



# **REPUBLIC OF NAMIBIA**

## **NATIONAL GHG INVENTORY REPORT NIR3 1994 - 2014**

**October 2018**

**PART 2**



# **REPUBLIC OF NAMIBIA**

## **NATIONAL GHG INVENTORY REPORT**

**NIR3**

**1994 - 2014**

**October 2018**

**PART 2**

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### Annex 1 : Inventory Year 1994

### LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-86,490.6	277.9	9.3	NE	NE	NE	NE	NE	48.4	2,198.1	15.9	2.6
<b>1 - Energy</b>	1,409.8	1.5	7.2E-02	NA	NA	NA	NA	NA	14.3	42.4	5.9	2.6
<b>1.A - Fuel Combustion Activities</b>	1,409.8	1.5	7.2E-02	NA	NA	NA	NA	NA	14.3	42.4	5.9	2.6
1.A.1 - Energy Industries	30.6	3.4E-04	4.8E-04	NA	NA	NA	NA	NA	6.7E-02	2.9E-03	3.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	110.5	9.8E-03	1.5E-03	NA	NA	NA	NA	NA	0.4	0.1	0.4	2.3E-02
1.A.3 - Transport	786.4	0.2	5.0E-02	NA	NA	NA	NA	NA	4.5	24.1	2.3	1.2E-02
1.A.4 - Other Sectors	467.4	1.3	1.9E-02	NA	NA	NA	NA	NA	9.2	18.1	3.1	2.3
1.A.5 - Non-Specified	14.9	7.8E-04	7.8E-04	NA	NA	NA	NA	NA	0.2	3.6E-02	8.9E-03	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	22.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.7	NO
<b>2.A - Mineral Industry</b>	4.0	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 1 : Inventory Year 1994

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.5	NO
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA

## Annex 1 : Inventory Year 1994

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2.H - Other</b>	-	-	NO	NA	NA	NA	NA	NA	-	-	0.1	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.1	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-87,923.6	274.0	9.2	NA	NA	NA	NA	NA	33.8	2,152.3	9.2	NO	
<b>3.A - Livestock</b>	NA	133.8	0.3	NA	NA	NA	NA	NA	NA	NA	9.2	NA	
3.A.1 - Enteric Fermentation	NA	130.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.0	0.3	NA	NA	NA	NA	NA	NA	NA	9.2	NA	
<b>3.B - Land</b>	-87,923.9	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-96,659.2	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.3	140.2	8.8	NA	NA	NA	NA	NA	33.8	2,152.3	NA	NA	
3.C.1 - Emissions from biomass burning	NA	140.2	4.2	NA	NA	NA	NA	NA	33.8	2,152.3	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.0	2.4	7.7E-02	NA	NA	NA	NA	NA	0.2	3.5	0.2	6.8E-03	
<b>4.A - Solid Waste Disposal</b>	NA	0.4	NO	NA	NA	NA	NA	NA	NO	NO	7.6E-02	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	1.0	0.4	5.3E-03	NA	NA	NA	NA	NA	0.2	3.5	7.6E-02	6.8E-03	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.6	7.1E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	



## Annex 1 : Inventory Year 1994

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	212.4	1.4E-02	5.8E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	72.7	5.1E-04	2.0E-03	NA	NA	NA	NA	NA	0.3	2.5E-02	1.2E-02	2.3E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	139.7	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6
1.A.5.c - Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 1 : Inventory Year 1994

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,409.8	1.5	7.2E-02	14.3	42.4	5.9	2.6
<b>1.A - Fuel Combustion Activities</b>	1,409.8	1.5	7.2E-02	14.3	42.4	5.9	2.6
<b>1.A.1 - Energy Industries</b>	30.6	3.4E-04	4.8E-04	6.7E-02	2.9E-03	3.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	30.6	3.4E-04	4.8E-04	6.7E-02	2.9E-03	3.0E-04	0.3
1.A.1.a.i - Electricity Generation	30.6	3.4E-04	4.8E-04	6.7E-02	2.9E-03	3.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	110.5	9.8E-03	1.5E-03	0.4	0.1	0.4	2.3E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	109.2	9.7E-03	1.5E-03	0.4	0.1	0.4	2.2E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.3	5.4E-05	1.1E-05	9.2E-03	1.2E-03	5.0E-04	8.0E-04
<b>1.A.3 - Transport</b>	786.4	0.2	5.0E-02	4.5	24.1	2.3	1.2E-02
1.A.3.a - Civil Aviation	16.8	1.2E-04	4.7E-04	3.8E-02	3.3	5.2E-02	5.4E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	16.8	1.2E-04	4.7E-04	3.8E-02	3.3	5.2E-02	5.4E-03
1.A.3.b - Road Transportation	734.6	0.2	3.6E-02	3.9	20.7	2.2	6.9E-03
1.A.3.b.i - Cars	215.8	9.2E-02	1.0E-02	0.6	5.3	0.6	2.5E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	69.0	2.9E-02	3.2E-03	0.2	1.7	0.2	8.0E-04
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	146.7	6.3E-02	6.9E-03	0.4	3.6	0.4	1.7E-03
1.A.3.b.ii - Light-duty trucks	357.2	0.1	1.7E-02	1.6	14.9	1.4	4.0E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	267.9	0.1	1.3E-02	1.2	11.2	1.1	3.0E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	89.3	3.6E-02	4.2E-03	0.4	3.7	0.4	1.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	160.8	8.5E-03	8.5E-03	1.7	0.4	9.7E-02	4.0E-04
1.A.3.b.iv - Motorcycles	0.8	4.0E-04	3.9E-05	1.8E-03	0.1	3.6E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	35.1	2.0E-03	1.4E-02	0.6	0.1	5.2E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

## Annex 1 : Inventory Year 1994

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	467.4	1.3	1.9E-02	9.2	18.1	3.1	2.3
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	102.1	1.2	1.6E-02	0.3	16.1	2.4	4.4E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	365.3	4.9E-02	3.0E-03	8.9	2.0	0.7	2.3
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	365.3	4.9E-02	3.0E-03	8.9	2.0	0.7	2.3
<b>1.A.5 - Non-Specified</b>	14.9	7.8E-04	7.8E-04	0.2	3.6E-02	8.9E-03	1.0E-04
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	14.9	7.8E-04	7.8E-04	0.2	3.6E-02	8.9E-03	1.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	14.9	7.8E-04	7.8E-04	0.2	3.6E-02	8.9E-03	1.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	212.4	1.4E-02	5.8E-03	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	72.7	5.1E-04	2.0E-03	0.3	2.5E-02	1.2E-02	2.3E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	139.7	1.3E-02	3.7E-03	3.4	0.6	0.2	0.6
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	461.1						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	22.2	-	-	-	-	-	-	-	-	-	0.7	-	
<b>2.A - Mineral Industry</b>	4.0	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.5	NO	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.5	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.1	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.1	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-87,923.6	274.0	9.2	33.8	2,152.3	9.2
<b>3.A - Livestock</b>	NA	133.8	0.3	NA	NA	9.2
3.A.1 - Enteric Fermentation	NA	130.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	107.0	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	106.9	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.1	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.2	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.1	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.5	NA	NA	NA	NA
3.A.1.h - Swine	NA	1.8E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.0	0.3	NA	NA	9.2
3.A.2.a - Cattle	NA	2.0	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.0	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.3	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	9.6E-02	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	1.8E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	9.3E-03	3.9E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-87,923.9	NA	NO	NO	NO	NO
3.B.1 - Forest land	-96,659.2	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-95,039.3	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO



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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.3	140.2	8.8	33.8	2,152.3	NO
3.C.1 - Emissions from biomass burning	-	140.2	4.2	33.8	2,152.3	NO
3.C.1.a - Biomass burning in forest lands	NA	139.7	4.1	32.9	2,135.9	NO

## Annex 1 : Inventory Year 1994

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.6	5.3E-02	1.0	16.4	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.4	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

**Annex 1 : Inventory Year 1994**
**SECTORAL REPORT: WASTE**

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.0	2.4	7.7E-02	0.2	3.5	0.2	6.8E-03
<b>4.A - Solid Waste Disposal</b>	-	0.4	-	-	-	7.6E-02	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	7.6E-02	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.0	0.4	5.3E-03	0.2	3.5	7.6E-02	6.8E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.0	0.4	5.3E-03	0.2	3.5	7.6E-02	6.8E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.6	7.1E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.2	7.1E-02	NO	NO	5.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.3	NA	NO	NO	4.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 1 : Inventory Year 1994

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-86,490.6	277.9	9.3	NE	NE	NE	NE	NE	48.4	2,198.1	15.9	2.6
<b>1 - Energy</b>	1,409.8	1.5	7.2E-02	NA	NA	NA	NA	NA	14.3	42.4	5.9	2.6
1.A - Fuel Combustion Activities	1,409.8	1.5	7.2E-02	NA	NA	NA	NA	NA	14.3	42.4	5.9	2.6
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	22.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.7	NO
2.A - Mineral Industry	4.0	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.5	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.1	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-87,923.6	274.0	9.2	NA	NA	NA	NA	NA	33.8	2,152.3	9.2	NO
3.A - Livestock	NA	133.8	0.3	NA	NA	NA	NA	NA	NA	NA	9.2	NA
3.B - Land	-87,923.9		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.3	140.2	8.8	NA	NA	NA	NA	NA	33.8	2,152.3	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.0	2.4	7.7E-02	NA	NA	NA	NA	NA	0.2	3.5	0.2	6.8E-03
4.A - Solid Waste Disposal	NA	0.4	NO	NA	NA	NA	NA	NA	NO	NO	7.6E-02	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.0	0.4	5.3E-03	NA	NA	NA	NA	NA	0.2	3.5	7.6E-02	6.8E-03
4.D - Wastewater Treatment and Discharge	NA	1.6	7.1E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	212.4	1.4E-02	5.8E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	72.7	5.1E-04	2.0E-03	NA	NA	NA	NA	NA	0.3	2.5E-02	1.2E-02	2.3E-02
1.A.3.d.i - International water-borne	139.7	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6

**Annex 1 : Inventory Year 1994**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
navigation(International bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 2 : Inventory Year 1995

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-88,289.6	272.7	9.2	NE	NE	NE	NE	NE	45.0	2,082.6	16.0	2.1
<b>1 - Energy</b>	1,417.5	1.5	7.6E-02	NA	NA	NA	NA	NA	12.8	43.8	6.0	2.1
<b>1.A - Fuel Combustion Activities</b>	1,417.5	1.5	7.6E-02	NA	NA	NA	NA	NA	12.8	43.8	6.0	2.1
1.A.1 - Energy Industries	32.9	3.7E-04	5.2E-04	NA	NA	NA	NA	NA	7.2E-02	3.1E-03	4.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	113.4	9.9E-03	1.6E-03	NA	NA	NA	NA	NA	0.4	0.1	0.4	2.4E-02
1.A.3 - Transport	868.4	0.3	5.4E-02	NA	NA	NA	NA	NA	5.1	25.6	2.5	1.3E-02
1.A.4 - Other Sectors	385.0	1.3	1.9E-02	NA	NA	NA	NA	NA	7.1	18.0	3.1	1.8
1.A.5 - Non-Specified	17.9	9.4E-04	9.4E-04	NA	NA	NA	NA	NA	0.2	4.3E-02	1.1E-02	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	22.7	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.7	NO
<b>2.A - Mineral Industry</b>	4.5	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 2 : Inventory Year 1995

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.6</b>	<b>NO</b>	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.2</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-89,730.9</b>	<b>268.8</b>	<b>9.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>32.0</b>	<b>2,035.2</b>	<b>9.1</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>136.2</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>9.1</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	133.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.2	0.3	NA	NA	NA	NA	NA	NA	NA	9.1	NA	
<b>3.B - Land</b>	<b>-89,731.2</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

## Annex 2 : Inventory Year 1995

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
3.B.1 - Forest land	-98,466.5	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	<b>0.3</b>	<b>132.6</b>	<b>8.8</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>32.0</b>	<b>2,035.2</b>	<b>NA</b>	<b>NA</b>	
3.C.1 - Emissions from biomass burning	NA	132.6	3.9	NA	NA	NA	NA	NA	32.0	2,035.2	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	<b>1.0</b>	<b>2.4</b>	<b>7.0E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.6</b>	<b>0.2</b>	<b>7.1E-03</b>	
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>0.5</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>8.1E-02</b>	<b>NA</b>	
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.0</b>	<b>0.4</b>	<b>-</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.6</b>	<b>7.9E-02</b>	<b>7.1E-03</b>	
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.4</b>	<b>7.0E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.0E-07</b>	<b>NA</b>	
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	<b>213.7</b>	<b>1.3E-02</b>	<b>5.8E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.7</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	
1.A.3.a.i - International Aviation (International Bunkers)	75.1	5.3E-04	2.1E-03	NA	NA	NA	NA	NA	0.3	2.6E-02	1.2E-02	2.4E-02	
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	138.6	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6	
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,417.5	1.5	7.6E-02	12.8	43.8	6.0	2.1
<b>1.A - Fuel Combustion Activities</b>	1,417.5	1.5	7.6E-02	12.8	43.8	6.0	2.1
<b>1.A.1 - Energy Industries</b>	32.9	3.7E-04	5.2E-04	7.2E-02	3.1E-03	4.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	32.9	3.7E-04	5.2E-04	7.2E-02	3.1E-03	4.0E-04	0.3
1.A.1.a.i - Electricity Generation	32.9	3.7E-04	5.2E-04	7.2E-02	3.1E-03	4.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	113.4	9.9E-03	1.6E-03	0.4	0.1	0.4	2.4E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	112.0	9.9E-03	1.5E-03	0.4	0.1	0.4	2.4E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.3	5.6E-05	1.1E-05	9.6E-03	1.2E-03	5.0E-04	9.0E-04
<b>1.A.3 - Transport</b>	868.4	0.3	5.4E-02	5.1	25.6	2.5	1.3E-02
1.A.3.a - Civil Aviation	17.1	1.2E-04	4.8E-04	3.9E-02	3.3	5.3E-02	5.5E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	17.1	1.2E-04	4.8E-04	3.9E-02	3.3	5.3E-02	5.5E-03
1.A.3.b - Road Transportation	815.1	0.3	4.0E-02	4.4	22.1	2.4	7.5E-03
1.A.3.b.i - Cars	233.1	9.8E-02	1.1E-02	0.7	5.6	0.7	2.7E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	74.6	3.1E-02	3.5E-03	0.2	1.8	0.2	9.0E-04
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	158.5	6.7E-02	7.5E-03	0.5	3.8	0.5	1.8E-03
1.A.3.b.ii - Light-duty trucks	388.1	0.2	1.8E-02	1.7	15.9	1.5	4.3E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	291.0	0.1	1.4E-02	1.3	11.9	1.2	3.2E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	97.0	3.9E-02	4.6E-03	0.4	4.0	0.4	1.1E-03
1.A.3.b.iii - Heavy-duty trucks and buses	193.1	1.0E-02	1.0E-02	2.0	0.5	0.1	5.0E-04
1.A.3.b.iv - Motorcycles	0.9	4.2E-04	4.1E-05	1.9E-03	0.1	3.8E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	36.3	2.0E-03	1.4E-02	0.6	0.1	5.4E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>385.0</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>7.1</b>	<b>18.0</b>	<b>3.1</b>	<b>1.8</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	104.8	1.2	1.6E-02	0.3	16.1	2.5	4.4E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	280.2	3.8E-02	2.3E-03	6.8	1.9	0.7	1.8	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	280.2	3.8E-02	2.3E-03	6.8	1.9	0.7	1.8	
<b>1.A.5 - Non-Specified</b>	<b>17.9</b>	<b>9.4E-04</b>	<b>9.4E-04</b>	<b>0.2</b>	<b>4.3E-02</b>	<b>1.1E-02</b>	<b>1.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	17.9	9.4E-04	9.4E-04	0.2	4.3E-02	1.1E-02	1.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	17.9	9.4E-04	9.4E-04	0.2	4.3E-02	1.1E-02	1.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coaldumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	213.7	1.3E-02	5.8E-03	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	75.1	5.3E-04	2.1E-03	0.3	2.6E-02	1.2E-02	2.4E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	138.6	1.3E-02	3.7E-03	3.4	0.6	0.2	0.6
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	464.7						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	22.7	-	-	-	-	-	-	-	-	-	0.7	-	
<b>2.A - Mineral Industry</b>	4.5	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 2 : Inventory Year 1995

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.2	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 2 : Inventory Year 1995

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 2 : Inventory Year 1995

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-89,730.9	268.8	9.0	32.0	2,035.2	9.1
<b>3.A - Livestock</b>	NA	136.2	0.3	NA	NA	9.1
3.A.1 - Enteric Fermentation	NA	133.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	110.7	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	110.5	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	12.0	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.1	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.0	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.2	NA	NA	NA	NA
3.A.1.h - Swine	NA	2.0E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
<b>3.A.2 - Manure Management (1)</b>	NA	3.2	0.3	NA	NA	9.1
3.A.2.a - Cattle	NA	2.0	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.0	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	2.0E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.5E-02	4.1E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-89,731.2	NA	NO	NO	NO	NO
3.B.1 - Forest land	-98,466.5	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-96,846.6	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 2 : Inventory Year 1995

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	0.3	132.6	8.8	32.0	2,035.2	NO
3.C.1 - Emissions from biomass burning	-	132.6	3.9	32.0	2,035.2	NO
3.C.1.a - Biomass burning in forest lands	NA	132.1	3.9	31.1	2,020.2	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.5	4.8E-02	0.9	15.0	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO



## Annex 2 : Inventory Year 1995

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.6	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.2	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 2 : Inventory Year 1995

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.0	2.4	7.6E-02	0.2	3.6	0.2	7.1E-03
<b>4.A - Solid Waste Disposal</b>	-	0.5	-	-	-	8.1E-02	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	8.1E-02	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.0	0.4	5.5E-03	0.2	3.6	7.9E-02	7.1E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.0	0.4	5.5E-03	0.2	3.6	7.9E-02	7.1E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.4	7.0E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.0E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.2	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 2 : Inventory Year 1995

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>Total National Emissions and Removals</b>	-88,289.6	272.7	9.2	NE	NE	NE	NE	NE	45.0	2,082.6	16.0	2.1	
<b>1 - Energy</b>	1,417.5	1.5	7.6E-02	NA	NA	NA	NA	NA	12.8	43.8	6.0	2.1	
1.A - Fuel Combustion Activities	1,417.5	1.5	7.6E-02	NA	NA	NA	NA	NA	12.8	43.8	6.0	2.1	
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2 - Industrial Processes and Product Use</b>	22.7	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.7	NO	
2.A - Mineral Industry	4.5	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO	
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.2	-	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-89,730.9	268.8	9.0	NA	NA	NA	NA	NA	32.0	2,035.2	9.1	NO	
3.A - Livestock	NA	136.2	0.3	NA	NA	NA	NA	NA	NA	NA	9.1	NA	
3.B - Land	-89,731.2		-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.3	132.6	8.8	NA	NA	NA	NA	NA	32.0	2,035.2	NA	NA	
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.0	2.4	7.6E-02	NA	NA	NA	NA	NA	0.2	3.6	0.2	7.1E-03	
4.A - Solid Waste Disposal	NA	0.5	NO	NA	NA	NA	NA	NA	NO	NO	8.1E-02	NA	
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
4.C - Incineration and Open Burning of Waste	1.0	0.4	5.5E-03	NA	NA	NA	NA	NA	0.2	3.6	7.9E-02	7.1E-03	
4.D - Wastewater Treatment and Discharge	NA	1.4	7.0E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	213.7	1.3E-02	5.8E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6	
1.A.3.a.i - International Aviation (International Bunkers)	75.1	5.3E-04	2.1E-03	NA	NA	NA	NA	NA	0.3	2.6E-02	1.2E-02	2.4E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	138.6	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

## Annex 3 : Inventory Year 1996

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-90,023.3	259.9	8.8	NE	NE	NE	NE	NE	43.7	1,966.5	16.2	2.2
<b>1 - Energy</b>	1,507.9	1.6	8.1E-02	NA	NA	NA	NA	NA	13.4	45.6	6.3	2.2
<b>1.A - Fuel Combustion Activities</b>	1,507.9	1.6	8.1E-02	NA	NA	NA	NA	NA	13.4	45.6	6.3	2.2
1.A.1 - Energy Industries	35.2	3.9E-04	5.5E-04	NA	NA	NA	NA	NA	7.8E-02	3.3E-03	4.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	116.2	1.0E-02	1.6E-03	NA	NA	NA	NA	NA	0.4	0.1	0.4	2.6E-02
1.A.3 - Transport	950.5	0.3	5.9E-02	NA	NA	NA	NA	NA	5.6	27.0	2.6	1.4E-02
1.A.4 - Other Sectors	385.1	1.3	1.9E-02	NA	NA	NA	NA	NA	7.1	18.4	3.2	1.8
1.A.5 - Non-Specified	20.8	1.1E-03	1.1E-03	NA	NA	NA	NA	NA	0.2	5.0E-02	1.2E-02	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	23.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.8	NO
<b>2.A - Mineral Industry</b>	5.1	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.6</b>	<b>NO</b>	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.2</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-91,555.5</b>	<b>256.1</b>	<b>8.6</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>30.1</b>	<b>1,917.2</b>	<b>9.0</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>131.1</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>9.0</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	128.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.1	0.3	NA	NA	NA	NA	NA	NA	NA	9.0	NA	
<b>3.B - Land</b>	<b>-91,555.8</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
3.B.1 - Forest land	-100,291.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>0.3</b>	<b>124.9</b>	<b>8.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>30.1</b>	<b>1,917.2</b>	<b>NA</b>	<b>NA</b>	
3.C.1 - Emissions from biomass burning	NA	124.9	3.7	NA	NA	NA	NA	NA	30.1	1,917.2	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	<b>1.0</b>	<b>2.3</b>	<b>7.7E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.7</b>	<b>0.2</b>	<b>7.3E-03</b>	
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>0.6</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>8.6E-02</b>	<b>NA</b>	
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.0</b>	<b>0.4</b>	<b>5.7E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.7</b>	<b>8.2E-02</b>	<b>7.3E-03</b>	
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.2</b>	<b>7.1E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>3.0E-07</b>	<b>NA</b>	
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	<b>215.0</b>	<b>1.3E-02</b>	<b>5.8E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.7</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	
1.A.3.a.i - International Aviation (International Bunkers)	77.6	5.4E-04	2.2E-03	NA	NA	NA	NA	NA	0.3	2.7E-02	1.2E-02	2.5E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	137.4	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6	
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,507.9	1.6	8.1E-02	13.4	45.6	6.3	2.2
<b>1.A - Fuel Combustion Activities</b>	1,507.9	1.6	8.1E-02	13.4	45.6	6.3	2.2
<b>1.A.1 - Energy Industries</b>	35.2	3.9E-04	5.5E-04	7.8E-02	3.3E-03	4.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	35.2	3.9E-04	5.5E-04	7.8E-02	3.3E-03	4.0E-04	0.3
1.A.1.a.i - Electricity Generation	35.2	3.9E-04	5.5E-04	7.8E-02	3.3E-03	4.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	116.2	1.0E-02	1.6E-03	0.4	0.1	0.4	2.6E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	114.8	1.0E-02	1.6E-03	0.4	0.1	0.4	2.5E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.4	5.8E-05	1.2E-05	9.9E-03	1.3E-03	5.0E-04	9.0E-04
<b>1.A.3 - Transport</b>	950.5	0.3	5.9E-02	5.6	27.0	2.6	1.4E-02
1.A.3.a - Civil Aviation	17.4	1.2E-04	4.9E-04	4.0E-02	3.4	5.3E-02	5.6E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	17.4	1.2E-04	4.9E-04	4.0E-02	3.4	5.3E-02	5.6E-03
1.A.3.b - Road Transportation	895.6	0.3	4.4E-02	5.0	23.5	2.5	8.0E-03
1.A.3.b.i - Cars	250.3	0.1	1.2E-02	0.8	6.0	0.7	2.9E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	80.1	3.3E-02	3.8E-03	0.2	1.9	0.2	9.0E-04
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	170.2	7.1E-02	8.0E-03	0.5	4.1	0.5	2.0E-03
1.A.3.b.ii - Light-duty trucks	419.0	0.2	2.0E-02	1.8	16.9	1.6	4.5E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	314.2	0.1	1.5E-02	1.4	12.7	1.2	3.4E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	104.7	4.1E-02	5.0E-03	0.5	4.2	0.4	1.1E-03
1.A.3.b.iii - Heavy-duty trucks and buses	225.3	1.2E-02	1.2E-02	2.4	0.5	0.1	6.0E-04
1.A.3.b.iv - Motorcycles	1.0	4.5E-04	4.4E-05	2.0E-03	0.2	4.0E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	37.5	2.1E-03	1.4E-02	0.6	0.1	5.5E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							

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Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	
<b>1.A.4 - Other Sectors</b>	<b>385.1</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>7.1</b>	<b>18.4</b>	<b>3.2</b>	<b>1.8</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	
1.A.4.b - Residential	104.4	1.2	1.7E-02	0.4	16.4	2.5	4.5E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	280.7	3.8E-02	2.3E-03	6.8	2.0	0.7	1.8	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	
1.A.4.c.iii - Fishing (mobile combustion)	280.7	3.8E-02	2.3E-03	6.8	2.0	0.7	1.8	
<b>1.A.5 - Non-Specified</b>	<b>20.8</b>	<b>1.1E-03</b>	<b>1.1E-03</b>	<b>0.2</b>	<b>5.0E-02</b>	<b>1.2E-02</b>	<b>1.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b - Mobile	20.8	1.1E-03	1.1E-03	0.2	5.0E-02	1.2E-02	1.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b.iii - Mobile (Other)	20.8	1.1E-03	1.1E-03	0.2	5.0E-02	1.2E-02	1.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	



## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	215.0	1.3E-02	5.8E-03	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	77.6	5.4E-04	2.2E-03	0.3	2.7E-02	1.2E-02	2.5E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	137.4	1.3E-02	3.7E-03	3.4	0.6	0.2	0.6
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	468.2						

## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	23.3	-	-	-	-	-	-	-	-	-	0.8	-	
<b>2.A - Mineral Industry</b>	5.1	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.2	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

**Annex 3 : Inventory Year 1996**

**SECTORAL REPORT: IPPU**

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-91,555.5	256.1	8.6	30.1	1,917.2	9.0
<b>3.A - Livestock</b>	NA	131.1	0.3	NA	NA	9.0
3.A.1 - Enteric Fermentation	NA	128.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	105.6	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	105.5	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	11.0	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.9	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.0	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.4	NA	NA	NA	NA
3.A.1.h - Swine	NA	1.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.1	0.3	NA	NA	9.0
3.A.2.a - Cattle	NA	2.0	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.0	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	1.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.4E-02	3.9E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-91,555.8	NA	NO	NO	NO	NO
3.B.1 - Forest land	-100,291.1	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-98,671.2	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	0.3	124.9	8.3	30.1	1,917.2	NO
3.C.1 - Emissions from biomass burning	-	124.9	3.7	30.1	1,917.2	NO
3.C.1.a - Biomass burning in forest lands	NA	124.5	3.7	29.3	1,903.5	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.5	4.4E-02	0.8	13.7	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.3	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 3 : Inventory Year 1996

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.0	2.3	7.7E-02	0.2	3.7	0.2	7.3E-03
<b>4.A - Solid Waste Disposal</b>	-	0.6	-	-	-	8.6E-02	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	8.6E-02	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.0	0.4	5.7E-03	0.2	3.7	8.2E-02	7.3E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.0	0.4	5.7E-03	0.2	3.7	8.2E-02	7.3E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.1E-02	NO	NO	3.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.1E-02	NO	NO	6.7E-14	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.0	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO



## Annex 3 : Inventory Year 1996

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-90,023.3	259.9	8.8	NE	NE	NE	NE	NE	43.7	1,966.5	16.2	2.2
<b>1 - Energy</b>	1,507.9	1.6	8.1E-02	NA	NA	NA	NA	NA	13.4	45.6	6.3	2.2
1.A - Fuel Combustion Activities	1,507.9	1.6	8.1E-02	NA	NA	NA	NA	NA	13.4	45.6	6.3	2.2
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	23.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.8	NO
2.A - Mineral Industry	5.1	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.2	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-91,555.5	256.1	8.6	NA	NA	NA	NA	NA	30.1	1,917.2	9.0	NO
3.A - Livestock	NA	131.1	0.3	NA	NA	NA	NA	NA	NA	NA	9.0	NA
3.B - Land	-91,555.8		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources onland	0.3	124.9	8.3	NA	NA	NA	NA	NA	30.1	1,917.2	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.0	2.3	7.7E-02	NA	NA	NA	NA	NA	0.2	3.7	0.2	7.3E-03
4.A - Solid Waste Disposal	NA	0.6	NO	NA	NA	NA	NA	NA	NO	NO	8.6E-02	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.0	0.4	5.7E-03	NA	NA	NA	NA	NA	0.2	3.7	8.2E-02	7.3E-03
4.D - Wastewater Treatment and Discharge	NA	1.2	7.1E-02	NA	NA	NA	NA	NA	NO	NO	3.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	215.0	1.3E-02	5.8E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	77.6	5.4E-04	2.2E-03	NA	NA	NA	NA	NA	0.3	2.7E-02	1.2E-02	2.5E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	137.4	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.4	0.6	0.2	0.6
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,815.2	257.8	8.7	NE	NE	NE	NE	NE	41.4	1,849.1	16.7	1.9
<b>1 - Energy</b>	1,557.2	1.6	8.5E-02	NA	NA	NA	NA	NA	13.0	47.1	6.4	1.9
<b>1.A - Fuel Combustion Activities</b>	1,557.2	1.6	8.5E-02	NA	NA	NA	NA	NA	13.0	47.1	6.4	1.9
1.A.1 - Energy Industries	37.5	4.1E-04	5.9E-04	NA	NA	NA	NA	NA	8.3E-02	3.5E-03	4.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	119.1	1.0E-02	1.6E-03	NA	NA	NA	NA	NA	0.4	0.1	0.4	2.7E-02
1.A.3 - Transport	1,032.6	0.3	6.3E-02	NA	NA	NA	NA	NA	6.2	28.5	2.8	1.4E-02
1.A.4 - Other Sectors	344.3	1.3	1.9E-02	NA	NA	NA	NA	NA	6.0	18.5	3.2	1.5
1.A.5 - Non-Specified	23.8	1.3E-03	1.3E-03	NA	NA	NA	NA	NA	0.2	5.7E-02	1.4E-02	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	23.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.9	NO
<b>2.A - Mineral Industry</b>	5.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.6</b>	<b>NO</b>	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.2</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-93,397.4</b>	<b>253.8</b>	<b>8.6</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>28.2</b>	<b>1,798.1</b>	<b>9.3</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>136.7</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>9.3</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	133.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.3	0.3	NA	NA	NA	NA	NA	NA	NA	9.3	NA	
<b>3.B - Land</b>	<b>-93,397.8</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

## Annex 4 : Inventory Year 1997

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
3.B.1 - Forest land	-102,133.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	<b>0.3</b>	<b>117.2</b>	<b>8.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>28.2</b>	<b>1,798.1</b>	<b>NA</b>	<b>NA</b>	
3.C.1 - Emissions from biomass burning	NA	117.2	3.5	NA	NA	NA	NA	NA	28.2	1,798.1	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	<b>1.1</b>	<b>2.4</b>	<b>7.8E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.9</b>	<b>0.2</b>	<b>7.6E-03</b>	
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>0.7</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.2E-02</b>	<b>NA</b>	
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.1</b>	<b>0.5</b>	<b>5.9E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>3.9</b>	<b>8.5E-02</b>	<b>7.6E-03</b>	
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.2</b>	<b>7.2E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>3.6E-06</b>	<b>NA</b>	
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	<b>216.3</b>	<b>1.3E-02</b>	<b>5.9E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.7</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	
1.A.3.a.i - International Aviation (International Bunkers)	80.0	5.6E-04	2.2E-03	NA	NA	NA	NA	NA	0.3	2.8E-02	1.3E-02	2.5E-02	
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	136.3	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	3.4	0.5	0.2	0.5	
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,557.2	1.6	8.5E-02	13.0	47.1	6.4	1.9
<b>1.A - Fuel Combustion Activities</b>	1,557.2	1.6	8.5E-02	13.0	47.1	6.4	1.9
<b>1.A.1 - Energy Industries</b>	37.5	4.1E-04	5.9E-04	8.3E-02	3.5E-03	4.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	37.5	4.1E-04	5.9E-04	8.3E-02	3.5E-03	4.0E-04	0.3
1.A.1.a.i - Electricity Generation	37.5	4.1E-04	5.9E-04	8.3E-02	3.5E-03	4.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	119.1	1.0E-02	1.6E-03	0.4	0.1	0.4	2.7E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	117.6	1.0E-02	1.6E-03	0.4	0.1	0.4	2.6E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.4	6.0E-05	1.2E-05	1.0E-02	1.3E-03	5.0E-04	9.0E-04
<b>1.A.3 - Transport</b>	1,032.6	0.3	6.3E-02	6.2	28.5	2.8	1.4E-02
1.A.3.a - Civil Aviation	17.8	1.3E-04	5.0E-04	4.1E-02	3.4	5.4E-02	5.7E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	17.8	1.3E-04	5.0E-04	4.1E-02	3.4	5.4E-02	5.7E-03
1.A.3.b - Road Transportation	976.1	0.3	4.8E-02	5.5	24.9	2.7	8.6E-03
1.A.3.b.i - Cars	267.6	0.1	1.3E-02	0.8	6.3	0.8	3.1E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	85.6	3.5E-02	4.0E-03	0.3	2.0	0.2	1.0E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	182.0	7.5E-02	8.6E-03	0.6	4.3	0.5	2.1E-03
1.A.3.b.ii - Light-duty trucks	449.9	0.2	2.1E-02	2.0	17.9	1.7	4.9E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	337.4	0.1	1.6E-02	1.5	13.4	1.3	3.7E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	112.5	4.4E-02	5.3E-03	0.5	4.5	0.4	1.2E-03
1.A.3.b.iii - Heavy-duty trucks and buses	257.6	1.4E-02	1.4E-02	2.7	0.6	0.2	6.0E-04
1.A.3.b.iv - Motorcycles	1.0	4.8E-04	4.6E-05	2.2E-03	0.2	4.3E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	38.7	2.2E-03	1.5E-02	0.6	0.1	5.7E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>344.3</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>6.0</b>	<b>18.5</b>	<b>3.2</b>	<b>1.5</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	107.1	1.2	1.7E-02	0.4	16.5	2.5	4.5E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	237.3	3.2E-02	1.9E-03	5.7	2.0	0.7	1.5	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	237.3	3.2E-02	1.9E-03	5.7	2.0	0.7	1.5	
<b>1.A.5 - Non-Specified</b>	<b>23.8</b>	<b>1.3E-03</b>	<b>1.3E-03</b>	<b>0.2</b>	<b>5.7E-02</b>	<b>1.4E-02</b>	<b>1.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	23.8	1.3E-03	1.3E-03	0.2	5.7E-02	1.4E-02	1.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	23.8	1.3E-03	1.3E-03	0.2	5.7E-02	1.4E-02	1.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coaldumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	216.3	1.3E-02	5.9E-03	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	80.0	5.6E-04	2.2E-03	0.3	2.8E-02	1.3E-02	2.5E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	136.3	1.3E-02	3.6E-03	3.4	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	471.8						

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	23.9	-	-	-	-	-	-	-	-	-	0.9	-	
<b>2.A - Mineral Industry</b>	5.7	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	



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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.2	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 4 : Inventory Year 1997

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.2	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-93,397.4	253.8	8.6	28.2	1,798.1	9.3
<b>3.A - Livestock</b>	NA	136.7	0.3	NA	NA	9.3
3.A.1 - Enteric Fermentation	NA	133.4	NA	NA	NA	NA
3.A.1.a - Cattle	NA	109.6	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	109.5	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	12.1	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.1	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.0	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.5	NA	NA	NA	NA
3.A.1.h - Swine	NA	1.7E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.3	0.3	NA	NA	9.3
3.A.2.a - Cattle	NA	2.1	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.1	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	1.7E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.6E-02	4.4E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-93,397.8	NA	NO	NO	NO	NO
3.B.1 - Forest land	-102,133.0	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-100,513.2	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 4 : Inventory Year 1997

## SECTORAL REPORT: AFOLU

Categories	(Gg)						
	Net CO <sub>2</sub> emissions / removals	Emissions					
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO	NO
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	0.3	117.2	8.3	28.2	1,798.1	NO	NO
3.C.1 - Emissions from biomass burning	-	117.2	3.5	28.2	1,798.1	NO	NO
3.C.1.a - Biomass burning in forest lands	NA	116.8	3.4	27.5	1,785.7	NO	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.4	4.0E-02	0.7	12.4	NO	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.5	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.6E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.1	2.4	7.8E-02	0.2	3.9	0.2	7.6E-03
<b>4.A - Solid Waste Disposal</b>	-	0.7	-	-	-	9.2E-02	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	9.2E-02	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.1	0.5	5.9E-03	0.2	3.9	8.5E-02	7.6E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.1	0.5	5.9E-03	0.2	3.9	8.5E-02	7.6E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.2E-02	NO	NO	3.6E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.2E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.9	NA	NO	NO	3.0E-06	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 4 : Inventory Year 1997

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,815.2	257.8	8.7	NE	NE	NE	NE	NE	41.4	1,849.1	16.7	1.9
<b>1 - Energy</b>	1,557.2	1.6	8.5E-02	NA	NA	NA	NA	NA	13.0	47.1	6.4	1.9
1.A - Fuel Combustion Activities	1,557.2	1.6	8.5E-02	NA	NA	NA	NA	NA	13.0	47.1	6.4	1.9
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	23.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	0.9	NO
2.A - Mineral Industry	5.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.6	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.2	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-93,397.4	253.8	8.6	NA	NA	NA	NA	NA	28.2	1,798.1	9.3	NO
3.A - Livestock	NA	136.7	0.3	NA	NA	NA	NA	NA	NA	NA	9.3	NA
3.B - Land	-93,397.8	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources onland	0.3	117.2	8.3	NA	NA	NA	NA	NA	28.2	1,798.1	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.1	2.4	7.8E-02	NA	NA	NA	NA	NA	0.2	3.9	0.2	7.6E-03
4.A - Solid Waste Disposal	NA	0.7	NO	NA	NA	NA	NA	NA	NO	NO	9.2E-02	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.1	0.5	5.9E-03	NA	NA	NA	NA	NA	0.2	3.9	8.5E-02	7.6E-03
4.D - Wastewater Treatment and Discharge	NA	1.2	7.2E-02	NA	NA	NA	NA	NA	NO	NO	3.6E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	216.3	1.3E-02	5.9E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	80.0	5.6E-04	2.2E-03	NA	NA	NA	NA	NA	0.3	2.8E-02	1.3E-02	2.5E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	136.3	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	3.4	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 5 : Inventory Year 1998

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-93,534.8	254.9	8.7	NE	NE	NE	NE	NE	41.4	1,731.1	17.6	2.3
<b>1 - Energy</b>	1,696.3	1.6	9.0E-02	NA	NA	NA	NA	NA	14.8	49.1	6.7	2.2
<b>1.A - Fuel Combustion Activities</b>	1,696.3	1.6	9.0E-02	NA	NA	NA	NA	NA	14.8	49.1	6.7	2.2
1.A.1 - Energy Industries	39.8	4.4E-04	6.3E-04	NA	NA	NA	NA	NA	8.8E-02	3.7E-03	4.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	121.5	1.0E-02	1.6E-03	NA	NA	NA	NA	NA	0.4	0.1	0.4	2.8E-02
1.A.3 - Transport	1,114.6	0.3	6.8E-02	NA	NA	NA	NA	NA	6.7	29.9	3.0	1.5E-02
1.A.4 - Other Sectors	393.6	1.3	1.9E-02	NA	NA	NA	NA	NA	7.3	19.0	3.3	1.9
1.A.5 - Non-Specified	26.8	1.4E-03	1.4E-03	NA	NA	NA	NA	NA	0.3	6.4E-02	1.6E-02	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	24.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.1	NO
<b>2.A - Mineral Industry</b>	6.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO



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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOcs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.7</b>	<b>NO</b>	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.4</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.4	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-95,256.7</b>	<b>250.7</b>	<b>8.5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>26.3</b>	<b>1,678.0</b>	<b>9.7</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>141.3</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>9.7</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	138.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.3	0.3	NA	NA	NA	NA	NA	NA	NA	9.7	NA	
<b>3.B - Land</b>	<b>-95,256.9</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
3.B.1 - Forest land	-103,992.2	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	<b>0.3</b>	<b>109.4</b>	<b>8.2</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>26.3</b>	<b>1,678.0</b>	<b>NA</b>	<b>NA</b>	
3.C.1 - Emissions from biomass burning	NA	109.4	3.2	NA	NA	NA	NA	NA	26.3	1,678.0	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.9E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	<b>1.1</b>	<b>2.5</b>	<b>7.8E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>4.0</b>	<b>0.2</b>	<b>7.9E-03</b>	
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>0.8</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.7E-02</b>	<b>NA</b>	
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.1</b>	<b>0.5</b>	<b>6.2E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>4.0</b>	<b>8.9E-02</b>	<b>7.9E-03</b>	
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.2</b>	<b>7.2E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.0E-07</b>	<b>NA</b>	
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	<b>217.6</b>	<b>1.3E-02</b>	<b>5.9E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.7</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>	
1.A.3.a.i - International Aviation (International Bunkers)	82.4	5.8E-04	2.3E-03	NA	NA	NA	NA	NA	0.3	2.9E-02	1.3E-02	2.6E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	135.2	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5	
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,696.3	1.6	9.0E-02	14.8	49.1	6.7	2.2
<b>1.A - Fuel Combustion Activities</b>	1,696.3	1.6	9.0E-02	14.8	49.1	6.7	2.2
<b>1.A.1 - Energy Industries</b>	39.8	4.4E-04	6.3E-04	8.8E-02	3.7E-03	4.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	39.8	4.4E-04	6.3E-04	8.8E-02	3.7E-03	4.0E-04	0.3
1.A.1.a.i - Electricity Generation	39.8	4.4E-04	6.3E-04	8.8E-02	3.7E-03	4.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	121.5	1.0E-02	1.6E-03	0.4	0.1	0.4	2.8E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	120.0	1.0E-02	1.6E-03	0.4	0.1	0.4	2.7E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.5	6.2E-05	1.2E-05	1.1E-02	1.4E-03	5.0E-04	1.0E-03
<b>1.A.3 - Transport</b>	1,114.6	0.3	6.8E-02	6.7	29.9	3.0	1.5E-02
1.A.3.a - Civil Aviation	18.1	1.3E-04	5.1E-04	4.2E-02	3.4	5.5E-02	5.8E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	18.1	1.3E-04	5.1E-04	4.2E-02	3.4	5.5E-02	5.8E-03
1.A.3.b - Road Transportation	1,056.6	0.3	5.2E-02	6.0	26.3	2.8	9.1E-03
1.A.3.b.i - Cars	284.9	0.1	1.3E-02	0.9	6.6	0.8	3.2E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	91.2	3.7E-02	4.3E-03	0.3	2.1	0.3	1.0E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	193.7	7.9E-02	9.1E-03	0.6	4.5	0.5	2.2E-03
1.A.3.b.ii - Light-duty trucks	480.8	0.2	2.3E-02	2.1	18.8	1.8	5.2E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	360.6	0.1	1.7E-02	1.6	14.1	1.4	3.9E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	120.2	4.6E-02	5.7E-03	0.5	4.7	0.5	1.3E-03
1.A.3.b.iii - Heavy-duty trucks and buses	289.9	1.5E-02	1.5E-02	3.0	0.7	0.2	7.0E-04
1.A.3.b.iv - Motorcycles	1.1	5.0E-04	4.9E-05	2.3E-03	0.2	4.5E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	39.9	2.2E-03	1.5E-02	0.7	0.1	5.9E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	
<b>1.A.4 - Other Sectors</b>	<b>393.6</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>7.3</b>	<b>19.0</b>	<b>3.3</b>	<b>1.9</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	
1.A.4.b - Residential	104.9	1.3	1.7E-02	0.4	16.8	2.6	4.6E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	288.7	3.9E-02	2.3E-03	6.9	2.3	0.8	1.8	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	
1.A.4.c.iii - Fishing (mobile combustion)	288.7	3.9E-02	2.3E-03	6.9	2.3	0.8	1.8	
<b>1.A.5 - Non-Specified</b>	<b>26.8</b>	<b>1.4E-03</b>	<b>1.4E-03</b>	<b>0.3</b>	<b>6.4E-02</b>	<b>1.6E-02</b>	<b>1.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b - Mobile	26.8	1.4E-03	1.4E-03	0.3	6.4E-02	1.6E-02	1.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	
1.A.5.b.iii - Mobile (Other)	26.8	1.4E-03	1.4E-03	0.3	6.4E-02	1.6E-02	1.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	
1.B.1.b - Uncontrolled combustion and burning coaldumps	NO	NA	NA	NO	NO	NO	NO	
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	

## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	217.6	1.3E-02	5.9E-03	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	82.4	5.8E-04	2.3E-03	0.3	2.9E-02	1.3E-02	2.6E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	135.2	1.3E-02	3.6E-03	3.3	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	475.4						

## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	24.5	-	-	-	-	-	-	-	-	-	1.1	-	
<b>2.A - Mineral Industry</b>	6.3	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.7	NO
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.4	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 5 : Inventory Year 1998

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.4	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO



## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-95,256.7	250.7	8.5	26.3	1,678.0	9.7
<b>3.A - Livestock</b>	NA	141.3	0.3	NA	NA	9.7
3.A.1 - Enteric Fermentation	NA	138.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	116.5	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	116.3	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	10.4	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.6	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.0	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.6	NA	NA	NA	NA
3.A.1.h - Swine	NA	1.5E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.3	0.3	NA	NA	9.7
3.A.2.a - Cattle	NA	2.2	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.2	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	1.5E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.2E-02	3.4E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-95,256.9	NA	NO	NO	NO	NO
3.B.1 - Forest land	-103,992.2	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-102,372.4	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	0.3	109.4	8.2	26.3	1,678.0	NO
3.C.1 - Emissions from biomass burning	-	109.4	3.2	26.3	1,678.0	NO
3.C.1.a - Biomass burning in forest lands	NA	109.0	3.2	25.6	1,666.8	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.4	3.6E-02	0.7	11.1	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.6	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.9E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 5 : Inventory Year 1998

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.1	2.5	7.8E-02	0.2	4.0	0.2	7.9E-03
<b>4.A - Solid Waste Disposal</b>	-	0.8	-	-	-	9.7E-02	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	9.7E-02	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.1	0.5	6.2E-03	0.2	4.0	8.9E-02	7.9E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.1	0.5	6.2E-03	0.2	4.0	8.9E-02	7.9E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.2E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.2E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.9	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 5 : Inventory Year 1998

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-93,534.8	254.9	8.7	NE	NE	NE	NE	NE	41.4	1,731.1	17.6	2.3
<b>1 - Energy</b>	1,696.3	1.6	9.0E-02	NA	NA	NA	NA	NA	14.8	49.1	6.7	2.2
1.A - Fuel Combustion Activities	1,696.3	1.6	9.0E-02	NA	NA	NA	NA	NA	14.8	49.1	6.7	2.2
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	24.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.1	NO
2.A - Mineral Industry	6.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.7	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.4	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-95,256.7	250.7	8.5	NA	NA	NA	NA	NA	26.3	1,678.0	9.7	NO
3.A - Livestock	NA	141.3	0.3	NA	NA	NA	NA	NA	NA	NA	9.7	NA
3.B - Land	-95,256.9	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources onland	0.3	109.4	8.2	NA	NA	NA	NA	NA	26.3	1,678.0	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.1	2.5	7.8E-02	NA	NA	NA	NA	NA	0.2	4.0	0.2	7.9E-03
4.A - Solid Waste Disposal	NA	0.8	NO	NA	NA	NA	NA	NA	NO	NO	9.7E-02	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.1	0.5	6.2E-03	NA	NA	NA	NA	NA	0.2	4.0	8.9E-02	7.9E-03
4.D - Wastewater Treatment and Discharge	NA	1.2	7.2E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	217.6	1.3E-02	5.9E-03	NA	NA	NA	NA	NA	3.7	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	82.4	5.8E-04	2.3E-03	NA	NA	NA	NA	NA	0.3	2.9E-02	1.3E-02	2.6E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	135.2	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 6 : Inventory Year 1999

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-95,278.0	252.1	8.6	NE	NE	NE	NE	NE	41.1	1,611.9	18.4	2.5
<b>1 - Energy</b>	1,829.0	1.7	9.6E-02	NA	NA	NA	NA	NA	16.5	50.9	7.0	2.5
<b>1.A - Fuel Combustion Activities</b>	1,829.0	1.7	9.6E-02	NA	NA	NA	NA	NA	16.5	50.9	7.0	2.5
1.A.1 - Energy Industries	42.1	4.6E-04	6.6E-04	NA	NA	NA	NA	NA	9.3E-02	3.9E-03	5.0E-04	0.4
1.A.2 - Manufacturing Industries and Construction	126.2	1.1E-02	1.7E-03	NA	NA	NA	NA	NA	0.5	0.1	0.4	3.0E-02
1.A.3 - Transport	1,196.7	0.3	7.2E-02	NA	NA	NA	NA	NA	7.3	31.4	3.1	1.6E-02
1.A.4 - Other Sectors	434.2	1.3	2.0E-02	NA	NA	NA	NA	NA	8.3	19.3	3.4	2.1
1.A.5 - Non-Specified	29.8	1.6E-03	1.6E-03	NA	NA	NA	NA	NA	0.3	7.1E-02	1.8E-02	1.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	25.0	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.2	NO
<b>2.A - Mineral Industry</b>	6.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	6.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 6 : Inventory Year 1999

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.7</b>	<b>NO</b>
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NO	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.5</b>	<b>-</b>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.5	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-97,133.1</b>	<b>247.8</b>	<b>8.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>24.4</b>	<b>1,556.9</b>	<b>10.0</b>	<b>NO</b>
<b>3.A - Livestock</b>	<b>NA</b>	<b>146.3</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.0</b>	<b>NA</b>
3.A.1 - Enteric Fermentation	NA	142.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.5	0.3	NA	NA	NA	NA	NA	NA	NA	10.0	NA
<b>3.B - Land</b>	<b>-97,133.4</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

## Annex 6 : Inventory Year 1999

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-105,868.6	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	<b>0.2</b>	<b>101.5</b>	<b>8.1</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>24.4</b>	<b>1,556.9</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	101.5	3.0	NA	NA	NA	NA	NA	24.4	1,556.9	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.2</b>	<b>2.7</b>	<b>8.0E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>4.2</b>	<b>0.2</b>	<b>8.2E-03</b>
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>0.9</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.1</b>	<b>NA</b>
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.2</b>	<b>0.5</b>	<b>6.4E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.2</b>	<b>4.2</b>	<b>9.2E-02</b>	<b>8.2E-03</b>
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.3</b>	<b>7.3E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.0E-07</b>	<b>NA</b>
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>218.9</b>	<b>1.3E-02</b>	<b>5.9E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.6</b>	<b>0.6</b>	<b>0.2</b>	<b>0.6</b>
1.A.3.a.i - International Aviation (International Bunkers)	84.8	5.9E-04	2.4E-03	NA	NA	NA	NA	NA	0.3	3.0E-02	1.3E-02	2.7E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers)	134.1	1.2E-02	3.6E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,829.0	1.7	9.6E-02	16.5	50.9	7.0	2.5
<b>1.A - Fuel Combustion Activities</b>	1,829.0	1.7	9.6E-02	16.5	50.9	7.0	2.5
<b>1.A.1 - Energy Industries</b>	42.1	4.6E-04	6.6E-04	9.3E-02	3.9E-03	5.0E-04	0.4
1.A.1.a - Main Activity Electricity and Heat Production	42.1	4.6E-04	6.6E-04	9.3E-02	3.9E-03	5.0E-04	0.4
1.A.1.a.i - Electricity Generation	42.1	4.6E-04	6.6E-04	9.3E-02	3.9E-03	5.0E-04	0.4
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	126.2	1.1E-02	1.7E-03	0.5	0.1	0.4	3.0E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	124.6	1.1E-02	1.7E-03	0.5	0.1	0.4	2.9E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.6	6.6E-05	1.3E-05	1.1E-02	1.4E-03	5.0E-04	1.0E-03
<b>1.A.3 - Transport</b>	1,196.7	0.3	7.2E-02	7.3	31.4	3.1	1.6E-02
1.A.3.a - Civil Aviation	18.5	1.3E-04	5.2E-04	4.3E-02	3.5	5.6E-02	5.9E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	18.5	1.3E-04	5.2E-04	4.3E-02	3.5	5.6E-02	5.9E-03
1.A.3.b - Road Transportation	1,137.1	0.3	5.6E-02	6.5	27.7	3.0	9.7E-03
1.A.3.b.i - Cars	302.2	0.1	1.4E-02	0.9	7.0	0.8	3.4E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	96.7	3.9E-02	4.6E-03	0.3	2.2	0.3	1.1E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	205.5	8.3E-02	9.7E-03	0.6	4.7	0.6	2.3E-03
1.A.3.b.ii - Light-duty trucks	511.7	0.2	2.4E-02	2.2	19.8	1.9	5.5E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	383.8	0.1	1.8E-02	1.7	14.8	1.4	4.1E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	127.9	4.8E-02	6.1E-03	0.6	4.9	0.5	1.4E-03
1.A.3.b.iii - Heavy-duty trucks and buses	322.1	1.7E-02	1.7E-02	3.4	0.8	0.2	8.0E-04
1.A.3.b.iv - Motorcycles	1.1	5.3E-04	5.1E-05	2.4E-03	0.2	4.7E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	41.1	2.3E-03	1.6E-02	0.7	0.1	6.1E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							

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Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>434.2</b>	<b>1.3</b>	<b>2.0E-02</b>	<b>8.3</b>	<b>19.3</b>	<b>3.4</b>	<b>2.1</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	103.3	1.3	1.7E-02	0.4	16.9	2.6	4.6E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	330.9	4.5E-02	2.7E-03	8.0	2.4	0.8	2.1	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	330.9	4.5E-02	2.7E-03	8.0	2.4	0.8	2.1	
<b>1.A.5 - Non-Specified</b>	<b>29.8</b>	<b>1.6E-03</b>	<b>1.6E-03</b>	<b>0.3</b>	<b>7.1E-02</b>	<b>1.8E-02</b>	<b>1.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	29.8	1.6E-03	1.6E-03	0.3	7.1E-02	1.8E-02	1.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	29.8	1.6E-03	1.6E-03	0.3	7.1E-02	1.8E-02	1.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	218.9	1.3E-02	5.9E-03	3.6	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers) (1)	84.8	5.9E-04	2.4E-03	0.3	3.0E-02	1.3E-02	2.7E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	134.1	1.2E-02	3.6E-03	3.3	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	479.1						

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	25.0	-	-	-	-	-	-	-	-	-	1.2	-	
<b>2.A - Mineral Industry</b>	6.9	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	6.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.7	NO	
2.D.1 - Lubricant Use	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.7	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.5	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

Annex 6 : Inventory Year 1999

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.5	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 6 : Inventory Year 1999

