N ₂ O	No		
Industrial Processes				
CH ₄ emission from Chemical industry-other	CH ₄	No		
CO ₂ emission from Aluminium production	CO ₂	No		
CO ₂ emission from Ammonia production	CO ₂	Yes	Level, Trend	
CO ₂ emission from Carbide production	CO ₂	No		
CO ₂ emission from Ferroalloys production	CO ₂	No		
CO ₂ emission from Iron and steel production	CO ₂	Yes	Level, Trend	
CO ₂ emission from Limestone and dolomite use	CO ₂	No		
CO ₂ emission from Mineral products - other	CO ₂	No		
CO ₂ emission from Soda ash production and use	CO ₂	No		
CO ₂ emissions from Cement production	CO ₂	Yes	Level	
CO ₂ emissions from Lime production	CO ₂	Yes	Level	
Emission from Consumption of halocarbons	PFC, HFC and SF ₆	No		
N ₂ O emission from Nitric acid production	N ₂ O	Yes	Level, Trend	
N ₂ O emission from Adipic acid production	N ₂ O	No		
PFC emission from Aluminium production	PFC	Yes	Trend	
Solvents and other product use				
CO ₂ emission from Solvent and other product use	CO ₂	No		
Agriculture				
Agricultural soils: animal production	N ₂ O	Yes	Level	
CH ₄ from enteric fermentation	CH ₄	Yes	Level, Trend	
CH ₄ from field burning of agricultural residues	CH ₄	No		
CH ₄ from manure management	CH ₄	Yes	Level, Trend	
CH ₄ from rice production	CH ₄	No		
Direct N ₂ O emissions from agricultural soils	N ₂ O	Yes	Level, Trend	
Indirect N ₂ O emissions from agricultural soils	N ₂ O	Yes	Level, Trend	
N ₂ O from field burning of agricultural residues	N ₂ O	No		
N ₂ O from manure management	N ₂ O	Yes	Level	

Key Category Analysis Summary, 2008, including LULUCF (Table 5.4.5 of IPCC GPG 2003)				
Quantitative Method Used: <input checked="" type="checkbox"/> Tier 1 <input type="checkbox"/> Tier 2				
A IPCC Source Categories	B Direct Green house Gas	C Key Source Category Flag	D If Column C is Yes, Criteria for Identification	E Comments
LULUCF				
CO ₂ from Forest Land remaining Forest Land	CO ₂	Yes	Level, Trend	
CH ₄ from Forest Land remaining Forest Land	CH ₄	No		
N ₂ O from Forest Land remaining Forest Land	N ₂ O	No		
Waste				
CH ₄ from solid waste disposal sites	CH ₄	Yes	Level, Trend	
CH ₄ from waste water handling	CH ₄	Yes	Trend	
CO ₂ from waste incineration	CO ₂	No		
N ₂ O from waste water handling	N ₂ O	No		

Table NIR. 3, as contained in the Annex to Decision 6/CMP. 3

Romania is currently developing the elements which characterize the activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.