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-97,133.1	247.8	8.4	24.4	1,556.9	10.0
<b>3.A - Livestock</b>	NA	146.3	0.3	NA	NA	10.0
3.A.1 - Enteric Fermentation	NA	142.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	120.5	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	120.3	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	10.8	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.4	NA	NA	NA	NA
3.A.1.e - Camels	NA	NO	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.2	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.8	NA	NA	NA	NA
3.A.1.h - Swine	NA	1.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.5	0.3	NA	NA	10.0
3.A.2.a - Cattle	NA	2.3	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.3	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	NO	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	1.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.4E-02	3.8E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-97,133.4	NA	NO	NO	NO	NO
3.B.1 - Forest land	-105,868.6	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-104,248.8	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 6 : Inventory Year 1999

## SECTORAL REPORT: AFOLU

Categories	(Gg)						
	Net CO <sub>2</sub> emissions / removals	Emissions					
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO	
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO	
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO	
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO	
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO	
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO	
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO	
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO	
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO	
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO	
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO	
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO	
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO	
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO	
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	0.2	101.5	8.1	24.4	1,556.9	NO	
3.C.1 - Emissions from biomass burning	-	101.5	3.0	24.4	1,556.9	NO	
3.C.1.a - Biomass burning in forest lands	NA	101.1	3.0	23.8	1,546.9	NO	
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO	
3.C.1.c - Biomass burning in grasslands	NA	0.4	3.2E-02	0.6	10.0	NO	
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO	



## Annex 6 : Inventory Year 1999

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.8	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.0E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 6 : Inventory Year 1999

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.2	2.7	8.0E-02	0.2	4.2	0.2	8.2E-03
<b>4.A - Solid Waste Disposal</b>	-	0.9	-	-	-	0.1	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.1	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.2	0.5	6.4E-03	0.2	4.2	9.2E-02	8.2E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.2	0.5	6.4E-03	0.2	4.2	9.2E-02	8.2E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.3E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.3E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.0	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 6 : Inventory Year 1999

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-95,278.0	252.1	8.6	NE	NE	NE	NE	NE	41.1	1,611.9	18.4	2.5
<b>1 - Energy</b>	1,829.0	1.7	9.6E-02	NA	NA	NA	NA	NA	16.5	50.9	7.0	2.5
1.A - Fuel Combustion Activities	1,829.0	1.7	9.6E-02	NA	NA	NA	NA	NA	16.5	50.9	7.0	2.5
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	25.0	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.2	NO
2.A - Mineral Industry	6.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.7	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.5	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-97,133.1	247.8	8.4	NA	NA	NA	NA	NA	24.4	1,556.9	10.0	NO
3.A - Livestock	NA	146.3	0.3	NA	NA	NA	NA	NA	NA	NA	10.0	NA
3.B - Land	-97,133.4	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources onland	0.2	101.5	8.1	NA	NA	NA	NA	NA	24.4	1,556.9	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.2	2.7	8.0E-02	NA	NA	NA	NA	NA	0.2	4.2	0.2	8.2E-03
4.A - Solid Waste Disposal	NA	0.9	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.2	0.5	6.4E-03	NA	NA	NA	NA	NA	0.2	4.2	9.2E-02	8.2E-03
4.D - Wastewater Treatment and Discharge	NA	1.3	7.3E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	218.9	1.3E-02	5.9E-03	NA	NA	NA	NA	NA	3.6	0.6	0.2	0.6
1.A.3.a.i - International Aviation (International Bunkers)	84.8	5.9E-04	2.4E-03	NA	NA	NA	NA	NA	0.3	3.0E-02	1.3E-02	2.7E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	134.1	1.2E-02	3.6E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

Annex 7 : Inventory Year 2000

LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-97,437.2	255.6	8.7	NE	NE	NE	NE	NE	39.0	1,465.5	19.8	2.2
<b>1 - Energy</b>	1,867.5	1.7	9.9E-02	NA	NA	NA	NA	NA	16.7	52.8	7.2	2.2
<b>1.A - Fuel Combustion Activities</b>	1,867.5	1.7	9.9E-02	NA	NA	NA	NA	NA	16.7	52.8	7.2	2.2
1.A.1 - Energy Industries	7.3	8.2E-05	1.1E-04	NA	NA	NA	NA	NA	1.6E-02	7.0E-04	1.0E-04	6.3E-02
1.A.2 - Manufacturing Industries and Construction	130.5	1.1E-02	1.8E-03	NA	NA	NA	NA	NA	0.5	0.1	0.5	3.1E-02
1.A.3 - Transport	1,277.7	0.4	7.6E-02	NA	NA	NA	NA	NA	7.8	32.9	3.3	1.6E-02
1.A.4 - Other Sectors	419.2	1.3	2.0E-02	NA	NA	NA	NA	NA	8.1	19.7	3.5	2.1
1.A.5 - Non-Specified	32.8	1.7E-03	1.7E-03	NA	NA	NA	NA	NA	0.3	7.8E-02	2.0E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	25.0	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.3	NO
<b>2.A - Mineral Industry</b>	7.1	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	7.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 7 : Inventory Year 2000

LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	17.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO
2.D.1 - Lubricant Use	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA

Annex 7 : Inventory Year 2000

LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	NO	NA	NA	NA	NA	NA	-	-	0.6	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.6	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,330.9	251.0	8.5	NA	NA	NA	NA	NA	22.1	1,408.3	11.0	NO
<b>3.A - Livestock</b>	NA	159.1	0.4	NA	NA	NA	NA	NA	NA	NA	11.0	NA
3.A.1 - Enteric Fermentation	NA	155.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	11.0	NA
<b>3.B - Land</b>	-99,331.5	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.1 - Forest land	-108,066.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,671.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	63.3	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	0.5	91.8	8.1	NA	NA	NA	NA	NA	22.1	1,408.3	NA	NA
3.C.1 - Emissions from biomass burning	NA	91.8	2.7	NA	NA	NA	NA	NA	22.1	1,408.3	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.2	3.0	8.0E-02	NA	NA	NA	NA	NA	0.2	4.3	0.2	8.5E-03

## Annex 7 : Inventory Year 2000

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
4.A - Solid Waste Disposal	NA	1.1	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.2	0.5	6.6E-03	NA	NA	NA	NA	NA	0.2	4.3	9.6E-02	8.5E-03
4.D - Wastewater Treatment and Discharge	NA	1.4	7.4E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
5 - Other	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	220.1	1.3E-02	6.0E-03	NA	NA	NA	NA	NA	3.6	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers)	87.2	6.1E-04	2.4E-03	NA	NA	NA	NA	NA	0.4	3.0E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	132.9	1.2E-02	3.5E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5
1.A.5.c - Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	1,867.5	1.7	9.9E-02	16.7	52.8	7.2	2.2
<b>1.A - Fuel Combustion Activities</b>	1,867.5	1.7	9.9E-02	16.7	52.8	7.2	2.2
<b>1.A.1 - Energy Industries</b>	7.3	8.2E-05	1.1E-04	1.6E-02	7.0E-04	1.0E-04	6.3E-02
1.A.1.a - Main Activity Electricity and Heat Production	7.3	8.2E-05	1.1E-04	1.6E-02	7.0E-04	1.0E-04	6.3E-02
1.A.1.a.i - Electricity Generation	7.3	8.2E-05	1.1E-04	1.6E-02	7.0E-04	1.0E-04	6.3E-02
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	130.5	1.1E-02	1.8E-03	0.5	0.1	0.5	3.1E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	128.8	1.1E-02	1.7E-03	0.5	0.1	0.5	2.9E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.7	7.0E-05	1.4E-05	1.2E-02	1.5E-03	6.0E-04	1.1E-03
<b>1.A.3 - Transport</b>	1,277.7	0.4	7.6E-02	7.8	32.9	3.3	1.6E-02
1.A.3.a - Civil Aviation	19.0	1.3E-04	5.4E-04	4.4E-02	3.6	5.8E-02	6.1E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	19.0	1.3E-04	5.4E-04	4.4E-02	3.6	5.8E-02	6.1E-03
1.A.3.b - Road Transportation	1,217.6	0.4	6.0E-02	7.1	29.1	3.2	1.0E-02
1.A.3.b.i - Cars	319.5	0.1	1.5E-02	1.0	7.3	0.9	3.5E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	102.2	4.1E-02	4.8E-03	0.3	2.3	0.3	1.1E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	217.2	8.7E-02	1.0E-02	0.7	5.0	0.6	2.4E-03
1.A.3.b.ii - Light-duty trucks	542.6	0.2	2.6E-02	2.4	20.8	2.0	5.7E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	406.9	0.2	1.9E-02	1.8	15.6	1.5	4.3E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	135.6	5.1E-02	6.5E-03	0.6	5.2	0.5	1.4E-03
1.A.3.b.iii - Heavy-duty trucks and buses	354.4	1.9E-02	1.9E-02	3.7	0.8	0.2	9.0E-04
1.A.3.b.iv - Motorcycles	1.2	5.5E-04	5.3E-05	2.5E-03	0.2	5.0E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	41.1	2.3E-03	1.6E-02	0.7	0.1	6.1E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							



## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>419.2</b>	<b>1.3</b>	<b>2.0E-02</b>	<b>8.1</b>	<b>19.7</b>	<b>3.5</b>	<b>2.1</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	96.8	1.3	1.7E-02	0.4	17.1	2.6	4.7E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	322.4	4.4E-02	2.6E-03	7.7	2.6	0.9	2.0	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	322.4	4.4E-02	2.6E-03	7.7	2.6	0.9	2.0	
<b>1.A.5 - Non-Specified</b>	<b>32.8</b>	<b>1.7E-03</b>	<b>1.7E-03</b>	<b>0.3</b>	<b>7.8E-02</b>	<b>2.0E-02</b>	<b>2.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	32.8	1.7E-03	1.7E-03	0.3	7.8E-02	2.0E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	32.8	1.7E-03	1.7E-03	0.3	7.8E-02	2.0E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coaldumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	220.1	1.3E-02	6.0E-03	3.6	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers) (1)	87.2	6.1E-04	2.4E-03	0.4	3.0E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	132.9	1.2E-02	3.5E-03	3.3	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	482.7						

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	25.0	-	-	-	-	-	-	-	-	-	1.3	-	
<b>2.A - Mineral Industry</b>	7.1	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	7.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	17.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO	
2.D.1 - Lubricant Use	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.6	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

Annex 7 : Inventory Year 2000

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.6	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,330.9	251.0	8.5	22.1	1,408.3	11.0
<b>3.A - Livestock</b>	NA	159.1	0.4	NA	NA	11.0
3.A.1 - Enteric Fermentation	NA	155.4	NA	NA	NA	NA
3.A.1.a - Cattle	NA	131.1	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	131.0	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	12.2	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.2	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.5E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.1	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.7	NA	NA	NA	NA
3.A.1.h - Swine	NA	2.3E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	11.0
3.A.2.a - Cattle	NA	2.4	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.4	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.4E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	2.3E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.4E-02	4.0E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-99,331.5	NA	NO	NO	NO	NO
3.B.1 - Forest land	-108,066.7	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-106,446.9	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,619.9	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-250.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,369.6	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: AFOLU

Categories	(Gg)						
	Net CO <sub>2</sub> emissions / removals	Emissions					
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO	
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO	
3.B.3 - Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b - Land Converted to Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.b.i - Forest Land converted to Grassland	8,671.9	NA	NA	NO	NO	NO	
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO	
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO	
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO	
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO	
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO	
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO	
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO	
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO	
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO	
3.B.5 - Settlements	63.3	NA	NA	NO	NO	NO	
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b - Land Converted to Settlements	63.3	NA	NA	NO	NO	NO	
3.B.5.b.i - Forest Land converted to Settlements	55.5	NA	NA	NO	NO	NO	
3.B.5.b.ii - Cropland converted to Settlements	7.9	NA	NA	NO	NO	NO	
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO	
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO	
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO	
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO	
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	<b>0.5</b>	<b>91.8</b>	<b>8.1</b>	<b>22.1</b>	<b>1,408.3</b>	<b>NO</b>	
3.C.1 - Emissions from biomass burning	-	91.8	2.7	22.1	1,408.3	NO	
3.C.1.a - Biomass burning in forest lands	NA	91.5	2.7	21.5	1,399.6	NO	
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO	
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.8E-02	0.5	8.7	NO	
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO	

## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.5	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.0	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.0E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO



## Annex 7 : Inventory Year 2000

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.2	3.0	8.0E-02	0.2	4.3	0.2	8.5E-03
<b>4.A - Solid Waste Disposal</b>	-	1.1	-	-	-	0.1	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.1	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.2	0.5	6.6E-03	0.2	4.3	9.6E-02	8.5E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.2	0.5	6.6E-03	0.2	4.3	9.6E-02	8.5E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.4	7.4E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.3	7.4E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.1	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 7 : Inventory Year 2000

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>Total National Emissions and Removals</b>	-97,437.2	255.6	8.7	NE	NE	NE	NE	NE	39.0	1,465.5	19.8	2.2	
<b>1 - Energy</b>	1,867.5	1.7	9.9E-02	NA	NA	NA	NA	NA	16.7	52.8	7.2	2.2	
1.A - Fuel Combustion Activities	1,867.5	1.7	9.9E-02	NA	NA	NA	NA	NA	16.7	52.8	7.2	2.2	
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2 - Industrial Processes and Product Use</b>	25.0	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.3	NO	
2.A - Mineral Industry	7.1	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.D - Non-Energy Products from Fuels and Solvent Use	17.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO	
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.6	-	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,330.9	251.0	8.5	NA	NA	NA	NA	NA	22.1	1,408.3	11.0	NO	
3.A - Livestock	NA	159.1	0.4	NA	NA	NA	NA	NA	NA	NA	11.0	NA	
3.B - Land	-99,331.5	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources onland	0.5	91.8	8.1	NA	NA	NA	NA	NA	22.1	1,408.3	NA	NA	
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.2	3.0	8.0E-02	NA	NA	NA	NA	NA	0.2	4.3	0.2	8.5E-03	
4.A - Solid Waste Disposal	NA	1.1	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA	
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
4.C - Incineration and Open Burning of Waste	1.2	0.5	6.6E-03	NA	NA	NA	NA	NA	0.2	4.3	9.6E-02	8.5E-03	
4.D - Wastewater Treatment and Discharge	NA	1.4	7.4E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	220.1	1.3E-02	6.0E-03	NA	NA	NA	NA	NA	3.6	0.6	0.2	0.5	
1.A.3.a.i - International Aviation (International Bunkers)	87.2	6.1E-04	2.4E-03	NA	NA	NA	NA	NA	0.4	3.0E-02	1.4E-02	2.8E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	132.9	1.2E-02	3.5E-03	NA	NA	NA	NA	NA	3.3	0.5	0.2	0.5	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

## Annex 8 : Inventory Year 2001

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-97,190.9	256.8	8.8	NE	NE	NE	NE	NE	40.6	1,478.7	19.7	2.4
<b>1 - Energy</b>	2,045.9	1.7	0.1	NA	NA	NA	NA	NA	18.2	55.5	7.1	2.4
<b>1.A - Fuel Combustion Activities</b>	2,045.9	1.7	0.1	NA	NA	NA	NA	NA	18.2	55.5	7.1	2.4
1.A.1 - Energy Industries	9.2	1.1E-04	1.4E-04	NA	NA	NA	NA	NA	2.0E-02	9.0E-04	1.0E-04	7.9E-02
1.A.2 - Manufacturing Industries and Construction	141.8	1.2E-02	1.9E-03	NA	NA	NA	NA	NA	0.3	4.7E-02	1.8E-02	3.0E-02
1.A.3 - Transport	1,408.4	0.4	8.3E-02	NA	NA	NA	NA	NA	8.6	35.4	3.6	1.7E-02
1.A.4 - Other Sectors	449.6	1.3	2.0E-02	NA	NA	NA	NA	NA	8.8	19.9	3.5	2.3
1.A.5 - Non-Specified	36.9	1.9E-03	1.9E-03	NA	NA	NA	NA	NA	0.4	8.8E-02	2.2E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	24.6	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.5	NO
<b>2.A - Mineral Industry</b>	8.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 8 : Inventory Year 2001

LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NM VOCs	SO <sub>2</sub>
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	16.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO
2.D.1 - Lubricant Use	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	16.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	NO	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,262.6	252.1	8.7	NA	NA	NA	NA	NA	22.2	1,418.8	10.9	NO
<b>3.A - Livestock</b>	NA	159.6	0.4	NA	NA	NA	NA	NA	NA	NA	10.9	NA
3.A.1 - Enteric Fermentation	NA	155.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.9	NA
<b>3.B - Land</b>	-99,265.7	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.1 - Forest land	-108,212.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland</b>	3.0	92.5	8.3	NA	NA	NA	NA	NA	22.2	1,418.8	NA	NA
3.C.1 - Emissions from biomass burning	NA	92.5	2.7	NA	NA	NA	NA	NA	22.2	1,418.8	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.3	3.0	8.1E-02	NA	NA	NA	NA	NA	0.3	4.5	0.2	8.9E-03

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
4.A - Solid Waste Disposal	NA	1.2	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.3	0.5	6.9E-03	NA	NA	NA	NA	NA	0.3	4.5	1.0E-01	8.9E-03
4.D - Wastewater Treatment and Discharge	NA	1.3	7.4E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
5 - Other	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	223.0	1.3E-02	6.0E-03	NA	NA	NA	NA	NA	2.3	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers)	88.1	6.2E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	134.9	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	1.9	0.5	0.2	0.5
1.A.5.c - Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,045.9	1.7	0.1	18.2	55.5	7.1	2.4
<b>1.A - Fuel Combustion Activities</b>	2,045.9	1.7	0.1	18.2	55.5	7.1	2.4
<b>1.A.1 - Energy Industries</b>	9.2	1.1E-04	1.4E-04	2.0E-02	9.0E-04	1.0E-04	7.9E-02
1.A.1.a - Main Activity Electricity and Heat Production	9.2	1.1E-04	1.4E-04	2.0E-02	9.0E-04	1.0E-04	7.9E-02
1.A.1.a.i - Electricity Generation	9.2	1.1E-04	1.4E-04	2.0E-02	9.0E-04	1.0E-04	7.9E-02
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	141.8	1.2E-02	1.9E-03	0.3	4.7E-02	1.8E-02	3.0E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	140.1	1.2E-02	1.9E-03	0.3	4.5E-02	1.8E-02	2.9E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.7	7.0E-05	1.4E-05	1.2E-02	1.5E-03	6.0E-04	1.1E-03
<b>1.A.3 - Transport</b>	1,408.4	0.4	8.3E-02	8.6	35.4	3.6	1.7E-02
1.A.3.a - Civil Aviation	19.2	1.4E-04	5.4E-04	4.4E-02	3.7	5.8E-02	6.1E-03
1.A.3.a.i - International Aviation (International Bunkers)(1)							
1.A.3.a.ii - Domestic Aviation	19.2	1.4E-04	5.4E-04	4.4E-02	3.7	5.8E-02	6.1E-03
1.A.3.b - Road Transportation	1,345.8	0.4	6.6E-02	7.9	31.6	3.4	1.1E-02
1.A.3.b.i - Cars	349.1	0.1	1.7E-02	1.1	8.0	1.0	3.9E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	111.7	4.5E-02	5.3E-03	0.3	2.6	0.3	1.2E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	237.4	9.5E-02	1.1E-02	0.7	5.4	0.6	2.7E-03
1.A.3.b.ii - Light-duty trucks	593.9	0.2	2.8E-02	2.6	22.4	2.2	6.1E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	445.4	0.2	2.1E-02	2.0	16.8	1.6	4.6E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	148.5	5.5E-02	7.1E-03	0.7	5.6	0.5	1.5E-03
1.A.3.b.iii - Heavy-duty trucks and buses	401.5	2.1E-02	2.1E-02	4.2	1.0	0.2	1.0E-03
1.A.3.b.iv - Motorcycles	1.3	6.1E-04	5.9E-05	2.8E-03	0.2	5.5E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	43.4	2.4E-03	1.7E-02	0.7	0.1	6.4E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation(International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>449.6</b>	<b>1.3</b>	<b>2.0E-02</b>	<b>8.8</b>	<b>19.9</b>	<b>3.5</b>	<b>2.3</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	98.0	1.3	1.7E-02	0.4	17.2	2.6	4.7E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	351.6	4.8E-02	2.9E-03	8.4	2.8	0.9	2.2	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	351.6	4.8E-02	2.9E-03	8.4	2.8	0.9	2.2	
<b>1.A.5 - Non-Specified</b>	<b>36.9</b>	<b>1.9E-03</b>	<b>1.9E-03</b>	<b>0.4</b>	<b>8.8E-02</b>	<b>2.2E-02</b>	<b>2.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	36.9	1.9E-03	1.9E-03	0.4	8.8E-02	2.2E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	36.9	1.9E-03	1.9E-03	0.4	8.8E-02	2.2E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coaldumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO



## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	223.0	1.3E-02	6.0E-03	2.3	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers) (1)	88.1	6.2E-04	2.5E-03	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (Internationalbunkers) (1)	134.9	1.3E-02	3.6E-03	1.9	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	486.4						

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	24.6	-	-	-	-	-	-	-	-	-	1.5	-	
<b>2.A - Mineral Industry</b>	8.3	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	16.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO	
2.D.1 - Lubricant Use	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	16.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.7	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

Annex 8 : Inventory Year 2001

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,262.6	252.1	8.7	22.2	1,418.8	10.9
<b>3.A - Livestock</b>	NA	159.6	0.4	NA	NA	10.9
3.A.1 - Enteric Fermentation	NA	155.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	132.5	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	132.3	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	11.8	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.8	NA	NA	NA	NA
3.A.1.e - Camels	NA	3.3E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.7	NA	NA	NA	NA
3.A.1.h - Swine	NA	2.2E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.9
3.A.2.a - Cattle	NA	2.5	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.5	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.8E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	2.2E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	1.5E-02	4.3E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-99,265.7	NA	NO	NO	NO	NO
3.B.1 - Forest land	-108,212.1	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-106,713.1	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources onland (2)</b>	<b>3.0</b>	<b>92.5</b>	<b>8.3</b>	<b>22.2</b>	<b>1,418.8</b>	<b>NO</b>
3.C.1 - Emissions from biomass burning	-	92.5	2.7	22.2	1,418.8	NO
3.C.1.a - Biomass burning in forest lands	NA	92.2	2.7	21.7	1,410.4	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.7E-02	0.5	8.4	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	3.0	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.2	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.0E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 8 : Inventory Year 2001

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.3	3.0	8.1E-02	0.3	4.5	0.2	8.9E-03
<b>4.A - Solid Waste Disposal</b>	-	1.2	-	-	-	0.1	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.1	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.3	0.5	6.9E-03	0.3	4.5	1.0E-01	8.9E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.3	0.5	6.9E-03	0.3	4.5	1.0E-01	8.9E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.4E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.4E-02	NO	NO	6.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.0	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO



## Annex 8 : Inventory Year 2001

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-97,190.9	256.8	8.8	NE	NE	NE	NE	NE	40.6	1,478.7	19.7	2.4
<b>1 - Energy</b>	2,045.9	1.7	0.1	NA	NA	NA	NA	NA	18.2	55.5	7.1	2.4
1.A - Fuel Combustion Activities	2,045.9	1.7	0.1	NA	NA	NA	NA	NA	18.2	55.5	7.1	2.4
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	24.6	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.5	NO
2.A - Mineral Industry	8.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	16.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.7	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-99,262.6	252.1	8.7	NA	NA	NA	NA	NA	22.2	1,418.8	10.9	NO
3.A - Livestock	NA	159.6	0.4	NA	NA	NA	NA	NA	NA	NA	10.9	NA
3.B - Land	-99,265.7		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	3.0	92.5	8.3	NA	NA	NA	NA	NA	22.2	1,418.8	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.3	3.0	8.1E-02	NA	NA	NA	NA	NA	0.3	4.5	0.2	8.9E-03
4.A - Solid Waste Disposal	NA	1.2	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.3	0.5	6.9E-03	NA	NA	NA	NA	NA	0.3	4.5	1.0E-01	8.9E-03
4.D - Wastewater Treatment and Discharge	NA	1.3	7.4E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	223.0	1.3E-02	6.0E-03	NA	NA	NA	NA	NA	2.3	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers)	88.1	6.2E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	134.9	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	1.9	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-101,617.0	228.4	8.0	NE	NE	NE	NE	NE	37.0	1,132.8	19.3	2.7
<b>1 - Energy</b>	2,092.8	1.7	0.1	NA	NA	NA	NA	NA	19.9	55.4	7.2	2.7
<b>1.A - Fuel Combustion Activities</b>	2,092.8	1.7	0.1	NA	NA	NA	NA	NA	19.9	55.4	7.2	2.7
1.A.1 - Energy Industries	0.5	1.6E-05	3.9E-06	NA	NA	NA	NA	NA	9.0E-04	1.0E-04	-	3.0E-03
1.A.2 - Manufacturing Industries and Construction	109.4	9.2E-03	1.5E-03	NA	NA	NA	NA	NA	0.3	5.5E-02	2.3E-02	2.9E-02
1.A.3 - Transport	1,417.1	0.4	8.5E-02	NA	NA	NA	NA	NA	8.8	35.1	3.5	1.7E-02
1.A.4 - Other Sectors	528.2	1.3	2.1E-02	NA	NA	NA	NA	NA	10.5	20.2	3.6	2.7
1.A.5 - Non-Specified	37.6	2.0E-03	2.0E-03	NA	NA	NA	NA	NA	0.4	9.0E-02	2.2E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	26.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.4	NO
<b>2.A - Mineral Industry</b>	8.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>18.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.8</b>	<b>NO</b>	
2.D.1 - Lubricant Use	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.6</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.6	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-103,738.0</b>	<b>223.6</b>	<b>7.8</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>16.8</b>	<b>1,072.6</b>	<b>10.5</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>153.7</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.5</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	150.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.5	NA	
<b>3.B - Land</b>	<b>-103,740.1</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

## Annex 9 : Inventory Year 2002

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-112,686.5	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>2.1</b>	<b>70.0</b>	<b>7.5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>16.8</b>	<b>1,072.6</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	70.0	2.1	NA	NA	NA	NA	NA	16.8	1,072.6	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	2.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	7.2E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.3</b>	<b>3.1</b>	<b>8.1E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>4.7</b>	<b>0.2</b>	<b>9.3E-03</b>
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>1.3</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.1</b>	<b>NA</b>
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.3</b>	<b>0.6</b>	<b>7.2E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>4.7</b>	<b>0.1</b>	<b>9.3E-03</b>
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.2</b>	<b>7.4E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>9.0E-07</b>	<b>NA</b>
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>225.6</b>	<b>1.3E-02</b>	<b>6.1E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>2.3</b>	<b>0.6</b>	<b>0.2</b>	<b>0.5</b>
1.A.3.a.i - International Aviation (International Bunkers)	89.0	6.2E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	136.6	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	1.9	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>1 - Energy</b>	2,092.8	1.7	0.1	19.9	55.4	7.2	2.7	
<b>1.A - Fuel Combustion Activities</b>	2,092.8	1.7	0.1	19.9	55.4	7.2	2.7	
<b>1.A.1 - Energy Industries</b>	0.5	1.6E-05	3.9E-06	9.0E-04	1.0E-04	-	3.0E-03	
1.A.1.a - Main Activity Electricity and Heat Production	0.5	1.6E-05	3.9E-06	9.0E-04	1.0E-04	-	3.0E-03	
1.A.1.a.i - Electricity Generation	0.5	1.6E-05	3.9E-06	9.0E-04	1.0E-04	-	3.0E-03	
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO	
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO	
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO	
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO	
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO	
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO	
<b>1.A.2 - Manufacturing Industries and Construction</b>	109.4	9.2E-03	1.5E-03	0.3	5.5E-02	2.3E-02	2.9E-02	
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO	
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO	
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO	
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO	
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE	
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE	
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO	
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO	
1.A.2.i - Mining (excluding fuels) and Quarrying	107.5	9.2E-03	1.4E-03	0.3	5.4E-02	2.3E-02	2.8E-02	
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO	
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE	
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE	
1.A.2.m - Non-specified Industry	1.9	7.9E-05	1.6E-05	1.4E-02	1.7E-03	7.0E-04	1.2E-03	
<b>1.A.3 - Transport</b>	1,417.1	0.4	8.5E-02	8.8	35.1	3.5	1.7E-02	
1.A.3.a - Civil Aviation	19.4	1.4E-04	5.5E-04	4.5E-02	3.7	5.9E-02	6.2E-03	
1.A.3.a.i - International Aviation (International Bunkers) (1)								
1.A.3.a.ii - Domestic Aviation	19.4	1.4E-04	5.5E-04	4.5E-02	3.7	5.9E-02	6.2E-03	
1.A.3.b - Road Transportation	1,352.1	0.4	6.6E-02	8.0	31.2	3.4	1.1E-02	
1.A.3.b.i - Cars	345.7	0.1	1.6E-02	1.1	7.9	0.9	3.8E-03	
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	110.6	4.4E-02	5.2E-03	0.3	2.5	0.3	1.2E-03	
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	235.1	9.4E-02	1.1E-02	0.7	5.4	0.6	2.6E-03	
1.A.3.b.ii - Light-duty trucks	594.1	0.2	2.8E-02	2.6	22.1	2.2	6.1E-03	
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	445.6	0.2	2.1E-02	2.0	16.6	1.6	4.6E-03	
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	148.5	5.4E-02	7.1E-03	0.7	5.5	0.5	1.5E-03	
1.A.3.b.iii - Heavy-duty trucks and buses	410.9	2.2E-02	2.2E-02	4.3	1.0	0.2	1.0E-03	
1.A.3.b.iv - Motorcycles	1.3	6.2E-04	6.0E-05	2.8E-03	0.2	5.6E-02	-	
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO	
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO	
1.A.3.c - Railways	45.6	2.6E-03	1.8E-02	0.8	0.2	6.7E-02	1.0E-04	
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	
1.A.3.d.i - International water-borne navigation (International bunkers) (1)								

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Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>528.2</b>	<b>1.3</b>	<b>2.1E-02</b>	<b>10.5</b>	<b>20.2</b>	<b>3.6</b>	<b>2.7</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	109.2	1.3	1.7E-02	0.4	17.2	2.6	4.7E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	419.0	5.7E-02	3.4E-03	10.1	3.0	1.0	2.6	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	419.0	5.7E-02	3.4E-03	10.1	3.0	1.0	2.6	
<b>1.A.5 - Non-Specified</b>	<b>37.6</b>	<b>2.0E-03</b>	<b>2.0E-03</b>	<b>0.4</b>	<b>9.0E-02</b>	<b>2.2E-02</b>	<b>2.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	37.6	2.0E-03	2.0E-03	0.4	9.0E-02	2.2E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	37.6	2.0E-03	2.0E-03	0.4	9.0E-02	2.2E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	225.6	1.3E-02	6.1E-03	2.3	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers) (1)	89.0	6.2E-04	2.5E-03	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	136.6	1.3E-02	3.6E-03	1.9	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	486.8						

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	26.9	-	-	-	-	-	-	-	-	-	1.4	-	
<b>2.A - Mineral Industry</b>	8.6	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	8.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	



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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO	
2.D.1 - Lubricant Use	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.8	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.6	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

Annex 9 : Inventory Year 2002

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.6	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-103,738.0	223.6	7.8	16.8	1,072.6	10.5
<b>3.A - Livestock</b>	NA	153.7	0.4	NA	NA	10.5
3.A.1 - Enteric Fermentation	NA	150.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	123.4	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	123.2	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.8	NA	NA	NA	NA
3.A.1.d - Goats	NA	10.6	NA	NA	NA	NA
3.A.1.e - Camels	NA	4.0E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.3	NA	NA	NA	NA
3.A.1.h - Swine	NA	4.8E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.5
3.A.2.a - Cattle	NA	2.3	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.3	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.6	NA	NA	NA	-
3.A.2.d - Goats	NA	0.5	NA	NA	NA	-
3.A.2.e - Camels	NA	2.3E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	4.8E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.7E-02	7.5E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-103,740.1	NA	NO	NO	NO	NO
3.B.1 - Forest land	-112,686.5	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-111,187.5	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 9 : Inventory Year 2002

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	2.1	70.0	7.5	16.8	1,072.6	NO
3.C.1 - Emissions from biomass burning	-	70.0	2.1	16.8	1,072.6	NO
3.C.1.a - Biomass burning in forest lands	NA	69.7	2.1	16.4	1,066.5	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.2	2.0E-02	0.4	6.1	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	2.1	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.1	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	7.2E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.3	3.1	8.1E-02	0.3	4.7	0.2	9.3E-03
<b>4.A - Solid Waste Disposal</b>	-	1.3	-	-	-	0.1	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.1	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.3	0.6	7.2E-03	0.3	4.7	0.1	9.3E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.3	0.6	7.2E-03	0.3	4.7	0.1	9.3E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.4E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.4E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.8	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 9 : Inventory Year 2002

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-101,617.0	228.4	8.0	NE	NE	NE	NE	NE	37.0	1,132.8	19.3	2.7
<b>1 - Energy</b>	2,092.8	1.7	0.1	NA	NA	NA	NA	NA	19.9	55.4	7.2	2.7
1.A - Fuel Combustion Activities	2,092.8	1.7	0.1	NA	NA	NA	NA	NA	19.9	55.4	7.2	2.7
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	26.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.4	NO
2.A - Mineral Industry	8.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	18.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.8	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.6	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-103,738.0	223.6	7.8	NA	NA	NA	NA	NA	16.8	1,072.6	10.5	NO
3.A - Livestock	NA	153.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.5	NA
3.B - Land	-103,740.1		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	2.1	70.0	7.5	NA	NA	NA	NA	NA	16.8	1,072.6	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.3	3.1	8.1E-02	NA	NA	NA	NA	NA	0.3	4.7	0.2	9.3E-03
4.A - Solid Waste Disposal	NA	1.3	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.3	0.6	7.2E-03	NA	NA	NA	NA	NA	0.3	4.7	0.1	9.3E-03
4.D - Wastewater Treatment and Discharge	NA	1.2	7.4E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	225.6	1.3E-02	6.1E-03	NA	NA	NA	NA	NA	2.3	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers)	89.0	6.2E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	136.6	1.3E-02	3.6E-03	NA	NA	NA	NA	NA	1.9	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 10 : Inventory Year 2003

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>Total National Emissions and Removals</b>	-101,690.5	232.1	8.2	NE	NE	NE	NE	NE	38.8	1,140.6	20.1	3.0	
<b>1 - Energy</b>	2,378.9	1.8	0.1	NA	NA	NA	NA	NA	21.7	60.0	7.7	3.0	
<b>1.A - Fuel Combustion Activities</b>	2,378.9	1.8	0.1	NA	NA	NA	NA	NA	21.7	60.0	7.7	3.0	
1.A.1 - Energy Industries	21.3	2.8E-04	3.2E-04	NA	NA	NA	NA	NA	4.6E-02	2.2E-03	3.0E-04	0.2	
1.A.2 - Manufacturing Industries and Construction	143.3	1.3E-02	2.0E-03	NA	NA	NA	NA	NA	0.3	6.6E-02	2.8E-02	3.1E-02	
1.A.3 - Transport	1,632.0	0.4	9.6E-02	NA	NA	NA	NA	NA	10.1	39.3	4.0	1.9E-02	
1.A.4 - Other Sectors	541.0	1.3	2.1E-02	NA	NA	NA	NA	NA	10.8	20.5	3.7	2.8	
1.A.5 - Non-Specified	41.3	2.2E-03	2.2E-03	NA	NA	NA	NA	NA	0.4	9.9E-02	2.5E-02	2.0E-04	
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO	
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2 - Industrial Processes and Product Use</b>	110.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.6	NO	
<b>2.A - Mineral Industry</b>	9.5	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	81.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	



## Annex 10 : Inventory Year 2003

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	81.6	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>19.1</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.9</b>	<b>NO</b>
2.D.1 - Lubricant Use	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.7</b>	<b>-</b>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-104,181.0</b>	<b>226.7</b>	<b>8.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>16.8</b>	<b>1,075.7</b>	<b>10.5</b>	<b>NO</b>
<b>3.A - Livestock</b>	<b>NA</b>	<b>156.6</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.5</b>	<b>NA</b>
3.A.1 - Enteric Fermentation	NA	152.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.7	0.3	NA	NA	NA	NA	NA	NA	NA	10.5	NA
<b>3.B - Land</b>	<b>-104,181.9</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-113,128.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>0.9</b>	<b>70.2</b>	<b>7.6</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>16.8</b>	<b>1,075.7</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	70.2	2.1	NA	NA	NA	NA	NA	16.8	1,075.7	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	5.3E-03	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.4</b>	<b>3.5</b>	<b>8.2E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>5.0</b>	<b>0.3</b>	<b>9.8E-03</b>
4.A - Solid Waste Disposal	NA	1.5	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.4	0.6	7.6E-03	NA	NA	NA	NA	NA	0.3	5.0	0.1	9.8E-03
4.D - Wastewater Treatment and Discharge	NA	1.5	7.5E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>228.3</b>	<b>1.3E-02</b>	<b>6.2E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>2.2</b>	<b>0.6</b>	<b>0.2</b>	<b>0.5</b>
1.A.3.a.i - International Aviation (International Bunkers)	89.9	6.3E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	138.4	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	1.8	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,378.9	1.8	0.1	21.7	60.0	7.7	3.0
<b>1.A - Fuel Combustion Activities</b>	2,378.9	1.8	0.1	21.7	60.0	7.7	3.0
<b>1.A.1 - Energy Industries</b>	21.3	2.8E-04	3.2E-04	4.6E-02	2.2E-03	3.0E-04	0.2
1.A.1.a - Main Activity Electricity and Heat Production	21.3	2.8E-04	3.2E-04	4.6E-02	2.2E-03	3.0E-04	0.2
1.A.1.a.i - Electricity Generation	21.3	2.8E-04	3.2E-04	4.6E-02	2.2E-03	3.0E-04	0.2
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	143.3	1.3E-02	2.0E-03	0.3	6.6E-02	2.8E-02	3.1E-02
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	141.5	1.3E-02	2.0E-03	0.3	6.4E-02	2.8E-02	3.0E-02
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	1.9	7.7E-05	1.5E-05	1.3E-02	1.7E-03	6.0E-04	1.2E-03
<b>1.A.3 - Transport</b>	1,632.0	0.4	9.6E-02	10.1	39.3	4.0	1.9E-02
1.A.3.a - Civil Aviation	19.6	1.4E-04	5.5E-04	4.5E-02	3.7	5.9E-02	6.3E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	19.6	1.4E-04	5.5E-04	4.5E-02	3.7	5.9E-02	6.3E-03
1.A.3.b - Road Transportation	1,564.5	0.4	7.7E-02	9.3	35.5	3.9	1.3E-02
1.A.3.b.i - Cars	400.0	0.2	1.9E-02	1.2	9.2	1.1	4.4E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	128.0	5.1E-02	6.1E-03	0.4	2.9	0.4	1.4E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	272.0	0.1	1.3E-02	0.8	6.2	0.7	3.0E-03
1.A.3.b.ii - Light-duty trucks	678.1	0.2	3.3E-02	3.0	24.9	2.4	6.9E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	508.6	0.2	2.4E-02	2.2	18.7	1.8	5.2E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	169.5	6.1E-02	8.1E-03	0.7	6.2	0.6	1.7E-03
1.A.3.b.iii - Heavy-duty trucks and buses	484.9	2.6E-02	2.6E-02	5.1	1.2	0.3	1.2E-03
1.A.3.b.iv - Motorcycles	1.5	7.1E-04	6.8E-05	3.2E-03	0.2	6.4E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	47.9	2.7E-03	1.8E-02	0.8	0.2	7.1E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>541.0</b>	<b>1.3</b>	<b>2.1E-02</b>	<b>10.8</b>	<b>20.5</b>	<b>3.7</b>	<b>2.8</b>
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	108.7	1.3	1.7E-02	0.4	17.3	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	432.3	5.8E-02	3.5E-03	10.4	3.2	1.1	2.7
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	432.3	5.8E-02	3.5E-03	10.4	3.2	1.1	2.7
<b>1.A.5 - Non-Specified</b>	<b>41.3</b>	<b>2.2E-03</b>	<b>2.2E-03</b>	<b>0.4</b>	<b>9.9E-02</b>	<b>2.5E-02</b>	<b>2.0E-04</b>
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	41.3	2.2E-03	2.2E-03	0.4	9.9E-02	2.5E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	41.3	2.2E-03	2.2E-03	0.4	9.9E-02	2.5E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	228.3	1.3E-02	6.2E-03	2.2	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers) (1)	89.9	6.3E-04	2.5E-03	0.4	3.1E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	138.4	1.3E-02	3.7E-03	1.8	0.5	0.2	0.5
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	487.1						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	110.2	-	-	-	-	-	-	-	-	-	1.6	-	
<b>2.A - Mineral Industry</b>	9.5	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	9.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	81.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	81.6	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 10 : Inventory Year 2003

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	<b>19.1</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.9</b>	<b>NO</b>	
2.D.1 - Lubricant Use	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.7</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO



## Annex 10 : Inventory Year 2003

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-104,181.0	226.7	8.0	16.8	1,075.7	10.5
<b>3.A - Livestock</b>	NA	156.6	0.3	NA	NA	10.5
3.A.1 - Enteric Fermentation	NA	152.9	NA	NA	NA	NA
3.A.1.a - Cattle	NA	125.6	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	125.4	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	14.8	NA	NA	NA	NA
3.A.1.d - Goats	NA	10.4	NA	NA	NA	NA
3.A.1.e - Camels	NA	5.7E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.2	NA	NA	NA	NA
3.A.1.h - Swine	NA	4.7E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.3	NA	NA	10.5
3.A.2.a - Cattle	NA	2.3	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.3	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.6	NA	NA	NA	-
3.A.2.d - Goats	NA	0.5	NA	NA	NA	-
3.A.2.e - Camels	NA	3.2E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	4.7E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.7E-02	7.6E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-104,181.9	NA	NO	NO	NO	NO
3.B.1 - Forest land	-113,128.4	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-111,629.4	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	<b>0.9</b>	<b>70.2</b>	<b>7.6</b>	<b>16.8</b>	<b>1,075.7</b>	<b>NO</b>
3.C.1 - Emissions from biomass burning	-	70.2	2.1	16.8	1,075.7	NO
3.C.1.a - Biomass burning in forest lands	NA	69.9	2.1	16.5	1,069.8	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.2	1.9E-02	0.4	5.9	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.9	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.2	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	5.3E-03	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

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## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.4	3.5	8.2E-02	0.3	5.0	0.3	9.8E-03
<b>4.A - Solid Waste Disposal</b>	-	1.5	-	-	-	0.1	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.1	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.4	0.6	7.6E-03	0.3	5.0	0.1	9.8E-03
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.4	0.6	7.6E-03	0.3	5.0	0.1	9.8E-03
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.5	7.5E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.5E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.1	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 10 : Inventory Year 2003

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-101,690.5	232.1	8.2	NE	NE	NE	NE	NE	38.8	1,140.6	20.1	3.0
<b>1 - Energy</b>	2,378.9	1.8	0.1	NA	NA	NA	NA	NA	21.7	60.0	7.7	3.0
1.A - Fuel Combustion Activities	2,378.9	1.8	0.1	NA	NA	NA	NA	NA	21.7	60.0	7.7	3.0
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	110.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.6	NO
2.A - Mineral Industry	9.5	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	81.6	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	19.1	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.9	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.7	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-104,181.0	226.7	8.0	NA	NA	NA	NA	NA	16.8	1,075.7	10.5	NO
3.A - Livestock	NA	156.6	0.3	NA	NA	NA	NA	NA	NA	NA	10.5	NA
3.B - Land	-104,181.9	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.9	70.2	7.6	NA	NA	NA	NA	NA	16.8	1,075.7	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.4	3.5	8.2E-02	NA	NA	NA	NA	NA	0.3	5.0	0.3	9.8E-03
4.A - Solid Waste Disposal	NA	1.5	NO	NA	NA	NA	NA	NA	NO	NO	0.1	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.4	0.6	7.6E-03	NA	NA	NA	NA	NA	0.3	5.0	0.1	9.8E-03
4.D - Wastewater Treatment and Discharge	NA	1.5	7.5E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	228.3	1.3E-02	6.2E-03	NA	NA	NA	NA	NA	2.2	0.6	0.2	0.5
1.A.3.a.i - International Aviation (International Bunkers)	89.9	6.3E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.1E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	138.4	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	1.8	0.5	0.2	0.5
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 11 : Inventory Year 2004

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-103,319.7	222.2	7.9	NE	NE	NE	NE	NE	36.9	1,024.7	20.5	3.5
<b>1 - Energy</b>	2,443.8	1.8	0.1	NA	NA	NA	NA	NA	21.7	62.8	8.0	3.5
<b>1.A - Fuel Combustion Activities</b>	2,443.8	1.8	0.1	NA	NA	NA	NA	NA	21.7	62.8	8.0	3.5
1.A.1 - Energy Industries	2.2	3.4E-05	3.1E-05	NA	NA	NA	NA	NA	4.6E-03	2.0E-04	-	1.8E-02
1.A.2 - Manufacturing Industries and Construction	157.0	1.5E-02	2.3E-03	NA	NA	NA	NA	NA	0.6	1.0	0.1	0.9
1.A.3 - Transport	1,735.2	0.5	0.1	NA	NA	NA	NA	NA	10.8	41.3	4.2	2.0E-02
1.A.4 - Other Sectors	506.6	1.3	2.1E-02	NA	NA	NA	NA	NA	9.9	20.5	3.7	2.5
1.A.5 - Non-Specified	42.8	2.3E-03	2.3E-03	NA	NA	NA	NA	NA	0.4	0.1	2.6E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	237.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.6	NO
<b>2.A - Mineral Industry</b>	9.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	9.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

Annex 11 : Inventory Year 2004

LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NM VOCs	SO <sub>2</sub>
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	205.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	205.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	22.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.9	NO
2.D.1 - Lubricant Use	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	20.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA

## Annex 11 : Inventory Year 2004

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	NO	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-106,002.2	216.7	7.7	NA	NA	NA	NA	NA	14.9	956.7	10.6	NO
<b>3.A - Livestock</b>	NA	154.3	0.4	NA	NA	NA	NA	NA	NA	NA	10.6	NA
3.A.1 - Enteric Fermentation	NA	150.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.6	NA
<b>3.B - Land</b>	-106,002.8	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.1 - Forest land	-114,949.2	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.6	62.4	7.3	NA	NA	NA	NA	NA	14.9	956.7	NA	NA
3.C.1 - Emissions from biomass burning	NA	62.4	1.8	NA	NA	NA	NA	NA	14.9	956.7	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.1E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.4	3.6	8.4E-02	NA	NA	NA	NA	NA	0.3	5.2	0.3	1.0E-02



## Annex 11 : Inventory Year 2004

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
4.A - Solid Waste Disposal	NA	1.6	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.4	0.6	8.0E-03	NA	NA	NA	NA	NA	0.3	5.2	0.1	1.0E-02
4.D - Wastewater Treatment and Discharge	NA	1.4	7.6E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
5 - Other	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	231.0	1.4E-02	6.3E-03	NA	NA	NA	NA	NA	3.8	0.7	0.2	0.9
1.A.3.a.i - International Aviation (International Bunkers)	90.8	6.4E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	140.2	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.5	0.7	0.2	0.9
1.A.5.c - Multilateral Operations	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 11 : Inventory Year 2004

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,443.8	1.8	0.1	21.7	62.8	8.0	3.5
<b>1.A - Fuel Combustion Activities</b>	2,443.8	1.8	0.1	21.7	62.8	8.0	3.5
<b>1.A.1 - Energy Industries</b>	2.2	3.4E-05	3.1E-05	4.6E-03	2.0E-04	-	1.8E-02
1.A.1.a - Main Activity Electricity and Heat Production	2.2	3.4E-05	3.1E-05	4.6E-03	2.0E-04	-	1.8E-02
1.A.1.a.i - Electricity Generation	2.2	3.4E-05	3.1E-05	4.6E-03	2.0E-04	-	1.8E-02
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	157.0	1.5E-02	2.3E-03	0.6	1.0	0.1	0.9
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	155.0	1.5E-02	2.3E-03	0.6	1.0	0.1	0.9
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.0	8.3E-05	1.7E-05	1.4E-02	1.8E-03	7.0E-04	1.3E-03
<b>1.A.3 - Transport</b>	1,735.2	0.5	0.1	10.8	41.3	4.2	2.0E-02
1.A.3.a - Civil Aviation	19.8	1.4E-04	5.6E-04	4.6E-02	3.8	6.0E-02	6.3E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	19.8	1.4E-04	5.6E-04	4.6E-02	3.8	6.0E-02	6.3E-03
1.A.3.b - Road Transportation	1,665.3	0.5	8.2E-02	9.9	37.3	4.1	1.3E-02
1.A.3.b.i - Cars	430.7	0.2	2.0E-02	1.3	9.9	1.2	4.8E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	137.8	5.5E-02	6.5E-03	0.4	3.2	0.4	1.5E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	292.9	0.1	1.4E-02	0.9	6.7	0.8	3.3E-03
1.A.3.b.ii - Light-duty trucks	717.4	0.3	3.4E-02	3.2	26.0	2.5	7.2E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	538.0	0.2	2.6E-02	2.4	19.5	1.9	5.4E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	179.3	6.4E-02	8.6E-03	0.8	6.5	0.6	1.8E-03
1.A.3.b.iii - Heavy-duty trucks and buses	515.6	2.7E-02	2.7E-02	5.4	1.2	0.3	1.3E-03
1.A.3.b.iv - Motorcycles	1.6	7.6E-04	7.4E-05	3.4E-03	0.3	6.8E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	50.1	2.8E-03	1.9E-02	0.8	0.2	7.4E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>506.6</b>	<b>1.3</b>	<b>2.1E-02</b>	<b>9.9</b>	<b>20.5</b>	<b>3.7</b>	<b>2.5</b>	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	108.8	1.3	1.7E-02	0.4	17.3	2.6	4.8E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	397.8	5.4E-02	3.2E-03	9.5	3.2	1.1	2.5	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	397.8	5.4E-02	3.2E-03	9.5	3.2	1.1	2.5	
<b>1.A.5 - Non-Specified</b>	<b>42.8</b>	<b>2.3E-03</b>	<b>2.3E-03</b>	<b>0.4</b>	<b>0.1</b>	<b>2.6E-02</b>	<b>2.0E-04</b>	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	42.8	2.3E-03	2.3E-03	0.4	0.1	2.6E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	42.8	2.3E-03	2.3E-03	0.4	0.1	2.6E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	231.0	1.4E-02	6.3E-03	3.8	0.7	0.2	0.9
1.A.3.a.i - International Aviation (International Bunkers) (1)	90.8	6.4E-04	2.5E-03	0.4	3.2E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	140.2	1.3E-02	3.7E-03	3.5	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	487.4						

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	237.3	-	-	-	-	-	-	-	-	-	1.6	-	
<b>2.A - Mineral Industry</b>	9.7	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	9.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	205.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	205.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	22.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.9	NO	
2.D.1 - Lubricant Use	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	20.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.7	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.7	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

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Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-106,002.2	216.7	7.7	14.9	956.7	10.6
<b>3.A - Livestock</b>	NA	154.3	0.4	NA	NA	10.6
3.A.1 - Enteric Fermentation	NA	150.6	NA	NA	NA	NA
3.A.1.a - Cattle	NA	124.9	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	124.8	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.1	NA	NA	NA	NA
3.A.1.d - Goats	NA	10.0	NA	NA	NA	NA
3.A.1.e - Camels	NA	5.2E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.1	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.4	NA	NA	NA	NA
3.A.1.h - Swine	NA	5.3E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.6
3.A.2.a - Cattle	NA	2.4	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.3	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	2.9E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	5.3E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.9E-02	8.1E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-106,002.8	NA	NO	NO	NO	NO
3.B.1 - Forest land	-114,949.2	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-113,450.2	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO



## Annex 11 : Inventory Year 2004

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.6	62.4	7.3	14.9	956.7	NO
3.C.1 - Emissions from biomass burning	-	62.4	1.8	14.9	956.7	NO
3.C.1.a - Biomass burning in forest lands	NA	62.2	1.8	14.6	951.7	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.2	1.6E-02	0.3	5.0	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.6	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.1	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.1E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 11 : Inventory Year 2004

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.4	3.6	8.4E-02	0.3	5.2	0.3	1.0E-02
<b>4.A - Solid Waste Disposal</b>	-	1.6	-	-	-	0.2	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.2	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.4	0.6	8.0E-03	0.3	5.2	0.1	1.0E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.4	0.6	8.0E-03	0.3	5.2	0.1	1.0E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.4	7.6E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.6E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.0	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 11 : Inventory Year 2004

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-103,319.7	222.2	7.9	NE	NE	NE	NE	NE	36.9	1,024.7	20.5	3.5
<b>1 - Energy</b>	2,443.8	1.8	0.1	NA	NA	NA	NA	NA	21.7	62.8	8.0	3.5
1.A - Fuel Combustion Activities	2,443.8	1.8	0.1	NA	NA	NA	NA	NA	21.7	62.8	8.0	3.5
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	237.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.6	NO
2.A - Mineral Industry	9.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	205.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	22.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.9	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.7	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-106,002.2	216.7	7.7	NA	NA	NA	NA	NA	14.9	956.7	10.6	NO
3.A - Livestock	NA	154.3	0.4	NA	NA	NA	NA	NA	NA	NA	10.6	NA
3.B - Land	-106,002.8		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.6	62.4	7.3	NA	NA	NA	NA	NA	14.9	956.7	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.4	3.6	8.4E-02	NA	NA	NA	NA	NA	0.3	5.2	0.3	1.0E-02
4.A - Solid Waste Disposal	NA	1.6	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.4	0.6	8.0E-03	NA	NA	NA	NA	NA	0.3	5.2	0.1	1.0E-02
4.D - Wastewater Treatment and Discharge	NA	1.4	7.6E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	231.0	1.4E-02	6.3E-03	NA	NA	NA	NA	NA	3.8	0.7	0.2	0.9
1.A.3.a.i - International Aviation (International Bunkers)	90.8	6.4E-04	2.5E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.4E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	140.2	1.3E-02	3.7E-03	NA	NA	NA	NA	NA	3.5	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 12 : Inventory Year 2005

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-100,924.0	230.1	8.1	NE	NE	NE	NE	NE	41.1	1,267.2	20.4	3.7
<b>1 - Energy</b>	2,590.3	1.8	0.1	NA	NA	NA	NA	NA	22.1	65.0	8.3	3.7
<b>1.A - Fuel Combustion Activities</b>	2,590.3	1.8	0.1	NA	NA	NA	NA	NA	22.1	65.0	8.3	3.7
1.A.1 - Energy Industries	53.6	6.8E-04	8.2E-04	NA	NA	NA	NA	NA	0.1	5.3E-03	6.0E-04	0.5
1.A.2 - Manufacturing Industries and Construction	145.8	1.4E-02	2.2E-03	NA	NA	NA	NA	NA	0.6	0.9	0.1	0.8
1.A.3 - Transport	1,853.2	0.5	0.1	NA	NA	NA	NA	NA	11.5	43.4	4.5	2.1E-02
1.A.4 - Other Sectors	494.7	1.3	2.0E-02	NA	NA	NA	NA	NA	9.5	20.6	3.7	2.5
1.A.5 - Non-Specified	43.1	2.3E-03	2.3E-03	NA	NA	NA	NA	NA	0.5	0.1	2.6E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	260.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.7	NO
<b>2.A - Mineral Industry</b>	10.0	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	228.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 12 : Inventory Year 2005

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	228.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>21.8</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.9</b>	<b>NO</b>
2.D.1 - Lubricant Use	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	18.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-103,776.1</b>	<b>224.4</b>	<b>7.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>18.7</b>	<b>1,196.7</b>	<b>10.1</b>	<b>NO</b>
<b>3.A - Livestock</b>	<b>NA</b>	<b>146.3</b>	<b>0.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.1</b>	<b>NA</b>
3.A.1 - Enteric Fermentation	NA	142.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.6	0.3	NA	NA	NA	NA	NA	NA	NA	10.1	NA
<b>3.B - Land</b>	<b>-103,776.3</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

## Annex 12 : Inventory Year 2005

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-112,722.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>0.2</b>	<b>78.1</b>	<b>7.5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>18.7</b>	<b>1,196.7</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	78.1	2.3	NA	NA	NA	NA	NA	18.7	1,196.7	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.3E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.5</b>	<b>3.9</b>	<b>8.5E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>5.4</b>	<b>0.3</b>	<b>1.1E-02</b>
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>1.8</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.2</b>	<b>NA</b>
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.5</b>	<b>0.6</b>	<b>8.3E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>5.4</b>	<b>0.1</b>	<b>1.1E-02</b>
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.5</b>	<b>7.7E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.0E-06</b>	<b>NA</b>
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>233.7</b>	<b>1.4E-02</b>	<b>6.3E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.9</b>	<b>0.7</b>	<b>0.3</b>	<b>0.9</b>
1.A.3.a.i - International Aviation (International Bunkers)	91.7	6.4E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	141.9	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.5	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,590.3	1.8	0.1	22.1	65.0	8.3	3.7
<b>1.A - Fuel Combustion Activities</b>	2,590.3	1.8	0.1	22.1	65.0	8.3	3.7
<b>1.A.1 - Energy Industries</b>	53.6	6.8E-04	8.2E-04	0.1	5.3E-03	6.0E-04	0.5
1.A.1.a - Main Activity Electricity and Heat Production	53.6	6.8E-04	8.2E-04	0.1	5.3E-03	6.0E-04	0.5
1.A.1.a.i - Electricity Generation	53.6	6.8E-04	8.2E-04	0.1	5.3E-03	6.0E-04	0.5
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	145.8	1.4E-02	2.2E-03	0.6	0.9	0.1	0.8
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	143.9	1.4E-02	2.2E-03	0.5	0.9	0.1	0.8
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.0	8.2E-05	1.6E-05	1.4E-02	1.8E-03	7.0E-04	1.3E-03
<b>1.A.3 - Transport</b>	1,853.2	0.5	0.1	11.5	43.4	4.5	2.1E-02
1.A.3.a - Civil Aviation	20.0	1.4E-04	5.7E-04	4.6E-02	3.8	6.1E-02	6.4E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	20.0	1.4E-04	5.7E-04	4.6E-02	3.8	6.1E-02	6.4E-03
1.A.3.b - Road Transportation	1,780.8	0.5	8.8E-02	10.6	39.5	4.3	1.4E-02
1.A.3.b.i - Cars	463.9	0.2	2.2E-02	1.4	10.6	1.3	5.2E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	148.4	6.0E-02	7.0E-03	0.5	3.4	0.4	1.7E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	315.4	0.1	1.5E-02	1.0	7.2	0.9	3.5E-03
1.A.3.b.ii - Light-duty trucks	763.5	0.3	3.7E-02	3.4	27.2	2.7	7.6E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	572.6	0.2	2.8E-02	2.5	20.4	2.0	5.7E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	190.9	6.7E-02	9.2E-03	0.8	6.8	0.7	1.9E-03
1.A.3.b.iii - Heavy-duty trucks and buses	551.6	2.9E-02	2.9E-02	5.8	1.3	0.3	1.4E-03
1.A.3.b.iv - Motorcycles	1.8	8.6E-04	8.3E-05	3.9E-03	0.3	7.7E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	52.4	2.9E-03	2.0E-02	0.9	0.2	7.7E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	494.7	1.3	2.0E-02	9.5	20.6	3.7	2.5	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	112.3	1.3	1.7E-02	0.4	17.3	2.6	4.8E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	382.4	5.2E-02	3.1E-03	9.1	3.2	1.1	2.4	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	382.4	5.2E-02	3.1E-03	9.1	3.2	1.1	2.4	
<b>1.A.5 - Non-Specified</b>	43.1	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	43.1	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	43.1	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	233.7	1.4E-02	6.3E-03	3.9	0.7	0.3	0.9
1.A.3.a.i - International Aviation (International Bunkers) (1)	91.7	6.4E-04	2.6E-03	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	141.9	1.3E-02	3.8E-03	3.5	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	487.7						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	260.3	-	-	-	-	-	-	-	-	-	1.7	-	
<b>2.A - Mineral Industry</b>	10.0	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	228.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	228.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 12 : Inventory Year 2005

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	<b>21.8</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.9</b>	<b>NO</b>	
2.D.1 - Lubricant Use	3.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	18.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.9	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 12 : Inventory Year 2005

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-103,776.1	224.4	7.9	18.7	1,196.7	10.1
<b>3.A - Livestock</b>	NA	146.3	0.3	NA	NA	10.1
3.A.1 - Enteric Fermentation	NA	142.7	NA	NA	NA	NA
3.A.1.a - Cattle	NA	116.9	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	116.8	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.3	NA	NA	NA	NA
3.A.1.d - Goats	NA	10.2	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.9E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.4	NA	NA	NA	NA
3.A.1.h - Swine	NA	5.6E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.6	0.3	NA	NA	10.1
3.A.2.a - Cattle	NA	2.2	0.3	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.2	0.3	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.6E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	5.6E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.8E-02	7.8E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-103,776.3	NA	NO	NO	NO	NO
3.B.1 - Forest land	-112,722.8	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-111,223.8	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 12 : Inventory Year 2005

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.2	78.1	7.5	18.7	1,196.7	NO
3.C.1 - Emissions from biomass burning	-	78.1	2.3	18.7	1,196.7	NO
3.C.1.a - Biomass burning in forest lands	NA	77.9	2.3	18.3	1,190.7	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.2	1.9E-02	0.4	6.0	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 12 : Inventory Year 2005

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.9	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.3E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO



## Annex 12 : Inventory Year 2005

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.5	3.9	8.5E-02	0.3	5.4	0.3	1.1E-02
<b>4.A - Solid Waste Disposal</b>	-	1.8	-	-	-	0.2	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.2	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.5	0.6	8.3E-03	0.3	5.4	0.1	1.1E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.5	0.6	8.3E-03	0.3	5.4	0.1	1.1E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.5	7.7E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.7E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	1.1	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 12 : Inventory Year 2005

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-100,924.0	230.1	8.1	NE	NE	NE	NE	NE	41.1	1,267.2	20.4	3.7
<b>1 - Energy</b>	2,590.3	1.8	0.1	NA	NA	NA	NA	NA	22.1	65.0	8.3	3.7
1.A - Fuel Combustion Activities	2,590.3	1.8	0.1	NA	NA	NA	NA	NA	22.1	65.0	8.3	3.7
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	260.3	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.7	NO
2.A - Mineral Industry	10.0	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	228.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	21.8	NO	NO	NA	NA	NA	NA	NA	NO	NO	0.9	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.8	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-103,776.1	224.4	7.9	NA	NA	NA	NA	NA	18.7	1,196.7	10.1	NO
3.A - Livestock	NA	146.3	0.3	NA	NA	NA	NA	NA	NA	NA	10.1	NA
3.B - Land	-103,776.3		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.2	78.1	7.5	NA	NA	NA	NA	NA	18.7	1,196.7	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.5	3.9	8.5E-02	NA	NA	NA	NA	NA	0.3	5.4	0.3	1.1E-02
4.A - Solid Waste Disposal	NA	1.8	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.5	0.6	8.3E-03	NA	NA	NA	NA	NA	0.3	5.4	0.1	1.1E-02
4.D - Wastewater Treatment and Discharge	NA	1.5	7.7E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	233.7	1.4E-02	6.3E-03	NA	NA	NA	NA	NA	3.9	0.7	0.3	0.9
1.A.3.a.i - International Aviation (International Bunkers)	91.7	6.4E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	141.9	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.5	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 13 : Inventory Year 2006

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-97,175.4	259.9	9.0	NE	NE	NE	NE	NE	45.5	1,618.8	21.3	4.2
<b>1 - Energy</b>	2,740.3	1.9	0.1	NA	NA	NA	NA	NA	21.1	67.4	8.6	4.2
<b>1.A - Fuel Combustion Activities</b>	2,740.3	1.9	0.1	NA	NA	NA	NA	NA	21.1	67.4	8.6	4.2
1.A.1 - Energy Industries	164.1	2.0E-03	2.5E-03	NA	NA	NA	NA	NA	0.4	1.6E-02	1.9E-03	1.4
1.A.2 - Manufacturing Industries and Construction	158.1	1.5E-02	2.4E-03	NA	NA	NA	NA	NA	0.6	0.9	0.1	0.8
1.A.3 - Transport	1,964.9	0.5	0.1	NA	NA	NA	NA	NA	12.1	45.8	4.7	2.2E-02
1.A.4 - Other Sectors	409.0	1.3	2.0E-02	NA	NA	NA	NA	NA	7.5	20.6	3.7	1.9
1.A.5 - Non-Specified	44.2	2.3E-03	2.3E-03	NA	NA	NA	NA	NA	0.5	0.1	2.6E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	255.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.7	NO
<b>2.A - Mineral Industry</b>	10.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	223.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 13 : Inventory Year 2006

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	223.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>21.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.0</b>	<b>NO</b>	
2.D.1 - Lubricant Use	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-100,172.3</b>	<b>254.0</b>	<b>8.8</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>24.1</b>	<b>1,545.7</b>	<b>10.7</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>153.2</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.7</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	149.5	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA	
<b>3.B - Land</b>	<b>-100,172.5</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-109,118.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>0.1</b>	<b>100.8</b>	<b>8.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>24.1</b>	<b>1,545.7</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	100.8	3.0	NA	NA	NA	NA	NA	24.1	1,545.7	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.0E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.6</b>	<b>4.0</b>	<b>8.8E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>5.7</b>	<b>0.3</b>	<b>1.1E-02</b>
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>2.0</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.2</b>	<b>NA</b>
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.6</b>	<b>0.7</b>	<b>8.7E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>5.7</b>	<b>0.1</b>	<b>1.1E-02</b>
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.4</b>	<b>7.9E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.0E-06</b>	<b>NA</b>
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>236.3</b>	<b>1.4E-02</b>	<b>6.4E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>3.9</b>	<b>0.7</b>	<b>0.3</b>	<b>0.9</b>
1.A.3.a.i - International Aviation (International Bunkers)	92.6	6.5E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	143.7	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

## Annex 13 : Inventory Year 2006

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,740.3	1.9	0.1	21.1	67.4	8.6	4.2
<b>1.A - Fuel Combustion Activities</b>	2,740.3	1.9	0.1	21.1	67.4	8.6	4.2
<b>1.A.1 - Energy Industries</b>	164.1	2.0E-03	2.5E-03	0.4	1.6E-02	1.9E-03	1.4
1.A.1.a - Main Activity Electricity and Heat Production	164.1	2.0E-03	2.5E-03	0.4	1.6E-02	1.9E-03	1.4
1.A.1.a.i - Electricity Generation	164.1	2.0E-03	2.5E-03	0.4	1.6E-02	1.9E-03	1.4
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	158.1	1.5E-02	2.4E-03	0.6	0.9	0.1	0.8
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	156.1	1.5E-02	2.4E-03	0.6	0.9	0.1	0.8
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.0	8.3E-05	1.7E-05	1.4E-02	1.8E-03	7.0E-04	1.3E-03
<b>1.A.3 - Transport</b>	1,964.9	0.5	0.1	12.1	45.8	4.7	2.2E-02
1.A.3.a - Civil Aviation	20.2	1.4E-04	5.7E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.a.i - International Aviation (International Bunkers) (1)							
1.A.3.a.ii - Domestic Aviation	20.2	1.4E-04	5.7E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.b - Road Transportation	1,891.1	0.5	9.3E-02	11.2	41.7	4.6	1.5E-02
1.A.3.b.i - Cars	496.6	0.2	2.3E-02	1.5	11.4	1.4	5.6E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	158.9	6.4E-02	7.5E-03	0.5	3.6	0.4	1.8E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	337.7	0.1	1.6E-02	1.0	7.7	0.9	3.8E-03
1.A.3.b.ii - Light-duty trucks	814.7	0.3	3.9E-02	3.6	28.6	2.8	8.0E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	611.0	0.2	2.9E-02	2.7	21.5	2.1	6.0E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	203.7	7.1E-02	9.8E-03	0.9	7.2	0.7	2.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	577.7	3.0E-02	3.0E-02	6.1	1.4	0.3	1.5E-03
1.A.3.b.iv - Motorcycles	2.1	9.8E-04	9.5E-05	4.4E-03	0.3	8.8E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	53.6	3.0E-03	2.1E-02	0.9	0.2	7.9E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							

## Annex 13 : Inventory Year 2006

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)							
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	409.0	1.3	2.0E-02	7.5	20.6	3.7	1.9	
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	106.6	1.3	1.7E-02	0.4	17.4	2.6	4.8E-02	
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	302.4	4.1E-02	2.5E-03	7.2	3.2	1.0	1.9	
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	302.4	4.1E-02	2.5E-03	7.2	3.2	1.0	1.9	
<b>1.A.5 - Non-Specified</b>	44.2	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	44.2	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	44.2	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04	
1.A.5.c - Multilateral Operations (1)(2)								
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	236.3	1.4E-02	6.4E-03	3.9	0.7	0.3	0.9
1.A.3.a.i - International Aviation (International Bunkers) (1)	92.6	6.5E-04	2.6E-03	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	143.7	1.3E-02	3.8E-03	3.6	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.0						



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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	255.1	-	-	-	-	-	-	-	-	-	1.7	-	
<b>2.A - Mineral Industry</b>	10.4	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	10.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	223.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	223.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	<b>21.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.0</b>	<b>NO</b>	
2.D.1 - Lubricant Use	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)				(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

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Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-100,172.3	254.0	8.8	24.1	1,545.7	10.7
<b>3.A - Livestock</b>	NA	153.2	0.4	NA	NA	10.7
3.A.1 - Enteric Fermentation	NA	149.5	NA	NA	NA	NA
3.A.1.a - Cattle	NA	123.3	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	123.1	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.3	NA	NA	NA	NA
3.A.1.d - Goats	NA	10.3	NA	NA	NA	NA
3.A.1.e - Camels	NA	3.4E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.6	NA	NA	NA	NA
3.A.1.h - Swine	NA	5.2E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.7
3.A.2.a - Cattle	NA	2.4	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.4	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.5	NA	NA	NA	-
3.A.2.e - Camels	NA	1.9E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	5.2E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.8E-02	7.8E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-100,172.5	NA	NO	NO	NO	NO
3.B.1 - Forest land	-109,118.9	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-107,619.9	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

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Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.1	100.8	8.4	24.1	1,545.7	NO
3.C.1 - Emissions from biomass burning	-	100.8	3.0	24.1	1,545.7	NO
3.C.1.a - Biomass burning in forest lands	NA	100.6	3.0	23.7	1,538.3	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.4E-02	0.4	7.4	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 13 : Inventory Year 2006

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.1	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.0	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.0E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 13 : Inventory Year 2006

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.6	4.0	8.8E-02	0.3	5.7	0.3	1.1E-02
<b>4.A - Solid Waste Disposal</b>	-	2.0	-	-	-	0.2	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.2	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.6	0.7	8.7E-03	0.3	5.7	0.1	1.1E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.6	0.7	8.7E-03	0.3	5.7	0.1	1.1E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.4	7.9E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.9E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.9	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 13 : Inventory Year 2006

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-97,175.4	259.9	9.0	NE	NE	NE	NE	NE	45.5	1,618.8	21.3	4.2
<b>1 - Energy</b>	2,740.3	1.9	0.1	NA	NA	NA	NA	NA	21.1	67.4	8.6	4.2
1.A - Fuel Combustion Activities	2,740.3	1.9	0.1	NA	NA	NA	NA	NA	21.1	67.4	8.6	4.2
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	255.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.7	NO
2.A - Mineral Industry	10.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	223.4	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	21.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.0	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.8	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-100,172.3	254.0	8.8	NA	NA	NA	NA	NA	24.1	1,545.7	10.7	NO
3.A - Livestock	NA	153.2	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA
3.B - Land	-100,172.5	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.1	100.8	8.4	NA	NA	NA	NA	NA	24.1	1,545.7	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.6	4.0	8.8E-02	NA	NA	NA	NA	NA	0.3	5.7	0.3	1.1E-02
4.A - Solid Waste Disposal	NA	2.0	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.6	0.7	8.7E-03	NA	NA	NA	NA	NA	0.3	5.7	0.1	1.1E-02
4.D - Wastewater Treatment and Discharge	NA	1.4	7.9E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	236.3	1.4E-02	6.4E-03	NA	NA	NA	NA	NA	3.9	0.7	0.3	0.9
1.A.3.a.i - International Aviation (International Bunkers)	92.6	6.5E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.2E-02	1.5E-02	2.9E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	143.7	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO



## Annex 14 : Inventory Year 2007

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-94,291.8	272.2	9.5	NE	NE	NE	NE	NE	49.3	1,904.4	21.4	4.0
<b>1 - Energy</b>	2,821.7	1.9	0.1	NA	NA	NA	NA	NA	20.4	69.1	8.8	4.0
<b>1.A - Fuel Combustion Activities</b>	2,821.7	1.9	0.1	NA	NA	NA	NA	NA	20.4	69.1	8.8	4.0
1.A.1 - Energy Industries	195.0	2.3E-03	3.0E-03	NA	NA	NA	NA	NA	0.4	1.9E-02	2.2E-03	1.7
1.A.2 - Manufacturing Industries and Construction	170.0	1.8E-02	2.7E-03	NA	NA	NA	NA	NA	0.7	0.9	0.2	0.7
1.A.3 - Transport	2,064.5	0.5	0.1	NA	NA	NA	NA	NA	12.7	47.6	5.0	2.2E-02
1.A.4 - Other Sectors	348.0	1.3	1.9E-02	NA	NA	NA	NA	NA	6.1	20.6	3.6	1.6
1.A.5 - Non-Specified	44.2	2.3E-03	2.3E-03	NA	NA	NA	NA	NA	0.5	0.1	2.6E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	293.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.8	NO
<b>2.A - Mineral Industry</b>	11.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	11.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	258.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 14 : Inventory Year 2007

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	258.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>23.8</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.0</b>	<b>NO</b>
2.D.1 - Lubricant Use	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	NA
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-97,408.2</b>	<b>266.5</b>	<b>9.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>28.5</b>	<b>1,829.3</b>	<b>10.5</b>	<b>NO</b>
<b>3.A - Livestock</b>	<b>NA</b>	<b>150.9</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.5</b>	<b>NA</b>
3.A.1 - Enteric Fermentation	NA	147.2	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.5	NA
<b>3.B - Land</b>	<b>-97,408.5</b>	<b>NA</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

## Annex 14 : Inventory Year 2007

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
3.B.1 - Forest land	-106,355.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	<b>0.3</b>	<b>115.6</b>	<b>8.9</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>28.5</b>	<b>1,829.3</b>	<b>NA</b>	<b>NA</b>
3.C.1 - Emissions from biomass burning	NA	115.6	3.5	NA	NA	NA	NA	NA	28.5	1,829.3	NA	NA
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.5E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>3.D - Other</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	<b>1.7</b>	<b>3.8</b>	<b>8.8E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>6.0</b>	<b>0.3</b>	<b>1.2E-02</b>
<b>4.A - Solid Waste Disposal</b>	<b>NA</b>	<b>2.1</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>0.2</b>	<b>NA</b>
<b>4.B - Biological Treatment of Solid Waste</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>4.C - Incineration and Open Burning of Waste</b>	<b>1.7</b>	<b>0.7</b>	<b>9.2E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>0.3</b>	<b>6.0</b>	<b>0.1</b>	<b>1.2E-02</b>
<b>4.D - Wastewater Treatment and Discharge</b>	<b>NA</b>	<b>1.0</b>	<b>7.9E-02</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.2E-06</b>	<b>NA</b>
<b>4.E - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>
<b>5 - Other</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
<b>5.B - Other (please specify)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	<b>239.0</b>	<b>1.4E-02</b>	<b>6.5E-03</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>4.0</b>	<b>0.7</b>	<b>0.3</b>	<b>1.0</b>
1.A.3.a.i - International Aviation (International Bunkers)	93.6	6.5E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	145.5	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9
<b>1.A.5.c - Multilateral Operations</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,821.7	1.9	0.1	20.4	69.1	8.8	4.0
<b>1.A - Fuel Combustion Activities</b>	2,821.7	1.9	0.1	20.4	69.1	8.8	4.0
<b>1.A.1 - Energy Industries</b>	195.0	2.3E-03	3.0E-03	0.4	1.9E-02	2.2E-03	1.7
1.A.1.a - Main Activity Electricity and Heat Production	195.0	2.3E-03	3.0E-03	0.4	1.9E-02	2.2E-03	1.7
1.A.1.a.i - Electricity Generation	195.0	2.3E-03	3.0E-03	0.4	1.9E-02	2.2E-03	1.7
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	170.0	1.8E-02	2.7E-03	0.7	0.9	0.2	0.7
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	168.0	1.7E-02	2.7E-03	0.7	0.9	0.2	0.7
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.0	8.3E-05	1.7E-05	1.4E-02	1.8E-03	7.0E-04	1.3E-03
<b>1.A.3 - Transport</b>	2,064.5	0.5	0.1	12.7	47.6	5.0	2.2E-02
1.A.3.a - Civil Aviation	20.4	1.4E-04	5.8E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.a.i - International Aviation (International Bunkers)							
1.A.3.a.ii - Domestic Aviation	20.4	1.4E-04	5.8E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.b - Road Transportation	1,989.4	0.5	9.8E-02	11.8	43.5	4.8	1.6E-02
1.A.3.b.i - Cars	519.7	0.2	2.5E-02	1.6	11.9	1.4	5.8E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	166.4	6.7E-02	7.9E-03	0.5	3.8	0.5	1.9E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	353.2	0.1	1.7E-02	1.1	8.1	1.0	3.9E-03
1.A.3.b.ii - Light-duty trucks	860.6	0.3	4.1E-02	3.8	29.8	2.9	8.4E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	645.4	0.2	3.1E-02	2.9	22.4	2.2	6.3E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	215.1	7.4E-02	1.0E-02	1.0	7.5	0.7	2.1E-03
1.A.3.b.iii - Heavy-duty trucks and buses	606.8	3.2E-02	3.2E-02	6.4	1.4	0.4	1.5E-03
1.A.3.b.iv - Motorcycles	2.3	1.1E-03	1.1E-04	4.9E-03	0.4	9.8E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	54.8	3.1E-03	2.1E-02	0.9	0.2	8.1E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>348.0</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>6.1</b>	<b>20.6</b>	<b>3.6</b>	<b>1.6</b>
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	105.0	1.3	1.7E-02	0.4	17.5	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	243.0	3.3E-02	2.0E-03	5.7	3.1	1.0	1.5
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	243.0	3.3E-02	2.0E-03	5.7	3.1	1.0	1.5
<b>1.A.5 - Non-Specified</b>	<b>44.2</b>	<b>2.3E-03</b>	<b>2.3E-03</b>	<b>0.5</b>	<b>0.1</b>	<b>2.6E-02</b>	<b>2.0E-04</b>
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	44.2	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	44.2	2.3E-03	2.3E-03	0.5	0.1	2.6E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	239.0	1.4E-02	6.5E-03	4.0	0.7	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	93.6	6.5E-04	2.6E-03	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	145.5	1.3E-02	3.8E-03	3.6	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.2						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	293.1	-	-	-	-	-	-	-	-	-	1.8	-	
<b>2.A - Mineral Industry</b>	11.2	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	11.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	258.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	258.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	23.8	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.0	NO
2.D.1 - Lubricant Use	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.0	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.8	-



## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-97,408.2	266.5	9.3	28.5	1,829.3	10.5
<b>3.A - Livestock</b>	NA	150.9	0.4	NA	NA	10.5
3.A.1 - Enteric Fermentation	NA	147.2	NA	NA	NA	NA
3.A.1.a - Cattle	NA	121.9	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	121.8	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.3	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.6	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.9E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.8	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.6	NA	NA	NA	NA
3.A.1.h - Swine	NA	5.2E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.5
3.A.2.a - Cattle	NA	2.4	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.4	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.6E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	9.6E-02	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	5.2E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.8E-02	7.8E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-97,408.5	NA	NO	NO	NO	NO
3.B.1 - Forest land	-106,355.0	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-104,856.0	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.3	115.6	8.9	28.5	1,829.3	NO
3.C.1 - Emissions from biomass burning	-	115.6	3.5	28.5	1,829.3	NO
3.C.1.a - Biomass burning in forest lands	NA	115.3	3.5	28.0	1,820.9	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.7E-02	0.5	8.4	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.0	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.5E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 14 : Inventory Year 2007

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.7	3.8	8.8E-02	0.3	6.0	0.3	1.2E-02
<b>4.A - Solid Waste Disposal</b>	-	2.1	-	-	-	0.2	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.2	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.7	0.7	9.2E-03	0.3	6.0	0.1	1.2E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.7	0.7	9.2E-03	0.3	6.0	0.1	1.2E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.0	7.9E-02	NO	NO	1.2E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.4	7.9E-02	NO	NO	1.0E-06	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.5	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 14 : Inventory Year 2007

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-94,291.8	272.2	9.5	NE	NE	NE	NE	NE	49.3	1,904.4	21.4	4.0
<b>1 - Energy</b>	2,821.7	1.9	0.1	NA	NA	NA	NA	NA	20.4	69.1	8.8	4.0
1.A - Fuel Combustion Activities	2,821.7	1.9	0.1	NA	NA	NA	NA	NA	20.4	69.1	8.8	4.0
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	293.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.8	NO
2.A - Mineral Industry	11.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	258.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	23.8	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.0	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.8	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-97,408.2	266.5	9.3	NA	NA	NA	NA	NA	28.5	1,829.3	10.5	NO
3.A - Livestock	NA	150.9	0.4	NA	NA	NA	NA	NA	NA	NA	10.5	NA
3.B - Land	-97,408.5	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.3	115.6	8.9	NA	NA	NA	NA	NA	28.5	1,829.3	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.7	3.8	8.8E-02	NA	NA	NA	NA	NA	0.3	6.0	0.3	1.2E-02
4.A - Solid Waste Disposal	NA	2.1	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.7	0.7	9.2E-03	NA	NA	NA	NA	NA	0.3	6.0	0.1	1.2E-02
4.D - Wastewater Treatment and Discharge	NA	1.0	7.9E-02	NA	NA	NA	NA	NA	NO	NO	1.2E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	239.0	1.4E-02	6.5E-03	NA	NA	NA	NA	NA	4.0	0.7	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	93.6	6.5E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International	145.5	1.3E-02	3.8E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9

**Annex 14 : Inventory Year 2007**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 15 : Inventory Year 2008

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-103,066.7	235.4	8.3	NE	NE	NE	NE	NE	37.0	1,200.4	21.3	4.1
<b>1 - Energy</b>	2,670.8	1.8	0.1	NA	NA	NA	NA	NA	19.0	64.6	8.3	4.1
<b>1.A - Fuel Combustion Activities</b>	2,670.8	1.8	0.1	NA	NA	NA	NA	NA	19.0	64.6	8.3	4.1
1.A.1 - Energy Industries	235.7	2.5E-03	3.7E-03	NA	NA	NA	NA	NA	0.5	2.2E-02	2.5E-03	2.0
1.A.2 - Manufacturing Industries and Construction	171.0	1.9E-02	2.9E-03	NA	NA	NA	NA	NA	0.8	0.8	0.2	0.6
1.A.3 - Transport	1,888.3	0.5	0.1	NA	NA	NA	NA	NA	11.8	43.1	4.5	2.1E-02
1.A.4 - Other Sectors	338.8	1.3	1.9E-02	NA	NA	NA	NA	NA	5.6	20.6	3.6	1.5
1.A.5 - Non-Specified	36.9	1.9E-03	1.9E-03	NA	NA	NA	NA	NA	0.4	8.8E-02	2.2E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	291.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.9	NO
<b>2.A - Mineral Industry</b>	11.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	11.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	250.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO



## Annex 15 : Inventory Year 2008

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	250.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>29.2</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.1</b>	<b>NO</b>	
2.D.1 - Lubricant Use	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	20.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NA	NE	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.8</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-106,030.4</b>	<b>229.4</b>	<b>8.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>17.6</b>	<b>1,129.5</b>	<b>10.7</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>155.7</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.7</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	152.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-106,030.4	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-114,976.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	5.2E-02	73.7	7.7	NA	NA	NA	NA	NA	17.6	1,129.5	NA	NA	
3.C.1 - Emissions from biomass burning	NA	73.7	2.2	NA	NA	NA	NA	NA	17.6	1,129.5	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	5.2E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.4E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.7	4.2	8.7E-02	NA	NA	NA	NA	NA	0.4	6.3	0.4	1.2E-02	
<b>4.A - Solid Waste Disposal</b>	NA	2.3	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	1.7	0.7	9.6E-03	NA	NA	NA	NA	NA	0.4	6.3	0.1	1.2E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.1	7.8E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	241.7	1.4E-02	6.5E-03	NA	NA	NA	NA	NA	4.0	0.7	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	94.5	6.6E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	147.2	1.4E-02	3.9E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,670.8	1.8	0.1	19.0	64.6	8.3	4.1
<b>1.A - Fuel Combustion Activities</b>	2,670.8	1.8	0.1	19.0	64.6	8.3	4.1
<b>1.A.1 - Energy Industries</b>	235.7	2.5E-03	3.7E-03	0.5	2.2E-02	2.5E-03	2.0
1.A.1.a - Main Activity Electricity and Heat Production	235.7	2.5E-03	3.7E-03	0.5	2.2E-02	2.5E-03	2.0
1.A.1.a.i - Electricity Generation	235.7	2.5E-03	3.7E-03	0.5	2.2E-02	2.5E-03	2.0
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	171.0	1.9E-02	2.9E-03	0.8	0.8	0.2	0.6
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	169.0	1.9E-02	2.8E-03	0.8	0.8	0.2	0.6
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.0	8.3E-05	1.7E-05	1.4E-02	1.8E-03	7.0E-04	1.3E-03
<b>1.A.3 - Transport</b>	1,888.3	0.5	0.1	11.8	43.1	4.5	2.1E-02
1.A.3.a - Civil Aviation	20.5	1.4E-04	5.8E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	20.5	1.4E-04	5.8E-04	4.7E-02	3.9	6.1E-02	6.5E-03
1.A.3.b - Road Transportation	1,816.8	0.5	9.0E-02	10.9	39.0	4.3	1.4E-02
1.A.3.b.i - Cars	447.8	0.2	2.1E-02	1.4	10.3	1.2	5.0E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	143.9	5.8E-02	6.8E-03	0.4	3.3	0.4	1.6E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	304.0	0.1	1.4E-02	0.9	7.0	0.8	3.4E-03
1.A.3.b.ii - Light-duty trucks	792.7	0.3	3.8E-02	3.5	27.1	2.7	7.6E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	594.5	0.2	2.9E-02	2.6	20.3	2.0	5.7E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	198.2	6.7E-02	9.6E-03	0.9	6.8	0.7	1.9E-03
1.A.3.b.iii - Heavy-duty trucks and buses	574.2	3.0E-02	3.0E-02	6.0	1.4	0.3	1.4E-03
1.A.3.b.iv - Motorcycles	2.1	9.8E-04	9.5E-05	4.4E-03	0.3	8.8E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	51.1	2.9E-03	2.0E-02	0.8	0.2	7.5E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>338.8</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>5.6</b>	<b>20.6</b>	<b>3.6</b>	<b>1.5</b>
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	115.3	1.3	1.7E-02	0.4	17.5	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	223.5	3.0E-02	1.8E-03	5.2	3.2	1.0	1.4
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	223.5	3.0E-02	1.8E-03	5.2	3.2	1.0	1.4
<b>1.A.5 - Non-Specified</b>	<b>36.9</b>	<b>1.9E-03</b>	<b>1.9E-03</b>	<b>0.4</b>	<b>8.8E-02</b>	<b>2.2E-02</b>	<b>2.0E-04</b>
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	36.9	1.9E-03	1.9E-03	0.4	8.8E-02	2.2E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	36.9	1.9E-03	1.9E-03	0.4	8.8E-02	2.2E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	241.7	1.4E-02	6.5E-03	4.0	0.7	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	94.5	6.6E-04	2.6E-03	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	147.2	1.4E-02	3.9E-03	3.6	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.4						

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	291.1	-	-	-	-	-	-	-	-	-	1.9	-	
<b>2.A - Mineral Industry</b>	11.9	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	11.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	250.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	250.1	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	29.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO
2.D.1 - Lubricant Use	8.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	20.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.8	-

Annex 15 : Inventory Year 2008

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.8	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO



## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-106,030.4	229.4	8.0	17.6	1,129.5	10.7
<b>3.A - Livestock</b>	NA	155.7	0.4	NA	NA	10.7
3.A.1 - Enteric Fermentation	NA	152.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	128.9	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	128.8	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	11.1	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.5	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.0E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.8	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.7	NA	NA	NA	NA
3.A.1.h - Swine	NA	4.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.7	0.4	NA	NA	10.7
3.A.2.a - Cattle	NA	2.5	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.5	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.1E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	9.3E-02	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	4.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.6E-02	7.3E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-106,030.4	NA	NO	NO	NO	NO
3.B.1 - Forest land	-114,976.9	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-113,477.9	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	5.2E-02	73.7	7.7	17.6	1,129.5	NO
3.C.1 - Emissions from biomass burning	-	73.7	2.2	17.6	1,129.5	NO
3.C.1.a - Biomass burning in forest lands	NA	73.5	2.2	17.3	1,124.6	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.2	1.6E-02	0.3	4.9	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	5.2E-02	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.1	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.4E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.3	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 15 : Inventory Year 2008

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.7	4.2	8.7E-02	0.4	6.3	0.4	1.2E-02
<b>4.A - Solid Waste Disposal</b>	-	2.3	-	-	-	0.2	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.2	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.7	0.7	9.6E-03	0.4	6.3	0.1	1.2E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.7	0.7	9.6E-03	0.4	6.3	0.1	1.2E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.1	7.8E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.5	7.8E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.7	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 15 : Inventory Year 2008

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-103,066.7	235.4	8.3	NE	NE	NE	NE	NE	37.0	1,200.4	21.3	4.1
<b>1 - Energy</b>	2,670.8	1.8	0.1	NA	NA	NA	NA	NA	19.0	64.6	8.3	4.1
1.A - Fuel Combustion Activities	2,670.8	1.8	0.1	NA	NA	NA	NA	NA	19.0	64.6	8.3	4.1
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	291.1	NO	NO	NE	NE	NE	NE	NE	NO	NO	1.9	NO
2.A - Mineral Industry	11.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	250.1	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	29.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.8	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-106,030.4	229.4	8.0	NA	NA	NA	NA	NA	17.6	1,129.5	10.7	NO
3.A - Livestock	NA	155.7	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA
3.B - Land	-106,030.4	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	5.2E-02	73.7	7.7	NA	NA	NA	NA	NA	17.6	1,129.5	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.7	4.2	8.7E-02	NA	NA	NA	NA	NA	0.4	6.3	0.4	1.2E-02
4.A - Solid Waste Disposal	NA	2.3	NO	NA	NA	NA	NA	NA	NO	NO	0.2	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.7	0.7	9.6E-03	NA	NA	NA	NA	NA	0.4	6.3	0.1	1.2E-02
4.D - Wastewater Treatment and Discharge	NA	1.1	7.8E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	241.7	1.4E-02	6.5E-03	NA	NA	NA	NA	NA	4.0	0.7	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	94.5	6.6E-04	2.6E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International	147.2	1.4E-02	3.9E-03	NA	NA	NA	NA	NA	3.6	0.7	0.2	0.9

**Annex 15 : Inventory Year 2008**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 16 : Inventory Year 2009

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,127.7	303.0	10.3	NE	NE	NE	NE	NE	54.9	2,263.2	21.7	3.7
<b>1 - Energy</b>	2,748.3	1.9	0.1	NA	NA	NA	NA	NA	20.5	66.9	8.6	3.7
<b>1.A - Fuel Combustion Activities</b>	2,748.3	1.9	0.1	NA	NA	NA	NA	NA	20.5	66.9	8.6	3.7
1.A.1 - Energy Industries	142.6	1.6E-03	2.2E-03	NA	NA	NA	NA	NA	0.3	1.3E-02	1.6E-03	1.2
1.A.2 - Manufacturing Industries and Construction	180.5	2.1E-02	3.1E-03	NA	NA	NA	NA	NA	0.7	1.0	0.2	0.8
1.A.3 - Transport	2,015.8	0.5	0.1	NA	NA	NA	NA	NA	12.7	45.0	4.7	2.2E-02
1.A.4 - Other Sectors	371.1	1.3	1.9E-02	NA	NA	NA	NA	NA	6.3	20.8	3.7	1.7
1.A.5 - Non-Specified	38.2	2.0E-03	2.0E-03	NA	NA	NA	NA	NA	0.4	9.1E-02	2.3E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	302.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.1	NO
<b>2.A - Mineral Industry</b>	13.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	13.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	258.7	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 16 : Inventory Year 2009

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	258.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>30.3</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.1</b>	<b>NO</b>	
2.D.1 - Lubricant Use	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	21.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-94,180.4</b>	<b>296.5</b>	<b>10.1</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>34.1</b>	<b>2,189.8</b>	<b>10.7</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>153.6</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.7</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	150.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.6	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA	



## Annex 16 : Inventory Year 2009

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-94,180.5	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-103,127.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.2	142.9	9.7	NA	NA	NA	NA	NA	34.1	2,189.8	NA	NA	
3.C.1 - Emissions from biomass burning	NA	142.9	4.2	NA	NA	NA	NA	NA	34.1	2,189.8	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.8E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.8	4.6	8.8E-02	NA	NA	NA	NA	NA	0.4	6.6	0.4	1.3E-02	
<b>4.A - Solid Waste Disposal</b>	NA	2.6	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	1.8	0.8	1.0E-02	NA	NA	NA	NA	NA	0.4	6.6	0.1	1.3E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.8E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	244.5	1.4E-02	6.6E-03	NA	NA	NA	NA	NA	4.1	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	95.4	6.7E-04	2.7E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	149.0	1.4E-02	3.9E-03	NA	NA	NA	NA	NA	3.7	0.7	0.2	0.9	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

## Annex 16 : Inventory Year 2009

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,748.3	1.9	0.1	20.5	66.9	8.6	3.7
<b>1.A - Fuel Combustion Activities</b>	2,748.3	1.9	0.1	20.5	66.9	8.6	3.7
<b>1.A.1 - Energy Industries</b>	142.6	1.6E-03	2.2E-03	0.3	1.3E-02	1.6E-03	1.2
1.A.1.a - Main Activity Electricity and Heat Production	142.6	1.6E-03	2.2E-03	0.3	1.3E-02	1.6E-03	1.2
1.A.1.a.i - Electricity Generation	142.6	1.6E-03	2.2E-03	0.3	1.3E-02	1.6E-03	1.2
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	180.5	2.1E-02	3.1E-03	0.7	1.0	0.2	0.8
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	178.4	2.1E-02	3.1E-03	0.7	1.0	0.2	0.8
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.1	8.8E-05	1.8E-05	1.5E-02	1.9E-03	7.0E-04	1.4E-03
<b>1.A.3 - Transport</b>	2,015.8	0.5	0.1	12.7	45.0	4.7	2.2E-02
1.A.3.a - Civil Aviation	20.6	1.5E-04	5.8E-04	4.8E-02	3.9	6.1E-02	6.6E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	20.6	1.5E-04	5.8E-04	4.8E-02	3.9	6.1E-02	6.6E-03
1.A.3.b - Road Transportation	1,945.2	0.5	9.6E-02	11.8	41.0	4.6	1.5E-02
1.A.3.b.i - Cars	469.6	0.2	2.2E-02	1.4	10.8	1.3	5.3E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	151.3	6.2E-02	7.1E-03	0.5	3.5	0.4	1.7E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	318.3	0.1	1.5E-02	1.0	7.3	0.9	3.6E-03
1.A.3.b.ii - Light-duty trucks	842.6	0.3	4.1E-02	3.7	28.3	2.8	8.0E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	631.9	0.2	3.1E-02	2.8	21.3	2.1	6.0E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	210.6	7.0E-02	1.0E-02	0.9	7.1	0.7	2.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	630.8	3.3E-02	3.3E-02	6.6	1.5	0.4	1.6E-03
1.A.3.b.iv - Motorcycles	2.2	1.0E-03	1.0E-04	4.7E-03	0.4	9.3E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	50.1	2.8E-03	1.9E-02	0.8	0.2	7.4E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>371.1</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>6.3</b>	<b>20.8</b>	<b>3.7</b>	<b>1.7</b>
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	115.9	1.3	1.7E-02	0.4	17.5	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	255.3	3.5E-02	2.1E-03	6.0	3.3	1.1	1.6
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	255.3	3.5E-02	2.1E-03	6.0	3.3	1.1	1.6
<b>1.A.5 - Non-Specified</b>	<b>38.2</b>	<b>2.0E-03</b>	<b>2.0E-03</b>	<b>0.4</b>	<b>9.1E-02</b>	<b>2.3E-02</b>	<b>2.0E-04</b>
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	38.2	2.0E-03	2.0E-03	0.4	9.1E-02	2.3E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	38.2	2.0E-03	2.0E-03	0.4	9.1E-02	2.3E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	244.5	1.4E-02	6.6E-03	4.1	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	95.4	6.7E-04	2.7E-03	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	149.0	1.4E-02	3.9E-03	3.7	0.7	0.2	0.9
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.5						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	302.5	-	-	-	-	-	-	-	-	-	2.1	-	
<b>2.A - Mineral Industry</b>	13.6	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	13.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	258.7	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	258.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	30.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO
2.D.1 - Lubricant Use	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	21.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	1.0	-

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-94,180.4	296.5	10.1	34.1	2,189.8	10.7
<b>3.A - Livestock</b>	NA	153.6	0.4	NA	NA	10.7
3.A.1 - Enteric Fermentation	NA	150.0	NA	NA	NA	NA
3.A.1.a - Cattle	NA	129.6	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	129.4	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	9.0	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.0	NA	NA	NA	NA
3.A.1.e - Camels	NA	1.1E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.7	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.7	NA	NA	NA	NA
3.A.1.h - Swine	NA	4.8E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.6	0.4	NA	NA	10.7
3.A.2.a - Cattle	NA	2.5	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.5	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	5.9E-05	NA	NA	NA	-
3.A.2.f - Horses	NA	8.4E-02	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	4.8E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.5E-02	7.1E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-94,180.5	NA	NO	NO	NO	NO
3.B.1 - Forest land	-103,127.0	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-101,628.0	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO



## Annex 16 : Inventory Year 2009

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
<b>3.B.3 - Grassland</b>	<b>8,888.7</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
<b>3.B.4 - Wetlands</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
<b>3.B.5 - Settlements</b>	<b>57.7</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
<b>3.B.6 - Other Land</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	<b>0.2</b>	<b>142.9</b>	<b>9.7</b>	<b>34.1</b>	<b>2,189.8</b>	<b>NO</b>
3.C.1 - Emissions from biomass burning	-	142.9	4.2	34.1	2,189.8	NO
3.C.1.a - Biomass burning in forest lands	NA	142.6	4.2	33.5	2,180.7	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.9E-02	0.5	9.1	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 16 : Inventory Year 2009

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.2	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.1	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	3.8E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

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## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.8	4.6	8.8E-02	0.4	6.6	0.4	1.3E-02
<b>4.A - Solid Waste Disposal</b>	-	2.6	-	-	-	0.3	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.3	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.8	0.8	1.0E-02	0.4	6.6	0.1	1.3E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.8	0.8	1.0E-02	0.4	6.6	0.1	1.3E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.2	7.8E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.5	7.8E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.8	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 16 : Inventory Year 2009

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,127.7	303.0	10.3	NE	NE	NE	NE	NE	54.9	2,263.2	21.7	3.7
<b>1 - Energy</b>	2,748.3	1.9	0.1	NA	NA	NA	NA	NA	20.5	66.9	8.6	3.7
1.A - Fuel Combustion Activities	2,748.3	1.9	0.1	NA	NA	NA	NA	NA	20.5	66.9	8.6	3.7
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	302.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.1	NO
2.A - Mineral Industry	13.6	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	258.7	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	30.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	1.0	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-94,180.4	296.5	10.1	NA	NA	NA	NA	NA	34.1	2,189.8	10.7	NO
3.A - Livestock	NA	153.6	0.4	NA	NA	NA	NA	NA	NA	NA	10.7	NA
3.B - Land	-94,180.5	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.2	142.9	9.7	NA	NA	NA	NA	NA	34.1	2,189.8	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.8	4.6	8.8E-02	NA	NA	NA	NA	NA	0.4	6.6	0.4	1.3E-02
4.A - Solid Waste Disposal	NA	2.6	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.8	0.8	1.0E-02	NA	NA	NA	NA	NA	0.4	6.6	0.1	1.3E-02
4.D - Wastewater Treatment and Discharge	NA	1.2	7.8E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	244.5	1.4E-02	6.6E-03	NA	NA	NA	NA	NA	4.1	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	95.4	6.7E-04	2.7E-03	NA	NA	NA	NA	NA	0.4	3.3E-02	1.5E-02	3.0E-02
1.A.3.d.i - International water-borne navigation (International	149.0	1.4E-02	3.9E-03	NA	NA	NA	NA	NA	3.7	0.7	0.2	0.9

**Annex 16 : Inventory Year 2009**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 17 : Inventory Year 2010

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-95,278.8	272.9	9.4	NE	NE	NE	NE	NE	51.2	1,946.0	21.8	3.0
<b>1 - Energy</b>	2,836.6	1.9	0.2	NA	NA	NA	NA	NA	21.8	71.0	9.1	2.9
<b>1.A - Fuel Combustion Activities</b>	2,836.6	1.9	0.2	NA	NA	NA	NA	NA	21.8	71.0	9.1	2.9
1.A.1 - Energy Industries	35.5	4.7E-04	5.3E-04	NA	NA	NA	NA	NA	7.7E-02	3.6E-03	4.0E-04	0.3
1.A.2 - Manufacturing Industries and Construction	190.4	2.1E-02	3.2E-03	NA	NA	NA	NA	NA	0.8	1.1	0.2	0.9
1.A.3 - Transport	2,210.6	0.6	0.1	NA	NA	NA	NA	NA	13.9	48.9	5.1	2.3E-02
1.A.4 - Other Sectors	359.3	1.3	1.9E-02	NA	NA	NA	NA	NA	6.6	20.9	3.7	1.7
1.A.5 - Non-Specified	40.8	2.1E-03	2.1E-03	NA	NA	NA	NA	NA	0.4	9.7E-02	2.4E-02	2.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	300.6	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.1	NO
<b>2.A - Mineral Industry</b>	15.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	15.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	260.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 17 : Inventory Year 2010

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	260.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>24.4</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.1</b>	<b>NO</b>	
2.D.1 - Lubricant Use	8.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	16.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>0.9</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.9	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-98,417.9</b>	<b>266.2</b>	<b>9.1</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>29.1</b>	<b>1,868.1</b>	<b>10.3</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>144.2</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>10.3</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	140.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.4	0.4	NA	NA	NA	NA	NA	NA	NA	10.3	NA	

## Annex 17 : Inventory Year 2010

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-98,417.9	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-107,364.4	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	8,888.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	57.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	8.0E-02	121.9	8.7	NA	NA	NA	NA	NA	29.1	1,868.1	NA	NA	
3.C.1 - Emissions from biomass burning	NA	121.9	3.6	NA	NA	NA	NA	NA	29.1	1,868.1	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	8.0E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	5.6E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	1.9	4.9	8.8E-02	NA	NA	NA	NA	NA	0.4	6.9	0.4	1.4E-02	
<b>4.A - Solid Waste Disposal</b>	NA	2.8	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	1.9	0.8	1.1E-02	NA	NA	NA	NA	NA	0.4	6.9	0.2	1.4E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.7E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	248.9	1.5E-02	6.7E-03	NA	NA	NA	NA	NA	4.1	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	98.1	6.9E-04	2.7E-03	NA	NA	NA	NA	NA	0.4	3.4E-02	1.6E-02	3.1E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	150.8	1.4E-02	4.0E-03	NA	NA	NA	NA	NA	3.7	0.7	0.3	1.0	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,836.6	1.9	0.2	21.8	71.0	9.1	2.9
<b>1.A - Fuel Combustion Activities</b>	2,836.6	1.9	0.2	21.8	71.0	9.1	2.9
<b>1.A.1 - Energy Industries</b>	35.5	4.7E-04	5.3E-04	7.7E-02	3.6E-03	4.0E-04	0.3
1.A.1.a - Main Activity Electricity and Heat Production	35.5	4.7E-04	5.3E-04	7.7E-02	3.6E-03	4.0E-04	0.3
1.A.1.a.i - Electricity Generation	35.5	4.7E-04	5.3E-04	7.7E-02	3.6E-03	4.0E-04	0.3
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	190.4	2.1E-02	3.2E-03	0.8	1.1	0.2	0.9
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	188.2	2.1E-02	3.2E-03	0.7	1.1	0.2	0.9
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.2	9.1E-05	1.8E-05	1.6E-02	2.0E-03	8.0E-04	1.4E-03
<b>1.A.3 - Transport</b>	2,210.6	0.6	0.1	13.9	48.9	5.1	2.3E-02
1.A.3.a - Civil Aviation	22.0	1.6E-04	6.2E-04	5.0E-02	4.3	6.9E-02	7.1E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	22.0	1.6E-04	6.2E-04	5.0E-02	4.3	6.9E-02	7.1E-03
1.A.3.b - Road Transportation	2,136.7	0.5	0.1	13.0	44.4	4.9	1.6E-02
1.A.3.b.i - Cars	507.5	0.2	2.4E-02	1.6	11.6	1.4	5.6E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	163.9	6.7E-02	7.7E-03	0.5	3.8	0.5	1.8E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	343.7	0.1	1.6E-02	1.1	7.9	0.9	3.8E-03
1.A.3.b.ii - Light-duty trucks	928.2	0.3	4.5E-02	4.1	30.7	3.0	8.7E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	696.1	0.2	3.4E-02	3.1	23.1	2.3	6.5E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	232.0	7.6E-02	1.1E-02	1.0	7.7	0.8	2.2E-03
1.A.3.b.iii - Heavy-duty trucks and buses	698.7	3.7E-02	3.7E-02	7.3	1.7	0.4	1.8E-03
1.A.3.b.iv - Motorcycles	2.3	1.1E-03	1.1E-04	4.9E-03	0.4	9.7E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	51.8	2.8E-03	1.9E-02	0.9	0.2	7.7E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

## Annex 17 : Inventory Year 2010

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	<b>359.3</b>	<b>1.3</b>	<b>1.9E-02</b>	<b>6.6</b>	<b>20.9</b>	<b>3.7</b>	<b>1.7</b>
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	93.5	1.3	1.7E-02	0.4	17.5	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	265.8	3.6E-02	2.2E-03	6.2	3.5	1.1	1.7
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	265.8	3.6E-02	2.2E-03	6.2	3.5	1.1	1.7
<b>1.A.5 - Non-Specified</b>	<b>40.8</b>	<b>2.1E-03</b>	<b>2.1E-03</b>	<b>0.4</b>	<b>9.7E-02</b>	<b>2.4E-02</b>	<b>2.0E-04</b>
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	40.8	2.1E-03	2.1E-03	0.4	9.7E-02	2.4E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	40.8	2.1E-03	2.1E-03	0.4	9.7E-02	2.4E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>1.B.1 - Solid Fuels</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	248.9	1.5E-02	6.7E-03	4.1	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	98.1	6.9E-04	2.7E-03	0.4	3.4E-02	1.6E-02	3.1E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	150.8	1.4E-02	4.0E-03	3.7	0.7	0.3	1.0
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.7						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	300.6	-	-	-	-	-	-	-	-	-	2.1	-	
<b>2.A - Mineral Industry</b>	15.2	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	15.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	260.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	260.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 17 : Inventory Year 2010

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	24.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO	
2.D.1 - Lubricant Use	8.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	16.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	0.9	-	

Annex 17 : Inventory Year 2010

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	0.9	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 17 : Inventory Year 2010

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-98,417.9	266.2	9.1	29.1	1,868.1	10.3
<b>3.A - Livestock</b>	NA	144.2	0.4	NA	NA	10.3
3.A.1 - Enteric Fermentation	NA	140.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	123.1	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	123.0	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	6.9	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.5	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.0E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.9	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.4	NA	NA	NA	NA
3.A.1.h - Swine	NA	6.3E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.4	0.4	NA	NA	10.3
3.A.2.a - Cattle	NA	2.4	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.4	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.3	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.1E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	6.3E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.3E-02	6.6E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-98,417.9	NA	NO	NO	NO	NO
3.B.1 - Forest land	-107,364.4	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-105,865.4	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-1,499.0	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-120.8	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-1,378.2	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 17 : Inventory Year 2010

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	8,888.7	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	57.7	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	50.6	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	7.1	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	8.0E-02	121.9	8.7	29.1	1,868.1	NO
3.C.1 - Emissions from biomass burning	-	121.9	3.6	29.1	1,868.1	NO
3.C.1.a - Biomass burning in forest lands	NA	121.7	3.6	28.6	1,860.7	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.4E-02	0.4	7.3	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO



## Annex 17 : Inventory Year 2010

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	8.0E-02	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	4.7	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	5.6E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

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## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	1.9	4.9	8.8E-02	0.4	6.9	0.4	1.4E-02
<b>4.A - Solid Waste Disposal</b>	-	2.8	-	-	-	0.3	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.3	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	1.9	0.8	1.1E-02	0.4	6.9	0.2	1.4E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	1.9	0.8	1.1E-02	0.4	6.9	0.2	1.4E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.7E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.5	7.7E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.8	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 17 : Inventory Year 2010

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-95,278.8	272.9	9.4	NE	NE	NE	NE	NE	51.2	1,946.0	21.8	3.0
<b>1 - Energy</b>	2,836.6	1.9	0.2	NA	NA	NA	NA	NA	21.8	71.0	9.1	2.9
1.A - Fuel Combustion Activities	2,836.6	1.9	0.2	NA	NA	NA	NA	NA	21.8	71.0	9.1	2.9
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	300.6	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.1	NO
2.A - Mineral Industry	15.2	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	260.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	24.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.1	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	0.9	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-98,417.9	266.2	9.1	NA	NA	NA	NA	NA	29.1	1,868.1	10.3	NO
3.A - Livestock	NA	144.2	0.4	NA	NA	NA	NA	NA	NA	NA	10.3	NA
3.B - Land	-98,417.9	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	8.0E-02	121.9	8.7	NA	NA	NA	NA	NA	29.1	1,868.1	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	1.9	4.9	8.8E-02	NA	NA	NA	NA	NA	0.4	6.9	0.4	1.4E-02
4.A - Solid Waste Disposal	NA	2.8	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	1.9	0.8	1.1E-02	NA	NA	NA	NA	NA	0.4	6.9	0.2	1.4E-02
4.D - Wastewater Treatment and Discharge	NA	1.3	7.7E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	248.9	1.5E-02	6.7E-03	NA	NA	NA	NA	NA	4.1	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	98.1	6.9E-04	2.7E-03	NA	NA	NA	NA	NA	0.4	3.4E-02	1.6E-02	3.1E-02
1.A.3.d.i - International water-borne navigation (International	150.8	1.4E-02	4.0E-03	NA	NA	NA	NA	NA	3.7	0.7	0.3	1.0

**Annex 17 : Inventory Year 2010**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 18 : Inventory Year 2011

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>Total National Emissions and Removals</b>	-92,525.5	308.4	10.6	NE	NE	NE	NE	NE	52.7	2,076.8	22.9	3.0	
<b>1 - Energy</b>	2,713.1	1.8	0.1	NA	NA	NA	NA	NA	21.1	66.3	8.6	3.0	
<b>1.A - Fuel Combustion Activities</b>	2,713.1	1.8	0.1	NA	NA	NA	NA	NA	21.1	66.3	8.6	3.0	
1.A.1 - Energy Industries	13.0	2.5E-04	1.7E-04	NA	NA	NA	NA	NA	2.7E-02	1.6E-03	2.0E-04	0.1	
1.A.2 - Manufacturing Industries and Construction	221.2	2.5E-02	3.8E-03	NA	NA	NA	NA	NA	0.8	1.4	0.2	1.2	
1.A.3 - Transport	2,076.0	0.5	0.1	NA	NA	NA	NA	NA	13.4	43.7	4.6	2.4E-02	
1.A.4 - Other Sectors	358.4	1.3	1.9E-02	NA	NA	NA	NA	NA	6.4	21.0	3.8	1.7	
1.A.5 - Non-Specified	44.5	2.7E-03	2.3E-03	NA	NA	NA	NA	NA	0.5	0.1	3.0E-02	2.0E-04	
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO	
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2 - Industrial Processes and Product Use</b>	437.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.2	NO	
<b>2.A - Mineral Industry</b>	162.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.1 - Cement production	147.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	14.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	249.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	249.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>26.7</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.2</b>	<b>NO</b>	
2.D.1 - Lubricant Use	9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NA	NE	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NA	NE	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-95,678.6</b>	<b>301.4</b>	<b>10.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>31.2</b>	<b>2,003.0</b>	<b>11.7</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>170.7</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>11.7</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	166.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.9	0.4	NA	NA	NA	NA	NA	NA	NA	11.7	NA	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-95,679.0	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-105,447.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	9,755.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	12.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.4	130.7	10.0	NA	NA	NA	NA	NA	31.2	2,003.0	NA	NA	
3.C.1 - Emissions from biomass burning	NA	130.7	3.9	NA	NA	NA	NA	NA	31.2	2,003.0	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	6.2E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	2.1	5.2	8.9E-02	NA	NA	NA	NA	NA	0.4	7.5	0.5	1.5E-02	
<b>4.A - Solid Waste Disposal</b>	NA	3.1	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	2.1	0.9	1.2E-02	NA	NA	NA	NA	NA	0.4	7.5	0.2	1.5E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.7E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	273.7	1.5E-02	7.4E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	119.3	8.3E-04	3.3E-03	NA	NA	NA	NA	NA	0.5	4.2E-02	1.9E-02	3.8E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,713.1	1.8	0.1	21.1	66.3	8.6	3.0
<b>1.A - Fuel Combustion Activities</b>	2,713.1	1.8	0.1	21.1	66.3	8.6	3.0
<b>1.A.1 - Energy Industries</b>	13.0	2.5E-04	1.7E-04	2.7E-02	1.6E-03	2.0E-04	0.1
1.A.1.a - Main Activity Electricity and Heat Production	13.0	2.5E-04	1.7E-04	2.7E-02	1.6E-03	2.0E-04	0.1
1.A.1.a.i - Electricity Generation	13.0	2.5E-04	1.7E-04	2.7E-02	1.6E-03	2.0E-04	0.1
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	221.2	2.5E-02	3.8E-03	0.8	1.4	0.2	1.2
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	219.1	2.5E-02	3.8E-03	0.8	1.4	0.2	1.2
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.1	8.7E-05	1.7E-05	1.5E-02	1.9E-03	7.0E-04	1.4E-03
<b>1.A.3 - Transport</b>	2,076.0	0.5	0.1	13.4	43.7	4.6	2.4E-02
1.A.3.a - Civil Aviation	28.4	2.0E-04	8.0E-04	7.2E-02	4.1	6.5E-02	9.1E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	28.4	2.0E-04	8.0E-04	7.2E-02	4.1	6.5E-02	9.1E-03
1.A.3.b - Road Transportation	2,000.8	0.5	9.9E-02	12.5	39.5	4.4	1.4E-02
1.A.3.b.i - Cars	420.9	0.2	2.0E-02	1.3	9.7	1.2	4.7E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	135.7	5.5E-02	6.4E-03	0.4	3.1	0.4	1.5E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	285.2	0.1	1.3E-02	0.9	6.5	0.8	3.2E-03
1.A.3.b.ii - Light-duty trucks	874.3	0.3	4.3E-02	3.9	27.8	2.7	7.9E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	655.7	0.2	3.2E-02	2.9	20.8	2.1	5.9E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	218.6	6.9E-02	1.1E-02	1.0	6.9	0.7	2.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	703.2	3.7E-02	3.7E-02	7.4	1.7	0.4	1.8E-03
1.A.3.b.iv - Motorcycles	2.3	1.1E-03	1.1E-04	5.0E-03	0.4	9.9E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	46.9	2.6E-03	1.8E-02	0.8	0.2	7.0E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	358.4	1.3	1.9E-02	6.4	21.0	3.8	1.7
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	98.3	1.3	1.7E-02	0.4	17.5	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	260.1	3.5E-02	2.1E-03	6.1	3.5	1.2	1.6
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	260.1	3.5E-02	2.1E-03	6.1	3.5	1.2	1.6
<b>1.A.5 - Non-Specified</b>	44.5	2.7E-03	2.3E-03	0.5	0.1	3.0E-02	2.0E-04
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	44.5	2.7E-03	2.3E-03	0.5	0.1	3.0E-02	2.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	44.5	2.7E-03	2.3E-03	0.5	0.1	3.0E-02	2.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	273.7	1.5E-02	7.4E-03	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	119.3	8.3E-04	3.3E-03	0.5	4.2E-02	1.9E-02	3.8E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	154.4	1.4E-02	4.1E-03	3.8	0.8	0.3	1.0
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	488.8						

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	437.9	-	-	-	-	-	-	-	-	-	2.2	-	
<b>2.A - Mineral Industry</b>	162.3	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	147.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	14.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	249.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	249.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	26.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.2	NO
2.D.1 - Lubricant Use	9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	1.0	-

Annex 18 : Inventory Year 2011

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-95,678.6	301.4	10.4	31.2	2,003.0	11.7
<b>3.A - Livestock</b>	NA	170.7	0.4	NA	NA	11.7
3.A.1 - Enteric Fermentation	NA	166.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	145.1	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	145.0	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	11.0	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.7	NA	NA	NA	NA
3.A.1.e - Camels	NA	3.2E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.8	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.1	NA	NA	NA	NA
3.A.1.h - Swine	NA	4.4E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.9	0.4	NA	NA	11.7
3.A.2.a - Cattle	NA	2.8	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.8	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.8E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	1.0E-01	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	4.4E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.1E-02	5.8E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-95,679.0	NA	NO	NO	NO	NO
3.B.1 - Forest land	-105,447.8	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-104,485.0	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-962.7	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-62.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-900.5	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	-	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.4	130.7	10.0	31.2	2,003.0	NO
3.C.1 - Emissions from biomass burning	-	130.7	3.9	31.2	2,003.0	NO
3.C.1.a - Biomass burning in forest lands	NA	130.5	3.8	30.7	1,995.1	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.5E-02	0.5	7.9	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.4	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.7	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	6.2E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO



## Annex 18 : Inventory Year 2011

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	2.1	5.2	8.9E-02	0.4	7.5	0.5	1.5E-02
<b>4.A - Solid Waste Disposal</b>	-	3.1	-	-	-	0.3	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.3	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	2.1	0.9	1.2E-02	0.4	7.5	0.2	1.5E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	2.1	0.9	1.2E-02	0.4	7.5	0.2	1.5E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.7E-02	NO	NO	9.0E-07	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.5	7.7E-02	NO	NO	7.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.7	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 18 : Inventory Year 2011

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-92,525.5	308.4	10.6	NE	NE	NE	NE	NE	52.7	2,076.8	22.9	3.0
<b>1 - Energy</b>	2,713.1	1.8	0.1	NA	NA	NA	NA	NA	21.1	66.3	8.6	3.0
1.A - Fuel Combustion Activities	2,713.1	1.8	0.1	NA	NA	NA	NA	NA	21.1	66.3	8.6	3.0
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	437.9	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.2	NO
2.A - Mineral Industry	162.3	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	249.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	26.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.2	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	1.0	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-95,678.6	301.4	10.4	NA	NA	NA	NA	NA	31.2	2,003.0	11.7	NO
3.A - Livestock	NA	170.7	0.4	NA	NA	NA	NA	NA	NA	NA	11.7	NA
3.B - Land	-95,679.0	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.4	130.7	10.0	NA	NA	NA	NA	NA	31.2	2,003.0	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	2.1	5.2	8.9E-02	NA	NA	NA	NA	NA	0.4	7.5	0.5	1.5E-02
4.A - Solid Waste Disposal	NA	3.1	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	2.1	0.9	1.2E-02	NA	NA	NA	NA	NA	0.4	7.5	0.2	1.5E-02
4.D - Wastewater Treatment and Discharge	NA	1.3	7.7E-02	NA	NA	NA	NA	NA	NO	NO	9.0E-07	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	273.7	1.5E-02	7.4E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	119.3	8.3E-04	3.3E-03	NA	NA	NA	NA	NA	0.5	4.2E-02	1.9E-02	3.8E-02
1.A.3.d.i - International water-borne navigation (International	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0

**Annex 18 : Inventory Year 2011**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 19 : Inventory Year 2012

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,281.2	325.9	11.3	NE	NE	NE	NE	NE	56.3	2,166.1	23.9	3.7
<b>1 - Energy</b>	2,917.6	1.9	0.2	NA	NA	NA	NA	NA	23.3	66.6	8.7	3.7
<b>1.A - Fuel Combustion Activities</b>	2,917.6	1.9	0.2	NA	NA	NA	NA	NA	23.3	66.6	8.7	3.7
1.A.1 - Energy Industries	96.5	1.5E-03	1.4E-03	NA	NA	NA	NA	NA	0.2	1.1E-02	1.4E-03	0.8
1.A.2 - Manufacturing Industries and Construction	190.6	2.2E-02	3.3E-03	NA	NA	NA	NA	NA	0.7	1.1	0.2	0.9
1.A.3 - Transport	2,173.3	0.5	0.1	NA	NA	NA	NA	NA	14.1	44.2	4.6	2.3E-02
1.A.4 - Other Sectors	406.8	1.3	2.0E-02	NA	NA	NA	NA	NA	7.7	21.1	3.8	2.0
1.A.5 - Non-Specified	50.5	3.0E-03	2.7E-03	NA	NA	NA	NA	NA	0.5	0.2	3.4E-02	3.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	514.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO
<b>2.A - Mineral Industry</b>	237.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	222.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	15.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	250.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 19 : Inventory Year 2012

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	250.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>26.7</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.2</b>	<b>NO</b>	
2.D.1 - Lubricant Use	9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-94,715.6</b>	<b>318.4</b>	<b>11.0</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>32.5</b>	<b>2,091.2</b>	<b>12.4</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>181.9</b>	<b>0.5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>12.4</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	177.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	4.2	0.5	NA	NA	NA	NA	NA	NA	NA	12.4	NA	

## Annex 19 : Inventory Year 2012

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-94,716.2	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-104,484.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	9,755.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	12.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.5	136.5	10.6	NA	NA	NA	NA	NA	32.5	2,091.2	NA	NA	
3.C.1 - Emissions from biomass burning	NA	136.5	4.0	NA	NA	NA	NA	NA	32.5	2,091.2	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	6.4E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	2.3	5.7	8.9E-02	NA	NA	NA	NA	NA	0.5	8.2	0.5	1.6E-02	
<b>4.A - Solid Waste Disposal</b>	NA	3.2	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	2.3	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.2	0.2	1.6E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.5	7.6E-02	NA	NA	NA	NA	NA	NO	NO	1.1E-06	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

## Annex 19 : Inventory Year 2012

## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,917.6	1.9	0.2	23.3	66.6	8.7	3.7
<b>1.A - Fuel Combustion Activities</b>	2,917.6	1.9	0.2	23.3	66.6	8.7	3.7
<b>1.A.1 - Energy Industries</b>	96.5	1.5E-03	1.4E-03	0.2	1.1E-02	1.4E-03	0.8
1.A.1.a - Main Activity Electricity and Heat Production	96.5	1.5E-03	1.4E-03	0.2	1.1E-02	1.4E-03	0.8
1.A.1.a.i - Electricity Generation	96.5	1.5E-03	1.4E-03	0.2	1.1E-02	1.4E-03	0.8
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	190.6	2.2E-02	3.3E-03	0.7	1.1	0.2	0.9
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	188.2	2.2E-02	3.3E-03	0.7	1.1	0.2	0.9
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.4	1.1E-04	2.1E-05	1.7E-02	2.4E-03	9.0E-04	1.5E-03
<b>1.A.3 - Transport</b>	2,173.3	0.5	0.1	14.1	44.2	4.6	2.3E-02
1.A.3.a - Civil Aviation	25.1	1.8E-04	7.1E-04	6.1E-02	4.2	6.6E-02	8.0E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	25.1	1.8E-04	7.1E-04	6.1E-02	4.2	6.6E-02	8.0E-03
1.A.3.b - Road Transportation	2,097.7	0.5	0.1	13.2	39.9	4.5	1.5E-02
1.A.3.b.i - Cars	439.5	0.2	2.1E-02	1.3	10.1	1.2	4.9E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	141.7	5.8E-02	6.6E-03	0.4	3.3	0.4	1.6E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	297.9	0.1	1.4E-02	0.9	6.8	0.8	3.3E-03
1.A.3.b.ii - Light-duty trucks	911.0	0.3	4.4E-02	4.1	27.7	2.8	8.0E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	683.3	0.2	3.3E-02	3.0	20.8	2.1	6.0E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	227.8	6.9E-02	1.1E-02	1.0	6.9	0.7	2.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	744.9	3.9E-02	3.9E-02	7.8	1.8	0.4	1.9E-03
1.A.3.b.iv - Motorcycles	2.3	1.1E-03	1.0E-04	4.8E-03	0.4	9.6E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	50.5	2.8E-03	1.9E-02	0.8	0.2	7.5E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	406.8	1.3	2.0E-02	7.7	21.1	3.8	2.0
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	93.7	1.3	1.7E-02	0.4	17.4	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	313.0	4.2E-02	2.5E-03	7.4	3.8	1.2	2.0
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	313.0	4.2E-02	2.5E-03	7.4	3.8	1.2	2.0
<b>1.A.5 - Non-Specified</b>	50.5	3.0E-03	2.7E-03	0.5	0.2	3.4E-02	3.0E-04
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	50.5	3.0E-03	2.7E-03	0.5	0.2	3.4E-02	3.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	50.5	3.0E-03	2.7E-03	0.5	0.2	3.4E-02	3.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO



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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	263.1	1.5E-02	7.1E-03	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	108.7	7.6E-04	3.0E-03	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	154.4	1.4E-02	4.1E-03	3.8	0.8	0.3	1.0
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	486.2						

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	514.5	-	-	-	-	-	-	-	-	-	2.3	-	
<b>2.A - Mineral Industry</b>	237.9	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	222.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	15.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	250.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	250.0	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	26.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.2	NO
2.D.1 - Lubricant Use	9.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2	NA
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	1.0	-

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-94,715.6	318.4	11.0	32.5	2,091.2	12.4
<b>3.A - Livestock</b>	NA	181.9	0.5	NA	NA	12.4
3.A.1 - Enteric Fermentation	NA	177.7	NA	NA	NA	NA
3.A.1.a - Cattle	NA	152.6	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.1	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	152.5	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	13.4	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.7	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.2E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.8	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.1	NA	NA	NA	NA
3.A.1.h - Swine	NA	6.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	4.2	0.5	NA	NA	12.4
3.A.2.a - Cattle	NA	2.9	0.5	NA	NA	-
3.A.2.a.i - Dairy cows	NA	1.5E-03	1.4E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.9	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.5	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.2E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	6.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.8E-02	8.0E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-94,716.2	NA	NO	NO	NO	NO
3.B.1 - Forest land	-104,484.9	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-103,522.2	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-962.7	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-62.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-900.5	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 19 : Inventory Year 2012

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	-	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.5	136.5	10.6	32.5	2,091.2	NO
3.C.1 - Emissions from biomass burning	-	136.5	4.0	32.5	2,091.2	NO
3.C.1.a - Biomass burning in forest lands	NA	136.2	4.0	32.1	2,083.3	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.3	2.6E-02	0.5	8.0	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.5	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	6.1	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	6.4E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 19 : Inventory Year 2012

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	2.3	5.7	8.9E-02	0.5	8.2	0.5	1.6E-02
<b>4.A - Solid Waste Disposal</b>	-	3.2	-	-	-	0.3	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.3	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	2.3	1.0	1.3E-02	0.5	8.2	0.2	1.6E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	2.3	1.0	1.3E-02	0.5	8.2	0.2	1.6E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.5	7.6E-02	NO	NO	1.1E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.5	7.6E-02	NO	NO	8.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.9	NA	NO	NO	3.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO



## Annex 19 : Inventory Year 2012

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-91,281.2	325.9	11.3	NE	NE	NE	NE	NE	56.3	2,166.1	23.9	3.7
<b>1 - Energy</b>	2,917.6	1.9	0.2	NA	NA	NA	NA	NA	23.3	66.6	8.7	3.7
1.A - Fuel Combustion Activities	2,917.6	1.9	0.2	NA	NA	NA	NA	NA	23.3	66.6	8.7	3.7
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	514.5	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO
2.A - Mineral Industry	237.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	250.0	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	26.7	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.2	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	1.0	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-94,715.6	318.4	11.0	NA	NA	NA	NA	NA	32.5	2,091.2	12.4	NO
3.A - Livestock	NA	181.9	0.5	NA	NA	NA	NA	NA	NA	NA	12.4	NA
3.B - Land	-94,716.2		-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.5	136.5	10.6	NA	NA	NA	NA	NA	32.5	2,091.2	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	2.3	5.7	8.9E-02	NA	NA	NA	NA	NA	0.5	8.2	0.5	1.6E-02
4.A - Solid Waste Disposal	NA	3.2	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	2.3	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.2	0.2	1.6E-02
4.D - Wastewater Treatment and Discharge	NA	1.5	7.6E-02	NA	NA	NA	NA	NA	NO	NO	1.1E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0

**Annex 19 : Inventory Year 2012**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-109,287.7	209.3	7.6	NE	NE	NE	NE	NE	30.7	657.3	22.5	2.5
<b>1 - Energy</b>	2,775.9	1.8	0.1	NA	NA	NA	NA	NA	21.2	66.5	8.5	2.5
<b>1.A - Fuel Combustion Activities</b>	2,775.9	1.8	0.1	NA	NA	NA	NA	NA	21.2	66.5	8.5	2.5
1.A.1 - Energy Industries	15.4	4.2E-04	1.7E-04	NA	NA	NA	NA	NA	3.1E-02	2.4E-03	3.0E-04	0.1
1.A.2 - Manufacturing Industries and Construction	174.1	2.1E-02	3.2E-03	NA	NA	NA	NA	NA	0.6	1.1	0.2	0.9
1.A.3 - Transport	2,215.6	0.5	0.1	NA	NA	NA	NA	NA	14.3	45.2	4.7	2.3E-02
1.A.4 - Other Sectors	319.0	1.3	1.9E-02	NA	NA	NA	NA	NA	5.6	20.1	3.5	1.5
1.A.5 - Non-Specified	51.9	3.1E-03	2.7E-03	NA	NA	NA	NA	NA	0.5	0.2	3.5E-02	3.0E-04
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	528.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO
<b>2.A - Mineral Industry</b>	286.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.1 - Cement production	270.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	16.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	214.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	214.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>26.9</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.3</b>	<b>NO</b>	
2.D.1 - Lubricant Use	9.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>1.1</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.1	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-112,594.1</b>	<b>201.7</b>	<b>7.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>9.1</b>	<b>582.4</b>	<b>11.2</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>163.7</b>	<b>0.4</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>11.2</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	159.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	3.8	0.4	NA	NA	NA	NA	NA	NA	NA	11.2	NA	

## Annex 20 : Inventory Year 2013

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-112,594.5	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-122,363.2	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	9,755.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	12.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.3	38.0	7.0	NA	NA	NA	NA	NA	9.1	582.4	NA	NA	
3.C.1 - Emissions from biomass burning	NA	38.0	1.1	NA	NA	NA	NA	NA	9.1	582.4	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.9E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	2.3	5.7	8.5E-02	NA	NA	NA	NA	NA	0.5	8.4	0.5	1.7E-02	
<b>4.A - Solid Waste Disposal</b>	NA	3.4	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	2.3	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.4	0.2	1.7E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.3E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	2,775.9	1.8	0.1	21.2	66.5	8.5	2.5
<b>1.A - Fuel Combustion Activities</b>	2,775.9	1.8	0.1	21.2	66.5	8.5	2.5
<b>1.A.1 - Energy Industries</b>	15.4	4.2E-04	1.7E-04	3.1E-02	2.4E-03	3.0E-04	0.1
1.A.1.a - Main Activity Electricity and Heat Production	15.4	4.2E-04	1.7E-04	3.1E-02	2.4E-03	3.0E-04	0.1
1.A.1.a.i - Electricity Generation	15.4	4.2E-04	1.7E-04	3.1E-02	2.4E-03	3.0E-04	0.1
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	174.1	2.1E-02	3.2E-03	0.6	1.1	0.2	0.9
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	171.7	2.1E-02	3.2E-03	0.6	1.1	0.2	0.9
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.4	1.1E-04	2.2E-05	1.7E-02	2.4E-03	9.0E-04	1.6E-03
<b>1.A.3 - Transport</b>	2,215.6	0.5	0.1	14.3	45.2	4.7	2.3E-02
1.A.3.a - Civil Aviation	25.2	1.8E-04	7.1E-04	6.1E-02	4.2	6.7E-02	8.0E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	25.2	1.8E-04	7.1E-04	6.1E-02	4.2	6.7E-02	8.0E-03
1.A.3.b - Road Transportation	2,143.7	0.5	0.1	13.5	40.8	4.6	1.5E-02
1.A.3.b.i - Cars	451.0	0.2	2.1E-02	1.4	10.3	1.2	5.0E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	145.3	5.9E-02	6.8E-03	0.4	3.3	0.4	1.6E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	305.6	0.1	1.4E-02	0.9	7.0	0.8	3.4E-03
1.A.3.b.ii - Light-duty trucks	930.1	0.3	4.5E-02	4.1	28.3	2.8	8.1E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	697.6	0.2	3.4E-02	3.1	21.2	2.1	6.1E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	232.5	7.1E-02	1.1E-02	1.0	7.1	0.7	2.0E-03
1.A.3.b.iii - Heavy-duty trucks and buses	760.3	4.0E-02	4.0E-02	8.0	1.8	0.5	1.9E-03
1.A.3.b.iv - Motorcycles	2.3	1.1E-03	1.0E-04	4.9E-03	0.4	9.7E-02	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	46.7	2.5E-03	1.7E-02	0.8	0.2	7.0E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	319.0	1.3	1.9E-02	5.6	20.1	3.5	1.5
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	94.2	1.3	1.7E-02	0.4	17.4	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	224.8	3.0E-02	1.8E-03	5.3	2.7	0.9	1.4
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	224.8	3.0E-02	1.8E-03	5.3	2.7	0.9	1.4
<b>1.A.5 - Non-Specified</b>	51.9	3.1E-03	2.7E-03	0.5	0.2	3.5E-02	3.0E-04
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	51.9	3.1E-03	2.7E-03	0.5	0.2	3.5E-02	3.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	51.9	3.1E-03	2.7E-03	0.5	0.2	3.5E-02	3.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

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## SECTORAL REPORT: ENERGY

Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCS	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	263.1	1.5E-02	7.1E-03	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	108.7	7.6E-04	3.0E-03	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	154.4	1.4E-02	4.1E-03	3.8	0.8	0.3	1.0
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	483.7						



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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>2 - Industrial Processes and Product Use</b>	528.2	-	-	-	-	-	-	-	-	-	2.3	-	
<b>2.A - Mineral Industry</b>	286.4	-	-	-	-	-	-	-	-	-	-	-	
2.A.1 - Cement production	270.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	16.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	214.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO	
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	214.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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## SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)				
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	26.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.3	NO	
2.D.1 - Lubricant Use	9.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	1.1	-	

Annex 20 : Inventory Year 2013

SECTORAL REPORT: IPPU

Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.1	-
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-112,594.1	201.7	7.4	9.1	582.4	11.2
<b>3.A - Livestock</b>	NA	163.7	0.4	NA	NA	11.2
3.A.1 - Enteric Fermentation	NA	159.9	NA	NA	NA	NA
3.A.1.a - Cattle	NA	138.5	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.2	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	138.3	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	10.9	NA	NA	NA	NA
3.A.1.d - Goats	NA	8.5	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.3E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	0.7	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.2	NA	NA	NA	NA
3.A.1.h - Swine	NA	6.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	3.8	0.4	NA	NA	11.2
3.A.2.a - Cattle	NA	2.6	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	2.0E-03	1.8E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.6	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.3E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	8.8E-02	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.1	NA	NA	NA	-
3.A.2.h - Swine	NA	6.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	2.0E-02	5.6E-04	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-112,594.5	NA	NO	NO	NO	NO
3.B.1 - Forest land	-122,363.2	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-121,400.5	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-962.7	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-62.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-900.5	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

## Annex 20 : Inventory Year 2013

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	-	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	<b>0.3</b>	<b>38.0</b>	<b>7.0</b>	<b>9.1</b>	<b>582.4</b>	<b>NO</b>
3.C.1 - Emissions from biomass burning	-	38.0	1.1	9.1	582.4	NO
3.C.1.a - Biomass burning in forest lands	NA	37.9	1.1	8.9	580.3	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	7.6E-02	7.0E-03	0.1	2.2	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.4	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	4.9E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	2.3	5.7	8.5E-02	0.5	8.4	0.5	1.7E-02
<b>4.A - Solid Waste Disposal</b>	-	3.4	-	-	-	0.3	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.3	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	2.3	1.0	1.3E-02	0.5	8.4	0.2	1.7E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	2.3	1.0	1.3E-02	0.5	8.4	0.2	1.7E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.3E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.6	7.3E-02	NO	NO	8.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.7	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

## Annex 20 : Inventory Year 2013

## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-109,287.7	209.3	7.6	NE	NE	NE	NE	NE	30.7	657.3	22.6	2.5
<b>1 - Energy</b>	2,775.9	1.8	0.1	NA	NA	NA	NA	NA	21.2	66.5	8.5	2.5
1.A - Fuel Combustion Activities	2,775.9	1.8	0.1	NA	NA	NA	NA	NA	21.2	66.5	8.5	2.5
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	528.2	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO
2.A - Mineral Industry	286.4	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	214.9	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	26.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.3	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	1.1	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-112,594.1	201.7	7.4	NA	NA	NA	NA	NA	9.1	582.4	11.2	NO
3.A - Livestock	NA	163.7	0.4	NA	NA	NA	NA	NA	NA	NA	11.2	NA
3.B - Land	-112,594.5	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.3	38.0	7.0	NA	NA	NA	NA	NA	9.1	582.4	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	2.3	5.7	8.5E-02	NA	NA	NA	NA	NA	0.5	8.4	0.5	1.7E-02
4.A - Solid Waste Disposal	NA	3.4	NO	NA	NA	NA	NA	NA	NO	NO	0.3	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	2.3	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.4	0.2	1.7E-02
4.D - Wastewater Treatment and Discharge	NA	1.3	7.3E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0



**Annex 20 : Inventory Year 2013**

**SHORT SUMMARY**

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)				Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
bunkers)												
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

## Annex 21 : Inventory Year 2014

## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>Total National Emissions and Removals</b>	-105,997.6	241.9	8.6	NE	NE	NE	NE	NE	38.2	939.4	24.5	2.7	
<b>1 - Energy</b>	3,142.3	1.9	0.2	NA	NA	NA	NA	NA	24.4	72.9	9.2	2.7	
<b>1.A - Fuel Combustion Activities</b>	3,142.3	1.9	0.2	NA	NA	NA	NA	NA	24.4	72.9	9.2	2.7	
1.A.1 - Energy Industries	5.4	1.9E-04	4.7E-05	NA	NA	NA	NA	NA	1.0E-02	1.0E-03	1.0E-04	3.6E-02	
1.A.2 - Manufacturing Industries and Construction	174.6	2.1E-02	3.2E-03	NA	NA	NA	NA	NA	0.6	1.1	0.2	0.9	
1.A.3 - Transport	2,530.6	0.6	0.1	NA	NA	NA	NA	NA	16.3	51.2	5.4	2.5E-02	
1.A.4 - Other Sectors	371.7	1.3	1.9E-02	NA	NA	NA	NA	NA	6.8	20.3	3.6	1.8	
1.A.5 - Non-Specified	60.0	3.6E-03	3.2E-03	NA	NA	NA	NA	NA	0.6	0.2	4.0E-02	3.0E-04	
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
1.B.1 - Solid Fuels	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NO	
1.B.2 - Oil and Natural Gas	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
1.B.3 - Other emissions from Energy Production	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.1 - Transport of CO <sub>2</sub>	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.2 - Injection and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1.C.3 - Other	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2 - Industrial Processes and Product Use</b>	522.4	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO	
<b>2.A - Mineral Industry</b>	319.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.1 - Cement production	303.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.2 - Lime production	16.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.3 - Glass Production	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.A.4 - Other Process Uses of Carbonates	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.A.5 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.B.10 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.C - Metal Industry</b>	175.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO	NO	
2.C.4 - Magnesium production	NO	NA	NA	NA	NA	NO	NA	NO	NO	NO	NO	NO	
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.6 - Zinc Production	175.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.C.7 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>	<b>26.8</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NO</b>	<b>NO</b>	<b>1.3</b>	<b>NO</b>	
2.D.1 - Lubricant Use	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	
2.D.4 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.E.1 - Integrated Circuit or Semiconductor	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid	NA	NA	NA	NA	NO	NA	NA	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting Substances</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NE</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	<b>NO</b>	<b>NO</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NE</b>	<b>NO</b>	<b>NE</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.H - Other</b>	<b>-</b>	<b>-</b>	<b>NO</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-	
2.H.3 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3 - Agriculture, Forestry, and Other Land Use</b>	<b>-109,664.7</b>	<b>234.0</b>	<b>8.3</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>13.3</b>	<b>858.0</b>	<b>12.5</b>	<b>NO</b>	
<b>3.A - Livestock</b>	<b>NA</b>	<b>178.0</b>	<b>0.5</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>12.5</b>	<b>NA</b>	
3.A.1 - Enteric Fermentation	NA	173.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.A.2 - Manure Management	NA	4.2	0.5	NA	NA	NA	NA	NA	NA	NA	12.5	NA	

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## LONG SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)				
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
<b>3.B - Land</b>	-109,664.9	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.1 - Forest land	-119,433.7	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.2 - Cropland	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.3 - Grassland	9,755.9	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.4 - Wetlands	NO	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.5 - Settlements	12.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.B.6 - Other Land	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>	0.3	56.0	7.9	NA	NA	NA	NA	NA	13.3	858.0	NA	NA	
3.C.1 - Emissions from biomass burning	NA	56.0	1.7	NA	NA	NA	NA	NA	13.3	858.0	NA	NA	
3.C.2 - Liming	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	NA	NA	5.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.6E-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.C.8 - Other (please specify)	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>3.D - Other</b>	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
3.D.2 - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>4 - Waste</b>	2.4	5.9	8.4E-02	NA	NA	NA	NA	NA	0.5	8.5	0.5	1.7E-02	
<b>4.A - Solid Waste Disposal</b>	NA	3.7	NO	NA	NA	NA	NA	NA	NO	NO	0.4	NA	
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>4.C - Incineration and Open Burning of Waste</b>	2.4	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.5	0.2	1.7E-02	
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.1E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA	
<b>4.E - Other (please specify)</b>	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA	
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>5.A - Indirect N<sub>2</sub>O emissions from the atmospheric deposition of nitrogen in NO<sub>x</sub> and NH<sub>3</sub></b>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>5.B - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Memo Items (5)</b>													
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0	
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02	
1.A.3.d.i - International water-borne navigation (International bunkers)	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0	
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>1 - Energy</b>	3,142.3	1.9	0.2	24.4	72.9	9.2	2.7
<b>1.A - Fuel Combustion Activities</b>	3,142.3	1.9	0.2	24.4	72.9	9.2	2.7
<b>1.A.1 - Energy Industries</b>	5.4	1.9E-04	4.7E-05	1.0E-02	1.0E-03	1.0E-04	3.6E-02
1.A.1.a - Main Activity Electricity and Heat Production	5.4	1.9E-04	4.7E-05	1.0E-02	1.0E-03	1.0E-04	3.6E-02
1.A.1.a.i - Electricity Generation	5.4	1.9E-04	4.7E-05	1.0E-02	1.0E-03	1.0E-04	3.6E-02
1.A.1.a.ii - Combined Heat and Power Generation (CHP)	NO	NO	NO	NO	NO	NO	NO
1.A.1.a.iii - Heat Plants	NO	NO	NO	NO	NO	NO	NO
1.A.1.b - Petroleum Refining	NO	NO	NO	NO	NO	NO	NO
1.A.1.c - Manufacture of Solid Fuels and Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.i - Manufacture of Solid Fuels	NO	NO	NO	NO	NO	NO	NO
1.A.1.c.ii - Other Energy Industries	NO	NO	NO	NO	NO	NO	NO
<b>1.A.2 - Manufacturing Industries and Construction</b>	174.6	2.1E-02	3.2E-03	0.6	1.1	0.2	0.9
1.A.2.a - Iron and Steel	NO	NO	NO	NO	NO	NO	NO
1.A.2.b - Non-Ferrous Metals	NO	NO	NO	NO	NO	NO	NO
1.A.2.c - Chemicals	NO	NO	NO	NO	NO	NO	NO
1.A.2.d - Pulp, Paper and Print	NO	NO	NO	NO	NO	NO	NO
1.A.2.e - Food Processing, Beverages and Tobacco	EE	EE	EE	EE	EE	EE	EE
1.A.2.f - Non-Metallic Minerals	EE	EE	EE	EE	EE	EE	EE
1.A.2.g - Transport Equipment	NO	NO	NO	NO	NO	NO	NO
1.A.2.h - Machinery	NO	NO	NO	NO	NO	NO	NO
1.A.2.i - Mining (excluding fuels) and Quarrying	172.3	2.1E-02	3.1E-03	0.6	1.1	0.2	0.9
1.A.2.j - Wood and wood products	NO	NO	NO	NO	NO	NO	NO
1.A.2.k - Construction	EE	EE	EE	EE	EE	EE	EE
1.A.2.l - Textile and Leather	EE	EE	EE	EE	EE	EE	EE
1.A.2.m - Non-specified Industry	2.3	1.1E-04	2.1E-05	1.7E-02	2.4E-03	9.0E-04	1.5E-03
<b>1.A.3 - Transport</b>	2,530.6	0.6	0.1	16.3	51.2	5.4	2.5E-02
1.A.3.a - Civil Aviation	25.3	1.8E-04	7.1E-04	6.1E-02	4.2	6.8E-02	8.1E-03
1.A.3.a.i - International Aviation (International Bunkers)							
(1) 1.A.3.a.ii - Domestic Aviation	25.3	1.8E-04	7.1E-04	6.1E-02	4.2	6.8E-02	8.1E-03
1.A.3.b - Road Transportation	2,456.6	0.6	0.1	15.5	46.8	5.3	1.7E-02
1.A.3.b.i - Cars	516.0	0.2	2.4E-02	1.6	11.8	1.4	5.7E-03
1.A.3.b.i.1 - Passenger cars with 3-way catalysts	166.1	6.8E-02	7.8E-03	0.5	3.8	0.5	1.8E-03
1.A.3.b.i.2 - Passenger cars without 3-way catalysts	349.9	0.1	1.7E-02	1.1	8.0	1.0	3.9E-03
1.A.3.b.ii - Light-duty trucks	1,069.6	0.3	5.2E-02	4.8	32.5	3.2	9.3E-03
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts	802.2	0.2	3.9E-02	3.6	24.4	2.4	7.0E-03
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts	267.4	8.1E-02	1.3E-02	1.2	8.1	0.8	2.3E-03
1.A.3.b.iii - Heavy-duty trucks and buses	868.6	4.6E-02	4.6E-02	9.1	2.1	0.5	2.2E-03
1.A.3.b.iv - Motorcycles	2.4	1.1E-03	1.1E-04	5.1E-03	0.4	0.1	-
1.A.3.b.v - Evaporative emissions from vehicles	NO	NO	NO	NO	NO	NO	NO
1.A.3.b.vi - Urea-based catalysts	NO	NO	NO	NO	NO	NO	NO
1.A.3.c - Railways	48.7	2.6E-03	1.8E-02	0.8	0.2	7.3E-02	1.0E-04
1.A.3.d - Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.A.3.d.i - International water-borne navigation (International bunkers) (1)							
1.A.3.d.ii - Domestic Water-borne Navigation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e - Other Transportation	EE	EE	EE	EE	EE	EE	EE
1.A.3.e.i - Pipeline Transport	NO	NO	NO	NO	NO	NO	NO
1.A.3.e.ii - Off-road	EE	EE	EE	EE	EE	EE	EE
<b>1.A.4 - Other Sectors</b>	371.7	1.3	1.9E-02	6.8	20.3	3.6	1.8
1.A.4.a - Commercial/Institutional	EE	EE	EE	EE	EE	EE	EE
1.A.4.b - Residential	100.1	1.3	1.7E-02	0.4	17.4	2.6	4.8E-02
1.A.4.c - Agriculture/Forestry/Fishing/Fish Farms	271.5	3.7E-02	2.2E-03	6.4	2.9	1.0	1.7
1.A.4.c.i - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.ii - Off-road Vehicles and Other Machinery	EE	EE	EE	EE	EE	EE	EE
1.A.4.c.iii - Fishing (mobile combustion)	271.5	3.7E-02	2.2E-03	6.4	2.9	1.0	1.7
<b>1.A.5 - Non-Specified</b>	60.0	3.6E-03	3.2E-03	0.6	0.2	4.0E-02	3.0E-04
1.A.5.a - Stationary	EE	EE	EE	EE	EE	EE	EE
1.A.5.b - Mobile	60.0	3.6E-03	3.2E-03	0.6	0.2	4.0E-02	3.0E-04
1.A.5.b.i - Mobile (aviation component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.ii - Mobile (water-borne component)	EE	EE	EE	EE	EE	EE	EE
1.A.5.b.iii - Mobile (Other)	60.0	3.6E-03	3.2E-03	0.6	0.2	4.0E-02	3.0E-04
1.A.5.c - Multilateral Operations (1)(2)							
<b>1.B - Fugitive emissions from fuels</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.B.1 - Solid Fuels</b>	NO	NO	NO	NO	NO	NO	NO
1.B.1.a - Coal mining and handling	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i - Underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.3 - Abandoned underground mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.i.4 - Flaring of drained methane or conversion of methane to CO <sub>2</sub>	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii - Surface mines	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.1 - Mining	NO	NO	NA	NO	NO	NO	NO
1.B.1.a.ii.2 - Post-mining seam gas emissions	NO	NO	NA	NO	NO	NO	NO
1.B.1.b - Uncontrolled combustion and burning coal dumps	NO	NA	NA	NO	NO	NO	NO
1.B.1.c - Solid fuel transformation	NO	NO	NO	NO	NO	NO	NO
<b>1.B.2 - Oil and Natural Gas</b>	NO	NO	NO	NO	NO	NO	NO
1.B.2.a - Oil	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.1 - Exploration	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.2 - Production and Upgrading	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.3 - Transport	NO	NO	NO	NO	NO	NO	NO
1.B.2.a.iii.4 - Refining	NO	NO	NA	NO	NO	NO	NO
1.B.2.a.iii.5 - Distribution of oil products	NO	NO	NA	NO	NO	NO	NO

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Categories	Emissions (Gg)						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
1.B.2.a.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b - Natural Gas	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.i - Venting	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.ii - Flaring	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii - All Other	NO	NO	NO	NO	NO	NO	NO
1.B.2.b.iii.1 - Exploration	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.2 - Production	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.3 - Processing	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.4 - Transmission and Storage	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.5 - Distribution	NO	NO	NA	NO	NO	NO	NO
1.B.2.b.iii.6 - Other	NO	NO	NO	NO	NO	NO	NO
<b>1.B.3 - Other emissions from Energy Production</b>	NO	NO	NO	NO	NO	NO	NO
<b>1.C - Carbon dioxide Transport and Storage</b>	NO	NA	NA	NA	NA	NA	NA
<b>1.C.1 - Transport of CO<sub>2</sub></b>	NO	NA	NA	NA	NA	NA	NA
1.C.1.a - Pipelines	NO	NA	NA	NA	NA	NA	NA
1.C.1.b - Ships	NO	NA	NA	NA	NA	NA	NA
1.C.1.c - Other (please specify)	NO	NA	NA	NA	NA	NA	NA
<b>1.C.2 - Injection and Storage</b>	NO	NA	NA	NA	NA	NA	NA
1.C.2.a - Injection	NO	NA	NA	NA	NA	NA	NA
1.C.2.b - Storage	NO	NA	NA	NA	NA	NA	NA
<b>1.C.3 - Other</b>	NO	NA	NA	NA	NA	NA	NA
<b>Memo Items (3)</b>							
International Bunkers	263.1	1.5E-02	7.1E-03	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers) (1)	108.7	7.6E-04	3.0E-03	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International bunkers) (1)	154.4	1.4E-02	4.1E-03	3.8	0.8	0.3	1.0
1.A.5.c - Multilateral Operations (1)(2)	NO	NO	NO	NO	NO	NO	NO
<b>Information Items</b>							
CO <sub>2</sub> from Biomass Combustion for Energy Production	481.3						

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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)					(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>2 - Industrial Processes and Product Use</b>	522.4	-	-	-	-	-	-	-	-	-	2.3	-
<b>2.A - Mineral Industry</b>	319.9	-	-	-	-	-	-	-	-	-	-	-
2.A.1 - Cement production	303.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.2 - Lime production	16.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.3 - Glass Production	-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4 - Other Process Uses of Carbonates	-	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.4.a - Ceramics	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4.b - Other Uses of Soda Ash	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.4.c - Non Metallurgical Magnesia Production	NO	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2.A.4.d - Other (please specify) (3)	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.A.5 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>2.B - Chemical Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.1 - Ammonia Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.2 - Nitric Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.3 - Adipic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.4 - Caprolactam, Glyoxal and Glyoxylic Acid Production	NA	NA	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.5 - Carbide Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.6 - Titanium Dioxide Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.7 - Soda Ash Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8 - Petrochemical and Carbon Black Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.a - Methanol	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.b - Ethylene	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.c - Ethylene Dichloride and Vinyl Chloride Monomer	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.d - Ethylene Oxide	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.e - Acrylonitrile	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.8.f - Carbon Black	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9 - Fluorochemical Production	NA	NA	NA	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.B.9.a - By-product emissions (4)	NA	NA	NA	NO	NA	NA	NA	NA	NO	NO	NO	NO
2.B.9.b - Fugitive Emissions (4)	NA	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B.10 - Other (Please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.C - Metal Industry</b>	175.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C.1 - Iron and Steel Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.2 - Ferroalloys Production	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.3 - Aluminium production	NO	NA	NA	NA	NO	NA	NA	NA	NO	NO	NO	NO
2.C.4 - Magnesium production (5)	NO	NA	NA	NA	NA	NO	NA	NA	NO	NO	NO	NO
2.C.5 - Lead Production	NO	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.6 - Zinc Production	175.8	NA	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.C.7 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>2.D - Non-Energy Products from Fuels and Solvent Use (6)</b>	26.8	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.3	NO



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Categories	(Gg)			CO <sub>2</sub> Equivalents(Gg)						(Gg)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (1)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (2)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>	
2.D.1 - Lubricant Use	9.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.2 - Paraffin Wax Use	17.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.D.3 - Solvent Use (7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.3	NA	
2.D.4 - Other (please specify) (3), (8)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	
<b>2.E - Electronics Industry</b>	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.1 - Integrated Circuit or Semiconductor (9)	NA	NA	NA	NO	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.2 - TFT Flat Panel Display (9)	NA	NA	NA	NA	NO	NO	NO	NO	NA	NA	NA	NA	
2.E.3 - Photovoltaics (9)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.4 - Heat Transfer Fluid (10)	NA	NA	NA	NA	NO	NA	NO	NO	NA	NA	NA	NA	
2.E.5 - Other (please specify) (3)	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA	
<b>2.F - Product Uses as Substitutes for Ozone Depleting</b>	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.1 - Refrigeration and Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.a - Refrigeration and Stationary Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.1.b - Mobile Air Conditioning	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.2 - Foam Blowing Agents	NA	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.3 - Fire Protection	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.4 - Aerosols	NA	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	
2.F.5 - Solvents	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA	
2.F.6 - Other Applications (please specify) (3)	NA	NA	NA	NO	NO	NA	NA	NA	NA	NA	NA	NA	
<b>2.G - Other Product Manufacture and Use</b>	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA	
2.G.1 - Electrical Equipment	NA	NA	NA	NA	NE	-	NA	NE	-	-	-	-	
2.G.1.a - Manufacture of Electrical Equipment	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.1.b - Use of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.1.c - Disposal of Electrical Equipment	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2 - SF <sub>6</sub> and PFCs from Other Product Uses	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.a - Military Applications	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.b - Accelerators	NA	NA	NA	NA	NE	NE	NA	NE	NA	NA	NA	NA	
2.G.2.c - Other (please specify) (3)	NA	NA	NA	NA	NO	NO	NA	NO	NA	NA	NA	NA	
2.G.3 - N <sub>2</sub> O from Product Uses	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.a - Medical Applications	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.b - Propellant for pressure and aerosol products	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.3.c - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2.G.4 - Other (Please specify) (3)	NA	NA	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>2.H - Other</b>	-	-	-	-	-	-	-	-	-	-	1.0	-	
2.H.1 - Pulp and Paper Industry	NO	NO	NA	NA	NA	NA	NA	NA	NO	NO	NO	NO	
2.H.2 - Food and Beverages Industry	-	-	NA	NA	NA	NA	NA	NA	-	-	1.0	-	
2.H.3 - Other (please specify) (3)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO	

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-109,664.7	234.0	8.3	13.3	858.0	12.5
<b>3.A - Livestock</b>	NA	178.0	0.5	NA	NA	12.5
3.A.1 - Enteric Fermentation	NA	173.8	NA	NA	NA	NA
3.A.1.a - Cattle	NA	151.5	NA	NA	NA	NA
3.A.1.a.i - Dairy Cows	NA	0.2	NA	NA	NA	NA
3.A.1.a.ii - Other Cattle	NA	151.3	NA	NA	NA	NA
3.A.1.b - Buffalo	NA	NO	NA	NA	NA	NA
3.A.1.c - Sheep	NA	10.2	NA	NA	NA	NA
3.A.1.d - Goats	NA	9.5	NA	NA	NA	NA
3.A.1.e - Camels	NA	2.5E-03	NA	NA	NA	NA
3.A.1.f - Horses	NA	1.0	NA	NA	NA	NA
3.A.1.g - Mules and Asses	NA	1.6	NA	NA	NA	NA
3.A.1.h - Swine	NA	6.9E-02	NA	NA	NA	NA
3.A.1.j - Other (please specify)	NA	NO	NA	NA	NA	NA
3.A.2 - Manure Management (1)	NA	4.2	0.5	NA	NA	12.5
3.A.2.a - Cattle	NA	2.9	0.4	NA	NA	-
3.A.2.a.i - Dairy cows	NA	2.0E-03	1.8E-03	NA	NA	-
3.A.2.a.ii - Other cattle	NA	2.9	0.4	NA	NA	-
3.A.2.b - Buffalo	NA	NO	NA	NA	NA	-
3.A.2.c - Sheep	NA	0.4	NA	NA	NA	-
3.A.2.d - Goats	NA	0.4	NA	NA	NA	-
3.A.2.e - Camels	NA	1.4E-04	NA	NA	NA	-
3.A.2.f - Horses	NA	0.1	NA	NA	NA	-
3.A.2.g - Mules and Asses	NA	0.2	NA	NA	NA	-
3.A.2.h - Swine	NA	6.9E-02	NA	NA	NA	-
3.A.2.i - Poultry	NA	0.1	2.9E-03	NA	NA	-
3.A.2.j - Other (please specify)	NA	NA	NA	NA	NA	NA
<b>3.B - Land</b>	-109,664.9	NA	NO	NO	NO	NO
3.B.1 - Forest land	-119,433.7	NA	NO	NO	NO	NO
3.B.1.a - Forest land Remaining Forest land	-118,470.9	NA	NA	NO	NO	NO
3.B.1.b - Land Converted to Forest land	-962.7	NA	NA	NO	NO	NO
3.B.1.b.i - Cropland converted to Forest Land	-62.2	NA	NA	NO	NO	NO
3.B.1.b.ii - Grassland converted to Forest Land	-900.5	NA	NA	NO	NO	NO
3.B.1.b.iii - Wetlands converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.iv - Settlements converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.1.b.v - Other Land converted to Forest Land	NO	NA	NA	NO	NO	NO
3.B.2 - Cropland	NO	NA	NA	NO	NO	NO
3.B.2.a - Cropland Remaining Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b - Land Converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.i - Forest Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.ii - Grassland converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.iii - Wetlands converted to Cropland	NO	NA	NA	NO	NO	NO

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Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.B.2.b.iv - Settlements converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.2.b.v - Other Land converted to Cropland	NO	NA	NA	NO	NO	NO
3.B.3 - Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.a - Grassland Remaining Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b - Land Converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.i - Forest Land converted to Grassland	9,755.9	NA	NA	NO	NO	NO
3.B.3.b.ii - Cropland converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iii - Wetlands converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.iv - Settlements converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.3.b.v - Other Land converted to Grassland	NO	NA	NA	NO	NO	NO
3.B.4 - Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a - Wetlands Remaining Wetlands	NO	NO	NO	NO	NO	NO
3.B.4.a.i - Peatlands remaining peatlands	NO	NO	NO	NO	NO	NO
3.B.4.a.ii - Flooded land remaining flooded land	NA	NO	NO	NO	NO	NO
3.B.4.b - Land Converted to Wetlands	-	NO	NO	NO	NO	NO
3.B.4.b.i - Land converted for peat extraction	NA	NO	NO	NO	NO	NO
3.B.4.b.ii - Land converted to flooded land	NO	NO	NO	NO	NO	NO
3.B.4.b.iii - Land converted to other wetlands	NA	NO	NO	NO	NO	NO
3.B.5 - Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.a - Settlements Remaining Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b - Land Converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.i - Forest Land converted to Settlements	12.8	NA	NA	NO	NO	NO
3.B.5.b.ii - Cropland converted to Settlements	-	NA	NA	NO	NO	NO
3.B.5.b.iii - Grassland converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.iv - Wetlands converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.5.b.v - Other Land converted to Settlements	NO	NA	NA	NO	NO	NO
3.B.6 - Other Land	NO	NO	NO	NO	NO	NO
3.B.6.a - Other land Remaining Other land	NO	NO	NO	NO	NO	NO
3.B.6.b - Land Converted to Other land	NO	NO	NO	NO	NO	NO
3.B.6.b.i - Forest Land converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.ii - Cropland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iii - Grassland converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.iv - Wetlands converted to Other Land	NO	NO	NO	NO	NO	NO
3.B.6.b.v - Settlements converted to Other Land	NO	NO	NO	NO	NO	NO
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land (2)</b>	0.3	56.0	7.9	13.3	858.0	NO
3.C.1 - Emissions from biomass burning	-	56.0	1.7	13.3	858.0	NO
3.C.1.a - Biomass burning in forest lands	NA	55.9	1.6	13.2	854.9	NO
3.C.1.b - Biomass burning in croplands	NA	NO	NO	NO	NO	NO
3.C.1.c - Biomass burning in grasslands	NA	0.1	1.0E-02	0.2	3.1	NO
3.C.1.d - Biomass burning in all other land	NA	NO	NO	NO	NO	NO

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## SECTORAL REPORT: AFOLU

Categories	(Gg)					
	Net CO <sub>2</sub> emissions / removals	Emissions				
		CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs
3.C.2 - Liming	NO	NA	NA	NA	NA	NA
3.C.3 - Urea application	0.3	NA	NA	NA	NA	NA
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils (3)	NA	NA	5.8	NA	NA	NA
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	NA	NA	2.6E-02	NA	NA	NA
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	NA	NA	0.4	NA	NA	NA
3.C.7 - Rice cultivations	NA	NO	NA	NA	NA	NA
3.C.8 - Other (please specify)	NE	NO	NO	NA	NA	NA
<b>3.D - Other</b>	NE	NO	NO	NO	NO	NO
3.D.1 - Harvested Wood Products	NE	NA	NA	NA	NA	NA
3.D.2 - Other (please specify)	NO	NO	NO	NO	NO	NO

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## SECTORAL REPORT: WASTE

Categories	Emissions [Gg]						
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>4 - Waste</b>	2.4	5.9	8.4E-02	0.5	8.5	0.5	1.7E-02
<b>4.A - Solid Waste Disposal</b>	-	3.7	-	-	-	0.4	-
4.A.1 - Managed Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.2 - Unmanaged Waste Disposal Sites	NA		NA	NO	NO	NO	NA
4.A.3 - Uncategorised Waste Disposal Sites	NA		NA	NO	NO	0.4	NA
<b>4.B - Biological Treatment of Solid Waste</b>	NA	NO	NO	NO	NO	NO	NA
<b>4.C - Incineration and Open Burning of Waste</b>	2.4	1.0	1.3E-02	0.5	8.5	0.2	1.7E-02
4.C.1 - Waste Incineration	NE	NE	NE	NE	NE	NE	NE
4.C.2 - Open Burning of Waste	2.4	1.0	1.3E-02	0.5	8.5	0.2	1.7E-02
<b>4.D - Wastewater Treatment and Discharge</b>	NA	1.3	7.1E-02	NO	NO	1.0E-06	-
4.D.1 - Domestic Wastewater Treatment and Discharge	NA	0.6	7.1E-02	NO	NO	8.0E-07	NA
4.D.2 - Industrial Wastewater Treatment and Discharge	NA	0.7	NA	NO	NO	2.0E-07	NA
<b>4.E - Other (please specify)</b>	NO	NO	NO	NO	NO	NO	NO

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## SHORT SUMMARY

Categories	Emissions (Gg)			Emissions CO <sub>2</sub> Equivalents (Gg)					Emissions (Gg)			
	Net CO <sub>2</sub> (1)(2)	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Other halogenated gases with CO <sub>2</sub> equivalent conversion factors (3)	Other halogenated gases without CO <sub>2</sub> equivalent conversion factors (4)	NO <sub>x</sub>	CO	NMVOCs	SO <sub>2</sub>
<b>Total National Emissions and Removals</b>	-105,997.6	241.9	8.6	NE	NE	NE	NE	NE	38.2	939.4	24.5	2.7
<b>1 - Energy</b>	3,142.3	1.9	0.2	NA	NA	NA	NA	NA	24.4	72.9	9.2	2.7
1.A - Fuel Combustion Activities	3,142.3	1.9	0.2	NA	NA	NA	NA	NA	24.4	72.9	9.2	2.7
1.B - Fugitive emissions from fuels	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
1.C - Carbon dioxide Transport and Storage	NO	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>2 - Industrial Processes and Product Use</b>	522.4	NO	NO	NE	NE	NE	NE	NE	NO	NO	2.3	NO
2.A - Mineral Industry	319.9	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
2.B - Chemical Industry	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.C - Metal Industry	175.8	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
2.D - Non-Energy Products from Fuels and Solvent Use	26.8	NO	NO	NA	NA	NA	NA	NA	NO	NO	1.3	NO
2.E - Electronics Industry	NO	NO	NO	NO	NO	NO	NO	NO	NA	NA	NA	NA
2.F - Product Uses as Substitutes for Ozone Depleting Substances	NA	NA	NA	NE	NE	NA	NA	NA	NA	NA	NA	NA
2.G - Other Product Manufacture and Use	NO	NO	NE	NO	NE	NE	NO	NE	NA	NA	NA	NA
2.H - Other	-	-	NO	NA	NA	NA	NA	NA	-	-	1.0	-
<b>3 - Agriculture, Forestry, and Other Land Use</b>	-109,664.7	234.0	8.3	NA	NA	NA	NA	NA	13.3	858.0	12.5	NO
3.A - Livestock	NA	178.0	0.5	NA	NA	NA	NA	NA	NA	NA	12.5	NA
3.B - Land	-109,664.9	-	-	NA	NA	NA	NA	NA	NO	NO	NO	NO
3.C - Aggregate sources and non-CO <sub>2</sub> emissions sources on land	0.3	56.0	7.9	NA	NA	NA	NA	NA	13.3	858.0	NA	NA
3.D - Other	NE	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NO
<b>4 - Waste</b>	2.4	5.9	8.4E-02	NA	NA	NA	NA	NA	0.5	8.5	0.5	1.7E-02
4.A - Solid Waste Disposal	NA	3.7	NO	NA	NA	NA	NA	NA	NO	NO	0.4	NA
4.B - Biological Treatment of Solid Waste	NA	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
4.C - Incineration and Open Burning of Waste	2.4	1.0	1.3E-02	NA	NA	NA	NA	NA	0.5	8.5	0.2	1.7E-02
4.D - Wastewater Treatment and Discharge	NA	1.3	7.1E-02	NA	NA	NA	NA	NA	NO	NO	1.0E-06	NA
4.E - Other (please specify)	NO	NO	NO	NA	NA	NA	NA	NA	NO	NO	NO	NA
<b>5 - Other</b>	NO	NO	NE	NO	NO	NO	NO	NO	NO	NO	NO	NO
5.A - Indirect N <sub>2</sub> O emissions from the atmospheric deposition of nitrogen in NO <sub>x</sub> and NH <sub>3</sub>	NA	NA	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA
5.B - Other (please specify)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
<b>Memo Items (5)</b>												
<b>International Bunkers</b>	263.1	1.5E-02	7.1E-03	NA	NA	NA	NA	NA	4.3	0.8	0.3	1.0
1.A.3.a.i - International Aviation (International Bunkers)	108.7	7.6E-04	3.0E-03	NA	NA	NA	NA	NA	0.4	3.8E-02	1.7E-02	3.5E-02
1.A.3.d.i - International water-borne navigation (International bunkers)	154.4	1.4E-02	4.1E-03	NA	NA	NA	NA	NA	3.8	0.8	0.3	1.0
<b>1.A.5.c - Multilateral Operations</b>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO



## Annex 22 (a) - Uncertainties for the year 1994 – Level assessment

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	E	F	G	H
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T
<b>1.A - Fuel Combustion Activities</b>						
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	3	7	7.615773106	0
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.001594578	3	297	297.0151511	0
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.000540099	3	75	75.05997602	0
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	3	7	7.615773106	0
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	3	297	297.0151511	0
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	3	75	75.05997602	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	7	7	9.899494937	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	7	297	297.0824801	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	7	75	75.32595834	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fuels	CO <sub>2</sub>	1.2587076	7	75	75.32595834	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fuels	N <sub>2</sub> O	0.02129328	7	500	500.0489976	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fuels	CH <sub>4</sub>	0.01081836	7	100	100.2447006	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	7	7	9.899494937	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	7	297	297.0824801	0
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	7	75	75.32595834	0
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	17.5	7	18.84807682	0
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	17.5	297	297.5151257	0
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	17.5	75	77.014609	0
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fuels	CO <sub>2</sub>	72.7305865	4	5	6.403124237	0
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fuels	N <sub>2</sub> O	0.63067082	4	110	110.0727032	0
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fuels	CH <sub>4</sub>	0.010680716	4	79	79.101201	0
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	4	5	6.403124237	0
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	4	110	110.0727032	0
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	4	79	79.101201	0
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	5	3.5	6.103277808	0
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	5	12	13	0
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.617923656	5	9.62	10.84178952	0
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	146.721732	5	3.5	6.103277808	0
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	2.13493528	5	12	13	0
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	1.313093376	5	9.62	10.84178952	0
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.869535	5	3.5	6.103277808	0
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	5	12	13	0
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.285397198	5	9.62	10.84178952	0
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	89.290092	5	3.5	6.103277808	0
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.30764603	5	12	13	0
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.761799339	5	9.62	10.84178952	0
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	5	3.5	6.103277808	0



## Annex 22 (a) - Uncertainties for the year 1994 – Level assessment

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	E	F	G	H
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	5	12	13	0
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.177716448	5	9.62	10.84178952	0
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	5	3.5	6.103277808	0
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	5	12	13	0
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	5	9.62	10.84178952	0
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	5	3.5	6.103277808	0
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5	12	13	0
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.041230665	5	9.62	10.84178952	0
1.A.3.d.i - International water-borne navigation (International bunkers) - Liquid F	CO <sub>2</sub>	139.6901499	10	3	10.44030651	0
1.A.3.d.i - International water-borne navigation (International bunkers) - Liquid F	N <sub>2</sub> O	1.152887892	10	90	90.55385138	0
1.A.3.d.i - International water-borne navigation (International bunkers) - Liquid F	CH <sub>4</sub>	0.273346	10	50	50.99019514	0
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	20	297	297.672639	0
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	20	75	77.62087348	0
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	20	198	199.0075375	0
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	5	7	8.602325267	0
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	5	75	75.16648189	0
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	5	297	297.0420846	0
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	20	3	20.22374842	0
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	20	50	53.85164807	0
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	20	90	92.19544457	0
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	5	3.5	6.103277808	0
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	5	12	13	0
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.016434873	5	9.62	10.84178952	0
<b>2.A - Mineral Industry</b>						
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	5	2	5.385164807	6.76393E-08
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>						
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.503066667	15	50	52.20153254	1.02208E-07
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	15	100	101.1187421	0.000474121
<b>3.A - Livestock</b>						
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	20	20	28.28427125	0
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.040917	20	20	28.28427125	0
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	20	30	36.05551275	0
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	20	30	36.05551275	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	20	30	36.05551275	0
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	20	30	36.05551275	0
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	20	30	36.05551275	0

## Annex 22 (a) - Uncertainties for the year 1994 – Level assessment

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	E	F	G	H
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.420069375	20	30	36.05551275	0
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	20	30	36.05551275	0
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.77757549	20	30	36.05551275	0
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	20	30	36.05551275	0
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	20	30	36.05551275	0
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	20	30	36.05551275	0
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	20	30	36.05551275	0
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	20	30	36.05551275	0
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	20	30	36.05551275	0
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	20	30	36.05551275	0
3.A.2.i - Poultry	N <sub>2</sub> O	0.121892073	20	30	36.05551275	0
<b>3.B - Land</b>						
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.2971	20	10	22.36067977	669.336535
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.241064	20	10	22.36067977	0.004640398
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.617126	20	10	22.36067977	0.139006931
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.945333	20	10	22.36067977	5.57277056
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	20	10	22.36067977	0.000227869
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.862726108	10	10	14.14213562	1.8325E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>						
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.764658	20	20	28.28427125	1.019794137
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.329193	20	10	22.36067977	0.120148815
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.40594713	20	10	22.36067977	1.99453E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.17215432	20	20	28.28427125	1.75668E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.339007289	10	20	22.36067977	8.5164E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.423481	20	20	28.28427125	0.219112733
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	20	20	28.28427125	1.50301E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.09228096	20	20	28.28427125	0.000941105
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426140951	30	60	67.08203932	4.7352E-05
<b>4.A - Solid Waste Disposal</b>						
<b>4.C - Incineration and Open Burning of Waste</b>						
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.442826658	40	100	107.7032961	0.000122547
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.639392825	40	100	107.7032961	4.62053E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.959708786	40	100	107.7032961	1.58345E-06
<b>4.D - Wastewater Treatment and Discharge</b>						
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.08425121	20	0.15	20.00056249	2.89146E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.154378845	20	30	36.05551275	5.11875E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.24851393	25	30	39.05124838	0.000180355
Total						

### Annex 22 (a) - Uncertainties for the year 1994 – Level assessment

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	E	F	G	H
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T
		Sum(C): -77094.629				Sum(H): 676.414
					Uncertainty in	total inventory: 26.008

**Annex 22 (b) - Uncertainties for the period 1994 to 1995 – Level and Trend assessments - Base year- 1994, Year T-1995**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635409	3	7	7.61577311	4.0884E-09	2.165E-07	8.607E-06	1.51535E-06	3.65157E-05	1.33569E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0015946	3	297	297.015151	3.5911E-11	5.202E-10	2.068E-08	1.54509E-07	8.77509E-08	3.15733E-14
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0005401	3	75	75.059976	2.6311E-13	1.762E-10	7.006E-09	1.3215E-08	2.97221E-08	1.05804E-15
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	32.223078	3	7	7.61577311	9.6416E-06	1.997E-05	0.000418	0.000139759	0.001773287	3.16408E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.1583904	3	297	297.015151	3.5433E-07	9.814E-08	2.054E-06	2.91473E-05	8.71648E-06	9.25542E-10
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0071531	3	75	75.059976	4.6152E-11	4.432E-09	9.278E-08	3.32407E-07	3.93647E-07	2.65452E-13
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	36.393695	7	7	9.89949494	2.0781E-05	1.513E-05	0.0004721	0.000105927	0.004673208	2.18501E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.0924079	7	297	297.08248	1.2066E-07	3.768E-08	1.199E-06	1.11904E-05	1.18658E-05	2.66024E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0312995	7	75	75.3259583	8.8992E-10	1.276E-08	4.06E-07	9.57149E-07	4.01907E-06	1.70691E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fu	CO <sub>2</sub>	1.2587076	1.2587076	13	7	14.7648231	5.5296E-08	4.104E-07	1.633E-05	2.87292E-06	0.000300164	9.01069E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fu	N <sub>2</sub> O	0.0212933	0.0212933	13	500	500.168971	1.816E-08	6.943E-09	2.762E-07	3.47146E-06	5.07781E-06	3.78353E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil Fu	CH <sub>4</sub>	0.0108184	0.0108184	13	100	100.84146	1.9054E-10	3.527E-09	1.403E-07	3.52745E-07	2.57986E-06	6.78009E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	74.356415	7	7	9.89949494	8.6746E-05	1.405E-05	0.0009645	9.83153E-05	0.009547889	9.11718E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.365494	7	297	297.08248	1.8876E-06	6.904E-08	4.741E-06	2.05039E-05	4.6932E-05	2.62302E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1650618	7	75	75.3259583	2.475E-08	3.118E-08	2.141E-06	2.33834E-06	2.11951E-05	4.547E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.3456404	17.5	7	18.8480768	0.0299E-07	2.165E-07	1.745E-05	1.51568E-06	0.000431974	1.86604E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0034736	17.5	297	297.515126	1.7098E-10	5.37E-10	4.506E-08	1.5948E-07	1.11507E-06	1.26882E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0011765	17.5	75	77.014609	1.3144E-12	1.819E-10	1.526E-08	1.3641E-08	3.77686E-07	1.42833E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fu	CO <sub>2</sub>	72.730587	75.147708	4	5	6.40312424	3.7068E-05	7.638E-06	0.0009747	3.81902E-05	0.005513998	3.04056E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fu	N <sub>2</sub> O	0.6306708	0.6516305	4	110	110.072703	8.2366E-07	6.623E-08	8.452E-06	7.28546E-06	4.78137E-05	2.33923E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid Fu	CH <sub>4</sub>	0.0106807	0.0110357	4	79	79.101201	1.22E-10	1.122E-09	1.431E-07	8.86114E-08	8.09748E-07	6.63544E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	17.095714	4	5	6.40312424	1.9184E-06	9.892E-07	0.0002217	4.9461E-06	0.001254406	1.57356E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1498279	4	110	110.072703	4.3544E-08	8.803E-09	1.943E-06	9.68377E-07	1.09937E-05	1.21799E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0025374	4	79	79.101201	6.4496E-12	1.491E-10	3.291E-08	1.17774E-08	1.86184E-07	3.4803E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	74.576392	5	3.5	6.10327781	3.3168E-05	4.923E-05	0.0009673	0.00017232	0.006840097	4.68166E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.087122	5	12	13	3.1976E-08	7.419E-07	1.41E-05	8.90303E-06	9.97101E-05	1.00214E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	0.6586808	5	9.62	10.8417895	8.1647E-09	3.272E-07	8.544E-06	3.1475E-06	6.04138E-05	3.65973E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	146.72173	158.47483	5	3.5	6.10327781	0.00014977	0.0001046	0.0020556	0.000366142	0.014535206	0.000211406
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	2.1349353	2.3101343	5	12	13	1.4439E-07	1.576E-06	2.996E-05	1.89168E-05	0.000211884	4.52527E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	1.3130934	1.3996967	5	9.62	10.8417895	3.6869E-08	6.952E-07	1.816E-05	6.68771E-06	0.000128379	1.6526E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	291.04723	5	3.5	6.10327781	0.00050517	0.0002133	0.0037752	0.000746567	0.026694657	0.000713162
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	4.2724609	5	12	13	4.9389E-07	3.255E-06	5.542E-05	3.90567E-05	0.000391867	1.55085E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	2.4382541	5	9.62	10.8417895	1.1188E-07	1.238E-06	3.163E-05	1.19051E-05	0.000223635	5.01544E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	89.290092	97.015743	5	3.5	6.10327781	5.613E-05	7.11E-05	0.0012584	0.000248838	0.008898219	7.92402E-05
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	1.307646	1.4241536	5	12	13	5.4877E-08	1.085E-06	1.847E-05	1.30183E-05	0.000130622	1.72317E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	0.7617993	0.8127514	5	9.62	10.8417895	1.2431E-08	4.125E-07	1.054E-05	3.96834E-06	7.4545E-05	5.57271E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	193.05591	5	3.5	6.10327781	0.00022227	0.0003661	0.0025041	0.001281312	0.017706959	0.000315178
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	3.1498595	5	12	13	2.6845E-07	5.973E-06	4.086E-05	7.1675E-05	0.000288903	8.86022E-08

## Annex 22 (b) - Uncertainties for the period 1994 to 1995 – Level and Trend assessments - Base year- 1994, Year T-1995

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.2133776	5	9.62	10.8417895	8.5681E-10	4.046E-07	2.768E-06	3.89241E-06	1.95708E-05	3.98169E-10
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	0.9001483	5	3.5	6.10327781	4.8322E-09	4.263E-07	1.168E-05	1.49218E-06	8.2561E-05	6.81854E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0127504	5	12	13	4.3987E-12	6.042E-09	1.654E-07	7.25008E-08	1.16946E-06	1.37288E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0089073	5	9.62	10.8417895	1.4931E-12	4.221E-09	1.155E-07	4.06029E-08	8.16969E-07	6.69087E-13
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	36.270131	5	3.5	6.10327781	7.8453E-06	4.309E-06	0.0004705	1.50806E-05	0.003326672	1.1067E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.3396893	5	12	13	5.0956E-07	5.155E-07	5.629E-05	6.1864E-06	0.000398033	1.58469E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0426578	5	9.62	10.8417895	3.4244E-11	5.068E-09	5.533E-07	4.87497E-08	3.91254E-06	1.53104E-11
1.A.3.d.i - International water-borne navigation (International bun	CO <sub>2</sub>	139.69015	138.56048	10	3	10.4403065	0.00033504	6.02E-05	0.0017973	0.000180605	0.025417349	0.000646074
1.A.3.d.i - International water-borne navigation (International bun	N <sub>2</sub> O	1.1528879	1.1432544	10	90	90.5538514	1.7159E-06	5.009E-07	1.483E-05	4.50783E-05	0.000209717	4.60133E-08
1.A.3.d.i - International water-borne navigation (International bun	CH <sub>4</sub>	0.273346	0.2710619	10	50	50.9901951	3.0584E-08	1.188E-07	3.516E-06	5.93773E-06	4.97232E-05	2.50766E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	464.68499	20	297	297.672639	3.06325065	0.0001044	0.0060275	0.031018694	0.170482387	0.030026403
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	25.519031	20	75	77.6208735	0.00062816	5.672E-06	0.000331	0.000425432	0.009362354	8.78347E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	4.8703767	20	999	999.20018	0.00379156	1.067E-06	6.317E-05	0.00106571	0.001786831	4.3285E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	104.7541	5	7	8.60232527	0.00013001	1.018E-06	0.0013588	7.12389E-06	0.009607976	9.23133E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2757572	5	75	75.1664819	6.8784E-08	3.705E-08	3.577E-06	2.77912E-06	2.52923E-05	6.47422E-10
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2237139	5	297	297.042085	7.0698E-07	6.512E-08	2.902E-06	1.93412E-05	2.05189E-05	7.95106E-10
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	280.19615	50	1.5	50.0224949	0.03145158	0.0012236	0.0036344	0.001835352	0.256994033	0.066049301
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7954521	50	50	70.7106781	5.0651E-07	3.467E-06	1.032E-05	0.000173326	0.000729583	5.62334E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.7045433	50	90	102.956301	8.4238E-07	3.07E-06	9.139E-06	0.000276332	0.000646202	4.93937E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	17.853236	5	3.5	6.10327781	1.9008E-06	3.385E-05	0.0002316	0.000118482	0.001637487	2.6954E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.2912896	5	12	13	2.2957E-09	5.523E-07	3.778E-06	6.62785E-06	2.67169E-05	7.57721E-10
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0197325	5	9.62	10.8417895	7.3275E-12	3.742E-08	2.56E-07	3.59935E-07	1.80985E-06	3.40512E-12
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	4.54377	5	2	5.38516481	9.5856E-08	6.187E-06	5.894E-05	1.23746E-05	0.000416752	1.73835E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	0.5030667	15	50	52.2015325	1.1041E-07	1.64E-07	6.525E-06	8.20155E-06	0.000138423	1.92281E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00051216	5.767E-06	0.0002294	0.00057674	0.004866995	2.40203E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	1.0677E-06	9.414E-07	3.745E-05	1.88289E-05	0.001059293	1.12246E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2321.4925	20	20	28.2842712	0.69025884	0.000273	0.0301122	0.005460275	0.851702972	0.725427766
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	253.0184	20	30	36.0555128	0.01332401	0.0003755	0.0032819	0.011263949	0.092826712	0.008743675
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	169.68945	20	30	36.0555128	0.00599295	8.761E-05	0.0022011	0.002628341	0.062255211	0.00388262
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	21.880908	20	30	36.0555128	9.9646E-05	1.173E-05	0.0002838	0.000352009	0.008027609	6.45664E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	24.528	20	30	36.0555128	0.00012521	8.844E-05	0.0003182	0.002653158	0.008998767	8.80171E-05
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.419559	20	30	36.0555128	3.6637E-08	4.597E-07	5.442E-06	1.37896E-05	0.000153927	2.38836E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.6726E-08	1.37E-07	5.449E-06	4.10906E-06	0.000154114	2.3768E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	2.0652E-10	1.027E-08	4.086E-07	3.08129E-07	1.15566E-05	1.33651E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	84.541112	20	30	36.0555128	0.00148753	0.0002036	0.0010966	0.006107257	0.031016217	0.000999304
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	42.658413	20	30	36.0555128	0.00037874	1.515E-05	0.0005533	0.000454434	0.015650404	0.000245142
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	10.120736	20	30	36.0555128	2.1318E-05	2.156E-05	0.0001313	0.00064667	0.003713068	1.42051E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	7.4663358	20	30	36.0555128	1.1602E-05	1.903E-05	9.685E-05	0.000570955	0.002739229	7.82937E-06

## Annex 22 (b) - Uncertainties for the period 1994 to 1995 – Level and Trend assessments - Base year- 1994, Year T-1995

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.6621771	20	30	36.0555128	1.475E-06	7.603E-06	3.453E-05	0.000228095	0.000976692	1.00596E-06
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	2.94336	20	30	36.0555128	1.8031E-06	1.585E-06	3.818E-05	4.75557E-05	0.001079852	1.16834E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.419559	20	30	36.0555128	3.6637E-08	4.597E-07	5.442E-06	1.37896E-05	0.000153927	2.38836E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.3068295	20	30	36.0555128	1.9594E-08	1.386E-06	3.98E-06	4.15813E-05	0.000112569	1.44007E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.127818	20	30	36.0555128	3.4003E-09	3.712E-08	1.658E-06	1.11365E-06	4.68935E-05	2.20024E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-96846.597	20	10	22.3606798	750.803247	0.0074542	1.2562042	0.07454184	35.53082043	1262.444757
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.00501273	8.159E-05	0.0032459	0.000815914	0.091807772	0.008429333
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6171	20	10	22.3606798	0.15016052	0.0004465	0.0177654	0.004465007	0.502481466	0.25250756
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8671.9453	20	10	22.3606798	6.01991657	0.0028308	0.1124844	0.028307755	3.181540095	10.1229987
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	55.452788	20	10	22.3606798	0.00024615	1.808E-05	0.0007193	0.000180812	0.02034437	0.000413926
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.8627261	10	10	14.1421356	1.9795E-06	2.564E-06	0.000102	2.56374E-05	0.001442328	2.08097E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2773.9495	20	20	28.2842712	0.98554056	0.0030174	0.0359811	0.060348264	1.017699182	1.039353539
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	1204.3758	20	10	22.3606798	0.11611317	0.0013098	0.015622	0.013097993	0.441858188	0.195410216
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	15.011892	20	10	22.3606798	1.804E-05	2.343E-05	0.0001947	0.000234318	0.005507523	3.03877E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	11.137855	20	20	28.2842712	1.5888E-05	1.738E-05	0.0001445	0.000347697	0.004086226	1.68181E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.3390073	10	20	22.3606798	9.1997E-09	1.105E-07	4.397E-06	2.21075E-06	6.2187E-05	3.87212E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1418.7386	20	20	28.2842712	0.25779955	0.0003262	0.0184026	0.006523638	0.520503019	0.270965951
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	1.1259054	20	20	28.2842712	1.6236E-07	3.671E-07	1.46E-05	7.3423E-06	0.000413069	1.7068E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	77.240209	20	20	28.2842712	0.00076412	0.0001828	0.0010019	0.003655716	0.028337681	0.000816388
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	10.609447	30	60	67.0820393	8.1093E-05	2.557E-05	0.0001376	0.001534344	0.005838548	3.64429E-05
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	8.7715153	40	100	107.703296	0.00014289	1.511E-06	0.0001138	0.000151056	0.00643614	4.14467E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	1.7032162	40	100	107.703296	5.3875E-06	2.933E-07	2.209E-05	2.93314E-05	0.001249743	1.56272E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	0.9970713	40	100	107.703296	1.8463E-06	1.717E-07	1.293E-05	1.71708E-05	0.000731606	5.35542E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	21.831137	20	0	20	3.0521E-05	1.048E-05	0.0002832	0	0.008009349	6.41497E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	5.7011446	20	30	36.0555128	6.7648E-06	5.411E-06	7.395E-05	0.000162345	0.002091621	4.40123E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	24.549711	25	30	39.0512484	0.00014715	5.719E-05	0.0003184	0.001715652	0.011258415	0.000129695
Total												
		Sum(C) : -77094.629	-79032.605				Sum(H) : 762.152					Sum(M) : 1275.174
							Uncertainty in total inventory : 27.607					Trend uncertainty : 35.710

**Annex 22 (c) - Uncertainties for the period 1994 to 1996 – Level and Trend assessments - Base year- 1994, Year T-1996**  
(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635409	3	7	7.61577311	3.8762E-09	4.547E-07	8.607E-06	3.18317E-06	3.65157E-05	1.34353E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0015946	3	297	297.015151	3.4047E-11	1.093E-09	2.068E-08	3.2456E-07	8.77509E-08	1.13039E-13
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0005401	3	75	75.059976	2.4946E-13	3.701E-10	7.006E-09	2.77599E-08	2.97221E-08	1.65401E-15
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	34.518537	3	75	75.059976	0.00101898	3.899E-05	0.0004477	0.002924461	0.00189961	1.2161E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.1696736	3	297	297.015151	3.855E-07	1.917E-07	2.201E-06	5.69248E-05	9.33741E-06	3.32762E-09
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0076627	3	200	200.022499	3.5658E-10	8.656E-09	9.939E-08	1.73118E-06	4.21689E-07	3.17479E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	38.427542	7	7	9.89949494	2.1966E-05	2.917E-05	0.0004984	0.000204225	0.004934368	2.43897E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.0975131	7	297	297.08248	1.2739E-07	7.255E-08	1.265E-06	2.15469E-05	1.25214E-05	6.21055E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0330286	7	75	75.3259583	9.3954E-10	2.457E-08	4.284E-07	1.84297E-06	4.24111E-06	2.13836E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	1.2587076	5	20.4749092	21.0765724	1.0683E-07	8.624E-07	1.633E-05	1.76571E-05	0.000115448	1.364E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.0212933	5	108.333333	108.448657	8.0943E-10	1.459E-08	2.762E-07	1.58044E-06	1.95301E-06	6.31201E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.0108184	5	233.333333	233.386899	9.6765E-10	7.412E-09	1.403E-07	1.72946E-06	9.92253E-07	3.9756E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	75.126962	5	12.4600548	13.425832	0.00015443	3.047E-05	0.0009745	0.000379706	0.006890595	4.76245E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3692816	5	222.222222	222.278465	1.0227E-06	1.498E-07	4.79E-06	3.32869E-05	3.38703E-05	2.25521E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1667723	5	200	200.06249	1.6898E-07	6.765E-08	2.163E-06	1.35295E-05	1.52962E-05	4.17023E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.3952395	17.5	7	18.8480768	1.0497E-07	3.944E-07	1.81E-05	2.7608E-06	0.000447897	2.00619E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0036004	17.5	297	297.515126	1.7417E-10	9.806E-10	4.67E-08	2.91226E-07	1.1558E-06	1.42069E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0012195	17.5	75	77.014609	1.3389E-12	3.321E-10	1.582E-08	2.49094E-08	3.91482E-07	1.53879E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	77.564649	4	5	6.40312424	3.7442E-05	1.287E-05	0.0010061	6.43662E-05	0.005691342	3.23955E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.6725886	4	110	110.072703	8.3196E-07	1.116E-07	8.724E-06	1.2279E-05	4.93515E-05	2.58634E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0113906	4	79	79.101201	1.2323E-10	1.89E-09	1.477E-07	1.49347E-07	8.35792E-07	7.20852E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	17.442117	4	5	6.40312424	1.8933E-06	2.511E-06	0.0002262	1.25536E-05	0.001279823	1.63811E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1528541	4	110	110.072703	4.2969E-08	2.227E-08	1.983E-06	2.44941E-06	1.12157E-05	1.31792E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0025887	4	79	79.101201	6.3644E-12	3.771E-10	3.358E-08	2.97919E-08	1.89944E-07	3.69663E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalyts - Liquid Fuels	CO <sub>2</sub>	69.045102	80.107352	5	3.06826084	5.86636383	3.3522E-05	9.619E-05	0.0010391	0.000295122	0.007347393	5.40713E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalyts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.1695699	5	209.937584	209.997117	9.1564E-06	1.451E-06	1.517E-05	0.000304538	0.000107272	1.04251E-07
1.A.3.b.i.1 - Passenger cars with 3-way catalyts - Liquid Fuels	CH <sub>4</sub>	0.6179237	0.6994363	5	244.692758	244.743837	4.448E-06	6.339E-07	9.072E-06	0.000155123	6.41518E-05	2.81785E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalyts - Liquid Fue	CO <sub>2</sub>	146.72173	170.22812	5	3.5	6.10327781	0.00016384	0.0002044	0.002208	0.000715343	0.015613209	0.000244284
1.A.3.b.i.2 - Passenger cars without 3-way catalyts - Liquid Fue	N <sub>2</sub> O	2.1349353	2.4853359	5	12	13	1.5845E-07	3.082E-06	3.224E-05	3.69884E-05	0.000227953	5.33309E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalyts - Liquid Fue	CH <sub>4</sub>	1.3130934	1.4863022	5	9.62	10.8417895	3.9415E-08	1.347E-06	1.928E-05	1.29588E-05	0.000136323	1.87518E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalyts - Liquid Fuels	CO <sub>2</sub>	267.86954	314.22518	5	3.5	6.10327781	0.00055828	0.0004178	0.0040758	0.001462201	0.028820524	0.000832761
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalyts - Liquid Fuels	N <sub>2</sub> O	3.922926	4.6219999	5	12	13	5.4801E-07	6.38E-06	5.995E-05	7.65604E-05	0.000423927	1.85575E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalyts - Liquid Fuels	CH <sub>4</sub>	2.2853972	2.5911125	5	9.62	10.8417895	1.1979E-07	2.4E-06	3.361E-05	2.30848E-05	0.000237655	5.70129E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalyts - Liquid F	CO <sub>2</sub>	89.290092	104.74173	5	3.5	6.10327781	6.2031E-05	0.0001393	0.0013586	0.000487377	0.009606841	9.25289E-05
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalyts - Liquid F	N <sub>2</sub> O	1.307646	1.5406666	5	12	13	6.089E-08	2.127E-06	1.998E-05	2.55194E-05	0.000141309	2.06195E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalyts - Liquid F	CH <sub>4</sub>	0.7617993	0.8637042	5	9.62	10.8417895	1.331E-08	7.999E-07	1.12E-05	7.69488E-06	7.92184E-05	6.33476E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	225.32108	5	3.5	6.10327781	0.00028706	0.0007269	0.0029227	0.002544065	0.020666298	0.000433568
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	3.6762912	5	12	13	3.467E-07	1.186E-05	4.769E-05	0.000142312	0.000337187	1.33948E-07

## Annex 22 (c) - Uncertainties for the period 1994 to 1996 – Level and Trend assessments - Base year- 1994, Year T-1996

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.2490391	5	9.62	10.8417895	1.1066E-09	8.034E-07	3.23E-06	7.72844E-06	2.28417E-05	5.81472E-10
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	0.9542621	5	3.5	6.10327781	5.1488E-09	8.245E-07	1.238E-05	2.88566E-06	8.75243E-05	7.66883E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0135169	5	12	13	4.6869E-12	1.168E-08	1.753E-07	1.40176E-07	1.23976E-06	1.55665E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0094427	5	9.62	10.8417895	1.5909E-12	8.16E-09	1.225E-07	7.85034E-08	8.66082E-07	7.56261E-13
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	37.481467	5	3.5	6.10327781	7.9433E-06	7.433E-06	0.0004862	2.60167E-05	0.003437775	1.1819E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.4846246	5	12	13	5.1592E-07	8.894E-07	5.817E-05	1.06727E-05	0.000411327	1.69304E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0440825	5	9.62	10.8417895	3.4672E-11	8.742E-09	5.718E-07	8.41021E-08	4.04321E-06	1.63546E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	137.43843	10	3	10.4403065	0.00031253	0.0001249	0.0017827	0.000374746	0.025211521	0.000635761
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.1336838	10	90	90.5538514	1.5997E-06	1.039E-06	1.471E-05	9.35077E-05	0.000207961	5.19917E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2687928	10	50	50.9901951	2.8514E-08	2.463E-07	3.487E-06	1.23169E-05	4.9307E-05	2.58288E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	468.2466	20	297	297.672639	2.94897283	0.0002238	0.0060737	0.066477857	0.171789058	0.033930786
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	25.719371	20	75	77.6208735	0.00060495	1.217E-05	0.0003336	0.000912401	0.009435854	8.98678E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	4.9098088	20	999	999.20018	0.00365324	2.29E-06	6.369E-05	0.00287729	0.001801297	8.47838E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	104.41156	5	7	8.60232527	0.00012245	4.009E-05	0.0013543	0.000280629	0.009576559	9.17892E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2747567	5	75	75.1664819	6.4742E-08	1.476E-07	3.564E-06	1.10715E-05	2.52005E-05	7.57644E-10
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2228278	5	297	297.042085	6.6499E-07	1.567E-07	2.89E-06	4.65497E-05	2.04376E-05	2.58457E-09
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	280.71805	5	6.1361583	7.91532935	0.00074941	0.001348	0.0036412	0.00827145	0.025747271	0.000731339
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7970336	5	200	200.06249	3.8595E-06	3.818E-06	1.034E-05	0.000763648	7.31034E-05	5.88502E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.7059441	5	236.363636	236.416515	4.228E-06	3.382E-06	9.157E-06	0.000799351	6.47487E-05	6.43154E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	20.837023	5	3.5	6.10327781	2.4549E-06	6.722E-05	0.0002703	0.000235255	0.001911158	3.70787E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.3399725	5	12	13	2.965E-09	1.097E-06	4.41E-06	1.31601E-05	3.1182E-05	1.14551E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0230304	5	9.62	10.8417895	9.4634E-12	7.429E-08	2.987E-07	7.14679E-07	2.11233E-06	4.97271E-12
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	5.12127	5	2	5.38516481	1.1545E-07	1.225E-05	6.643E-05	2.45073E-05	0.000469719	2.21237E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	0.5030667	15	50	52.2015325	1.0468E-07	3.447E-07	6.525E-06	1.72333E-05	0.000138423	1.94579E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00048558	1.212E-05	0.0002294	0.001211859	0.004866995	2.51562E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	1.0123E-06	1.978E-06	3.745E-05	3.95638E-05	0.001059293	1.12367E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2215.2713	20	20	28.2842712	0.59591939	0.0019112	0.0287344	0.038223736	0.812732816	0.661995684
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	230.83578	20	30	36.0555128	0.01051461	0.000762	0.0029942	0.022859171	0.084688413	0.007694669
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	187.54575	20	30	36.0555128	0.00694067	8.221E-05	0.0024327	0.002466186	0.068806283	0.004740387
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	21.541464	20	30	36.0555128	9.1567E-05	2.412E-05	0.0002794	0.000723526	0.007903075	6.29821E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	28.707	20	30	36.0555128	0.00016262	4.521E-05	0.0003724	0.001356351	0.010531947	0.000112762
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.397383	20	30	36.0555128	3.1161E-08	3.746E-08	5.154E-06	1.12392E-06	0.000145791	2.12562E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.482E-08	2.878E-07	5.449E-06	8.63405E-06	0.000154114	2.38256E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.958E-10	2.158E-08	4.086E-07	6.47447E-07	1.15566E-05	1.33975E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	92.134244	20	30	36.0555128	0.00167506	0.0001402	0.0011951	0.004205763	0.033801965	0.001160261
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	41.788908	20	30	36.0555128	0.0003446	4.178E-05	0.000542	0.001253311	0.015331403	0.000236623
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.2334312	20	30	36.0555128	1.6823E-05	7.084E-06	0.0001198	0.000212506	0.003387537	1.15206E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.252013	20	30	36.0555128	1.3437E-05	2.712E-05	0.000107	0.00081365	0.003027476	9.82764E-06



## Annex 22 (c) - Uncertainties for the period 1994 to 1996 – Level and Trend assessments - Base year- 1994, Year T-1996

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.6208781	20	30	36.0555128	1.3554E-06	6.34E-06	3.4E-05	0.00019021	0.000961541	9.60741E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.44484	20	30	36.0555128	2.3417E-06	7.102E-06	4.468E-05	0.000213053	0.001263834	1.64267E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.397383	20	30	36.0555128	3.1161E-08	3.746E-08	5.154E-06	1.12392E-06	0.000145791	2.12562E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.2886395	20	30	36.0555128	1.644E-08	1.08E-06	3.744E-06	3.24017E-05	0.000105895	1.22637E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.1202405	20	30	36.0555128	2.8529E-09	1.049E-07	1.56E-06	3.14803E-06	4.41135E-05	1.95591E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-98671.245	20	10	22.3606798	738.915701	0.0177847	1.2798718	0.177847025	36.20024223	1310.489167
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.0047526	0.0001714	0.0032459	0.001714419	0.091807772	0.008431606
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6171	20	10	22.3606798	0.14236789	0.0009382	0.0177654	0.009381981	0.502481466	0.252575645
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8671.9453	20	10	22.3606798	5.70751082	0.0059481	0.1124844	0.05948094	3.181540095	10.12573536
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	55.452788	20	10	22.3606798	0.00023338	3.799E-05	0.0007193	0.000379926	0.02034437	0.000414038
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.8627261	10	10	14.1421356	1.8768E-06	5.387E-06	0.000102	5.38699E-05	0.001442328	2.08321E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2613.6662	20	20	28.2842712	0.82953343	0.0061507	0.0339021	0.123014247	0.958894844	0.934611827
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	1134.785	20	10	22.3606798	0.09773292	0.0026699	0.0147194	0.026699024	0.416326893	0.17404092
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	13.672586	20	10	22.3606798	1.4188E-05	4.669E-05	0.0001773	0.000466949	0.005016162	2.53799E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	10.144177	20	20	28.2842712	1.2496E-05	3.464E-05	0.0001316	0.000692892	0.003721668	1.43309E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.3390073	10	20	22.3606798	8.7223E-09	2.323E-07	4.397E-06	4.64528E-06	6.2187E-05	3.88881E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1337.7682	20	20	28.2842712	0.21731785	0.0012125	0.0173523	0.024249735	0.490796819	0.241469567
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	1.1259054	20	20	28.2842712	1.5394E-07	7.714E-07	1.46E-05	1.54278E-05	0.000413069	1.70864E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	84.022616	20	20	28.2842712	0.00085729	0.0001268	0.0010899	0.002536004	0.030825993	0.000956673
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	12.837445	30	60	67.0820393	0.00011257	5.145E-05	0.0001665	0.003086784	0.007064651	5.94375E-05
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	9.1122598	40	100	107.703296	0.0001462	2.899E-06	0.0001182	0.000289884	0.006686163	4.47888E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	1.7693806	40	100	107.703296	5.5124E-06	5.629E-07	2.295E-05	5.62884E-05	0.001298291	1.68873E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.0358043	40	100	107.703296	1.8891E-06	3.295E-07	1.344E-05	3.29515E-05	0.000760026	5.78726E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	22.026842	25	0	25	4.6029E-05	1.588E-05	0.0002857	0	0.010101436	0.000102039
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	5.976169	25	30	39.0512484	8.2672E-06	7.128E-06	7.752E-05	0.000213843	0.002740651	7.5569E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	20.109179	0	0	0	0	0.0001249	0.0002608	0	0	0
<b>Total</b>												
		Sum(C) : -77094.629	-81166.751				Sum(H) : 749.489					Sum(M) : 1322.941
							Uncertainty in total inventory : 27.377					Trend uncertainty : 36.372

## Annex 22 (d) - Uncertainties for the period 1994 to 1997 – Level and Trend assessments - Base year- 1994, Year T-1997

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635409	3	7	7.61577311	3.70682E-09	6.595E-07	8.607E-06	4.61628E-06	3.65157E-05	1.35471E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0015946	3	297	297.015151	3.25593E-11	1.585E-09	2.068E-08	4.7068E-07	8.77509E-08	2.2924E-13
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0005401	3	75	75.059976	2.38555E-13	5.368E-10	7.006E-09	4.02579E-08	2.97221E-08	2.5041E-15
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	36.813997	3	7	7.61577311	1.14102E-05	5.953E-05	0.0004775	0.000416727	0.002025933	4.27807E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.1809567	3	297	297.015151	4.19319E-07	2.926E-07	2.347E-06	8.69102E-05	9.95834E-06	7.65255E-09
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0081722	3	75	75.059976	5.46181E-11	1.322E-08	1.06E-07	9.91156E-07	4.49731E-07	1.18465E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	40.461389	7	7	9.89949494	2.32887E-05	4.495E-05	0.0005248	0.000314677	0.005195528	2.70925E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1026183	7	297	297.08248	1.34909E-07	1.118E-07	1.331E-06	3.32137E-05	1.31769E-05	1.27678E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0347578	7	75	75.3259583	9.95021E-10	3.788E-08	4.508E-07	2.84086E-06	4.46315E-06	2.79902E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	1.2587076	7	7	9.89949494	2.25379E-08	1.251E-06	1.633E-05	8.75515E-06	0.000161627	2.61999E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.0212933	7	297	297.08248	5.80868E-09	2.116E-08	2.762E-07	6.28405E-06	2.73421E-06	4.69652E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.0108184	7	75	75.3259583	9.6394E-11	1.075E-08	1.403E-07	8.06238E-07	1.38915E-06	2.57977E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	75.897509	7	7	9.89949494	8.19443E-05	4.318E-05	0.0009845	0.00030229	0.009745776	9.50715E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3730691	7	297	297.08248	1.78308E-06	2.123E-07	4.839E-06	6.30434E-05	4.79047E-05	6.26933E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1684828	7	75	75.3259583	2.33797E-08	9.586E-08	2.185E-06	7.1897E-06	2.16344E-05	5.19738E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.4448387	13	7	14.7648231	6.60592E-08	6.378E-07	1.874E-05	4.46445E-06	0.000344551	1.18735E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0037273	13	500	500.168971	5.04503E-10	1.593E-09	4.835E-08	7.96661E-07	8.88854E-07	1.42473E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0012625	13	100	100.84146	2.35268E-12	5.397E-10	1.638E-08	5.39672E-08	3.01063E-07	9.35516E-14
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	79.981591	4	5	6.40312424	3.80717E-05	2.178E-05	0.0010374	0.000108918	0.005868686	3.44533E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.6935467	4	110	110.072703	8.45957E-07	1.889E-07	8.996E-06	2.0778E-05	5.08893E-06	3.02145E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0117455	4	79	79.101201	1.253E-10	3.199E-09	1.524E-07	2.52716E-07	8.61835E-07	8.06625E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	17.788519	4	5	6.40312424	1.88322E-06	3.186E-06	0.0002307	1.59289E-05	0.001305241	1.70391E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1558803	4	110	110.072703	4.27346E-08	2.831E-08	2.022E-06	3.11439E-06	1.14378E-05	1.40522E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0026399	4	79	79.101201	6.32968E-12	4.795E-10	3.424E-08	3.78795E-08	1.93704E-07	3.89563E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	85.638311	5	3.5	6.10327781	3.96552E-05	0.0001466	0.0011108	0.000513188	0.007854689	6.19595E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	1.2520177	5	12	13	3.84544E-08	2.21E-06	1.624E-05	2.65208E-05	0.000114834	1.38903E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	0.7401918	5	9.62	10.8417895	9.34821E-09	9.719E-07	9.601E-06	9.35006E-06	6.78899E-05	4.69646E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	181.98141	5	3.5	6.10327781	0.000179068	0.0003116	0.0023605	0.001090492	0.016691213	0.000279786
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	2.6605376	5	12	13	1.73645E-07	4.696E-06	3.451E-05	5.63546E-05	0.000244023	6.27229E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	1.5729076	5	9.62	10.8417895	4.2213E-08	2.065E-06	2.04E-05	1.98681E-05	0.000144266	2.12074E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	337.40314	5	3.5	6.10327781	0.000615549	0.0006358	0.0043765	0.002225211	0.03094639	0.000962631
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	4.9715388	5	12	13	6.06326E-07	9.704E-06	6.449E-05	0.000116443	0.000455986	2.21482E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	2.7439709	5	9.62	10.8417895	1.28469E-07	3.677E-06	3.559E-05	3.53753E-05	0.000251675	6.45918E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	112.46771	5	3.5	6.10327781	6.83943E-05	0.0002119	0.0014588	0.000741708	0.010315463	0.000106959
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	1.6571796	5	12	13	6.73696E-08	3.234E-06	2.15E-05	3.88135E-05	0.000151995	2.46091E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	0.914657	5	9.62	10.8417895	1.42743E-08	1.226E-06	1.186E-05	1.17917E-05	8.38917E-05	7.17687E-09

**Annex 22 (d) - Uncertainties for the period 1994 to 1997 – Level and Trend assessments - Base year- 1994, Year T-1997**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	257.58625	5	3.5	6.10327781	0.000358765	0.0010958	0.0033412	0.003835256	0.023625638	0.00057288
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	4.202723	5	12	13	4.33297E-07	1.788E-05	5.451E-06	0.000214539	0.000385471	1.94615E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.2847006	5	9.62	10.8417895	1.38298E-09	1.211E-06	3.693E-06	1.16509E-05	2.61125E-05	8.17608E-10
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.0083754	5	3.5	6.10327781	5.49805E-09	1.265E-06	1.308E-05	4.42874E-06	9.24875E-05	8.57355E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0142834	5	12	13	5.00481E-12	1.793E-08	1.853E-07	2.15117E-07	1.31006E-06	1.76254E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0099782	5	9.62	10.8417895	1.69881E-12	1.252E-08	1.294E-07	1.20473E-07	9.15195E-07	8.52096E-13
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	38.692802	5	3.5	6.10327781	8.09514E-06	1.233E-05	0.0005019	4.31529E-05	0.003548878	1.25964E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.6295598	5	12	13	5.2578E-07	1.475E-06	6.005E-05	1.77023E-05	0.00042462	1.80616E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0455071	5	9.62	10.8417895	3.53345E-11	1.45E-08	5.903E-07	1.39497E-07	4.17388E-06	1.74408E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	136.32136	10	3	10.4403065	0.00029403	0.0001825	0.0017682	0.000547517	0.025006607	0.00062563
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.1241533	10	90	90.5538514	1.50419E-06	1.518E-06	1.458E-05	0.000136647	0.000206213	6.11964E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2665331	10	50	50.9901951	2.6811E-08	3.6E-07	3.457E-06	1.79993E-05	4.88925E-05	2.71445E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	471.82956	20	297	297.672639	2.863426246	0.0003196	0.0061201	0.09493374	0.173103567	0.03897726
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	25.920913	20	75	77.6208735	0.000587619	1.736E-05	0.0003362	0.001302246	0.009509795	9.2132E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	4.9494773	20	999	999.20018	0.003550271	3.266E-06	6.42E-05	0.003262808	0.001815851	1.39432E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	107.05365	5	7	8.60232527	0.000123104	3.732E-05	0.0013886	0.000261265	0.009818889	9.64788E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2787228	5	75	75.1664819	6.37135E-08	1.8E-07	3.615E-06	1.35023E-05	2.55643E-05	8.35845E-10
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2234079	5	297	297.042085	6.39251E-07	2.181E-07	2.898E-06	6.47609E-05	2.04908E-05	4.61385E-09
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	237.25067	20	3	20.2237484	0.003341766	0.0020246	0.0030774	0.006073669	0.08704189	0.00761318
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.6739492	20	50	53.8516481	1.91201E-07	5.735E-06	8.742E-06	0.000286731	0.000247257	1.43351E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.5969264	20	90	92.1954446	4.39641E-07	5.079E-06	7.743E-06	0.000457131	0.000218999	2.56929E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	23.82081	5	3.5	6.10327781	3.06815E-06	0.0001013	0.000309	0.000354658	0.002184829	4.89926E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.3886553	5	12	13	3.70556E-09	1.653E-06	5.041E-06	1.98395E-05	3.56472E-05	1.66433E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0263283	5	9.62	10.8417895	1.18273E-11	1.12E-07	3.415E-07	1.07741E-06	2.41481E-06	6.99213E-12
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	5.69877	5	2	5.38516481	1.36709E-07	1.852E-05	7.392E-05	3.7041E-05	0.000522687	2.74574E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	0.5030667	15	50	52.2015325	1.00105E-07	4.999E-07	6.525E-06	2.4994E-05	0.000138423	1.97856E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.000464364	1.758E-05	0.0002294	0.001757602	0.004866995	2.67768E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	9.68095E-07	2.869E-06	3.745E-05	5.73807E-05	0.001059293	1.12539E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2298.9883	20	20	28.2842712	0.61376395	0.0015175	0.0298203	0.030350878	0.843446674	0.712323468
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	255.07944	20	30	36.0555128	0.012278127	0.0005324	0.0033087	0.01597083	0.093582862	0.00901282
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	191.20595	20	30	36.0555128	0.006898966	7.658E-05	0.0024801	0.002297345	0.070149125	0.004926178
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	21.583422	20	30	36.0555128	8.79067E-05	3.043E-05	0.00028	0.000912933	0.007918468	6.35356E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	30.786	20	30	36.0555128	0.00017885	2.768E-05	0.0003993	0.000830372	0.011294685	0.000128259
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.354564	20	30	36.0555128	2.3723E-08	6.336E-07	4.599E-06	1.90066E-05	0.000130081	1.72824E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	3.32984E-08	4.174E-07	5.449E-06	1.25223E-05	0.000154114	2.39079E-08

**Annex 22 (d) - Uncertainties for the period 1994 to 1997 – Level and Trend assessments - Base year- 1994, Year T-1997**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.87242E-10	3.13E-08	4.086E-07	9.39015E-07	1.15566E-05	1.34438E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	93.451503	20	30	36.0555128	0.001647987	0.0001533	0.0012122	0.004598222	0.034285237	0.001196621
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	43.163736	20	30	36.0555128	0.000351576	3.713E-05	0.0005599	0.001114034	0.015835796	0.000252014
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	10.203178	20	30	36.0555128	1.9645E-05	1.712E-05	0.0001323	0.000513489	0.003743314	1.42761E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.4130616	20	30	36.0555128	1.33564E-05	2.741E-05	0.0001091	0.000822152	0.003086562	1.02028E-05
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.625983	20	30	36.0555128	1.30126E-06	5.782E-06	3.406E-05	0.000173452	0.000963414	9.58251E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.69432	20	30	36.0555128	2.57543E-06	9.489E-06	4.792E-05	0.000284662	0.001355362	1.91804E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.354564	20	30	36.0555128	2.3723E-08	6.336E-07	4.599E-06	1.90066E-05	0.000130081	1.72824E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.3292493	20	30	36.0555128	2.04565E-08	1.547E-06	4.271E-06	4.63987E-05	0.000120794	1.67441E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.1371576	20	30	36.0555128	3.54994E-09	7.689E-08	1.779E-06	2.30671E-06	5.032E-05	2.53743E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-100513.17	20	10	22.3606798	733.2528813	0.02315	1.3037635	0.231500457	36.87600136	1359.893068
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.004544907	0.0002486	0.0032459	0.002486481	0.091807772	0.00843485
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6171	20	10	22.3606798	0.136146421	0.0013607	0.0177654	0.013607011	0.502481466	0.252672774
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8671.9453	20	10	22.3606798	5.458093048	0.0086267	0.1124844	0.086267266	3.181540095	10.12963942
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	55.452788	20	10	22.3606798	0.00022318	5.51E-05	0.0007193	0.00055102	0.02034437	0.000414197
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.8627261	10	10	14.1421356	1.79479E-06	7.813E-06	0.000102	7.81294E-05	0.001442328	2.08641E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	2451.9168	20	20	28.2842712	0.698134866	0.0091548	0.031804	0.183095695	0.899552688	0.842719072
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	1064.5577	20	10	22.3606798	0.08225197	0.0039739	0.0138085	0.039739108	0.390562091	0.154117944
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	12.387944	20	10	22.3606798	1.1138E-05	6.842E-05	0.0001607	0.0006842	0.004544856	2.11238E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	9.1910554	20	20	28.2842712	9.80977E-06	5.076E-05	0.0001192	0.001015264	0.00337199	1.24011E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.3390073	10	20	22.3606798	8.34115E-09	3.369E-07	4.397E-06	6.73721E-06	6.2187E-05	3.91262E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1401.6084	20	20	28.2842712	0.228129388	0.0008038	0.0181804	0.016075439	0.514218337	0.264678918
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	1.1259054	20	20	28.2842712	1.47208E-07	1.119E-06	1.46E-05	2.23755E-05	0.000413069	1.71127E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	85.254003	20	20	28.2842712	0.000844029	0.0001383	0.0011058	0.002766324	0.03127776	0.000985951
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	15.115017	30	60	67.0820393	0.000149234	7.839E-05	0.0001961	0.004703352	0.008318035	9.13112E-05
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	9.4657476	40	100	107.703296	0.000150871	4.879E-06	0.0001228	0.000487903	0.006945536	4.84785E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	1.8380193	40	100	107.703296	5.68848E-06	9.474E-07	2.384E-05	9.47389E-05	0.001348655	1.82785E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.0759857	40	100	107.703296	1.94944E-06	5.546E-07	1.396E-05	5.54606E-05	0.00078951	6.26401E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	22.221247	20	0	20	2.86705E-05	2.017E-05	0.0002882	0	0.008152471	6.64628E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	6.2612441	20	30	36.0555128	7.3978E-06	9.236E-06	8.122E-05	0.000277065	0.002297108	5.35347E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	19.678013	25	30	39.0512484	8.57176E-05	0.0001392	0.0002552	0.004177161	0.009024271	9.88861E-05
Total		Sum(C) : -77094.629	-83000.568				Sum(H): 743.370					Sum(M): 1372.325

**Annex 22 (d) - Uncertainties for the period 1994 to 1997 – Level and Trend assessments - Base year- 1994, Year T-1997**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
							Uncertainty in total inventory: 27.265					Trend uncertainty: 37.045

**Annex 22 (e) - Uncertainties for the period 1994 to 1998 – Level and Trend assessments - Base year- 1994, Year T-1998**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635409	3	7	7.61577311	3.551E-09	8.606E-07	8.607E-06	6.02421E-06	3.65157E-05	1.36969E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0015946	3	297	297.015151	3.1191E-11	2.068E-09	2.068E-08	6.14234E-07	8.77509E-08	3.84983E-13
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0005401	3	75	75.059976	2.2853E-13	7.005E-10	7.006E-09	5.25365E-08	2.97221E-08	3.64349E-15
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	39.109456	3	7	7.61577311	1.2336E-05	8.023E-05	0.0005073	0.000561641	0.002152256	4.94765E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.1922399	3	297	297.015151	4.5335E-07	3.944E-07	2.494E-06	0.000117132	1.05793E-05	1.38319E-08
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0086818	3	75	75.059976	5.905E-11	1.781E-08	1.126E-07	1.33582E-06	4.77774E-07	2.01269E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	42.083044	7	7	9.89949494	2.4134E-05	5.557E-05	0.0005459	0.000389007	0.00540376	2.93519E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1069446	7	297	297.08248	1.4036E-07	1.415E-07	1.387E-06	4.20203E-05	1.37324E-05	1.95429E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0362232	7	75	75.3259583	1.0353E-09	4.792E-08	4.699E-07	3.59411E-06	4.65131E-06	3.45524E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	1.2587076	7	7	9.89949494	2.159E-08	1.632E-06	1.633E-05	1.14259E-05	0.000161627	2.62538E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.0212933	7	297	297.08248	5.5645E-09	2.761E-08	2.762E-07	8.201E-06	2.73421E-06	7.47323E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.0108184	7	75	75.3259583	9.2342E-11	1.403E-08	1.403E-07	1.05218E-06	1.38915E-06	3.03683E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	76.668056	7	7	9.89949494	8.0102E-05	5.55E-05	0.0009945	0.000388471	0.00984472	9.70694E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3768567	7	297	297.08248	1.743E-06	2.728E-07	4.888E-06	8.10166E-05	4.83911E-05	8.90539E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1701934	7	75	75.3259583	2.2854E-08	1.232E-07	2.208E-06	9.23943E-06	2.1854E-05	5.62966E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.4944378	17.5	7	18.8480768	1.1033E-07	8.882E-07	1.938E-05	6.21728E-06	0.000479741	0.000479741
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0038542	17.5	297	297.515126	1.8284E-10	2.224E-09	4.999E-08	6.60596E-07	1.23726E-06	1.96721E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0013055	17.5	75	77.014609	1.4056E-12	7.534E-10	1.693E-08	5.65023E-08	4.19073E-07	1.78815E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	82.398532	4	5	6.40312424	3.8709E-05	3.109E-05	0.0010688	0.00015544	0.006046031	3.65786E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.7145048	4	110	110.072703	8.6011E-07	2.696E-07	9.268E-06	2.96529E-05	5.24271E-05	3.6279E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0121005	4	79	79.101201	1.274E-10	4.565E-09	1.57E-07	3.60661E-07	8.87879E-07	9.18405E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	18.134922	4	5	6.40312424	1.875E-06	3.77E-06	0.0002352	1.88503E-05	0.001330658	1.77101E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1589065	4	110	110.072703	4.2543E-08	3.356E-08	2.061E-06	3.69184E-06	1.16598E-05	1.49582E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0026912	4	79	79.101201	6.3013E-12	5.684E-10	3.491E-08	4.49027E-08	1.97465E-07	4.10087E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	91.16927	5	3.5	6.10327781	4.3054E-05	0.0001974	0.0011826	0.000691038	0.008361984	7.04003E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.3344655	5	12	13	4.1849E-08	2.975E-06	1.731E-05	3.56997E-05	0.000122396	1.62553E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	0.7809473	5	9.62	10.8417895	9.9685E-09	1.313E-06	1.013E-05	1.26337E-05	7.1628E-05	5.29018E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	CO <sub>2</sub>	146.72173	193.7347	5	3.5	6.10327781	0.00019441	0.0004196	0.0025129	0.001468425	0.017769217	0.000317901
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	N <sub>2</sub> O	2.1349353	2.8357392	5	12	13	1.8898E-07	6.322E-06	3.678E-05	7.58596E-05	0.000260092	7.34026E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	CH <sub>4</sub>	1.3130934	1.6595131	5	9.62	10.8417895	4.5014E-08	2.791E-06	2.153E-05	2.68459E-05	0.000152209	2.38884E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	360.5811	5	3.5	6.10327781	0.00067347	0.0008552	0.0046771	0.002993302	0.033072257	0.001102734
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	5.3210777	5	12	13	6.6538E-07	1.305E-05	6.902E-05	0.00015658	0.000488046	2.62706E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	2.8968293	5	9.62	10.8417895	1.3716E-07	4.967E-06	3.757E-05	4.77851E-05	0.000265695	7.28774E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	120.1937	5	3.5	6.10327781	7.483E-05	0.0002851	0.001559	0.000997732	0.011024086	0.000122526
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	1.7736926	5	12	13	7.3931E-08	4.349E-06	2.301E-05	5.21927E-05	0.000162682	2.91895E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	0.9656098	5	9.62	10.8417895	1.524E-08	1.656E-06	1.252E-05	1.59283E-05	8.85651E-05	8.09748E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	289.85142	5	3.5	6.10327781	0.00043517	0.0014656	0.0037597	0.005129496	0.026584978	0.000733073
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	4.7291547	5	12	13	5.2558E-07	2.391E-05	6.134E-05	0.000286937	0.000433755	2.70476E-07

## Annex 22 (e) - Uncertainties for the period 1994 to 1998 – Level and Trend assessments - Base year- 1994, Year T-1998

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.3203621	5	9.62	10.8417895	1.6775E-09	1.62E-06	4.155E-06	1.55825E-05	2.93834E-05	1.1062E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.0624893	5	3.5	6.10327781	5.8474E-09	1.711E-06	1.378E-05	5.9879E-06	9.74508E-05	9.53252E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0150499	5	12	13	5.3228E-12	2.424E-08	1.952E-07	2.90838E-07	1.38037E-06	1.99E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0105137	5	9.62	10.8417895	1.8068E-12	1.693E-08	1.364E-07	1.62879E-07	9.64309E-07	9.56421E-13
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	39.904138	5	1.5	5.22015325	6.0338E-06	1.742E-05	0.0005176	2.61231E-05	0.003659981	1.33961E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.7744951	5	125	125.09996	4.9608E-05	2.084E-06	6.193E-05	0.000260466	0.000437913	2.59611E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0469318	5	250	250.049995	1.915E-08	2.048E-08	6.088E-07	5.1206E-06	4.30455E-06	4.47498E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	135.20932	10	3	10.4403065	0.00027709	0.0002393	0.0017538	0.000717821	0.024802616	0.000615685
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.1146631	10	90	90.5538514	1.4167E-06	1.991E-06	1.446E-05	0.000179178	0.000204472	7.39136E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.264283	10	50	50.9901951	2.5252E-08	4.72E-07	3.428E-06	2.36014E-05	4.84797E-05	2.90731E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	475.43449	20	7	21.1896201	0.01411282	0.0004127	0.0061669	0.002888683	0.174426132	0.03043282
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.12369	20	100	101.98039	0.00098693	2.241E-05	0.0003389	0.002240796	0.009584189	9.68779E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	4.989389	20	500	500.39984	0.00086679	4.213E-06	6.472E-05	0.002106396	0.001830494	7.78761E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	104.90541	20	7	21.1896201	0.00068711	9.614E-05	0.0013607	0.000672982	0.038487416	0.001481734
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2747176	20	100	101.98039	1.0914E-07	3.144E-07	3.563E-06	3.14365E-05	0.000100788	1.11464E-08
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2216347	20	500	500.39984	1.7104E-06	3.087E-07	2.875E-06	0.000154342	8.13127E-05	3.04333E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	288.70752	50	1.5	50.0224949	0.02900233	0.0014678	0.0037448	0.00220173	0.264800605	0.070124208
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.8198808	50	50	70.7106781	4.6737E-07	4.156E-06	1.063E-05	0.000207798	0.000751989	6.08668E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.7261801	50	90	102.956301	7.7729E-07	3.681E-06	9.419E-06	0.000331289	0.000666048	5.53372E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	26.804597	5	3.5	6.10327781	3.7216E-06	0.0001355	0.0003477	0.000474343	0.0024585	6.26922E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.4373382	5	12	13	4.4948E-09	2.211E-06	5.673E-06	2.65346E-05	4.01124E-05	2.31309E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0296261	5	9.62	10.8417895	1.4346E-11	1.498E-07	3.843E-07	1.441E-06	2.71729E-06	9.46015E-12
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	6.27627	5	2	5.38516481	1.5885E-07	2.481E-05	8.141E-05	4.96176E-05	0.000575655	3.33841E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	0.5030667	15	50	52.2015325	9.5897E-08	6.524E-07	6.525E-06	3.26185E-05	0.000138423	2.02248E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00044484	2.294E-05	0.0002294	0.002293758	0.004866995	2.8949E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	9.274E-07	3.744E-06	3.745E-05	7.48847E-05	0.001059293	1.12771E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2443.2015	20	20	28.2842712	0.66404056	0.0003268	0.0316909	0.006536113	0.89635524	0.803495437
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	219.07557	20	30	36.0555128	0.00867595	0.0010828	0.0028416	0.032482855	0.080373859	0.007515093
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	179.56995	20	30	36.0555128	0.00582904	0.0001265	0.0023292	0.003795883	0.065880143	0.004354602
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	20.15685	20	30	36.0555128	7.3447E-05	5.567E-05	0.0002615	0.001670181	0.007395091	5.74769E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	32.865	20	30	36.0555128	0.00019525	9.981E-06	0.0004263	0.000299421	0.012057423	0.000145471
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.308826	20	30	36.0555128	1.7241E-08	1.34E-06	4.006E-06	4.02121E-05	0.000113301	1.44542E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.1899E-08	5.447E-07	5.449E-06	1.63422E-05	0.000154114	2.40182E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.7937E-10	4.085E-08	4.086E-07	1.22546E-06	1.15566E-05	1.35058E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	101.0944	20	30	36.0555128	0.0018475	8.377E-05	0.0013113	0.002513241	0.037089243	0.001381928
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	46.039518	20	30	36.0555128	0.00038317	1.279E-05	0.0005972	0.000383733	0.016890855	0.000285448
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	8.7630228	20	30	36.0555128	1.3882E-05	4.065E-06	0.0001137	0.000121958	0.003214954	1.03508E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	7.9010778	20	30	36.0555128	1.1285E-05	1.899E-05	0.0001025	0.000569708	0.002898726	8.72718E-06

## Annex 22 (e) - Uncertainties for the period 1994 to 1998 – Level and Trend assessments - Base year- 1994, Year T-1998

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.4524168	20	30	36.0555128	1.0872E-06	2.917E-06	3.181E-05	8.74964E-05	0.000899736	8.17181E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.9438	20	30	36.0555128	2.8116E-06	1.189E-05	5.116E-05	0.000356717	0.001446891	2.22074E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.308826	20	30	36.0555128	1.7241E-08	1.34E-06	4.006E-06	4.02121E-05	0.000113301	1.44542E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.2544803	20	30	36.0555128	1.1707E-08	5.177E-07	3.301E-06	1.55298E-05	9.33631E-05	8.95783E-09
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.1060106	20	30	36.0555128	2.0316E-09	3.641E-07	1.375E-06	1.0922E-05	3.88929E-05	1.63195E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-102372.35	20	10	22.3606798	728.654085	0.0277854	1.3278792	0.277853604	37.55809472	1410.687682
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.00435385	0.0003245	0.0032459	0.003244982	0.091807772	0.008439197
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6171	20	10	22.3606798	0.13042306	0.0017758	0.0177654	0.017757827	0.502481466	0.252802964
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8671.9453	20	10	22.3606798	5.22864432	0.0112583	0.1124844	0.112583074	3.181540095	10.13487232
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	55.452788	20	10	22.3606798	0.0002138	7.191E-05	0.0007193	0.000719108	0.02034437	0.000414411
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.8627261	10	10	14.1421356	1.7193E-06	1.02E-05	0.000102	0.000101963	0.001442328	2.09071E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2288.7039	20	20	28.2842712	0.58271372	0.0121619	0.0296869	0.24323897	0.839673565	0.764216893
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	993.69498	20	10	22.3606798	0.06865343	0.0052793	0.0128893	0.05279261	0.364564153	0.135694081
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	11.157879	20	10	22.3606798	8.656E-06	8.935E-05	0.0001447	0.000893482	0.004093573	1.75556E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	8.2784264	20	20	28.2842712	7.6238E-06	6.629E-05	0.0001074	0.001325812	0.003037167	1.09822E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.2680781	10	20	22.3606798	4.9966E-09	1.36E-06	3.477E-06	2.71929E-05	4.91759E-05	3.15772E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1433.0591	20	20	28.2842712	0.22845687	0.0008079	0.0185883	0.016157773	0.525756889	0.27668138
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	1.2052655	20	20	28.2842712	1.616E-07	4.307E-07	1.563E-05	8.61344E-06	0.000442185	1.95601E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	91.955192	20	20	28.2842712	0.00094065	7.84E-05	0.0011928	0.001567987	0.033736275	0.001140595
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	17.45135	30	60	67.0820393	0.00019057	0.0001061	0.0002264	0.006368392	0.009603757	0.000132789
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	9.8324325	40	100	107.703296	0.00015594	7.076E-06	0.0001275	0.000707616	0.007214593	5.25511E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	1.9092207	40	100	107.703296	5.8797E-06	1.374E-06	2.476E-05	0.000137402	0.0014009	1.9814E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.1176674	40	100	107.703296	2.015E-06	8.044E-07	1.45E-05	8.04357E-05	0.000820094	6.79023E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	22.414216	20	0	20	2.7944E-05	2.436E-05	0.0002907	0	0.008223267	6.76221E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	6.3791091	20	30	36.0555128	7.3561E-06	9.202E-06	8.274E-05	0.000276059	0.00234035	5.55345E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	19.608475	25	30	39.0512484	8.1535E-05	0.0001487	0.0002543	0.0044611	0.008992381	0.000100764
Total												
		Sum(C) : -77094.629	-84802.174				Sum(H) : 735.628					Sum(M) : 1423.185
							Uncertainty in total inventory : 27.122					Trend uncertainty : 37.725



## Annex 22 (f) - Uncertainties for the period 1994 to 1999 – Level and Trend assessments - Base year- 1994, Year T-1999

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635409	3	7	7.61577311	3.4038E-09	1.063E-06	8.607E-06	7.44166E-06	3.65157E-05	1.38878E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0015946	3	297	297.015151	2.9898E-11	2.555E-09	2.068E-08	7.58757E-07	8.77509E-08	5.83412E-13
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0005401	3	75	75.059976	2.1906E-13	8.653E-10	7.006E-09	6.4898E-08	2.97221E-08	5.09515E-15
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	41.404916	3	7	7.61577311	1.3254E-05	0.0001009	0.0005371	0.000706125	0.002278579	5.69053E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.2035231	3	297	297.015151	4.8707E-07	4.958E-07	2.64E-06	0.000147265	1.12002E-05	2.18125E-08
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0091914	3	75	75.059976	6.3443E-11	2.239E-08	1.192E-07	1.67947E-06	5.05816E-07	3.07646E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	45.901537	7	7	9.89949494	2.7522E-05	9.462E-05	0.0005954	0.000662312	0.005894082	3.51789E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1154173	7	297	297.08248	1.5671E-07	2.247E-07	1.497E-06	6.67473E-05	1.48204E-05	4.67484E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0390929	7	75	75.3259583	1.1558E-09	7.612E-08	5.071E-07	5.70908E-06	5.01981E-06	5.77921E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	1.2587076	7	7	9.89949494	2.0696E-08	2.016E-06	1.633E-05	1.41147E-05	0.000161627	2.63225E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.0212933	7	297	297.08248	5.3339E-09	3.411E-08	2.762E-07	1.01309E-05	2.73421E-06	1.10111E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.0108184	7	75	75.3259583	8.8515E-11	1.733E-08	1.403E-07	1.29979E-06	1.38915E-06	3.61919E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	77.438603	7	7	9.89949494	7.8333E-05	6.796E-05	0.0010045	0.000475706	0.009943664	9.91027E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3806443	7	297	297.08248	1.7045E-06	3.34E-07	4.937E-06	9.92098E-05	4.88774E-05	1.22316E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1719039	7	75	75.3259583	2.2349E-08	1.509E-07	2.23E-06	1.13143E-05	2.20737E-05	6.15259E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.5755627	12.5	7	14.3265488	6.7914E-08	1.545E-06	2.044E-05	1.0814E-05	0.000361274	1.30636E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0040648	12.5	297	297.262931	1.9461E-10	3.934E-09	5.272E-08	1.16853E-06	9.32053E-07	2.23417E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0013768	12.5	75	76.0345316	1.4607E-12	1.333E-09	1.786E-08	9.99462E-08	3.15696E-07	1.09653E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	84.815474	4	5	6.40312424	3.9313E-05	4.024E-05	0.0011001	0.000201218	0.006223375	3.87709E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.7354628	4	110	110.072703	8.7354E-07	3.49E-07	9.54E-06	3.83858E-05	5.39649E-05	4.38569E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0124554	4	79	79.101201	1.2939E-10	5.91E-09	1.616E-07	4.66877E-07	9.13922E-07	1.05323E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	18.481324	4	5	6.40312424	1.8666E-06	4.389E-06	0.0002397	2.19433E-05	0.001356076	1.83942E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1619327	4	110	110.072703	4.2348E-08	3.911E-08	2.1E-06	4.30237E-06	1.18819E-05	1.5969E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0027424	4	79	79.101201	6.2724E-12	6.624E-10	3.557E-08	5.23278E-08	2.01225E-07	4.32299E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	96.700229	5	3.5	6.10327781	4.6429E-05	0.0002481	0.0012543	0.000868392	0.00886928	7.94182E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.4169133	5	12	13	4.5225E-08	3.738E-06	1.838E-05	4.48539E-05	0.000129958	1.8901E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	0.8217028	5	9.62	10.8417895	1.0579E-08	1.653E-06	1.066E-05	1.59052E-05	7.5366E-05	5.93302E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	CO <sub>2</sub>	146.72173	205.48799	5	3.5	6.10327781	0.00020965	0.0005272	0.0026654	0.001845307	0.018847221	0.000358623
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	N <sub>2</sub> O	2.1349353	3.0109409	5	12	13	2.0422E-07	7.943E-06	3.906E-05	9.53121E-05	0.000276161	8.53496E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid F	CH <sub>4</sub>	1.3130934	1.7461186	5	9.62	10.8417895	4.777E-08	3.513E-06	2.265E-05	3.37979E-05	0.000160153	2.67912E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	383.75905	5	3.5	6.10327781	0.00073122	0.0010741	0.0049778	0.003759473	0.035198123	0.001253042
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	5.6706167	5	12	13	7.2436E-07	1.639E-05	7.355E-05	0.000196621	0.000520105	3.09169E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	3.0496876	5	9.62	10.8417895	1.4572E-07	6.253E-06	3.956E-05	6.01498E-05	0.000279715	8.18587E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	127.91968	5	3.5	6.10327781	8.1247E-05	0.000358	0.0016593	0.001253116	0.011732708	0.000139227
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	1.8902056	5	12	13	8.0484E-08	5.462E-06	2.452E-05	6.55397E-05	0.000173368	3.4352E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.0165625	5	9.62	10.8417895	1.6191E-08	2.084E-06	1.319E-05	2.00499E-05	9.32384E-05	9.0954E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	322.11659	5	3.5	6.10327781	0.00051518	0.001835	0.0041782	0.006422584	0.029544318	0.000914116

**Annex 22 (f) - Uncertainties for the period 1994 to 1999 – Level and Trend assessments - Base year- 1994, Year T-1999**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	5.2555864	5	12	13	6.222E-07	2.994E-05	6.817E-05	0.000359271	0.000482039	3.61437E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.3560236	5	9.62	10.8417895	1.9859E-09	2.028E-06	4.618E-06	1.95107E-05	3.26542E-05	1.44697E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.1166025	5	3.5	6.10327781	6.1905E-09	2.155E-06	1.448E-05	7.54097E-06	0.000102414	1.05455E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0158164	5	12	13	5.6352E-12	3.052E-08	2.052E-07	3.66264E-07	1.45067E-06	2.23859E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0110492	5	9.62	10.8417895	1.9128E-12	2.132E-08	1.433E-07	2.05121E-07	1.01342E-06	1.0691E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	41.115474	5	1.5	5.22015325	6.1402E-06	2.243E-05	0.0005333	3.36445E-05	0.003771084	1.42222E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.9194303	5	125	125.09996	5.0483E-05	2.684E-06	6.381E-05	0.00033546	0.000451207	3.16121E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0483565	5	250	250.049995	1.9488E-08	2.638E-08	6.272E-07	6.59493E-06	4.43522E-06	6.31643E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	134.10236	10	3	10.4403065	0.00026128	0.0002963	0.0017395	0.000888785	0.024599558	0.000605928
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.1052137	10	90	90.5538514	1.3351E-06	2.465E-06	1.434E-05	0.000221873	0.000202739	9.03307E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2620426	10	50	50.9901951	2.3797E-08	5.845E-07	3.399E-06	2.92252E-05	4.80687E-05	3.16472E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	479.062	20	7	21.1896201	0.01373517	0.0005063	0.0062139	0.00354443	0.175756986	0.030903081
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.327738	20	100	101.98039	0.00096087	2.749E-05	0.0003415	0.0027488	0.00965905	0.000100853
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.0295508	20	500	500.39984	0.0008443	5.166E-06	6.524E-05	0.002583079	0.001845228	1.00772E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	103.34514	20	7	21.1896201	0.00063919	0.0001475	0.0013405	0.001032776	0.037914988	0.001438613
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2716908	20	100	101.98039	1.0233E-07	4.366E-07	3.524E-06	4.36564E-05	9.96772E-05	1.18414E-08
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2201503	20	500	500.39984	1.6176E-06	3.96E-07	2.856E-06	0.000198014	8.07682E-05	4.57331E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	330.90347	50	1.5	50.0224949	0.03652058	0.001032	0.0042922	0.001547942	0.303502449	0.092116133
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.9395669	50	50	70.7106781	5.8834E-07	2.92E-06	1.219E-05	0.000145992	0.000861764	7.63952E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.8321878	50	90	102.956301	9.7848E-07	2.586E-06	1.079E-05	0.000232753	0.000763277	6.36766E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	29.788384	5	3.5	6.10327781	4.4058E-06	0.0001697	0.0003864	0.000593922	0.002732171	7.8175E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.486021	5	12	13	5.3211E-09	2.769E-06	6.304E-06	3.32238E-05	4.45775E-05	3.09098E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.032924	5	9.62	10.8417895	1.6984E-11	1.876E-07	4.271E-07	1.80427E-06	3.01977E-06	1.23744E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	6.853	5	2	5.38516481	1.8154E-07	3.108E-05	8.889E-05	6.2158E-05	0.000628553	3.98942E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	0.5030667	15	50	52.2015325	9.1923E-08	8.059E-07	6.525E-06	4.02944E-05	0.000138423	2.07845E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00042641	2.834E-05	0.0002294	0.002833535	0.004866995	3.17166E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	8.8896E-07	4.625E-06	3.745E-05	9.25069E-05	0.001059293	1.13066E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2526.864	20	20	28.2842712	0.68086026	7.37E-05	0.0327761	0.001473981	0.927049093	0.859422193
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	227.81336	20	30	36.0555128	0.00899303	0.0010534	0.002955	0.031600739	0.083579554	0.007984149
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	177.42585	20	30	36.0555128	0.00545483	0.0002069	0.0023014	0.006206	0.065093521	0.004275681
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	24.975216	20	30	36.0555128	0.00010809	4.401E-08	0.000324	1.32021E-06	0.00916284	8.39576E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	38.04864	20	30	36.0555128	0.00025086	4.793E-05	0.0004935	0.001437771	0.013959183	0.000196926
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.393351	20	30	36.0555128	2.6811E-08	3.584E-07	5.102E-06	1.07511E-05	0.000144312	2.09414E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.0577E-08	6.729E-07	5.449E-06	2.01879E-05	0.000154114	2.41587E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.7194E-10	5.046E-08	4.086E-07	1.51384E-06	1.15566E-05	1.35848E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	107.0335	20	30	36.0555128	0.00198512	3.658E-05	0.0013883	0.00109728	0.039268162	0.001543193
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	47.849991	20	30	36.0555128	0.00039674	2.354E-06	0.0006207	7.06071E-05	0.017555077	0.000308186
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.1125342	20	30	36.0555128	1.4389E-05	2.05E-06	0.0001182	6.14934E-05	0.003343182	1.11806E-05

**Annex 22 (f) - Uncertainties for the period 1994 to 1999 – Level and Trend assessments - Base year- 1994, Year T-1999**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	7.8067374	20	30	36.0555128	1.0561E-05	1.598E-05	0.0001013	0.000479422	0.002864115	8.433E-06
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	3.0386513	20	30	36.0555128	1.6E-06	9.903E-06	3.941E-05	0.000297079	0.001114812	1.33106E-06
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.5658368	20	30	36.0555128	3.6123E-06	1.912E-05	5.922E-05	0.000573578	0.001675102	3.13496E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.393351	20	30	36.0555128	2.6811E-08	3.584E-07	5.102E-06	1.07511E-05	0.000144312	2.09414E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.2838232	20	30	36.0555128	1.3959E-08	8.387E-07	3.681E-06	2.51622E-05	0.000104128	1.14758E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.1182341	20	30	36.0555128	2.4223E-09	2.427E-07	1.534E-06	7.28137E-06	4.33774E-05	1.93462E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-104248.78	20	10	22.3606798	724.296221	0.032392	1.3522184	0.323920166	38.2465127	1462.900658
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.00417341	0.0004009	0.0032459	0.004008606	0.091807772	0.008444736
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6171	20	10	22.3606798	0.12501802	0.0021937	0.0177654	0.021936681	0.502481466	0.252968841
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8671.9453	20	10	22.3606798	5.01195699	0.0139077	0.1124844	0.139076644	3.181540095	10.14153969
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	55.452788	20	10	22.3606798	0.00020494	8.883E-05	0.0007193	0.000888332	0.02034437	0.000414683
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.8627261	10	10	14.1421356	1.6481E-06	1.26E-05	0.000102	0.000125957	0.001442328	2.09618E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2124.0297	20	20	28.2842712	0.48107791	0.0151941	0.0275509	0.303881625	0.779258326	0.69958758
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	922.19776	20	10	22.3606798	0.05667903	0.0065954	0.0119619	0.065954498	0.338333447	0.118819517
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	9.9823045	20	10	22.3606798	6.641E-06	0.0001096	0.0001295	0.001096033	0.003662281	1.46136E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	7.4062259	20	20	28.2842712	5.8491E-06	8.132E-05	9.607E-05	0.00162637	0.002717176	1.00281E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.2266293	10	20	22.3606798	3.423E-09	2.001E-06	2.94E-06	4.00147E-05	4.15726E-05	3.32946E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1474.1312	20	20	28.2842712	0.23172162	0.00069	0.0191211	0.013799346	0.540825319	0.292682448
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	0.9173527	20	20	28.2842712	8.9736E-08	4.509E-06	1.19E-05	9.0176E-05	0.000336556	1.21402E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	97.419703	20	20	28.2842712	0.00101202	3.471E-05	0.0012636	0.000694123	0.03574108	0.001277907
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	19.8513	30	60	67.0820393	0.00023637	0.0001347	0.0002575	0.008081908	0.010924488	0.000184662
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	10.212775	40	100	107.703296	0.00016127	9.433E-06	0.0001325	0.000943316	0.007493671	5.7045E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	1.9830741	40	100	107.703296	6.0805E-06	1.832E-06	2.572E-05	0.000183169	0.00145509	2.15084E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.1609015	40	100	107.703296	2.0838E-06	1.072E-06	1.506E-05	0.000107228	0.000851817	7.3709E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	22.674305	20	0	20	2.7411E-05	2.772E-05	0.0002941	0	0.008318688	6.92006E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	6.7070836	20	30	36.0555128	7.795E-06	1.188E-05	8.7E-05	0.000356496	0.002460677	6.18202E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	20.549887	25	30	39.0512484	8.5841E-05	0.0001451	0.0002666	0.00435338	0.00942411	0.000107766
Total												
		Sum(C): -77094.629	-86615.949				Sum(H): 730.962					Sum(M): 1475.419
							Uncertainty in total inventory: 27.036					Trend uncertainty: 38.411

**Annex 22 (g) - Uncertainties for the period 1994 to 2000 – Level and Trend assessments - Base year- 1994, Year T-2000**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.1644781	0.2	7	7.00285656	1.68708E-10	7.767E-06	2.133E-06	5.43668E-05	6.03433E-07	2.95611E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0003953	0.2	297	297.000067	1.75244E-12	1.866E-08	5.127E-09	5.54324E-06	1.45011E-09	3.07275E-11
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0001339	0.2	75	75.0002667	1.28206E-14	6.322E-09	1.737E-09	4.74128E-07	4.91166E-10	2.24798E-13
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	7.1414297	0.2	7	7.00285656	3.18046E-07	0.0003539	9.263E-05	0.002477615	2.62003E-05	6.13926E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0351032	0.2	297	297.000067	1.38222E-08	1.74E-06	4.553E-07	0.000516716	1.28786E-07	2.66996E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0015853	0.2	75	75.0002667	1.79772E-12	7.857E-08	2.056E-08	5.89282E-06	5.81613E-09	3.47254E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	45.689142	7	7	9.89949494	2.60148E-05	7.994E-05	0.0005926	0.000559576	0.005866809	3.47326E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1156191	7	297	297.08248	1.50031E-07	1.971E-07	1.5E-06	5.8529E-05	1.48463E-05	3.64606E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0391613	7	75	75.3259583	1.10655E-09	6.675E-08	5.08E-07	5.00615E-06	5.02859E-06	5.03482E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	CO <sub>2</sub>	1.2587076	1.422202	7	7	9.89949494	2.52003E-08	3.347E-07	1.845E-05	2.34311E-06	0.000182597	3.33473E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	N <sub>2</sub> O	0.02129328	0.024056	7	297	297.08248	6.49486E-09	5.663E-09	3.12E-07	1.68178E-06	3.08896E-06	1.23701E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	CH <sub>4</sub>	0.01081836	0.012222	7	75	75.3259583	1.07781E-10	2.877E-09	1.585E-07	2.15771E-07	1.56939E-06	2.50955E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	81.71062	7	7	9.89949494	8.32055E-05	3.808E-05	0.0010599	0.000266527	0.010492221	0.000110158
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4016431	7	297	297.08248	1.81052E-06	1.872E-07	5.21E-06	5.55849E-05	5.15738E-05	5.74954E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1813872	7	75	75.3259583	2.37395E-08	8.452E-08	2.353E-06	6.33911E-06	2.32914E-05	5.82674E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.6805545	12.5	7	14.3265488	7.37152E-08	2.457E-06	2.18E-05	1.71988E-05	0.000385348	1.48789E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0043349	12.5	297	297.262931	2.1116E-10	6.276E-09	5.623E-08	1.86412E-06	9.93989E-07	4.46294E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0014683	12.5	75	76.0345316	1.58492E-12	2.126E-09	1.905E-08	1.59443E-07	3.36674E-07	1.38771E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	87.232415	4	5	6.40312424	3.96742E-05	4.636E-05	0.0011315	0.000231809	0.006400719	4.10229E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.7564209	4	110	110.072703	8.81567E-07	4.02E-07	9.812E-06	4.42215E-05	5.55027E-05	5.0361E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0128104	4	79	79.101201	1.30574E-10	6.808E-09	1.662E-07	5.37856E-07	9.39966E-07	1.17282E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	19.034033	4	5	6.40312424	1.88892E-06	3.031E-06	0.0002469	1.51539E-05	0.001396631	1.95081E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1667861	4	110	110.072703	4.28596E-08	2.709E-08	2.163E-06	2.98014E-06	1.2238E-05	1.5865E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0028246	4	79	79.101201	6.34819E-12	4.588E-10	3.664E-08	3.6247E-08	2.07257E-07	4.42692E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	102.23122	5	3.5	6.10327781	4.95065E-05	0.0002959	0.001326	0.001035656	0.009376579	8.89928E-05
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	1.4993616	5	12	13	4.83135E-08	4.459E-06	1.945E-05	5.35046E-05	0.00013752	2.17746E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	0.8624585	5	9.62	10.8417895	1.11185E-08	1.968E-06	1.119E-05	1.89285E-05	7.91041E-05	6.61575E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	217.24133	5	3.5	6.10327781	0.000223553	0.0006288	0.0028179	0.002200744	0.01992523	0.000401858
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	3.1861434	5	12	13	2.18166E-07	9.475E-06	4.133E-05	0.000113695	0.000292231	9.83254E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	1.8327243	5	9.62	10.8417895	5.02071E-08	4.181E-06	2.377E-05	4.02223E-05	0.000168096	2.98742E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CO <sub>2</sub>	267.869535	406.93714	5	3.5	6.10327781	0.000784422	0.0012819	0.0052784	0.004486494	0.037324002	0.00141321
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	N <sub>2</sub> O	3.922926	6.0201577	5	12	13	7.78881E-07	1.956E-05	7.809E-05	0.000234697	0.000552165	3.59969E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CH <sub>4</sub>	2.2853972	3.2025465	5	9.62	10.8417895	1.53307E-07	7.442E-06	4.154E-05	7.15964E-05	0.000293735	9.14065E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	CO <sub>2</sub>	89.290092	135.64571	5	3.5	6.10327781	8.7158E-05	0.0004273	0.0017595	0.001495451	0.012441334	0.000157023
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	N <sub>2</sub> O	1.30764603	2.0667192	5	12	13	8.65424E-08	6.519E-06	2.603E-05	7.82315E-05	0.000184055	3.99964E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	CH <sub>4</sub>	0.76179934	1.0675155	5	9.62	10.8417895	1.70341E-08	2.481E-06	1.385E-05	2.38654E-05	9.79118E-05	1.01563E-08

## Annex 22 (g) - Uncertainties for the period 1994 to 2000 – Level and Trend assessments - Base year- 1994, Year T-2000

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	354.38209	5	3.5	6.10327781	0.000594893	0.0021978	0.0045967	0.007692184	0.032503688	0.001115659
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	5.7820235	5	12	13	7.18481E-07	3.586E-05	7.5E-05	0.000430291	0.000530323	4.66393E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.3916855	5	9.62	10.8417895	2.29322E-09	2.429E-06	5.081E-06	2.33676E-05	3.59251E-05	1.83666E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.1707173	5	3.5	6.10327781	6.49231E-09	2.563E-06	1.519E-05	8.97044E-06	0.000107377	1.16104E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0165829	5	12	13	5.90986E-12	3.631E-08	2.151E-07	4.35685E-07	1.52097E-06	2.50318E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0115846	5	9.62	10.8417895	2.00602E-12	2.536E-08	1.503E-07	2.43999E-07	1.06254E-06	1.18852E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	41.10327	5	1.5	5.22015325	5.85448E-06	1.011E-05	0.0005332	1.51638E-05	0.003769964	1.42129E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	4.9179702	5	125	125.09996	4.81343E-05	1.21E-06	6.379E-05	0.000151194	0.000451073	2.26326E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0483421	5	250	250.049995	1.85812E-08	1.189E-08	6.27E-07	2.97237E-06	4.43391E-06	2.84945E-11
1.A.3.d.i - International water-borne navigation (International b	CO <sub>2</sub>	139.69015	132.89396	10	3	10.4403065	0.000244797	0.0003604	0.0017238	0.001081198	0.02437789	0.000595451
1.A.3.d.i - International water-borne navigation (International b	N <sub>2</sub> O	1.15288789	1.0949128	10	90	90.5538514	1.25009E-06	2.999E-06	1.42E-05	0.000269895	0.000200849	1.13184E-07
1.A.3.d.i - International water-borne navigation (International b	CH <sub>4</sub>	0.273346	0.2596003	10	50	50.9901951	2.22819E-08	7.11E-07	3.367E-06	3.55507E-05	4.76207E-05	3.53159E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	482.71279	20	7	21.1896201	0.013304322	0.000619	0.0062613	0.00433288	0.177096378	0.031381901
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.533095	20	100	101.98039	0.000931061	3.361E-05	0.0003442	0.003360849	0.009734391	0.000106054
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.0699702	20	500	500.39984	0.000818491	6.318E-06	6.576E-05	0.003158972	0.001860057	1.34389E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	96.811292	20	7	21.1896201	0.00053514	0.0002677	0.0012557	0.001874015	0.035517868	0.001265031
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2574926	20	100	101.98039	8.76863E-08	7.15E-07	3.34E-06	7.15018E-05	9.44682E-05	1.40368E-08
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2113344	20	500	500.39984	1.42214E-06	5.878E-07	2.741E-06	0.000293894	7.75338E-05	9.23853E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	322.38837	50	1.5	50.0224949	0.033071829	0.0012692	0.0041817	0.001903753	0.295692453	0.087437651
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.9156399	50	50	70.7106781	5.33075E-07	3.59E-06	1.188E-05	0.000179492	0.000839819	7.37513E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.8109953	50	90	102.956301	8.86567E-07	3.18E-06	1.052E-05	0.000286162	0.000743839	6.35186E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	32.772201	5	3.5	6.10327781	5.08752E-06	0.0002032	0.0004251	0.000711328	0.003005844	9.54109E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.5347043	5	12	13	6.14445E-09	3.316E-06	6.936E-06	3.97915E-05	4.90427E-05	3.98855E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0362219	5	9.62	10.8417895	1.96116E-11	2.246E-07	4.698E-07	2.16094E-06	3.32225E-06	1.5707E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	7.05397	5	2	5.38516481	1.83499E-07	3.231E-05	9.15E-05	6.46191E-05	0.000646985	4.22766E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	0.5690667	15	50	52.2015325	1.12218E-07	1.243E-07	7.381E-06	6.21623E-06	0.000156583	2.4557E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.343333	15	100	101.118742	0.000391108	3.894E-05	0.000225	0.003894253	0.004772157	3.79387E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	8.48104E-07	5.627E-06	3.745E-05	0.000112541	0.001059293	1.13477E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2750.7036	20	20	28.2842712	0.769744092	0.0021992	0.0356796	0.04398475	1.009170771	1.020360304
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	256.84533	20	30	36.0555128	0.010905749	0.0007722	0.0033316	0.023165832	0.094230727	0.009416086
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	194.20475	20	30	36.0555128	0.006234933	4.894E-05	0.002519	0.001468051	0.071249317	0.00507862
3.A.1.e - Camels	CH <sub>4</sub>	0	0.052164	0	0	0	0	6.766E-07	6.766E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	23.39253	20	30	36.0555128	9.04621E-05	2.82E-05	0.0003034	0.000845889	0.008582189	7.43695E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	35.18508	20	30	36.0555128	0.000204658	1.739E-07	0.0004564	5.21701E-06	0.012908608	0.000166632
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.486108	20	30	36.0555128	3.90641E-08	7.148E-07	6.305E-06	2.14438E-05	0.000178342	3.22657E-08

## Annex 22 (g) - Uncertainties for the period 1994 to 2000 – Level and Trend assessments - Base year- 1994, Year T-2000

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	2.91712E-08	8.187E-07	5.449E-06	2.45599E-05	0.000154114	2.43543E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.64034E-10	6.139E-08	4.086E-07	1.84169E-06	1.15566E-05	1.36948E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	116.90784	20	30	36.0555128	0.002259433	5.758E-05	0.0015164	0.001727527	0.042890835	0.001842608
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	51.28053	20	30	36.0555128	0.000434728	2.731E-05	0.0006652	0.00081938	0.018813664	0.000354625
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	10.273813	20	30	36.0555128	1.74492E-05	1.015E-05	0.0001333	0.000304518	0.003769229	1.42998E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.5450088	20	30	36.0555128	1.20708E-05	2.353E-05	0.0001108	0.000705801	0.00313497	1.03262E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.002903	20	30	36.0555128	1.39322E-12	3.766E-08	3.766E-08	1.12967E-06	1.06506E-06	2.4105E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.8460912	20	30	36.0555128	1.33909E-06	6.702E-06	3.692E-05	0.000201071	0.001044166	1.13071E-06
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.2222096	20	30	36.0555128	2.94708E-06	1.371E-05	5.477E-05	0.000411219	0.001549033	2.5686E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.486108	20	30	36.0555128	3.90641E-08	7.148E-07	6.305E-06	2.14438E-05	0.000178342	3.22657E-08
3.A.2.h - Swine	N <sub>2</sub> O	0	0.3780024	20	30	36.0555128	2.36212E-08	4.903E-06	4.903E-06	0.000147093	0.000138681	4.08686E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.3000885	20	30	36.0555128	1.48871E-08	9.82E-07	3.892E-06	2.94613E-05	0.000110096	1.2989E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.1250099	20	30	36.0555128	2.58346E-09	1.971E-07	1.622E-06	5.91333E-06	4.58633E-05	2.13841E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-106446.86	20	10	22.3606798	720.4511251	0.036798	1.3807299	0.367979585	39.05294004	1525.267535
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-250.24106	20	10	22.3606798	0.003981585	0.0004877	0.0032459	0.004876733	0.091807772	0.008452449
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1369.6128	20	10	22.3606798	0.119270877	0.0026688	0.0177653	0.026687978	0.502479883	0.253198281
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8671.9453	20	10	22.3606798	4.781584732	0.0169196	0.1124844	0.169195907	3.181540095	10.15082463
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	55.452788	20	10	22.3606798	0.000195517	0.0001081	0.0007193	0.001080715	0.02034437	0.000415061
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.8627261	10	10	14.1421356	1.57233E-06	1.532E-05	0.000102	0.000153235	0.001442328	2.10379E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	1921.7948	20	20	28.2842712	0.37572734	0.0188361	0.0249277	0.376722552	0.705062928	0.639033614
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	834.39269	20	10	22.3606798	0.044266968	0.0081764	0.010823	0.0817639	0.306119759	0.100394642
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	8.6977436	20	10	22.3606798	4.81008E-06	0.000132	0.0001128	0.001319571	0.003191005	1.19238E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	6.4531646	20	20	28.2842712	4.23647E-06	9.79E-05	8.37E-05	0.001958072	0.00236752	9.4392E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.5223145	10	20	22.3606798	1.73461E-08	1.717E-06	6.775E-06	3.43401E-05	9.58127E-05	1.03593E-08
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1562.5958	20	20	28.2842712	0.248400273	1.399E-05	0.0202685	0.000279795	0.573280957	0.328651133
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	1.2550981	20	20	28.2842712	1.60256E-07	5.185E-07	1.628E-05	1.03697E-05	0.000460467	2.12137E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	106.40702	20	20	28.2842712	0.001151859	5.096E-05	0.0013802	0.001019229	0.039038324	0.00152503
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	22.321898	30	60	67.0820393	0.00028513	0.0001638	0.0002895	0.009829292	0.012284097	0.000247514
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	10.607261	0	0	0	0	1.162E-05	0.0001376	0	0	0
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	2.0596736	0	0	0	0	2.257E-06	2.672E-05	0	0	0
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.2057433	0	0	0	0	1.321E-06	1.564E-05	0	0	0
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	22.795232	20	0	20	2.64312E-05	3.382E-05	0.0002957	0	0.008363054	6.99407E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	6.8384667	20	30	36.0555128	7.73089E-06	1.18E-05	8.87E-05	0.000353975	0.002508878	6.41977E-06

**Annex 22 (g) - Uncertainties for the period 1994 to 2000 – Level and Trend assessments - Base year- 1994, Year T-2000**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	22.333776	25	30	39.0512484	9.67304E-05	0.0001318	0.0002897	0.003953216	0.010242195	0.00012053
Total		Sum(C): -77094.629	-88677.942			Sum(H): 726.867						Sum(M): 1537.912
						Uncertainty in total inventory: 26.960						Trend uncertainty: 39.216

**Annex 22 (h) - Uncertainties for the period 1994 to 2001 – Level and Trend assessments - Base year- 1994, Year T-2001**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.3711702	0.2	7	7.00285656	8.6566E-10	5.048E-06	4.814E-06	3.53382E-05	1.36174E-06	1.25065E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.000892	0.2	297	297.000067	8.992E-12	1.213E-08	1.157E-08	3.60309E-06	3.2724E-09	1.29823E-11
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0003021	0.2	75	75.0002667	6.5784E-14	4.109E-09	3.919E-09	3.08182E-07	1.10839E-09	9.49772E-14
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	8.8084141	0.2	7	7.00285656	4.8753E-07	0.0003306	0.0001143	0.002314465	3.23161E-05	5.35779E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0432972	0.2	297	297.000067	2.1188E-08	1.625E-06	5.616E-07	0.000482691	1.58848E-07	2.32991E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0019554	0.2	75	75.0002667	2.7557E-12	7.34E-08	2.536E-08	5.50478E-06	7.17376E-09	3.03027E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	44.202323	6.5	7	9.55248659	2.2844E-05	6.259E-05	0.0005734	0.000438113	0.00527047	2.79698E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.112263	6.5	297	297.071119	1.4251E-07	1.584E-07	1.456E-06	4.70591E-05	1.33857E-05	2.39374E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0380246	6.5	75	75.2811397	1.0499E-09	5.367E-08	4.932E-07	4.0251E-06	4.53386E-06	3.67573E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	0.6597	6.5	7	9.55248659	5.0884E-09	1.015E-05	8.557E-06	7.1064E-05	7.86594E-05	1.12374E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.01116	6.5	297	297.071119	1.4083E-09	1.717E-07	1.448E-07	5.10065E-05	1.33066E-06	2.60344E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.00567	6.5	75	75.2811397	2.3345E-11	8.725E-08	7.355E-08	6.54409E-06	6.76063E-07	4.32822E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	95.284147	6.5	7	9.55248659	0.00010615	0.0001421	0.0012359	0.000994917	0.011361218	0.000130067
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4683629	6.5	297	297.071119	2.4805E-06	6.986E-07	6.075E-06	0.000207493	5.58453E-05	4.61719E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.2115187	6.5	75	75.2811397	3.2488E-08	3.155E-07	2.744E-06	2.36632E-05	2.52205E-05	1.19602E-09
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.6901973	12.5	7	14.3265488	7.5129E-08	2.655E-06	2.192E-05	1.8585E-05	0.000387559	1.50548E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0043558	12.5	297	297.262931	2.1482E-10	6.736E-09	5.65E-08	2.00057E-06	9.9878E-07	4.99985E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0014754	12.5	75	76.0345316	1.6124E-12	2.282E-09	1.914E-08	1.71114E-07	3.38296E-07	1.43725E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	88.113551	4	5	6.40312424	4.0787E-05	6.188E-05	0.0011429	0.000309421	0.006465373	4.18968E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.7640616	4	110	110.072703	9.0629E-07	5.366E-07	9.911E-06	5.90274E-05	5.60634E-05	6.62733E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0129398	4	79	79.101201	1.3424E-10	9.088E-09	1.678E-07	7.17935E-07	9.4946E-07	1.41691E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	19.226296	4	5	6.40312424	1.9419E-06	4.058E-07	0.0002494	2.02885E-06	0.001410738	1.99019E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1684709	4	110	110.072703	4.4062E-08	3.023E-09	2.185E-06	3.32484E-07	1.23616E-05	1.5292E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0028531	4	79	79.101201	6.5262E-12	5.119E-11	3.701E-08	4.04437E-09	2.0935E-07	4.38438E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	111.72001	5	3.5	6.10327781	5.9572E-05	0.0004229	0.0014491	0.001480039	0.010246885	0.000107189
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.6385279	5	12	13	5.8136E-08	6.32E-06	2.125E-05	7.58447E-05	0.000150285	2.83379E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	0.9425093	5	9.62	10.8417895	1.3379E-08	3.041E-06	1.223E-05	2.92519E-05	8.64463E-05	8.32864E-09
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CO <sub>2</sub>	146.72173	237.40503	5	3.5	6.10327781	0.000269	0.0008986	0.0030794	0.003145068	0.021774631	0.000484026
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	N <sub>2</sub> O	2.1349353	3.4818718	5	12	13	2.6252E-07	1.343E-05	4.516E-05	0.000161168	0.000319355	1.27963E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CH <sub>4</sub>	1.3130934	2.0028323	5	9.62	10.8417895	6.0415E-08	6.461E-06	2.598E-05	6.21596E-05	0.000183698	3.76089E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	445.44923	5	3.5	6.10327781	0.00094705	0.0017965	0.005778	0.006287719	0.040856305	0.001708773
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	6.5999754	5	12	13	9.4324E-07	2.73E-05	8.561E-05	0.000327596	0.000605345	4.73762E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	3.4608453	5	9.62	10.8417895	1.8039E-07	1.092E-05	4.489E-05	0.000105065	0.000317426	1.11798E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	148.48308	5	3.5	6.10327781	0.00010523	0.0005988	0.001926	0.002095845	0.013618768	0.000189863
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	2.1999918	5	12	13	1.048E-07	9.1E-06	2.854E-05	0.000109198	0.000201782	5.26401E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.1536151	5	9.62	10.8417895	2.0044E-08	3.64E-06	1.496E-05	3.50215E-05	0.000105809	1.2422E-08
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	401.45906	5	3.5	6.10327781	0.00076924	0.0028175	0.0052074	0.009861135	0.036821556	0.001453069
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	6.5501214	5	12	13	9.2904E-07	4.597E-05	8.496E-05	0.000551619	0.000600773	6.65212E-07



**Annex 22 (h) - Uncertainties for the period 1994 to 2001 – Level and Trend assessments - Base year- 1994, Year T-2001**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.4437179	5	9.62	10.8417895	2.9653E-09	3.114E-06	5.755E-06	2.99565E-05	4.06975E-05	2.55368E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.2919387	5	3.5	6.10327781	7.9664E-09	4.183E-06	1.676E-05	1.46404E-05	0.000118496	1.42556E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0183	5	12	13	7.2517E-12	5.925E-08	2.374E-07	7.11046E-07	1.67846E-06	3.32283E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0127842	5	9.62	10.8417895	2.4615E-12	4.139E-08	1.658E-07	3.98211E-07	1.17256E-06	1.53346E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	43.355984	5	3.5	6.10327781	8.9717E-06	4.13E-05	0.0005624	0.000144558	0.003976582	1.58341E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.1875055	5	12	13	5.8271E-07	4.942E-06	6.729E-05	5.93012E-05	0.000475795	2.29897E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0509916	5	9.62	10.8417895	3.9161E-11	4.858E-08	6.614E-07	4.67301E-07	4.67691E-06	2.20919E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	134.85034	10	3	10.4403065	0.00025397	0.0003272	0.0017492	0.000981484	0.024736766	0.000612871
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.109956	10	90	90.5538514	1.2944E-06	2.739E-06	1.44E-05	0.000246495	0.000203609	1.02216E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.263167	10	50	50.9901951	2.3072E-08	6.494E-07	3.414E-06	3.24684E-05	4.8275E-05	3.38467E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	486.38758	20	297	297.672639	2.68592563	0.0005454	0.006309	0.161972252	0.178444574	0.058077476
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.739801	20	75	77.6208735	0.00055198	2.95E-05	0.0003468	0.002212677	0.009810227	0.000101136
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.1106553	20	999	999.20018	0.00334125	5.518E-06	6.629E-05	0.005512815	0.001874984	3.39067E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	98.013162	5	7	8.60232527	9.1086E-05	0.0002464	0.0012713	0.001724663	0.008989702	8.37892E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2534283	5	75	75.1664819	4.6495E-08	7.524E-07	3.287E-06	5.64332E-05	2.32443E-05	3.725E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2015966	5	297	297.042085	4.5947E-07	7.015E-07	2.615E-06	0.000208358	1.84903E-05	4.37549E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	351.58697	20	3	20.2237484	0.00647799	0.0008699	0.0045605	0.002609558	0.128989285	0.016645045
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.9984914	20	50	53.8516481	3.7046E-07	2.457E-06	1.295E-05	0.000122842	0.000366324	1.49283E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.8843781	20	90	92.1954446	8.5182E-07	2.176E-06	1.147E-05	0.000195845	0.000324458	1.43628E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	36.884085	5	3.5	6.10327781	6.4932E-06	0.0002574	0.0004784	0.000900932	0.003382984	1.22563E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.601793	5	250	250.049995	2.9013E-06	4.2E-06	7.806E-06	0.001049956	5.5196E-05	1.10545E-06
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0407666	5	9.62	10.8417895	2.503E-11	2.845E-07	5.288E-07	2.73693E-06	3.73909E-06	2.14716E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	8.26595	5	2	5.38516481	2.5388E-07	4.825E-05	0.0001072	9.65069E-05	0.000758147	5.84101E-07
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	0.264	15	50	52.2015325	2.4335E-08	4.053E-06	3.424E-06	0.000202653	7.26417E-05	4.6345E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	16.106933	15	100	101.118742	0.00033989	5.398E-05	0.0002089	0.005398458	0.004431951	4.87855E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	8.5454E-07	5.465E-06	3.745E-05	0.000109291	0.001059293	1.13405E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2779.3259	20	20	28.2842712	0.79180843	0.0026969	0.0360508	0.053938603	1.019671636	1.042639618
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	248.82995	20	30	36.0555128	0.01031335	0.0008607	0.0032276	0.025820609	0.091290064	0.00900058
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	185.75078	20	30	36.0555128	0.00574719	0.0001489	0.0024094	0.004467247	0.068147747	0.004664072
3.A.1.e - Camels	CH <sub>4</sub>	0	0.068586	20	30	36.0555128	7.8355E-10	8.896E-07	8.896E-07	2.6689E-05	2.51626E-05	1.34546E-09
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	19.845756	20	30	36.0555128	6.5604E-05	7.295E-05	0.0002574	0.002188531	0.007280958	5.7802E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	35.55594	20	30	36.0555128	0.00021058	6.705E-06	0.0004612	0.000201155	0.013044668	0.000170204
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.458934	20	30	36.0555128	3.5083E-08	3.834E-07	5.953E-06	1.15021E-05	0.000168372	2.84816E-08
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	2.9393E-08	7.95E-07	5.449E-06	2.38507E-05	0.000154114	2.432E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.6528E-10	5.962E-08	4.086E-07	1.78851E-06	1.15566E-05	1.36755E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	118.24885	20	30	36.0555128	0.0023291	8.048E-05	0.0015338	0.002414443	0.043382821	0.001887899
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	52.679991	20	30	36.0555128	0.00046226	4.787E-05	0.0006833	0.001436136	0.019327094	0.000375599
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.9531978	20	30	36.0555128	1.6501E-05	6.456E-06	0.0001291	0.000193687	0.003651603	1.33717E-05

## Annex 22 (h) - Uncertainties for the period 1994 to 2001 – Level and Trend assessments - Base year- 1994, Year T-2001

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.1730341	20	30	36.0555128	1.1127E-05	1.903E-05	0.000106	0.000570933	0.002998501	9.31697E-06
3.A.2.e - Camels	CH <sub>4</sub>	0	0.003817	20	30	36.0555128	2.4268E-12	4.951E-08	4.951E-08	1.4853E-06	1.40036E-06	4.16712E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.414567	20	30	36.0555128	9.7112E-07	1.219E-06	3.132E-05	3.65701E-05	0.00088585	7.86067E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.2667128	20	30	36.0555128	3.0324E-06	1.444E-05	5.534E-05	0.000433183	0.00156536	2.638E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.458934	20	30	36.0555128	3.5083E-08	3.834E-07	5.953E-06	1.15021E-05	0.000168372	2.84816E-08
3.A.2.h - Swine	N <sub>2</sub> O	0	0.3568716	20	30	36.0555128	2.1214E-08	4.629E-06	4.629E-06	0.00013887	0.000130928	3.64271E-08
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.3164843	20	30	36.0555128	1.6684E-08	1.206E-06	4.105E-06	3.61708E-05	0.000116111	1.47901E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.13184	20	30	36.0555128	2.8953E-09	1.017E-07	1.71E-06	3.04974E-06	4.83691E-05	2.34887E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-106713.11	20	10	22.3606798	729.552796	0.0281032	1.3841834	0.281032186	39.15061897	1532.849945
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.00093429	0.002153	0.0015664	0.021530165	0.04430491	0.002426473
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.12169439	0.0024799	0.0178772	0.024798577	0.505644802	0.256291635
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8888.744	20	10	22.3606798	5.06176517	0.0136157	0.1152965	0.136157393	3.261078597	10.65317245
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	50.635677	10	10	14.1421356	6.5704E-05	0.0001674	0.0006568	0.001674343	0.009288541	8.90804E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.0685113	0	0	0	0	2.518E-05	9.169E-05	0	0	0
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	1936.5328	20	20	28.2842712	0.38440667	0.0184798	0.0251189	0.369595575	0.710469985	0.641368488
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	840.79157	20	10	22.3606798	0.04528954	0.0080217	0.010906	0.080217061	0.30846736	0.101586889
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	8.4330304	20	10	22.3606798	4.5561E-06	0.0001345	0.0001094	0.001344675	0.003093888	1.13803E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	6.2567645	20	20	28.2842712	4.0127E-06	9.977E-05	8.116E-05	0.001995323	0.002295465	9.25047E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	3.0106795	10	20	22.3606798	5.807E-07	3.401E-05	3.905E-05	0.000680257	0.000552275	7.67757E-07
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1606.5706	20	20	28.2842712	0.26457015	0.000633	0.0208389	0.012660576	0.589414339	0.347569553
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	1.2494429	20	20	28.2842712	1.6002E-07	5.285E-07	1.621E-05	1.05695E-05	0.000458392	2.10235E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	107.62507	20	20	28.2842712	0.00118732	7.177E-05	0.001396	0.001435495	0.039485196	0.001561141
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	24.870353	30	60	67.0820393	0.00035664	0.0001974	0.0003226	0.011841117	0.013686553	0.000327534
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	11.016372	0	0	0	0	1.74E-05	0.0001429	0	0	0
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	2.1391132	0	0	0	0	3.379E-06	2.775E-05	0	0	0
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.2522476	0	0	0	0	1.978E-06	1.624E-05	0	0	0
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	22.911381	20	0	20	2.6904E-05	3.107E-05	0.0002972	0	0.008405666	7.06552E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	7.4630325	20	30	36.0555128	9.2774E-06	2.019E-05	9.68E-05	0.000605716	0.002738017	7.86363E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	20.224662	25	30	39.0512484	7.9925E-05	0.0001575	0.0002623	0.004726251	0.009274963	0.000108362
<b>Total</b>												
		Sum(C): -77094.629	-88343.460				Sum(H): 738.943				Sum(M): 1545.993	
							Uncertainty in total inventory: 27.184				Trend uncertainty: 39.319	

**Annex 22 (i) - Uncertainties for the period 1994 to 2002 – Level and Trend assessments - Base year- 1994, Year T-2002**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.4105698	0.2	7	7.00285656	9.43194E-10	5.126E-06	5.326E-06	3.58832E-05	1.50629E-06	1.28988E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0009866	0.2	297	297.000067	9.79733E-12	1.232E-08	1.28E-08	3.65866E-06	3.61976E-09	1.33858E-11
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0003342	0.2	75	75.0002667	7.16763E-14	4.172E-09	4.335E-09	3.12935E-07	1.22605E-09	9.79297E-14
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	0.0439322	0.2	7	7.00285656	1.07993E-11	0.0004709	5.698E-07	0.003296215	1.61177E-07	1.0865E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0002159	0.2	297	297.000067	4.69332E-13	2.315E-06	2.801E-09	0.000687439	7.92257E-10	4.72572E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	9.752E-06	0.2	75	75.0002667	6.10415E-17	1.045E-07	1.265E-10	7.8398E-06	3.57793E-11	6.14625E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	42.745814	6.5	7	9.55248659	1.90238E-05	1.32E-05	0.0005545	9.23771E-05	0.005096803	2.59859E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1085771	6.5	297	297.071119	1.18706E-07	3.315E-08	1.408E-06	9.84542E-06	1.29462E-05	2.64537E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0367761	6.5	75	75.2811397	8.74542E-10	1.123E-08	4.77E-07	8.42107E-07	4.385E-06	1.99374E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	1.8196725	6.5	7	9.55248659	3.44743E-08	3.777E-06	2.36E-05	2.64387E-05	0.000216969	4.77745E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.030783	6.5	297	297.071119	9.54156E-09	6.389E-08	3.993E-07	1.89765E-05	3.67042E-06	3.73579E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.0156398	6.5	75	75.2811397	1.58164E-10	3.246E-08	2.029E-07	2.43467E-06	1.86481E-06	9.40512E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	62.969544	6.5	7	9.55248659	4.12829E-05	0.0003423	0.0008168	0.002396385	0.007508182	6.21155E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3095226	6.5	297	297.071119	9.64678E-07	1.683E-06	4.015E-06	0.000499773	3.6906E-05	2.51135E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1397844	6.5	75	75.2811397	1.26347E-08	7.599E-07	1.813E-06	5.69959E-05	1.66672E-05	3.52633E-09
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.909689	12.5	7	14.3265488	8.54053E-08	4.351E-06	2.477E-05	3.04605E-05	0.000437888	1.92674E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0049114	12.5	297	297.262931	2.43198E-10	1.097E-08	6.371E-08	3.25823E-06	1.12616E-06	1.18843E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0016635	12.5	75	76.0345316	1.82539E-12	3.716E-09	2.158E-08	2.78686E-07	3.81443E-07	2.23165E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	89.003587	4	5	6.40312424	3.70574E-05	8.878E-06	0.0011545	4.43924E-05	0.00653068	4.26517E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.7717794	4	110	110.072703	8.23421E-07	7.699E-08	1.001E-05	8.46863E-06	5.66297E-05	3.27864E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0130705	4	79	79.101201	1.21962E-10	1.304E-09	1.695E-07	1.03002E-07	9.59051E-07	9.30388E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	19.420501	4	5	6.40312424	1.76434E-06	1.194E-05	0.0002519	5.97099E-05	0.001424988	2.03416E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1701726	4	110	110.072703	4.00327E-08	1.052E-07	2.207E-06	1.15727E-05	1.24865E-05	2.8984E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.002882	4	79	79.101201	5.92949E-12	1.782E-09	3.738E-08	1.40756E-07	2.11465E-07	6.45297E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	110.6271	5	3.5	6.10327781	5.20147E-05	0.0003474	0.001435	0.001215944	0.010146644	0.000104433
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	1.6224989	5	12	13	5.07612E-08	5.221E-06	2.105E-05	6.26498E-05	0.000148815	2.60708E-09
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	0.9332891	5	9.62	10.8417895	1.16818E-08	2.373E-06	1.211E-05	2.28256E-05	8.56007E-05	7.84848E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	235.08259	5	3.5	6.10327781	0.000234879	0.0007382	0.0030493	0.002583857	0.021561618	0.00047158
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	3.4478101	5	12	13	2.29219E-07	1.109E-05	4.472E-05	0.000133128	0.000316231	1.17725E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	1.9832394	5	9.62	10.8417895	5.27508E-08	5.042E-06	2.572E-05	4.85036E-05	0.000181901	3.54407E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	445.59175	5	3.5	6.10327781	0.000843873	0.0015606	0.0057798	0.005462072	0.040869377	0.00170014
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	6.6121574	5	12	13	8.43043E-07	2.398E-05	8.577E-05	0.000287712	0.000606463	4.50575E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	3.4171932	5	9.62	10.8417895	1.56609E-07	8.327E-06	4.432E-05	8.0105E-05	0.000313423	1.04651E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	148.53058	5	3.5	6.10327781	9.37637E-05	0.0005202	0.0019266	0.001820635	0.013623126	0.000188904
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	2.2040525	5	12	13	9.36714E-08	7.992E-06	2.859E-05	9.59033E-05	0.000202154	5.00638E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.1390644	5	9.62	10.8417895	1.7401E-08	2.776E-06	1.477E-05	2.67016E-05	0.000104474	1.16278E-08

**Annex 22 (i) - Uncertainties for the period 1994 to 2002 – Level and Trend assessments - Base year- 1994, Year T-2002**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	410.94915	5	3.5	6.10327781	0.00071776	0.0027979	0.0053305	0.009792504	0.037691981	0.001516579
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	6.7049598	5	12	13	8.66873E-07	4.565E-05	8.697E-05	0.00054778	0.000614974	6.78256E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.454207	5	9.62	10.8417895	2.76685E-09	3.092E-06	5.892E-06	2.9748E-05	4.16596E-05	2.62046E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.317416	5	3.5	6.10327781	7.37647E-09	3.763E-06	1.709E-05	1.3169E-05	0.000120833	1.47739E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0186609	5	12	13	6.71471E-12	5.33E-08	2.421E-07	6.39592E-07	1.71156E-06	3.33853E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0130363	5	9.62	10.8417895	2.27922E-12	3.723E-08	1.691E-07	3.58194E-07	1.19568E-06	1.55795E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	45.608698	5	3.5	6.10327781	8.84093E-06	3.941E-05	0.0005916	0.000137931	0.004183199	1.75182E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.4570407	5	12	13	5.74219E-07	4.715E-06	7.078E-05	5.65826E-05	0.000500516	2.53718E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.053641	5	9.62	10.8417895	3.85898E-11	4.635E-08	6.958E-07	4.45878E-07	4.91992E-06	2.44044E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	136.62098	10	3	10.4403065	0.000232134	0.0004282	0.0017721	0.001284521	0.025061569	0.000629732
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.1234436	10	90	90.5538514	1.18085E-06	3.587E-06	1.457E-05	0.000322838	0.000206083	1.46695E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2663649	10	50	50.9901951	2.10477E-08	8.505E-07	3.455E-06	4.25244E-05	4.88616E-05	4.19578E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	486.76248	20	297	297.672639	2.395458165	0.0009498	0.0063138	0.282089782	0.178582116	0.111466217
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.76089	20	75	77.6208735	0.000492306	5.17E-05	0.0003471	0.003877559	0.009817964	0.000111428
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.114806	20	999	999.20018	0.002980162	9.752E-06	6.634E-05	0.009742511	0.001876506	9.84378E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	109.15174	5	7	8.60232527	0.000100593	0.0001925	0.0014158	0.001347668	0.010011324	0.000102043
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2782263	5	75	75.1664819	4.99024E-08	6.72E-07	3.609E-06	5.03999E-05	2.55187E-05	3.19135E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2177452	5	297	297.042085	4.7732E-07	6.901E-07	2.824E-06	0.000204961	1.99714E-05	4.2408E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	419.02116	20	3	20.2237484	0.008193544	0.0003194	0.0054352	0.000958134	0.153729363	0.023633635
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	1.1897029	20	50	53.8516481	4.6833E-07	8.967E-07	1.543E-05	4.48329E-05	0.000436475	1.9252E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	1.0537369	20	90	92.1954446	1.07686E-06	7.942E-07	1.367E-05	7.14765E-05	0.000386592	1.54562E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	37.637657	5	3.5	6.10327781	6.02071E-06	0.000254	0.0004882	0.000888953	0.003452101	1.27072E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.6140881	5	12	13	7.27151E-09	4.144E-06	7.965E-06	4.97278E-05	5.63237E-05	5.64522E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0415995	5	9.62	10.8417895	2.32089E-11	2.807E-07	5.396E-07	2.70054E-06	3.81548E-06	2.18508E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	8.624	5	2	5.38516481	2.46089E-07	4.938E-05	0.0001119	9.87539E-05	0.000790988	6.35414E-07
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	0.0602	10	50	50.9901951	1.07509E-09	7.809E-07	7.809E-07	3.90429E-05	1.1043E-05	1.6463E-09
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	0.7289333	15	50	52.2015325	1.65203E-07	1.531E-06	9.455E-06	7.65573E-05	0.000200572	4.60901E-08
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.438667	15	100	101.118742	0.000354786	5.241E-05	0.0002262	0.005240903	0.004798389	5.04916E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	7.60951E-07	8.027E-06	3.745E-05	0.000160542	0.001059293	1.14787E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2587.9678	20	20	28.2842712	0.611342088	0.0017781	0.0335687	0.035562462	0.949466709	0.90275172
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	290.24657	20	30	36.0555128	0.012495513	0.0005676	0.0037648	0.017027118	0.106484883	0.011628953
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	221.55966	20	30	36.0555128	0.007281172	0.0001628	0.0028739	0.00488463	0.081285215	0.006631146
3.A.1.e - Camels	CH <sub>4</sub>	0	0.085008	0	0	0	0	1.103E-06	1.103E-06	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	18.03816	20	30	36.0555128	4.82619E-05	0.0001161	0.000234	0.00348373	0.006617792	5.59315E-05

## Annex 22 (i) - Uncertainties for the period 1994 to 2002 – Level and Trend assessments - Base year- 1994, Year T-2002

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	28.20405	20	30	36.0555128	0.000117989	0.0001158	0.0003658	0.00347386	0.010347426	0.000119137
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.003905	20	30	36.0555128	1.49488E-07	7.12E-06	1.302E-05	0.000213591	0.00036831	1.81273E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	2.61735E-08	1.168E-06	5.449E-06	3.50353E-05	0.000154114	2.49786E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.47177E-10	8.757E-08	4.086E-07	2.62721E-06	1.15566E-05	1.40458E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	108.706	20	30	36.0555128	0.001752778	0.0001301	0.00141	0.003902455	0.039881766	0.001605784
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	48.920613	20	30	36.0555128	0.00035498	3.884E-05	0.0006346	0.00116506	0.017947864	0.000323483
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.609863	20	30	36.0555128	1.99928E-05	2.062E-05	0.0001506	0.000618648	0.004259395	1.85252E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	9.748625	20	30	36.0555128	1.40963E-05	3.427E-05	0.0001265	0.001028234	0.003576549	1.3849E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0047309	20	30	36.0555128	3.31974E-12	6.136E-08	6.136E-08	1.84094E-06	1.73565E-06	6.40154E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.1716478	20	30	36.0555128	6.99518E-07	3.729E-06	2.817E-05	0.000111877	0.000796728	6.47293E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.384486	20	30	36.0555128	1.69905E-06	5.536E-07	4.39E-05	1.66069E-05	0.001241691	1.54207E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.003905	20	30	36.0555128	1.49488E-07	7.12E-06	1.302E-05	0.000213591	0.00036831	1.81273E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.7806465	20	30	36.0555128	9.03917E-08	1.013E-05	1.013E-05	0.000303775	0.000286401	1.74305E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.5568885	20	30	36.0555128	4.59998E-08	4.151E-06	7.223E-06	0.000124526	0.00020431	5.72492E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2319868	20	30	36.0555128	7.98264E-09	1.089E-06	3.009E-06	3.26752E-05	8.51107E-05	8.3115E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-111187.55	20	10	22.3606798	705.2756144	0.0540938	1.4422217	0.540938211	40.79218976	1664.295359
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.000831972	0.0023751	0.0015664	0.023751032	0.04430491	0.002527037
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.108366719	0.0036952	0.0178772	0.036952046	0.505644802	0.257042119
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	20	10	22.3606798	4.507413092	0.0213209	0.1152965	0.213209331	3.261078597	10.68009184
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000146272	0.0002167	0.0006568	0.002166501	0.018577082	0.000349802
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.14015E-06	3.216E-05	9.169E-05	0.000321612	0.001296638	1.7847E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	1464.4038	20	20	28.2842712	0.1957439	0.02721	0.0189949	0.544200155	0.537256541	0.5847984
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	635.80556	20	10	22.3606798	0.023061907	0.0118113	0.0082471	0.118113256	0.233262644	0.068362202
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	6.1290322	20	10	22.3606798	2.14304E-06	0.0001789	7.95E-05	0.001789135	0.002248603	8.25722E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	4.5473465	20	20	28.2842712	1.88748E-06	0.0001327	5.898E-05	0.002654844	0.001668318	9.83148E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	2.0588018	10	20	22.3606798	2.41811E-07	2.137E-05	2.67E-05	0.000427302	0.000377664	3.25217E-07
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1573.8567	20	20	28.2842712	0.226098117	0.0009981	0.0204146	0.019962182	0.577412347	0.333803508
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	2.2256866	20	20	28.2842712	4.52163E-07	1.114E-05	2.887E-05	0.000222704	0.000816554	7.16357E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	99.904	20	20	28.2842712	0.000911029	0.0001074	0.0012959	0.00214898	0.036652512	0.001348025
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	27.67906	30	60	67.0820393	0.000393361	0.0002263	0.000359	0.013578333	0.015232229	0.000416392
<b>4.A - Solid Waste Disposal</b>												
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	11.555212	40	100	107.703296	0.000176722	1.69E-05	0.0001499	0.001689891	0.00847869	7.47439E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	2.2437428	40	100	107.703296	6.66317E-06	3.281E-06	2.91E-05	0.000328136	0.001646357	2.81816E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.3134983	40	100	107.703296	2.28346E-06	1.921E-06	1.704E-05	0.000192092	0.000963785	9.65782E-07
<b>4.D - Wastewater Treatment and Discharge</b>												

**Annex 22 (i) - Uncertainties for the period 1994 to 2002 – Level and Trend assessments - Base year- 1994, Year T-2002**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M	
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)	
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	22.871397	20	0	20	2.38738E-05	5.119E-05	0.0002967	0	0.008390997	7.04088E-05	
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	7.531506	20	30	36.0555128	8.41363E-06	1.65E-05	9.769E-05	0.000495123	0.002763139	7.88008E-06	
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	17.498353	25	30	39.0512484	5.32771E-05	0.000218	0.000227	0.006539286	0.008024686	0.000107158	
Total													
		Sum(C): -77094.629	-93618.509				Sum(H): 713.382					Sum(M): 1677.288	
								Uncertainty in total inventory: 26.709					Trend uncertainty: 40.955

**Annex 22 (j) - Uncertainties for the period 1994 to 2003 – Level and Trend assessments - Base year- 1994, Year T-2003**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	1.964669	0.2	7	7.00285656	2.1621E-08	1.504E-05	2.548E-05	0.000105264	7.20792E-06	1.11324E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0047213	0.2	297	297.000067	2.2458E-10	3.614E-08	6.124E-08	1.07327E-05	1.73214E-08	1.15191E-10
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0015991	0.2	75	75.0002667	1.643E-12	1.224E-08	2.074E-08	9.17999E-07	5.86692E-09	8.42757E-13
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	19.383881	0.2	7	7.00285656	2.1046E-06	0.0002198	0.0002514	0.001538441	7.11151E-05	2.37186E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0952802	0.2	297	297.000067	9.1465E-08	1.08E-06	1.236E-06	0.000320848	3.49561E-07	1.02944E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.004303	0.2	75	75.0002667	1.1896E-11	4.879E-08	5.581E-08	3.65907E-06	1.57866E-08	1.3389E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	45.63373	13	7	14.7648231	5.1852E-05	5.094E-05	0.0005919	0.000356601	0.010882288	0.000118551
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1158543	13	500	500.168971	3.8353E-07	1.283E-07	1.503E-06	6.41359E-05	2.76278E-05	4.87671E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.039241	13	100	100.84146	1.7885E-09	4.345E-08	5.09E-07	4.34469E-06	9.35781E-06	1.06445E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	2.979645	6.5	7	9.55248659	9.2533E-08	1.883E-05	3.865E-05	0.000131835	0.000355278	1.43603E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.050406	6.5	297	297.071119	2.5611E-08	3.186E-07	6.538E-07	9.46251E-05	6.01017E-06	8.99003E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.0256095	6.5	75	75.2811397	4.2453E-10	1.619E-07	3.322E-07	1.21403E-05	3.05355E-06	1.56711E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	92.843467	6.5	7	9.55248659	8.9841E-05	4.577E-05	0.0012043	0.000320418	0.011070203	0.000122652
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4563659	6.5	297	297.071119	2.0993E-06	2.25E-07	5.92E-06	6.6824E-05	5.44148E-05	7.42642E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.2061007	6.5	75	75.2811397	2.7496E-08	1.016E-07	2.673E-06	7.62085E-06	2.45744E-05	6.61981E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.8663599	12.5	7	14.3265488	8.166E-08	3.8E-06	2.421E-05	2.6602E-05	0.000427953	1.83852E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.004804	12.5	297	297.262931	2.3293E-10	9.606E-09	6.231E-08	2.85309E-06	1.10156E-06	9.35354E-12
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0016272	12.5	75	76.0345316	1.7483E-12	3.254E-09	2.111E-08	2.44033E-07	3.73108E-07	1.98761E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	89.902613	4	5	6.40312424	3.785E-05	2.115E-05	0.0011661	0.000105734	0.006596646	4.35269E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.7795751	4	110	110.072703	8.4103E-07	1.834E-07	1.011E-05	2.01707E-05	5.72017E-05	3.67889E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0132025	4	79	79.101201	1.2457E-10	3.105E-09	1.713E-07	2.4533E-07	9.68738E-07	9.98641E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	19.616668	4	5	6.40312424	1.8021E-06	9.258E-06	0.0002544	4.62884E-05	0.001439382	2.07396E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1718915	4	110	110.072703	4.0889E-08	8.168E-08	2.23E-06	8.98535E-06	1.26126E-05	2.39815E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0029111	4	79	79.101201	6.0563E-12	1.383E-09	3.776E-08	1.09287E-07	2.13601E-07	5.75689E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	128.01379	5	3.5	6.10327781	6.9723E-05	0.0005735	0.0016605	0.002007301	0.011741339	0.000141888
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.8774986	5	250	250.049995	2.5174E-05	8.537E-06	2.435E-05	0.002134204	0.000172203	4.58448E-06
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	1.0799693	5	250	250.049995	8.3294E-06	4.28E-06	1.401E-05	0.001070121	9.90541E-05	1.15497E-06
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CO <sub>2</sub>	146.72173	272.0293	5	3.5	6.10327781	0.00031484	0.0012187	0.0035285	0.004265509	0.024950346	0.000640714
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	N <sub>2</sub> O	2.1349353	3.9896845	5	250	250.049995	0.00011368	1.814E-05	5.175E-05	0.004535132	0.000365931	2.07013E-05
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CH <sub>4</sub>	1.3130934	2.2949349	5	250	250.049995	3.7612E-05	9.096E-06	2.977E-05	0.002273984	0.00021049	5.21531E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	508.56962	5	3.5	6.10327781	0.00110043	0.0023797	0.0065967	0.008329113	0.046645666	0.002245192
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	7.5575847	5	250	250.049995	0.0004079	3.627E-05	9.803E-05	0.009067992	0.000693177	8.2709E-05
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	3.8517361	5	250	250.049995	0.00010595	1.398E-05	4.996E-05	0.003495622	0.000353279	1.23442E-05
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	169.52321	5	3.5	6.10327781	0.00012227	0.0007932	0.0021989	0.002776293	0.015548555	0.000249465
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	2.5191949	5	250	250.049995	4.5323E-05	1.209E-05	3.268E-05	0.003022647	0.000231059	9.18978E-06
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.283912	5	250	250.049995	1.1772E-05	4.661E-06	1.665E-05	0.001165206	0.00011776	1.37157E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	484.85002	5	3.5	6.10327781	0.00100018	0.0037578	0.006289	0.013152277	0.044470119	0.002150574
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	7.9107108	5	250	250.049995	0.00044691	6.131E-05	0.0001026	0.015327527	0.000725565	0.00023546

## Annex 22 (j) - Uncertainties for the period 1994 to 2003 – Level and Trend assessments - Base year- 1994, Year T-2003

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.5358869	5	250	250.049995	2.0509E-06	4.153E-06	6.951E-06	0.001038316	4.91512E-05	1.08052E-06
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.499044	5	3.5	6.10327781	9.5607E-09	6.126E-06	1.944E-05	2.14394E-05	0.000137491	1.93635E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0212336	5	250	250.049995	3.2199E-09	8.677E-08	2.754E-07	2.16925E-05	1.94753E-06	4.74359E-10
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0148335	5	250	250.049995	1.5714E-09	6.062E-08	1.924E-07	1.51542E-05	1.36052E-06	2.31499E-10
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	47.861412	5	3.5	6.10327781	9.7462E-06	6.892E-05	0.0006208	0.000241226	0.004389817	1.93287E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.726576	5	12	13	6.3301E-07	8.246E-06	7.428E-05	9.89566E-05	0.000525238	2.85667E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0562904	5	9.62	10.8417895	4.2541E-11	8.106E-08	7.301E-07	7.79791E-07	5.16292E-06	2.72638E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	138.39162	10	3	10.4403065	0.00023844	0.000404	0.0017951	0.001212122	0.025386373	0.000645937
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.1369312	10	90	90.5538514	1.2107E-06	3.403E-06	1.475E-05	0.000306227	0.000208557	1.37271E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2695627	10	50	50.9901951	2.1579E-08	8.067E-07	3.497E-06	4.03364E-05	4.94482E-05	4.07215E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	487.10715	20	297	297.672639	2.40139568	0.0009415	0.0063183	0.279618857	0.178708567	0.110123457
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.780277	20	75	77.6208735	0.00049354	5.124E-05	0.0003474	0.00384285	0.009825076	0.0001113
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.118622	20	999	999.20018	0.00298778	9.662E-06	6.639E-05	0.009652786	0.001877906	9.67028E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	108.67576	5	7	8.60232527	9.9824E-05	0.0001978	0.0014096	0.001384922	0.009967668	0.000101272
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2794448	5	75	75.1664819	5.0394E-08	6.539E-07	3.625E-06	4.90443E-05	2.56305E-05	3.06227E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2209418	5	297	297.042085	4.9196E-07	6.468E-07	2.866E-06	0.000192094	2.02646E-05	3.73106E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	432.28826	20	3	20.2237484	0.00872986	0.0001442	0.0056072	0.000432697	0.158596761	0.02515312
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	1.2274044	20	50	53.8516481	4.9901E-07	3.99E-07	1.592E-05	1.99489E-05	0.000450307	2.03174E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	1.0871296	20	90	92.1954446	1.1474E-06	3.534E-07	1.41E-05	3.18042E-05	0.000398843	1.60087E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	41.315417	5	3.5	6.10327781	7.2625E-06	0.0003018	0.0005359	0.001056353	0.003789422	1.54756E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.6740936	5	12	13	8.7713E-09	4.924E-06	8.744E-06	5.90921E-05	6.18274E-05	7.31451E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0456644	5	9.62	10.8417895	2.7996E-11	3.336E-07	5.923E-07	3.20908E-06	4.18831E-06	2.78402E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	9.548	5	2	5.38516481	3.0197E-07	6.14E-05	0.0001238	0.000122791	0.000875736	7.81991E-07
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	81.58992	10	50	50.9901951	0.00197689	0.0010583	0.0010583	0.052915437	0.014966746	0.003024047
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	1.1924	15	50	52.2015325	4.4253E-07	7.547E-06	1.547E-05	0.00037735	0.000328098	2.50042E-07
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.883067	15	100	101.118742	0.00037349	4.65E-05	0.000232	0.004649706	0.004920669	4.58327E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	30	36.0555128	1.2379E-06	8.003E-06	3.745E-05	0.00024009	0.001059293	1.17974E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2633.7327	20	20	28.2842712	0.63382632	0.0011656	0.0341623	0.023311954	0.966256812	0.934195675
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	310.32267	20	30	36.0555128	0.01429905	0.0003049	0.0040252	0.009145717	0.113850351	0.013045546
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	219.11526	20	30	36.0555128	0.00712895	0.0001326	0.0028422	0.003976506	0.08038842	0.006478111
3.A.1.e - Camels	CH <sub>4</sub>	0	0.119784	0	0	0	0	1.554E-06	1.554E-06	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	17.970876	20	30	36.0555128	4.7953E-05	0.0001168	0.0002331	0.003504348	0.006593107	5.57495E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	25.16388	20	30	36.0555128	9.4023E-05	0.000155	0.0003264	0.004649237	0.009232057	0.000106846
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.985572	20	30	36.0555128	1.4423E-07	6.885E-06	1.278E-05	0.000206551	0.000361584	1.73406E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	2.6201E-08	1.164E-06	5.449E-06	3.49301E-05	0.000154114	2.49712E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.4733E-10	8.731E-08	4.086E-07	2.61933E-06	1.15566E-05	1.40417E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	102.92195	20	30	36.0555128	0.00157288	0.0002043	0.001335	0.006128763	0.037759729	0.001463359



**Annex 22 (j) - Uncertainties for the period 1994 to 2003 – Level and Trend assessments - Base year- 1994, Year T-2003**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	49.057953	20	30	36.0555128	0.00035735	3.67E-05	0.0006363	0.001100913	0.017998251	0.000325149
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	12.412907	20	30	36.0555128	2.2878E-05	3.111E-05	0.000161	0.000933205	0.004554014	2.16099E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	9.6410714	20	30	36.0555128	1.3802E-05	3.293E-05	0.0001251	0.000987847	0.00353709	1.34869E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0066662	20	30	36.0555128	6.5985E-12	8.647E-08	8.647E-08	2.59405E-06	2.44569E-06	1.27105E-11
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.1864566	20	30	36.0555128	7.0984E-07	3.52E-06	2.836E-05	0.000105608	0.000802161	6.54616E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.0196656	20	30	36.0555128	1.3539E-06	4.156E-06	3.917E-05	0.000124668	0.001107847	1.24287E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.985572	20	30	36.0555128	1.4423E-07	6.885E-06	1.278E-05	0.000206551	0.000361584	1.73406E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.7663905	20	30	36.0555128	8.7213E-08	9.941E-06	9.941E-06	0.000298227	0.000281171	1.67997E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.563237	20	30	36.0555128	4.7105E-08	4.235E-06	7.306E-06	0.000127045	0.000206639	5.88401E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.2346314	20	30	36.0555128	8.1743E-09	1.124E-06	3.043E-06	3.37348E-05	8.6081E-05	8.54797E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-111629.35	20	10	22.3606798	711.645494	0.0476494	1.4479524	0.476494346	40.95427829	1677.479957
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.00083285	0.002373	0.0015664	0.02373015	0.04430491	0.002526045
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.10848164	0.0036838	0.0178772	0.036837767	0.505644802	0.257033687
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8888.744	20	10	22.3606798	4.51219315	0.0212485	0.1152965	0.212484813	3.261078597	10.67978341
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	50.635677	20	10	22.3606798	0.00014643	0.0002162	0.0006568	0.002161874	0.018577082	0.000349782
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.0685113	10	10	14.1421356	1.1414E-06	3.21E-05	9.169E-05	0.000320956	0.001296638	1.78428E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	1468.8611	20	20	28.2842712	0.19714617	0.0271277	0.0190527	0.542553696	0.538891845	0.584768933
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	637.74083	20	10	22.3606798	0.02322712	0.0117756	0.0082722	0.117755908	0.23397265	0.068609655
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	5.9010457	20	10	22.3606798	1.9887E-06	0.0001817	7.654E-05	0.001817338	0.00216496	7.98977E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	4.3781952	20	20	28.2842712	1.7515E-06	0.0001348	5.679E-05	0.002696694	0.001606261	9.85223E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.8652377	10	20	22.3606798	4.2754E-08	5.886E-06	1.122E-05	0.000117722	0.000158718	3.905E-08
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1623.2382	20	20	28.2842712	0.24076391	0.0003461	0.0210551	0.006922371	0.595529293	0.354703058
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	1.6529958	20	20	28.2842712	2.4967E-07	3.716E-06	2.144E-05	7.43234E-05	0.000606447	3.73302E-07
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	94.696835	20	20	28.2842712	0.0008194	0.0001742	0.0012283	0.003484976	0.034742121	0.00121916
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	30.684457	30	60	67.0820393	0.00048393	0.0002654	0.000398	0.015921548	0.016886147	0.000538638
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	12.117621	0	0	0	0	2.426E-05	0.0001572	0	0	0
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	2.3529491	0	0	0	0	4.712E-06	3.052E-05	0	0	0
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.3774282	0	0	0	0	2.758E-06	1.787E-05	0	0	0
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	23.193877	20	0	20	2.4578E-05	4.682E-05	0.0003008	0	0.008509308	7.24083E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	7.8543405	20	30	36.0555128	9.1601E-06	2.073E-05	0.0001019	0.000622039	0.002881579	8.69043E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	23.47523	25	30	39.0512484	9.599E-05	0.0001402	0.0003045	0.00420641	0.010765662	0.000133593
<b>Total</b>												
		Sum(C) : -77094.629	-93568.907				Sum(H): 719.807					Sum(M): 1690.531
							Uncertainty in total inventory: 26.829					Trend uncertainty: 41.116

**Annex 22 (k) - Uncertainties for the period 1994 to 2004 – Level and Trend assessments - Base year- 1994, Year T-2004**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.4074429	0.2	7	7.00285656	8.9288E-10	5.375E-06	5.285E-06	3.76274E-05	1.49482E-06	1.41806E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0009791	0.2	297	297.000067	9.2747E-12	1.292E-08	1.27E-08	3.8365E-06	3.59219E-09	1.47188E-11
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0003316	0.2	75	75.0002667	6.7853E-14	4.375E-09	4.302E-09	3.28146E-07	1.21671E-09	1.07681E-13
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	1.7524082	0.2	7	7.00285656	1.6517E-08	0.0004581	2.273E-05	0.003206958	6.42919E-06	1.02846E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0086138	0.2	297	297.000067	7.1782E-10	2.252E-06	1.117E-07	0.000668824	3.16022E-08	4.47326E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.000389	0.2	75	75.0002667	9.3361E-14	1.017E-07	5.046E-09	7.62751E-06	1.4272E-09	5.8179E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuel	CO <sub>2</sub>	34.36326	56.095861	6.5	7	9.55248659	3.1492E-05	0.0001756	0.0007276	0.001228911	0.006688597	4.62476E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuel	N <sub>2</sub> O	0.0873084	0.1417166	6.5	297	297.071119	1.9439E-07	4.356E-07	1.838E-06	0.00012936	1.68976E-05	1.70196E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuel	CH <sub>4</sub>	0.0295722	0.0480008	6.5	75	75.2811397	1.4321E-09	1.475E-07	6.226E-07	1.10645E-05	5.72338E-05	1.55181E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fos	CO <sub>2</sub>	1.2587076	6.0416059	6.5	7	9.55248659	3.653E-07	5.814E-05	7.837E-05	0.00040701	0.000720372	6.84592E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fos	N <sub>2</sub> O	0.0212933	0.1022045	6.5	297	297.071119	1.011E-07	9.836E-07	1.326E-06	0.000292133	1.21864E-05	8.54903E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fos	CH <sub>4</sub>	0.0108184	0.0519265	6.5	75	75.2811397	1.676E-09	4.997E-07	6.735E-07	3.74804E-05	6.19146E-06	1.44312E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuel	CO <sub>2</sub>	73.58934	92.843467	6.5	7	9.55248659	8.6267E-05	2.202E-05	0.0012043	0.000154172	0.011070203	0.000122573
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuel	N <sub>2</sub> O	0.3617235	0.4563659	6.5	297	297.071119	2.0159E-06	1.083E-07	5.92E-06	3.2153E-05	5.44148E-05	3.99479E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuel	CH <sub>4</sub>	0.163359	0.2061007	6.5	75	75.2811397	2.6402E-08	4.889E-08	2.673E-06	3.66684E-06	2.45744E-05	6.17349E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.9929999	12.5	7	14.3265488	8.9415E-08	5.025E-06	2.585E-05	3.51721E-05	0.000456992	2.10078E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.00513	12.5	297	297.262931	2.5505E-10	1.275E-08	6.654E-08	3.78805E-06	1.17631E-06	1.5733E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0017376	12.5	75	76.0345316	1.9144E-12	4.32E-09	2.254E-08	3.24002E-07	3.98426E-07	2.63721E-13
1.A.3.a.i - International Aviation (International Bunkers) - Li	CO <sub>2</sub>	72.730587	90.81072	4	5	6.40312424	3.7083E-05	9.454E-06	0.0011779	4.72695E-05	0.00663279	4.44015E-05
1.A.3.a.i - International Aviation (International Bunkers) - Li	N <sub>2</sub> O	0.6306708	0.7874496	4	110	110.072703	8.2398E-07	8.198E-08	1.021E-05	9.01748E-06	5.77795E-05	3.41978E-09
1.A.3.a.i - International Aviation (International Bunkers) - Li	CH <sub>4</sub>	0.0106807	0.0133358	4	79	79.101201	1.2204E-10	1.388E-09	1.73E-07	1.09676E-07	9.78523E-07	9.69537E-13
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	19.814816	4	5	6.40312424	1.7655E-06	1.209E-05	0.000257	6.04672E-05	0.001453921	2.11754E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1736278	4	110	110.072703	4.006E-08	1.065E-07	2.252E-06	1.17199E-05	1.274E-05	2.99665E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0029405	4	79	79.101201	5.9335E-12	1.804E-09	3.814E-08	1.42546E-07	2.15758E-07	6.68711E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid F	CO <sub>2</sub>	69.045102	137.83956	5	3.5	6.10327781	7.7622E-05	0.0006787	0.0017879	0.002375393	0.012642552	0.000165477
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid F	N <sub>2</sub> O	1.0046691	2.021607	5	12	13	7.5751E-08	1.008E-05	2.622E-05	0.000120982	0.00018542	4.90174E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid F	CH <sub>4</sub>	0.6179237	1.162863	5	9.62	10.8417895	1.7433E-08	5.156E-06	1.508E-05	4.96034E-05	0.000106657	1.38362E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid	CO <sub>2</sub>	146.72173	292.90906	5	3.5	6.10327781	0.00035051	0.0014422	0.0037993	0.005047711	0.026865423	0.00074723
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid	N <sub>2</sub> O	2.1349353	4.2959148	5	12	13	3.4207E-07	2.142E-05	5.572E-05	0.000257084	0.000394018	2.21343E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid	CH <sub>4</sub>	1.3130934	2.4710838	5	9.62	10.8417895	7.8721E-08	1.096E-05	3.205E-05	0.000105406	0.000226646	6.2479E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid	CO <sub>2</sub>	267.86954	538.03267	5	3.5	6.10327781	0.00118265	0.0026755	0.0069789	0.009364165	0.049347996	0.002522912
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid	N <sub>2</sub> O	3.922926	8.0073826	5	12	13	1.1884E-06	4.084E-05	0.0001039	0.000490084	0.000734432	7.79572E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid	CH <sub>4</sub>	2.2853972	4.0217074	5	9.62	10.8417895	2.0851E-07	1.545E-05	5.217E-05	0.000148626	0.000368868	1.58153E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Ligu	CO <sub>2</sub>	89.290092	179.34422	5	3.5	6.10327781	0.00013141	0.0008918	0.0023263	0.003121302	0.016449332	0.000280323
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Ligu	N <sub>2</sub> O	1.307646	2.6691275	5	12	13	1.3205E-07	1.361E-05	3.462E-05	0.00016336	0.000244811	8.66188E-08

## Annex 22 (k) - Uncertainties for the period 1994 to 2004 – Level and Trend assessments - Base year- 1994, Year T-2004

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalystrs - Liqu	CH <sub>4</sub>	0.7617993	1.3405691	5	9.62	10.8417895	2.3168E-08	5.15E-06	1.739E-05	4.95418E-05	0.000122956	1.75726E-08
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	515.57119	5	3.5	6.10327781	0.00108596	0.0041044	0.0066875	0.014365386	0.047287845	0.002442505
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	8.411951	5	12	13	1.3116E-06	6.697E-05	0.0001091	0.000803581	0.000771539	1.24101E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.5698418	5	9.62	10.8417895	4.1862E-09	4.536E-06	7.391E-06	4.36396E-05	5.22655E-05	4.6361E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.6091707	5	3.5	6.10327781	1.0579E-08	7.281E-06	2.087E-05	2.54834E-05	0.000147592	2.24328E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0227935	5	12	13	9.6299E-12	1.031E-07	2.957E-07	1.23764E-06	2.09061E-06	5.90238E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0159233	5	9.62	10.8417895	3.2687E-12	7.205E-08	2.065E-07	6.93122E-07	1.46047E-06	2.6134E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	50.114126	5	3.5	6.10327781	1.026E-05	8.683E-05	0.00065	0.000303899	0.004596434	2.12196E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.9961113	5	12	13	6.664E-07	1.039E-05	7.778E-05	0.000124666	0.000549959	3.17997E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0589399	5	9.62	10.8417895	4.4785E-11	1.021E-07	7.645E-07	9.82388E-07	5.40593E-06	3.01891E-11
1.A.3.d.i - International water-borne navigation (Internationa	CO <sub>2</sub>	139.69015	140.16225	10	3	10.4403065	0.00023485	0.0004262	0.0018181	0.001278466	0.025711176	0.000662699
1.A.3.d.i - International water-borne navigation (Internationa	N <sub>2</sub> O	1.1528879	1.1504188	10	90	90.5538514	1.1902E-06	3.6E-06	1.492E-05	0.000323968	0.000211031	1.49489E-07
1.A.3.d.i - International water-borne navigation (Internationa	CH <sub>4</sub>	0.273346	0.2727606	10	50	50.9901951	2.1215E-08	8.535E-07	3.538E-06	4.26731E-05	5.00348E-05	4.32448E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	487.42135	20	297	297.672639	2.30886191	0.0010862	0.0063224	0.322611412	0.178823841	0.136056089
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.797951	20	75	77.6208735	0.00047454	5.918E-05	0.0003476	0.004438511	0.009831561	0.00011636
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.1221007	20	999	999.20018	0.00287285	1.118E-05	6.644E-05	0.011165294	0.001879183	0.000128195
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	108.80077	5	7	8.60232527	9.6074E-05	0.0002292	0.0014113	0.001604246	0.009979134	0.000102157
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.290457	5	75	75.1664819	5.2279E-08	5.988E-07	3.768E-06	4.49096E-05	2.66405E-05	2.72659E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2394171	5	297	297.042085	5.547E-07	4.791E-07	3.105E-06	0.000142306	2.19592E-05	2.07332E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	397.76086	20	3	20.2237484	0.00709706	0.00071	0.0051594	0.002130061	0.14592944	0.021299939
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	1.1296559	20	50	53.8516481	4.0588E-07	2.001E-06	1.465E-05	0.000100072	0.000414445	1.81779E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	1.0005524	20	90	92.1954446	9.3327E-07	1.773E-06	1.298E-05	0.000159543	0.00036708	1.60202E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	42.830752	5	3.5	6.10327781	7.4946E-06	0.0003167	0.0005556	0.001108352	0.003928408	1.66608E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.6988175	5	12	13	9.0516E-09	5.167E-06	9.064E-06	6.20009E-05	6.40951E-05	7.95229E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0473393	5	9.62	10.8417895	2.8891E-11	3.5E-07	6.14E-07	3.36705E-06	4.34192E-06	3.01893E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	9.702	5	2	5.38516481	2.9939E-07	6.211E-05	0.0001258	0.000124225	0.000889861	8.07284E-07
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	205.0326	10	50	50.9901951	0.01198754	0.0026595	0.0026595	0.132974633	0.037610906	0.019096833
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	2.4170667	15	50	52.2015325	1.746E-06	2.327E-05	3.135E-05	0.001163495	0.000665075	1.79604E-06
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	20.159333	15	100	101.118742	0.00045575	2.268E-05	0.0002615	0.002267975	0.005547002	3.59129E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	7.3146E-07	8.935E-06	3.745E-05	0.000178696	0.001059293	1.15403E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2620.5587	20	20	28.2842712	0.60254406	0.0020609	0.0339915	0.041218961	0.961423578	0.926034299
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	275.03312	20	30	36.0555128	0.0107851	0.0008514	0.0035675	0.025541568	0.10903413	0.01083387
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	209.70306	20	30	36.0555128	0.00626995	4.509E-05	0.0027201	0.001352599	0.076935297	0.00592087
3.A.1.e - Camels	CH <sub>4</sub>	0	0.109158	0	0	0	0	1.416E-06	1.416E-06	0	0	0

## Annex 22 (k) - Uncertainties for the period 1994 to 2004 – Level and Trend assessments - Base year- 1994, Year T-2004

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A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	23.710428	20	30	36.0555128	8.0155E-05	4.954E-05	0.0003075	0.001486092	0.008698818	7.78779E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	29.89413	20	30	36.0555128	0.00012742	0.0001035	0.0003878	0.003104583	0.010967478	0.000129924
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.105104	20	30	36.0555128	1.7412E-07	8.315E-06	1.433E-05	0.000249437	0.000405438	2.26598E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	2.5159E-08	1.3E-06	5.449E-06	3.89972E-05	0.000154114	2.52719E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.4147E-10	9.748E-08	4.086E-07	2.9243E-06	1.15566E-05	1.42107E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	108.03146	20	30	36.0555128	0.00166401	0.0001696	0.0014013	0.005087133	0.039634294	0.001596756
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	49.3437	20	30	36.0555128	0.00034715	4.679E-05	0.00064	0.001403631	0.018103085	0.000329692
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.001325	20	30	36.0555128	1.7256E-05	1.013E-05	0.0001427	0.000304023	0.004036137	1.63828E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	9.2269346	20	30	36.0555128	1.2139E-05	2.567E-05	0.0001197	0.000770035	0.003385153	1.20522E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0060749	20	30	36.0555128	5.2617E-12	7.88E-08	7.88E-08	2.36393E-06	2.22874E-06	1.05554E-11
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.8847687	20	30	36.0555128	1.1865E-06	4.884E-06	3.742E-05	0.000146521	0.001058356	1.14159E-06
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.5872956	20	30	36.0555128	1.8348E-06	2.319E-06	4.653E-05	6.95717E-05	0.001316097	1.73695E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.105104	20	30	36.0555128	1.7412E-07	8.315E-06	1.433E-05	0.000249437	0.000405438	2.26598E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.8593398	20	30	36.0555128	1.0529E-07	1.115E-05	1.115E-05	0.000334397	0.000315272	2.11218E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.6035186	20	30	36.0555128	5.1932E-08	4.694E-06	7.828E-06	0.000140831	0.000221417	6.88591E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.2514118	20	30	36.0555128	9.0121E-09	1.303E-06	3.261E-06	3.90844E-05	9.22373E-05	1.00353E-08
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-113450.21	20	10	22.3606798	705.8162	0.0546167	1.4715708	0.546167037	41.62230863	1732.714874
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.00079973	0.0024538	0.0015664	0.024537715	0.04430491	0.002565024
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.10416705	0.0041257	0.0178772	0.041257085	0.505644802	0.257378813
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8888.744	20	10	22.3606798	4.33273197	0.0240503	0.1152965	0.240502902	3.261078597	10.69247526
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	50.635677	20	10	22.3606798	0.0001406	0.0002341	0.0006568	0.002340835	0.018577082	0.000350587
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.0685113	10	10	14.1421356	1.096E-06	3.463E-05	9.169E-05	0.000346331	0.001296638	1.80122E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	1306.7263	20	20	28.2842712	0.14982016	0.0301784	0.0169496	0.603567726	0.479408233	0.594126254
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	567.34614	20	10	22.3606798	0.01765132	0.0130998	0.0073591	0.1309984	0.208146432	0.060485518
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	5.0321319	20	10	22.3606798	1.3886E-06	0.0001983	6.527E-05	0.001982992	0.001846175	7.34062E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	3.7335172	20	20	28.2842712	1.223E-06	0.0001471	4.843E-05	0.002942503	0.001369743	1.05345E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.5874452	10	20	22.3606798	1.8924E-08	2.173E-06	7.62E-06	4.34689E-05	0.00010776	1.35018E-08
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1593.2854	20	20	28.2842712	0.22273485	0.0011735	0.0206666	0.023470097	0.584540292	0.342238198
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	6.4620334	20	20	28.2842712	3.6639E-06	6.573E-05	8.382E-05	0.001314624	0.0023370774	7.3488E-06
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	99.461819	20	20	28.2842712	0.00086799	0.0001412	0.0012901	0.002823876	0.036490286	0.001339515
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	33.90273	30	60	67.0820393	0.00056727	0.0003044	0.0004398	0.018263058	0.018657214	0.000681631
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	12.704399	40	100	107.703296	0.00020534	2.915E-05	0.0001648	0.002915085	0.009321912	9.53958E-05
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	2.4668871	40	100	107.703296	7.7423E-06	5.66E-06	3.2E-05	0.000566039	0.00181009	3.59683E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.4441281	40	100	107.703296	2.6533E-06	3.314E-06	1.873E-05	0.000331362	0.001059636	1.23263E-06

**Annex 22 (k) - Uncertainties for the period 1994 to 2004 – Level and Trend assessments - Base year- 1994, Year T-2004**

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<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	23.520917	20	0	20	2.4271E-05	4.97E-05	0.0003051	0	0.008629291	7.44647E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	8.1721586	20	30	36.0555128	9.522E-06	2.319E-05	0.000106	0.000695809	0.00299818	9.47323E-06
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	21.227	25	30	39.0512484	7.5363E-05	0.0001785	0.0002753	0.005354769	0.009734631	0.000123437
Total												
		Sum(C) : -77094.629	-95487.052				Sum(H): 713.603					Sum(M): 1745.796
							Uncertainty in total inventory: 26.713					Trend uncertainty: 41.783

## Annex 22 (I) - Uncertainties for the period 1994 to 2005 – Level and Trend assessments - Base year- 1994, Year T-2005

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	3.87274	0.2	7	7.00285656	8.52889E-08	3.987E-05	5.023E-05	0.000279063	1.42082E-05	7.80779E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0093066	0.2	297	297.000067	8.85929E-10	9.58E-08	1.207E-07	2.84533E-05	3.41437E-08	8.0959E-10
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0031522	0.2	75	75.0002667	6.48137E-12	3.245E-08	4.089E-08	2.43369E-06	1.15648E-08	5.92297E-10
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	49.750821	0.2	7	7.00285656	1.40753E-05	0.0001777	0.0006453	0.001243661	0.000182524	1.58001E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.2445468	0.2	297	297.000067	6.11706E-07	8.733E-07	3.172E-06	0.000259371	8.97187E-07	6.72739E-08
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0110441	0.2	75	75.0002667	7.95587E-11	3.944E-08	1.433E-07	2.95796E-06	4.05181E-08	8.75115E-12
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	55.202531	6.5	7	9.55248659	3.22445E-05	0.0001791	0.000716	0.001253957	0.006582081	4.48962E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1398914	6.5	297	297.071119	2.00267E-07	4.504E-07	1.815E-06	0.000133773	1.668E-05	1.81734E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0473826	6.5	75	75.2811397	1.47542E-09	1.526E-07	6.146E-07	1.1442E-05	5.64967E-06	1.62837E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	9.1035668	6.5	7	9.55248659	8.76923E-07	9.842E-05	0.0001181	0.000688917	0.001085465	1.65284E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.154003	6.5	297	297.071119	2.42708E-07	1.665E-06	1.998E-06	0.000494473	1.83626E-05	2.44841E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.0782435	6.5	75	75.2811397	4.02322E-09	8.459E-07	1.015E-06	6.34405E-05	9.32937E-06	4.11173E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	79.566168	6.5	7	9.55248659	6.69877E-05	0.0001177	0.0010321	0.000824045	0.009487082	9.06838E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3911022	6.5	297	297.071119	1.56533E-06	5.786E-07	5.073E-06	0.000171857	4.66331E-05	3.17095E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1766268	6.5	75	75.2811397	2.05017E-08	2.613E-07	2.291E-06	1.95992E-05	2.10601E-05	8.27657E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.9699401	12.5	7	14.3265488	9.23622E-08	5.298E-06	2.555E-05	3.70831E-05	0.000451704	2.05412E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0050683	12.5	297	297.262931	2.63215E-10	1.343E-08	6.574E-08	3.9891E-06	1.16215E-06	1.72635E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0017167	12.5	75	76.0345316	1.97563E-12	4.549E-09	2.227E-08	3.41198E-07	3.93632E-07	2.71363E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	91.718827	4	5	6.40312424	3.9995E-05	5.333E-05	0.0011897	0.000266656	0.006729912	4.53628E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.7953241	4	110	110.072703	8.88695E-07	4.624E-07	1.032E-05	5.08693E-05	5.83573E-05	5.99326E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0134692	4	79	79.101201	1.3163E-10	7.832E-09	1.747E-07	6.18711E-07	9.88309E-07	1.35956E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	20.012964	4	5	6.40312424	1.9042E-06	2.131E-06	0.0002596	1.06532E-05	0.001468461	2.15649E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1753641	4	110	110.072703	4.32062E-08	1.923E-08	2.275E-06	2.11529E-06	1.28674E-05	1.70045E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0029699	4	79	79.101201	6.39952E-12	3.257E-10	3.852E-08	2.57271E-08	2.17916E-07	4.81493E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	148.43767	5	3.5	6.10327781	9.51743E-05	0.0008466	0.0019254	0.002963189	0.013614604	0.000194138
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.1770429	5	12	13	9.28808E-08	1.254E-05	2.824E-05	0.000150497	0.000199677	6.25201E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.2522724	5	9.62	10.8417895	2.13749E-08	6.589E-06	1.624E-05	6.33835E-05	0.000114858	1.72097E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	315.43005	5	3.5	6.10327781	0.000429771	0.0017991	0.0040915	0.006296791	0.028931033	0.000876654
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	4.6262161	5	12	13	4.19415E-07	2.665E-05	6.001E-05	0.000319803	0.000424313	2.82316E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.6610788	5	9.62	10.8417895	9.65212E-08	1.4E-05	3.452E-05	0.000134689	0.000244072	7.77125E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	572.59047	5	3.5	6.10327781	0.001416184	0.003242	0.0074271	0.011346876	0.052517615	0.002886851
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	8.534334	5	12	13	1.42735E-06	4.941E-05	0.0001107	0.000592881	0.000782763	9.64226E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	4.2238504	5	9.62	10.8417895	2.43178E-07	1.908E-05	5.479E-05	0.000183552	0.000387409	1.83777E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	190.86349	5	3.5	6.10327781	0.000157354	0.0010806	0.0024757	0.003782191	0.017505872	0.000320761
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	2.844778	5	12	13	1.58595E-07	1.647E-05	3.69E-05	0.000197626	0.000260921	1.07136E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.4079501	5	9.62	10.8417895	2.70198E-08	6.36E-06	1.826E-05	6.1184E-05	0.000129136	2.04196E-08

## Annex 22 (I) - Uncertainties for the period 1994 to 2005 – Level and Trend assessments - Base year- 1994, Year T-2005

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	551.64928	5	3.5	6.10327781	0.001314491	0.0046433	0.0071555	0.016251689	0.050596903	0.002824164
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	9.0005935	5	12	13	1.58757E-06	7.576E-05	0.0001167	0.000909098	0.000825528	1.50796E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.6097176	5	9.62	10.8417895	5.06716E-09	5.132E-06	7.909E-06	4.93699E-05	5.59229E-05	5.56476E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	1.815043	5	3.5	6.10327781	1.423E-08	1.032E-05	2.354E-05	3.61366E-05	0.000166475	2.90196E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0257096	5	12	13	1.29534E-11	1.463E-07	3.335E-07	1.75501E-06	2.35807E-06	8.64054E-12
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0179605	5	9.62	10.8417895	4.39685E-12	1.022E-07	2.33E-07	9.82865E-07	1.64732E-06	3.67969E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	52.366841	5	3.5	6.10327781	1.18452E-05	0.0001315	0.0006793	0.00046032	0.004803052	2.32812E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	6.2656465	5	12	13	7.6935E-07	1.574E-05	8.127E-05	0.000188834	0.000574681	3.65916E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0615893	5	9.62	10.8417895	5.17033E-11	1.547E-07	7.989E-07	1.48804E-06	5.64893E-06	3.41247E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	141.93289	10	3	10.4403065	0.000254623	0.0003415	0.001841	0.001024614	0.026035979	0.000678922
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.1639064	10	90	90.5538514	1.28812E-06	2.916E-06	1.51E-05	0.00026243	0.000213505	1.14454E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2759585	10	50	50.9901951	2.29597E-08	6.913E-07	3.579E-06	3.45674E-05	5.06215E-05	3.75744E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	487.70487	20	297	297.672639	2.443977599	0.000879	0.0063261	0.26107174	0.178927856	0.100173631
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.813899	20	75	77.6208735	0.000502322	4.78E-05	0.0003478	0.003584922	0.009837411	0.000109626
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.1252396	20	999	999.20018	0.003041155	9.004E-06	6.648E-05	0.008994632	0.001880334	8.44391E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	112.30238	5	7	8.60232527	0.000108222	0.0001387	0.0014567	0.000970858	0.010300299	0.000107039
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2864545	5	75	75.1664819	5.37607E-08	5.308E-07	3.716E-06	3.98076E-05	2.62734E-05	2.27494E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2243938	5	297	297.042085	5.15184E-07	5.755E-07	2.911E-06	0.000170936	2.05812E-05	2.96427E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	382.35126	20	3	20.2237484	0.006933517	0.0007487	0.0049595	0.002246005	0.140276006	0.019682403
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	1.0860875	20	50	53.8516481	3.96673E-07	2.109E-06	1.409E-05	0.000105453	0.000398461	1.69891E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.9619632	20	90	92.1954446	9.12097E-07	1.868E-06	1.248E-05	0.000168123	0.000352922	1.52819E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	43.05191	5	3.5	6.10327781	8.00601E-06	0.0003261	0.0005584	0.00114136	0.003948692	1.68949E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.7024259	5	12	13	9.66925E-09	5.321E-06	9.111E-06	6.38474E-05	6.4426E-05	8.22721E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0475837	5	9.62	10.8417895	3.0862E-11	3.604E-07	6.172E-07	3.46733E-06	4.36434E-06	3.10699E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	10.0485	5	2	5.38516481	3.39552E-07	6.836E-05	0.0001303	0.000136716	0.000921642	8.68115E-07
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	228.43836	10	50	50.9901951	0.015733184	0.0029631	0.0029631	0.148154523	0.041904427	0.023705744
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	3.6432	15	50	52.2015325	4.19409E-06	3.94E-05	4.726E-05	0.001969809	0.001002456	4.88506E-06
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	18.138267	15	100	101.118742	0.000390086	4.109E-05	0.0002353	0.004108904	0.004990889	4.17921E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	7.73367E-07	7.661E-06	3.745E-05	0.000153212	0.001059293	1.14557E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2451.8442	20	20	28.2842712	0.557674686	0.0032594	0.031803	0.06518709	0.899526035	0.813396444
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	279.69848	20	30	36.0555128	0.011793121	0.0006695	0.003628	0.020084345	0.102615028	0.010933225
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	214.5653	20	30	36.0555128	0.006940129	9.394E-05	0.0027831	0.002818332	0.078719141	0.006204646
3.A.1.e - Camels	CH <sub>4</sub>	0	0.060858	0	0	0	0	7.894E-07	7.894E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	17.928162	20	30	36.0555128	4.84529E-05	0.0001147	0.0002325	0.003441887	0.006577436	5.51092E-05

## Annex 22 (I) - Uncertainties for the period 1994 to 2005 – Level and Trend assessments - Base year- 1994, Year T-2005

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A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	29.46111	20	30	36.0555128	0.000130842	9.561E-05	0.0003821	0.002868246	0.010808613	0.000125053
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.174551	20	30	36.0555128	2.07966E-07	9.381E-06	1.524E-05	0.000281422	0.000430916	2.64887E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	2.66005E-08	1.115E-06	5.449E-06	3.34356E-05	0.000154114	2.4869E-07
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.49579E-10	8.358E-08	4.086E-07	2.50725E-06	1.15566E-05	1.39842E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	105.72529	20	30	36.0555128	0.001685025	0.0001563	0.0013714	0.004689983	0.038788212	0.001526521
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	46.60593	20	30	36.0555128	0.000327439	6.343E-05	0.0006045	0.001902969	0.017098659	0.000295985
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.187939	20	30	36.0555128	1.8869E-05	1.62E-05	0.0001451	0.000485888	0.004104601	1.70838E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	9.440873	20	30	36.0555128	1.34361E-05	3.103E-05	0.0001225	0.000930764	0.003463642	1.28631E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0033869	20	30	36.0555128	1.72921E-12	4.393E-08	4.393E-08	1.31794E-06	1.24257E-06	3.28095E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.1812597	20	30	36.0555128	7.17238E-07	3.347E-06	2.829E-05	0.000100425	0.000800255	6.50493E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.5353332	20	30	36.0555128	1.88412E-06	2.86E-06	4.586E-05	8.57869E-05	0.001297034	1.68966E-07
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.174551	20	30	36.0555128	2.07966E-07	9.381E-06	1.524E-05	0.000281422	0.000430916	2.64887E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.9133425	20	30	36.0555128	1.25752E-07	1.185E-05	1.185E-05	0.000355411	0.000335085	2.38599E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.5818397	20	30	36.0555128	5.10335E-08	4.499E-06	7.547E-06	0.000134978	0.000213464	6.37859E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2423809	20	30	36.0555128	8.85616E-09	1.239E-06	3.144E-06	3.7184E-05	8.8924E-05	9.29014E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-111223.78	20	10	22.3606798	717.2499174	0.0417118	1.4426917	0.417117561	40.80548243	1665.261384
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.000845546	0.0023433	0.0015664	0.023433375	0.04430491	0.002512048
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.1101348	0.0035214	0.0178772	0.035213698	0.505644802	0.25691667
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	20	10	22.3606798	4.58095479	0.0202188	0.1152965	0.202188355	3.261078597	10.67551375
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000148658	0.0002096	0.0006568	0.002096106	0.018577082	0.000349502
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.15875E-06	3.116E-05	9.169E-05	0.000311631	0.001296638	1.77838E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	1634.9284	20	20	28.2842712	0.247966308	0.0246248	0.0212068	0.492496761	0.599818159	0.602334883
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	709.84287	20	10	22.3606798	0.029214581	0.0106892	0.0092074	0.106891546	0.260425251	0.079247114
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	6.0261404	20	10	22.3606798	2.10549E-06	0.0001782	7.817E-05	0.001781655	0.002210854	8.06217E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	4.4710074	20	20	28.2842712	1.85441E-06	0.0001322	5.799E-05	0.002643744	0.001640311	9.68001E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.2011128	10	20	22.3606798	2.34506E-09	2.688E-06	2.609E-06	5.37617E-05	3.68919E-05	4.25133E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1508.3727	20	20	28.2842712	0.211063199	0.0016751	0.0195652	0.033501103	0.553387735	0.307360309
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	7.1421869	20	20	28.2842712	4.73214E-06	7.505E-05	9.264E-05	0.001501008	0.002620306	9.11903E-06
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	97.396565	20	20	28.2842712	0.00088	0.0001287	0.0012633	0.002573272	0.035732591	0.00128344
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	37.352465	30	60	67.0820393	0.000728042	0.0003528	0.0004845	0.021170987	0.020555659	0.000870746
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.448282666	13.316339	40	100	107.703296	0.000238524	4.081E-05	0.0001727	0.004081441	0.009770926	0.000112129
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	2.5857111	40	100	107.703296	8.99339E-06	7.925E-06	3.354E-05	0.000792517	0.001897278	4.22774E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.5136883	40	100	107.703296	3.08202E-06	4.639E-06	1.963E-05	0.000463943	0.001110676	1.44884E-06
<b>4.D - Wastewater Treatment and Discharge</b>												



### Annex 22 (I) - Uncertainties for the period 1994 to 2005 – Level and Trend assessments - Base year- 1994, Year T-2005

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	23.852564	20	0	20	2.63898E-05	3.566E-05	0.0003094	0	0.008750965	7.65794E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	8.5329101	20	30	36.0555128	1.0976E-05	3.015E-05	0.0001107	0.000904431	0.003130531	1.06182E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	22.524376	25	30	39.0512484	8.97182E-05	0.0001492	0.0002922	0.004475912	0.010329603	0.000126734
Total		Sum(C): -77094.629	-92864.002			Sum(H): 725.485					Sum(M): 1678.173	
								Uncertainty in total inventory: 26.935		Trend uncertainty: 40.966		

**Annex 22 (m) - Uncertainties for the period 1994 to 2006 – Level and Trend assessments - Base year- 1994, Year T-2006**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	8.1601148	0.2	7	7.00285656	4.19777E-07	9.6E-05	0.0001058	0.000671992	2.99376E-05	4.52469E-07
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0196096	0.2	297	297.000067	4.36039E-09	2.307E-07	2.544E-07	6.85164E-05	7.19431E-08	4.6945E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.006642	0.2	75	75.0002667	3.19002E-11	7.814E-08	8.615E-08	5.86039E-06	2.43678E-08	3.43448E-11
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	155.90332	0.2	7	7.00285656	0.000153228	0.0015781	0.0020222	0.011046542	0.000571974	0.000122353
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.7663324	0.2	297	297.000067	6.65922E-06	7.757E-06	9.94E-06	0.002303801	2.8115E-06	5.30751E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0346086	0.2	75	75.0002667	8.66101E-10	3.503E-07	4.489E-07	2.62734E-05	1.26971E-07	6.90307E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	65.706161	6.5	7	9.55248659	5.06432E-05	0.0003424	0.0008523	0.002396477	0.007834483	6.71222E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1646945	6.5	297	297.071119	3.0772E-07	8.407E-07	2.136E-06	0.000249678	1.96374E-05	6.27249E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0557836	6.5	75	75.2811397	2.26705E-09	2.847E-07	7.236E-07	2.13557E-05	6.65137E-06	5.00306E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	10.263319	6.5	7	9.55248659	1.23562E-06	0.0001144	0.0001331	0.000801135	0.001223748	2.13938E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.1736223	6.5	297	297.071119	3.41986E-07	1.936E-06	2.252E-06	0.000575019	2.07019E-05	3.31075E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.0882113	6.5	75	75.2811397	5.66888E-09	9.837E-07	1.144E-06	7.37744E-05	1.05179E-05	5.55329E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	80.151931	6.5	7	9.55248659	7.53593E-05	5.236E-05	0.0010397	0.000366513	0.009556926	9.14692E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3939815	6.5	297	297.071119	1.76096E-06	2.574E-07	5.11E-06	7.64374E-05	4.69764E-05	8.04945E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1779271	6.5	75	75.2811397	2.30639E-08	1.162E-07	2.308E-06	8.7172E-06	2.12152E-05	5.26073E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.99824	12.5	7	14.3265488	1.05355E-07	6.682E-06	2.592E-05	4.67756E-05	0.000458193	2.12129E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0051396	12.5	297	297.262931	3.00066E-10	1.698E-08	6.667E-08	5.04429E-06	1.1785E-06	2.68338E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0017408	12.5	75	76.0345316	2.25223E-12	5.753E-09	2.258E-08	4.31451E-07	3.9917E-07	3.45487E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	92.636015	4	5	6.40312424	4.52293E-05	0.0001223	0.0012016	0.00061159	0.006797211	4.65761E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.8032773	4	110	110.072703	1.005E-06	1.061E-06	1.042E-05	0.000116671	5.89408E-05	1.70862E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0136039	4	79	79.101201	1.48857E-10	1.796E-08	1.765E-07	1.41904E-06	9.98192E-07	3.01007E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	20.247101	4	5	6.40312424	2.16066E-06	1.405E-05	0.0002626	7.02742E-05	0.00148564	2.21207E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1774189	4	110	110.072703	4.9027E-08	1.227E-07	2.301E-06	1.34932E-05	1.30182E-05	3.51539E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0030047	4	79	79.101201	7.26168E-12	2.077E-09	3.897E-08	1.64115E-07	2.20469E-07	7.55404E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	158.92246	5	3.5	6.10327781	0.000120941	0.0010368	0.0020614	0.003628878	0.014576262	0.000225636
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.3308168	5	12	13	1.18026E-07	1.532E-05	3.023E-05	0.000183895	0.000213781	7.95197E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.3407258	5	9.62	10.8417895	2.71618E-08	8.221E-06	1.739E-05	7.90869E-05	0.00012297	2.13765E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	337.71023	5	3.5	6.10327781	0.000546123	0.0022033	0.0043805	0.007711398	0.030974557	0.001018889
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	4.9529858	5	12	13	5.32963E-07	3.256E-05	6.425E-05	0.000390775	0.000454285	3.5908E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.8490423	5	9.62	10.8417895	1.22652E-07	1.747E-05	3.696E-05	0.000168059	0.000261312	9.65279E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CO <sub>2</sub>	267.869535	610.99646	5	3.5	6.10327781	0.001787639	0.0039504	0.0079253	0.013826461	0.056040187	0.003331674
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	N <sub>2</sub> O	3.922926	9.1201678	5	12	13	1.80704E-06	6.008E-05	0.0001183	0.000721018	0.000836496	1.21959E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CH <sub>4</sub>	2.2853972	4.4475988	5	9.62	10.8417895	2.98902E-07	2.378E-05	5.769E-05	0.000228729	0.000407931	2.18725E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	203.66549	5	3.5	6.10327781	0.000198627	0.0013168	0.0026418	0.004608701	0.018680062	0.000370185
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	3.0400559	5	12	13	2.00783E-07	2.003E-05	3.943E-05	0.000240339	0.000278832	1.3551E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.4825329	5	9.62	10.8417895	3.32114E-08	7.925E-06	1.923E-05	7.6243E-05	0.000135977	2.43027E-08

## Annex 22 (m) - Uncertainties for the period 1994 to 2006 – Level and Trend assessments - Base year- 1994, Year T-2006

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	577.71633	5	3.5	6.10327781	0.001598202	0.0051077	0.0074936	0.017876874	0.052987755	0.003127285
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	9.4258979	5	12	13	1.93023E-06	8.333E-05	0.0001223	0.001000009	0.000864537	1.74744E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.6385286	5	9.62	10.8417895	6.16082E-09	5.645E-06	8.282E-06	5.43069E-05	5.85654E-05	6.37915E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.0763896	5	3.5	6.10327781	2.06452E-08	1.438E-05	2.693E-05	5.03256E-05	0.000190445	3.8802E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0294115	5	12	13	1.87931E-11	2.037E-07	3.815E-07	2.44409E-06	2.69761E-06	1.32507E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0205466	5	9.62	10.8417895	6.37906E-12	1.423E-07	2.665E-07	1.36878E-06	1.88452E-06	5.42496E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	53.55533	5	1.5	5.22015325	1.00473E-05	0.0001745	0.0006947	0.00026168	0.004912059	2.41968E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	6.4078483	5	125	125.09996	8.26066E-05	2.087E-05	8.312E-05	0.00260914	0.000587724	7.15303E-06
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0629871	5	250	250.049995	3.18885E-08	2.052E-07	8.17E-07	5.1294E-05	5.77714E-06	2.66445E-09
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	143.70353	10	3	10.4403065	0.000289359	0.0002089	0.001864	0.000626761	0.026360783	0.000695284
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.177394	10	90	90.5538514	1.46128E-06	1.836E-06	1.527E-05	0.00016524	0.00021598	7.39514E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2791563	10	50	50.9901951	2.60462E-08	4.353E-07	3.621E-06	2.17655E-05	5.12081E-05	3.096E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	487.95748	20	297	297.672639	2.712176236	0.0005138	0.0063293	0.152586932	0.179020535	0.055331124
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.828108	20	75	77.6208735	0.000557459	2.774E-05	0.000348	0.002080502	0.009842625	0.000101206
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.1280364	20	999	999.20018	0.003375074	5.175E-06	6.652E-05	0.005170002	0.00188136	3.02684E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	106.604	5	7	8.60232527	0.000108107	0.0001325	0.0013828	0.000927211	0.009777648	9.64621E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2720518	5	75	75.1664819	5.37561E-08	5.043E-07	3.529E-06	3.7819E-05	2.49524E-05	2.0529E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2132149	5	297	297.042085	5.15641E-07	5.454E-07	2.766E-06	0.000161985	1.95559E-05	2.66216E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	302.41271	20	3	20.2237484	0.004808388	0.0014988	0.0039226	0.004496473	0.110948365	0.012329758
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.8596434	20	50	53.8516481	2.75493E-07	4.233E-06	1.115E-05	0.000211629	0.000315384	1.44254E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.7613984	20	90	92.1954446	6.3346E-07	3.749E-06	9.876E-06	0.000337398	0.00027934	1.91868E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	44.239605	5	3.5	6.10327781	9.37184E-06	0.0003532	0.0005738	0.001236132	0.004057627	1.79924E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.7218041	5	12	13	1.13188E-08	5.762E-06	9.363E-06	6.91489E-05	6.62034E-05	9.16446E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0488964	5	9.62	10.8417895	3.6127E-11	3.904E-07	6.342E-07	3.75523E-06	4.48475E-06	3.42147E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	10.395	5	2	5.38516481	4.02831E-07	7.597E-05	0.0001348	0.000151932	0.000953422	9.32098E-07
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	223.42284	10	50	50.9901951	0.016684169	0.002898	0.002898	0.144901689	0.040984387	0.022676219
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	4.1066667	15	50	52.2015325	5.90774E-06	4.58E-05	5.327E-05	0.002290136	0.001129982	6.52158E-06
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.139467	15	100	101.118742	0.00038613	4.016E-05	0.0002223	0.004016054	0.004716061	3.83699E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	8.57347E-07	5.394E-06	3.745E-05	0.000107884	0.001059293	1.13374E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2585.5659	20	20	28.2842712	0.687507311	0.0002376	0.0335376	0.004752262	0.9485855	0.899837035
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	279.32646	20	30	36.0555128	0.01303898	0.0004584	0.0036232	0.013751966	0.102478544	0.010690969
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	216.44732	20	30	36.0555128	0.007829317	0.0002535	0.0028076	0.007603836	0.079409612	0.006363705
3.A.1.e - Camels	CH <sub>4</sub>	0	0.070518	0	0	0	0	9.147E-07	9.147E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	19.645416	20	30	36.0555128	6.44974E-05	7.501E-05	0.0002548	0.002250244	0.007207458	5.7011E-05

## Annex 22 (m) - Uncertainties for the period 1994 to 2006 – Level and Trend assessments - Base year- 1994, Year T-2006

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	33.58908	20	30	36.0555128	0.000188545	1.806E-05	0.0004357	0.000541867	0.012323072	0.000152152
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.091412	20	30	36.0555128	1.99066E-07	8.596E-06	1.416E-05	0.000257894	0.000400414	2.26841E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	2.94891E-08	7.848E-07	5.449E-06	2.35437E-05	0.000154114	2.43054E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.65821E-10	5.885E-08	4.086E-07	1.76548E-06	1.15566E-05	1.36673E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	121.18457	20	30	36.0555128	0.002454223	0.0001209	0.0015719	0.003628308	0.04445987	0.001989845
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	50.06316	20	30	36.0555128	0.000418848	1.497E-05	0.0006494	0.000449085	0.018367038	0.00033755
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.173058	20	30	36.0555128	2.08624E-05	2.248E-05	0.0001449	0.000674406	0.004099142	1.72578E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	9.5236819	20	30	36.0555128	1.51576E-05	3.669E-05	0.0001235	0.001100792	0.003494023	1.34199E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0039245	20	30	36.0555128	2.57385E-12	5.09E-08	5.09E-08	1.52714E-06	1.4398E-06	4.40519E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.1251519	20	30	36.0555128	7.54744E-07	2.486E-06	2.757E-05	7.45705E-05	0.00077967	6.13446E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.0306896	20	30	36.0555128	2.71505E-06	1.145E-05	5.228E-05	0.00034335	0.001478769	2.30465E-07
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.091412	20	30	36.0555128	1.99066E-07	8.596E-06	1.416E-05	0.000257894	0.000400414	2.26841E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.8486928	20	30	36.0555128	1.20371E-07	1.101E-05	1.101E-05	0.000330254	0.000311366	2.06016E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.5818397	20	30	36.0555128	5.65752E-08	4.652E-06	7.547E-06	0.000139572	0.000213464	6.5047E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2423809	20	30	36.0555128	9.81784E-09	1.335E-06	3.144E-06	4.00544E-05	8.8924E-05	9.51184E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-107619.94	20	10	22.3606798	744.4432017	0.0141966	1.395946	0.141965969	39.48331393	1558.952233
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.000937364	0.0021469	0.0015664	0.021469198	0.04430491	0.002423852
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.122094322	0.0024465	0.0178772	0.024464946	0.505644802	0.256275199
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	0	0	0	0	0.0134042	0.1152965	0	0	0
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000164801	0.0001661	0.0006568	0.001660833	0.018577082	0.000347866
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.28458E-06	2.499E-05	9.169E-05	0.000249913	0.001296638	1.74373E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	2112.1983	20	20	28.2842712	0.458812732	0.0161289	0.0273975	0.322577245	0.774917649	0.704553442
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	917.06087	20	10	22.3606798	0.054055818	0.0070012	0.0118953	0.070012198	0.336448839	0.118099529
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	7.4395782	20	10	22.3606798	3.55748E-06	0.000147	9.65E-05	0.001469539	0.002729413	9.60924E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	5.519687	20	20	28.2842712	3.13325E-06	0.000109	7.16E-05	0.002180606	0.002025048	8.85586E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.1441381	10	20	22.3606798	1.33538E-09	3.161E-06	1.87E-06	6.32202E-05	2.64405E-05	4.69589E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1553.7901	20	20	28.2842712	0.248285165	1.859E-05	0.0201543	0.000371726	0.570050337	0.324957525
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	9.1752241	20	20	28.2842712	8.65764E-06	0.0001023	0.000119	0.002046097	0.003366182	1.55177E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	111.24785	20	20	28.2842712	0.001272768	0.0001209	0.001443	0.002418747	0.040814313	0.001671659
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	41.052976	30	60	67.0820393	0.00097494	0.0004075	0.0005325	0.024447807	0.022592109	0.001108099
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	13.954227	40	100	107.703296	0.000290366	5.572E-05	0.000181	0.005571562	0.010238979	0.000135879
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	2.7095735	40	100	107.703296	1.0948E-05	1.082E-05	3.515E-05	0.001081862	0.001988162	5.12321E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.5861979	40	100	107.703296	3.75188E-06	6.333E-06	2.057E-05	0.000633327	0.00116388	1.75572E-06
<b>4.D - Wastewater Treatment and Discharge</b>												

### Annex 22 (m) - Uncertainties for the period 1994 to 2006 – Level and Trend assessments - Base year- 1994, Year T-2006

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	24.572832	20	0	20	3.10489E-05	8.979E-06	0.0003187	0	0.009015215	8.12741E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	8.5474575	20	30	36.0555128	1.22094E-05	3.438E-05	0.0001109	0.001031469	0.003135868	1.08976E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	19.880293	25	30	39.0512484	7.74803E-05	0.0001613	0.0002579	0.004839609	0.009117036	0.000106542
Total												
		Sum(C): -77094.629	-88198.652				Sum(H): 748.785					Sum(M): 1561.381
							Uncertainty in total inventory: 27.364					Trend uncertainty: 39.514

## Annex 22 (n) - -Uncertainties for the period 1994 to 2007 – Level and Trend assessments - Base year- 1994, Year T-2007

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	8.0315968	0.2	7	7.00285656	4.38864E-07	9.47E-05	0.0001042	0.0006629	2.94661E-05	4.40304E-07
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0193007	0.2	297	297.000067	4.55865E-09	2.276E-07	2.504E-07	6.75893E-05	7.081E-08	4.56832E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0065373	0.2	75	75.0002667	3.33506E-11	7.708E-08	8.48E-08	5.7811E-06	2.3984E-08	3.34217E-11
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	186.95365	0.2	7	7.00285656	0.00023779	0.0019974	0.002425	0.013982097	0.000685891	0.000195969
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.9189582	0.2	297	297.000067	1.03343E-05	9.818E-06	1.192E-05	0.002916022	3.37145E-06	8.5032E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0415013	0.2	75	75.0002667	1.34408E-09	4.434E-07	5.383E-07	3.32554E-05	1.52259E-07	1.10594E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	82.167854	6.5	7	9.55248659	8.54698E-05	0.0005749	0.0010658	0.004024629	0.009797295	0.000112185
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.2075768	6.5	297	297.071119	5.27538E-07	1.445E-06	2.692E-06	0.000429266	2.47504E-05	1.84882E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0703083	6.5	75	75.2811397	3.88652E-09	4.896E-07	9.12E-07	3.67163E-05	8.38322E-06	1.41836E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	CO <sub>2</sub>	1.2587076	16.497118	6.5	7	9.55248659	3.44528E-06	0.000196	0.000214	0.001372038	0.001967036	5.75172E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	N <sub>2</sub> O	0.02129328	0.2790781	6.5	297	297.071119	9.5356E-07	3.316E-06	3.62E-06	0.000984786	3.32759E-05	9.70912E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil	CH <sub>4</sub>	0.01081836	0.1417897	6.5	75	75.2811397	1.58066E-08	1.685E-06	1.839E-06	0.000126347	1.69063E-05	1.62494E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	69.315312	6.5	7	9.55248659	6.08229E-05	0.0001521	0.0008991	0.001064642	0.00826482	6.94407E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3407148	6.5	297	297.071119	1.42128E-06	7.476E-07	4.419E-06	0.000222034	4.06252E-05	5.09495E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1538712	6.5	75	75.2811397	1.8615E-08	3.376E-07	1.996E-06	2.53216E-05	1.83469E-05	9.77789E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.0006121	12.5	7	14.3265488	1.13968E-07	7.432E-06	2.595E-05	5.2026E-05	0.000458737	2.13146E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0051493	12.5	297	297.262931	3.25052E-10	1.897E-08	6.679E-08	5.63334E-06	1.18072E-06	3.31286E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0017441	12.5	75	76.0345316	2.43976E-12	6.424E-09	2.262E-08	4.81835E-07	3.99923E-07	3.92103E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	93.562376	4	5	6.40312424	4.97923E-05	0.0001747	0.0012136	0.000873443	0.006865183	4.78936E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.8113101	4	110	110.0727203	1.10639E-06	1.515E-06	1.052E-05	0.000166625	5.95303E-05	3.13076E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0137399	4	79	79.101201	1.63874E-10	2.565E-08	1.782E-07	2.02661E-06	1.00817E-06	5.12358E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	20.35003	4	5	6.40312424	2.35554E-06	2.468E-05	0.000264	0.000123421	0.001493193	2.24486E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1783114	4	110	110.0727203	5.34433E-08	2.157E-07	2.313E-06	2.37273E-05	1.30837E-05	7.34168E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0030198	4	79	79.101201	7.91581E-12	3.653E-09	3.917E-08	2.8859E-07	2.21579E-07	1.32381E-13
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	166.4448	5	3.5	6.10327781	0.000143167	0.0011727	0.002159	0.004104471	0.015266206	0.000249904
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.4382018	5	12	13	1.3938E-07	1.727E-05	3.163E-05	0.000207299	0.00022363	9.29835E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.4068081	5	9.62	10.8417895	3.22736E-08	9.421E-06	1.825E-05	9.0631E-05	0.000129031	2.48631E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	353.23856	5	3.5	6.10327781	0.00064482	0.0024861	0.0045819	0.008701312	0.032398804	0.001125395
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	5.1807301	5	12	13	6.29281E-07	3.67E-05	6.72E-05	0.000440439	0.000475173	4.19776E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.9800447	5	9.62	10.8417895	1.44818E-07	1.99E-05	3.865E-05	0.000191414	0.000273328	1.11348E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CO <sub>2</sub>	267.869535	645.41939	5	3.5	6.10327781	0.002152712	0.0045456	0.0083718	0.015909485	0.059197435	0.003757448
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	N <sub>2</sub> O	3.922926	9.6480247	5	12	13	2.18242E-06	6.911E-05	0.0001251	0.0008293	0.00088491	1.47081E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fue	CH <sub>4</sub>	2.2853972	4.6357877	5	9.62	10.8417895	3.50449E-07	2.749E-05	6.013E-05	0.00026441	0.000425191	2.507E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	CO <sub>2</sub>	89.290092	215.1398	5	3.5	6.10327781	0.00023919	0.0015152	0.0027906	0.005303026	0.019732478	0.000417493
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	N <sub>2</sub> O	1.30764603	3.2160082	5	12	13	2.42492E-07	2.304E-05	4.172E-05	0.000276433	0.00029497	1.63422E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid	CH <sub>4</sub>	0.76179934	1.5452626	5	9.62	10.8417895	3.89388E-08	9.162E-06	2.004E-05	8.81367E-05	0.00014173	2.78556E-08

**Annex 22 (n) - Uncertainties for the period 1994 to 2007 – Level and Trend assessments - Base year- 1994, Year T-2007**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	606.81077	5	3.5	6.10327781	0.001902867	0.0055743	0.007871	0.01951001	0.055656278	0.003478262
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	9.9005967	5	12	13	2.29819E-06	9.095E-05	0.0001284	0.001091365	0.000908076	2.01568E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.6706856	5	9.62	10.8417895	7.33526E-09	6.161E-06	8.7E-06	5.92681E-05	6.15148E-05	7.29678E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.3065054	5	3.5	6.10327781	2.74923E-08	1.783E-05	2.992E-05	6.24155E-05	0.000211551	4.86496E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0326711	5	12	13	2.50259E-11	2.526E-07	4.238E-07	3.03124E-06	2.99657E-06	1.81678E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0228236	5	9.62	10.8417895	8.49469E-12	1.765E-07	2.96E-07	1.6976E-06	2.09337E-06	7.26404E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	54.826664	5	3.5	6.10327781	1.55341E-05	0.0002104	0.0007112	0.000736384	0.005028665	2.58297E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	6.5599623	5	12	13	1.00894E-06	2.517E-05	8.509E-05	0.000302082	0.000601675	4.53267E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0644824	5	9.62	10.8417895	6.78047E-11	2.474E-07	8.364E-07	2.38045E-06	5.91428E-06	4.06452E-11
1.A.3.d.i - International water-borne navigation (International b	CO <sub>2</sub>	139.69015	145.47416	10	3	10.4403065	0.000320018	0.0001084	0.001887	0.000325334	0.026685586	0.000712226
1.A.3.d.i - International water-borne navigation (International b	N <sub>2</sub> O	1.15288789	1.1908816	10	90	90.5538514	1.61334E-06	1.021E-06	1.545E-05	9.19235E-05	0.000218454	5.6172E-08
1.A.3.d.i - International water-borne navigation (International b	CH <sub>4</sub>	0.273346	0.2823542	10	50	50.9901951	2.87566E-08	2.422E-07	3.662E-06	1.21082E-05	5.17947E-05	2.8293E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	488.17899	20	297	297.672639	2.92962285	0.000255	0.0063322	0.075737194	0.179101803	0.037813578
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.840568	20	75	77.6208735	0.000602166	1.353E-05	0.0003482	0.001014728	0.009847196	9.79969E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.1304889	20	999	999.20018	0.003645845	2.463E-06	6.655E-05	0.002460337	0.00188226	9.59616E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	105.03706	5	7	8.60232527	0.000113264	9.613E-05	0.0013624	0.000672899	0.009633928	9.32654E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2694855	5	75	75.1664819	5.6924E-08	3.867E-07	3.496E-06	2.90058E-05	2.4717E-05	1.45227E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2125196	5	297	297.042085	5.52853E-07	4.306E-07	2.757E-06	0.000127895	1.94922E-05	1.6737E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	242.98119	20	3	20.2237484	0.003349996	0.002067	0.0031517	0.006201104	0.089144287	0.007985158
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.6913164	20	50	53.8516481	1.92277E-07	5.841E-06	8.967E-06	0.000292039	0.000253628	1.49614E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.6123088	20	90	92.1954446	4.42115E-07	5.173E-06	7.942E-06	0.000465594	0.000224642	2.67242E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	44.223223	5	3.5	6.10327781	1.01065E-05	0.0003612	0.0005736	0.001264264	0.004056124	1.80505E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.7215368	5	12	13	1.22062E-08	5.894E-06	9.359E-06	7.07226E-05	6.61789E-05	9.38133E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0488783	5	3.5	6.10327781	1.23462E-11	3.992E-07	6.34E-07	1.39734E-06	4.48308E-06	2.20506E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	11.165	5	2	5.38516481	5.01523E-07	8.816E-05	0.0001448	0.00017631	0.001024046	1.07976E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	258.1376	10	50	50.9901951	0.024035413	0.0033483	0.0033483	0.167416072	0.047352416	0.030270392
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	6.6014667	15	50	52.2015325	1.64749E-05	7.844E-05	8.563E-05	0.003922103	0.001816446	1.86824E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.174667	15	100	101.118742	0.000418423	2.989E-05	0.0002228	0.00298898	0.004725747	3.12667E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	9.25243E-07	3.792E-06	3.745E-05	7.58436E-05	0.001059293	1.12785E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2557.5572	20	20	28.2842712	0.725966173	0.0011197	0.0331743	0.022393325	0.938309725	0.880926601
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	278.52909	20	30	36.0555128	0.013991368	0.0003161	0.0036128	0.009483781	0.102186007	0.010531922
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	202.27505	20	30	36.0555128	0.007379105	0.0001651	0.0026237	0.004953851	0.074210127	0.005531684
3.A.1.e - Camels	CH <sub>4</sub>	0	0.060858	0	0	0	0	7.894E-07	7.894E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	16.580214	20	30	36.0555128	4.95792E-05	0.0001024	0.0002151	0.003073042	0.006082905	4.64453E-05

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3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	32.82888	20	30	36.0555128	0.000194371	1.096E-05	0.0004258	0.00032871	0.012044172	0.00014517
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.089123	20	30	36.0555128	2.13931E-07	8.775E-06	1.413E-05	0.00026324	0.000399575	2.28955E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	3.18245E-08	5.517E-07	5.449E-06	1.65515E-05	0.000154114	2.40251E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.78953E-10	4.137E-08	4.086E-07	1.24115E-06	1.15566E-05	1.35096E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	118.84093	20	30	36.0555128	0.00254713	0.0001448	0.0015415	0.004343881	0.043600043	0.001919833
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	49.423479	20	30	36.0555128	0.00044054	3.039E-05	0.0006411	0.000911784	0.018132354	0.000329614
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.141164	20	30	36.0555128	2.23862E-05	2.664E-05	0.0001445	0.000799344	0.00408744	1.73461E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.900102	20	30	36.0555128	1.42859E-05	3.185E-05	0.0001154	0.000955545	0.003265246	1.15749E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0033869	20	30	36.0555128	2.0688E-12	4.393E-08	4.393E-08	1.31794E-06	1.24257E-06	3.28095E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.0172594	20	30	36.0555128	7.3391E-07	2.762E-06	2.617E-05	8.28462E-05	0.000740087	5.54592E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.9394656	20	30	36.0555128	2.79894E-06	1.179E-05	5.11E-05	0.00035366	0.001445301	2.21397E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.089123	20	30	36.0555128	2.13931E-07	8.775E-06	1.413E-05	0.00026324	0.000399575	2.28955E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.8469128	20	30	36.0555128	1.29359E-07	1.099E-05	1.099E-05	0.000329561	0.000310713	2.05153E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.5777043	20	30	36.0555128	6.01908E-08	4.707E-06	7.493E-06	0.000141209	0.000211947	6.48615E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2406582	20	30	36.0555128	1.04453E-08	1.38E-06	3.122E-06	4.1413E-05	8.8292E-05	9.51052E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-104855.96	20	10	22.3606798	762.6617306	0.0024784	1.3600942	0.024784155	38.46927429	1479.885678
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.001011597	0.0020081	0.0015664	0.020080788	0.04430491	0.002366163
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.131763482	0.0016867	0.0178772	0.016867013	0.505644802	0.255961162
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	20	10	22.3606798	5.480579725	0.0085872	0.1152965	0.085871969	3.261078597	10.64200761
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000177852	0.0001353	0.0006568	0.001353152	0.018577082	0.000346939
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.38631E-06	2.063E-05	9.169E-05	0.000206287	0.001296638	1.72382E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	2421.3676	20	20	28.2842712	0.650709486	0.0104892	0.0314077	0.20978446	0.88834486	0.833166111
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	1085.5155	20	10	22.3606798	0.081736825	0.0041092	0.0140803	0.041092018	0.398251021	0.16029243
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	8.4003698	20	10	22.3606798	4.89489E-06	0.0001254	0.000109	0.001253886	0.003081905	1.10704E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	6.2325324	20	20	28.2842712	4.31117E-06	9.303E-05	8.084E-05	0.001860604	0.002286575	8.69027E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.27608	10	20	22.3606798	5.28707E-09	1.261E-06	3.581E-06	2.52297E-05	5.06437E-05	3.20132E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1537.7112	20	20	28.2842712	0.26243108	0.0005272	0.0199458	0.010544457	0.564151385	0.318377971
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	10.752332	20	20	28.2842712	1.28313E-05	0.0001234	0.0001395	0.002467727	0.003944787	2.1651E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	109.12894	20	20	28.2842712	0.001321739	0.0001429	0.0014155	0.002857714	0.040036935	0.001611123
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	45.025556	30	60	67.0820393	0.001265629	0.0004637	0.000584	0.027820041	0.024778283	0.001387918
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	14.618881	40	100	107.703296	0.000343924	6.902E-05	0.0001896	0.006902139	0.010726672	0.000162701
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	2.8386332	40	100	107.703296	1.29674E-05	1.34E-05	3.682E-05	0.001340227	0.00208286	6.13452E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.6617501	40	100	107.703296	4.44391E-06	7.846E-06	2.155E-05	0.000784576	0.001219317	2.10229E-06
<b>4.D - Wastewater Treatment and Discharge</b>												



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A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	24.529943	20	0	20	3.3391E-05	2.718E-06	0.0003182	0	0.00899948	8.09906E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	9.2436393	20	30	36.0555128	1.54101E-05	4.627E-05	0.0001199	0.001388172	0.003391282	1.34278E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	11.526504	25	30	39.0512484	2.81087E-05	0.000254	0.0001495	0.00762014	0.005286016	8.60085E-05
Total												
		Sum(C): -77094.629	-84900.872				Sum(H): 772.991					Sum(M): 1493.088
							Uncertainty in total inventory: 27.803					Trend uncertainty: 38.640

**Annex 22 (o) - Uncertainties for the period 1994 to 2008 – Level and Trend assessments - Base year- 1994, Year T-2008**  
(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	1.7320262	0.2	7	7.00285656	1.636E-08	1.188E-05	2.247E-05	8.31564E-05	6.35441E-06	6.95537E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0041622	0.2	297	297.000067	1.6994E-10	2.855E-08	5.399E-08	8.47864E-06	1.52703E-08	7.18876E-11
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0014098	0.2	75	75.0002667	1.2433E-12	9.669E-09	1.829E-08	7.25201E-07	5.1722E-09	5.25944E-13
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	234.00264	0.2	7	7.00285656	0.00029862	0.0025577	0.0030353	0.017904095	0.000858503	0.000321294
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	1.1502244	0.2	297	297.000067	1.2978E-05	1.257E-05	1.492E-05	0.003733971	4.21991E-06	1.39426E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0519456	0.2	75	75.0002667	1.6879E-09	5.678E-07	6.738E-07	4.25836E-05	1.90577E-07	1.8134E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	88.631527	6.5	7	9.55248659	7.9714E-05	0.0006014	0.0011496	0.004209751	0.010567992	0.000129404
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.2237982	6.5	297	297.071119	4.9154E-07	1.51E-06	2.903E-06	0.000448447	2.66846E-05	2.01817E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0758026	6.5	75	75.2811397	3.6213E-09	5.114E-07	9.832E-07	3.83569E-05	9.03833E-06	1.55294E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	21.923077	6.5	7	9.55248659	4.8771E-06	0.0002643	0.0002844	0.001849985	0.002614001	1.02554E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.3708679	6.5	297	297.071119	1.3498E-06	4.471E-06	4.811E-06	0.001327835	4.42205E-05	1.7651E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.1884248	6.5	75	75.2811397	2.2376E-08	2.271E-06	2.444E-06	0.00017036	2.24669E-05	2.95273E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	58.478693	6.5	7	9.55248659	3.4702E-05	0.0004156	0.0007585	0.00290898	0.006972715	5.70809E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.2874481	6.5	297	297.071119	8.109E-07	2.043E-06	3.729E-06	0.000606676	3.42739E-05	3.69231E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1298153	6.5	75	75.2811397	1.0621E-08	9.225E-07	1.684E-06	6.91876E-05	1.54785E-05	5.0265E-09
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	1.9953871	12.5	297	14.3265488	9.0879E-08	5.199E-06	2.588E-05	3.63949E-05	0.000457539	2.10666E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0051295	12.5	297	297.262931	2.5855E-10	1.312E-08	6.653E-08	3.89609E-06	1.17617E-06	1.65629E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0017374	12.5	75	76.0345316	1.9406E-12	4.443E-09	2.254E-08	3.33244E-07	3.98382E-07	2.69759E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	94.497996	4	5	6.40312424	4.0715E-05	6.535E-05	0.0012257	0.000326731	0.006933834	4.81848E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.8194232	4	110	110.072703	9.0469E-07	5.666E-07	1.063E-05	6.23296E-05	6.01256E-05	7.50006E-09
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0138773	4	79	79.101201	1.34E-10	9.596E-09	1.8E-07	7.58099E-07	1.01826E-06	1.61156E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	20.453985	4	5	6.40312424	1.9075E-06	1.946E-06	0.0002653	9.72753E-06	0.001500821	2.25256E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1792129	4	110	110.072703	4.3274E-08	1.782E-08	2.325E-06	1.96048E-06	1.31498E-05	1.76761E-10
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0030351	4	79	79.101201	6.4095E-12	3.018E-10	3.937E-08	2.38447E-08	2.22699E-07	5.01633E-14
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	143.86992	5	3.5	6.10327781	8.5742E-05	0.0007646	0.0018661	0.00267596	0.013195653	0.000181286
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	2.0987785	5	12	13	8.2784E-08	1.119E-05	2.722E-05	0.000134331	0.000192499	5.51004E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	1.2237851	5	9.62	10.8417895	1.9577E-08	6.015E-06	1.587E-05	5.78645E-05	0.000112245	1.59472E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.72173	303.97311	5	3.5	6.10327781	0.00038276	0.001602	0.0039429	0.005606952	0.02788021	0.000808744
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.1349353	4.4581844	5	12	13	3.7353E-07	2.377E-05	5.783E-05	0.000285182	0.000408902	2.48529E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.3130934	2.564424	5	9.62	10.8417895	8.5962E-08	1.231E-05	3.326E-05	0.000118454	0.000235207	6.93538E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.86954	594.51342	5	3.5	6.10327781	0.00146412	0.0034378	0.0077115	0.012032361	0.054528373	0.003118121
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	8.8992103	5	12	13	1.4884E-06	5.284E-05	0.0001154	0.000634119	0.00081623	1.06834E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	4.2161415	5	9.62	10.8417895	2.3236E-07	1.823E-05	5.469E-05	0.000175325	0.000386702	1.80277E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	198.17114	5	3.5	6.10327781	0.00016268	0.0011459	0.0025705	0.00401068	0.018176124	0.000346457
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	2.9664034	5	12	13	1.6538E-07	1.761E-05	3.848E-05	0.000211372	0.000272077	1.18704E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.4053805	5	9.62	10.8417895	2.5818E-08	6.075E-06	1.823E-05	5.84416E-05	0.000128901	2.00308E-08
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	574.18764	5	3.5	6.10327781	0.00136571	0.0048826	0.0074478	0.017088951	0.052664106	0.00306554
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	9.3683247	5	12	13	1.6494E-06	7.966E-05	0.0001215	0.000955934	0.000859256	1.65213E-06

## Annex 22 (o) - Uncertainties for the period 1994 to 2008 – Level and Trend assessments - Base year- 1994, Year T-2008

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.6346284	5	9.62	10.8417895	5.2646E-09	5.396E-06	8.232E-06	5.19134E-05	5.82077E-05	6.08313E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.0714571	5	3.5	6.10327781	1.7775E-08	1.337E-05	2.687E-05	4.6799E-05	0.000189993	3.82874E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0293417	5	12	13	1.618E-11	1.894E-07	3.806E-07	2.27282E-06	2.6912E-06	1.24083E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0204978	5	9.62	10.8417895	5.4921E-12	1.323E-07	2.659E-07	1.27286E-06	1.88004E-06	5.15473E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	51.050899	5	3.5	6.10327781	1.0796E-05	0.0001029	0.0006622	0.000360031	0.004682354	2.20541E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	6.1081952	5	12	13	7.0119E-07	1.231E-05	7.923E-05	0.000147693	0.00056024	3.35682E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0600416	5	9.62	10.8417895	4.7123E-11	1.21E-07	7.788E-07	1.16384E-06	5.50698E-06	3.16814E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	147.2448	10	3	10.4403065	0.0002628	0.0003188	0.0019099	0.000956393	0.027010389	0.000730476
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.2043692	10	90	90.5538514	1.3227E-06	2.772E-06	1.562E-05	0.000249482	0.000220928	1.1105E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2855521	10	50	50.9901951	2.3576E-08	6.572E-07	3.704E-06	3.28619E-05	5.23813E-05	3.8237E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	488.36921	20	297	297.672639	2.35017664	0.0010228	0.0063347	0.303773755	0.17917159	0.124380953
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.851268	20	75	77.6208735	0.00048307	5.568E-05	0.0003483	0.004176097	0.009851121	0.000114484
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.1325949	20	999	999.20018	0.00292486	1.05E-05	6.658E-05	0.010494203	0.001883033	0.000113674
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	115.25306	5	7	8.60232527	0.00010931	0.0001342	0.001495	0.000939139	0.010570933	0.000112627
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.3004912	5	75	75.1664819	5.6733E-08	4.385E-07	3.898E-06	3.28881E-05	2.75609E-05	1.84123E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2414598	5	297	297.042085	5.7207E-07	4.279E-07	3.132E-06	0.000127089	2.21465E-05	1.66422E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	223.51861	20	3	20.2237484	0.00227236	0.0029297	0.0028993	0.008789186	0.08200391	0.006801891
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.6362618	20	50	53.8516481	1.3056E-07	8.286E-06	8.253E-06	0.000414317	0.00023343	2.26149E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.5635461	20	90	92.1954446	3.002E-07	7.339E-06	7.31E-06	0.00066054	0.000206752	4.7906E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	36.925038	5	3.5	6.10327781	5.648E-06	0.0002417	0.000479	0.00084601	0.00338674	1.21857E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.6024611	5	12	13	6.8214E-09	3.944E-06	7.815E-06	4.73256E-05	5.52573E-05	5.29308E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0408119	5	9.62	10.8417895	2.1772E-11	2.672E-07	5.294E-07	2.57008E-06	3.74324E-06	2.06172E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	11.858	5	2	5.38516481	4.5347E-07	9.052E-05	0.0001538	0.000181036	0.001087608	1.21566E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	250.08112	10	50	50.9901951	0.01808262	0.0032438	0.0032438	0.162191013	0.045874546	0.028410399
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	8.7736	15	50	52.2015325	2.3326E-05	0.0001058	0.0001138	0.005288836	0.002414126	3.37998E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	20.414533	15	100	101.118742	0.00047388	1.741E-05	0.0002648	0.001740842	0.005617222	3.45837E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	7.4166E-07	8.615E-06	3.745E-05	0.000172294	0.001059293	1.15179E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	2704.0426	20	20	28.2842712	0.65049378	0.0007289	0.0350743	0.014577698	0.992051897	0.984379476
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	233.9462	20	30	36.0555128	0.00791228	0.0013538	0.0030345	0.040615491	0.085829554	0.00901633
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	198.80564	20	30	36.0555128	0.00571382	0.0001674	0.0025787	0.005020732	0.072937279	0.005345054
3.A.1.e - Camels	CH <sub>4</sub>	0	0.041538	0	0	0	0	5.388E-07	5.388E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	15.976926	20	30	36.0555128	3.6903E-05	0.0001474	0.0002072	0.004421525	0.005861572	5.39079E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	34.67646	20	30	36.0555128	0.00017384	3.806E-05	0.0004498	0.001141911	0.012722007	0.000163153
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.032927	20	30	36.0555128	1.5424E-07	7.42E-06	1.34E-05	0.000222597	0.000378957	1.93158E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	2.551E-08	1.253E-06	5.449E-06	3.75999E-05	0.000154114	2.51649E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.4345E-10	9.398E-08	4.086E-07	2.81953E-06	1.15566E-05	1.41506E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	117.8207	20	30	36.0555128	0.00200684	3.175E-05	0.0015283	0.000952549	0.043225744	0.001869372

## Annex 22 (o) - Uncertainties for the period 1994 to 2008 – Level and Trend assessments - Base year- 1994, Year T-2008

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A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	51.5151	20	30	36.0555128	0.00038365	1.388E-05	0.0006682	0.000416466	0.018899722	0.000357373
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.3578478	20	30	36.0555128	1.266E-05	1.027E-05	0.0001214	0.000308062	0.003433182	1.18816E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.7474479	20	30	36.0555128	1.1062E-05	2.01E-05	0.0001135	0.000602916	0.00320924	1.06627E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0023117	20	30	36.0555128	7.7255E-13	2.998E-08	2.998E-08	8.99549E-07	8.48103E-07	1.52847E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	1.9438593	20	30	36.0555128	5.4626E-07	7.096E-06	2.521E-05	0.000212881	0.000713158	5.53913E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.1611752	20	30	36.0555128	2.5032E-06	1.007E-05	5.397E-05	0.00030204	0.001526641	2.42186E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.032927	20	30	36.0555128	1.5424E-07	7.42E-06	1.34E-05	0.000222597	0.000378957	1.93158E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.8032143	20	30	36.0555128	9.3268E-08	1.042E-05	1.042E-05	0.000312557	0.000294681	1.84529E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.5449424	20	30	36.0555128	4.2931E-08	3.956E-06	7.068E-06	0.000118686	0.000199927	5.40573E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.2270103	20	30	36.0555128	7.4501E-09	9.998E-07	2.945E-06	2.99945E-05	8.32849E-05	7.83605E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-113477.85	20	10	22.3606798	716.008783	0.0438536	1.4719294	0.438536055	41.63245155	1733.453336
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.00081088	0.002426	0.0015664	0.024260277	0.04430491	0.002551486
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.10561983	0.0039739	0.0178772	0.039738836	0.505644802	0.257255841
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	8888.744	20	10	22.3606798	4.3931589	0.0230877	0.1152965	0.230877335	3.261078597	10.68793796
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	50.635677	10	10	14.1421356	5.7026E-05	0.0002279	0.0006568	0.002279353	0.009288541	9.14724E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	7.0685113	0	0	0	0	3.376E-05	9.169E-05	0	0	0
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	1544.1733	20	20	28.2842712	0.21213298	0.026772	0.0200296	0.53543973	0.566522182	0.607643086
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	670.4394	20	10	22.3606798	0.02499282	0.0116212	0.0086963	0.116211892	0.245969014	0.07400596
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	4.9397406	20	10	22.3606798	1.3568E-06	0.0001977	6.407E-05	0.001976787	0.001812279	7.19204E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	3.6649688	20	20	28.2842712	1.195E-06	0.0001467	4.754E-05	0.002933295	0.001344594	1.04122E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.0517972	10	20	22.3606798	1.4918E-10	4.737E-06	6.719E-07	9.47379E-05	9.50161E-06	9.06555E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1582.6056	20	20	28.2842712	0.22282375	0.0011613	0.0205281	0.023226203	0.580622095	0.337661474
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	7.4464125	20	20	28.2842712	4.933E-06	7.862E-05	9.659E-05	0.00157249	0.00273192	9.93611E-06
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	108.10601	20	20	28.2842712	0.00103972	1.919E-05	0.0014023	0.000383804	0.039661643	0.001573193
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	49.291565	30	60	67.0820393	0.00121586	0.0005049	0.0006394	0.030295706	0.027125936	0.001653646
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	15.311069	40	100	107.703296	0.00030241	6.39E-05	0.0001986	0.006389827	0.011234568	0.000167045
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	2.9730395	40	100	107.703296	1.1402E-05	1.241E-05	3.856E-05	0.001240749	0.002181482	6.29832E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	1.7404322	40	100	107.703296	3.9075E-06	7.263E-06	2.258E-05	0.000726341	0.00127705	2.15843E-06
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	24.086102	20	0	20	2.5806E-05	3.993E-05	0.0003124	0	0.008836645	7.80863E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	9.5520911	20	30	36.0555128	1.3191E-05	4.166E-05	0.0001239	0.001249929	0.003504446	1.38435E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	14.522492	25	30	39.0512484	3.5767E-05	0.0002623	0.0001884	0.007869759	0.006659966	0.000106288
<b>Total</b>												
		Sum(C): -77094.629	-94828.077					Sum(H): 724.017				Sum(M): 1746.594
							Uncertainty in total inventory: 26.908					Trend uncertainty: 41.792

**Annex 22 (p) - Uncertainties for the period 1994 to 2009 – Level and Trend assessments - Base year- 1994, Year T-2009**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	2.4205797	0.2	7	7.00285656	4.39648E-08	2.237E-05	3.14E-05	0.000156605	8.88056E-06	2.46039E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0058169	0.2	297	297.000067	4.56679E-10	5.376E-08	7.545E-08	1.59674E-05	2.13409E-08	2.54959E-10
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0019702	0.2	75	75.0002667	3.34102E-12	1.821E-08	2.556E-08	1.36574E-06	7.22836E-09	1.86529E-10
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	140.22439	0.2	7	7.00285656	0.000147541	0.0014117	0.0018189	0.009882228	0.000514451	9.79231E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.6892636	0.2	297	297.000067	6.41209E-06	6.939E-06	8.94E-06	0.002060978	2.52875E-06	4.24764E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.031128	0.2	75	75.0002667	8.33959E-10	3.134E-07	4.038E-07	2.35042E-05	1.14202E-07	5.52458E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	79.637288	6.5	7	9.55248659	8.85485E-05	0.0005656	0.001033	0.003959087	0.009495562	0.00010584
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.2012172	6.5	297	297.071119	5.46722E-07	1.422E-06	2.61E-06	0.00042247	2.39922E-05	1.79057E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0681542	6.5	75	75.2811397	4.02785E-09	4.818E-07	8.84E-07	3.6135E-05	8.12638E-06	1.37178E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	22.695806	6.5	7	9.55248659	7.19183E-06	0.0002773	0.0002944	0.001940879	0.002706137	1.10902E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.38394	6.5	297	297.071119	1.9905E-06	4.69E-06	4.98E-06	0.001393075	4.57791E-05	1.94275E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.1950663	6.5	75	75.2811397	3.29953E-08	2.383E-06	2.53E-06	0.00017873	2.32588E-05	3.24855E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	76.051589	6.5	7	9.55248659	8.07542E-05	1.447E-05	0.0009865	0.0001013	0.009068021	8.22393E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3738265	6.5	297	297.071119	1.88702E-06	7.113E-08	4.849E-06	2.11264E-05	4.45733E-05	2.4331E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1688249	6.5	75	75.2811397	2.4715E-08	3.212E-08	2.19E-06	2.40934E-06	2.01299E-05	4.11016E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.119084	12.5	7	14.3265488	1.41025E-07	9.854E-06	2.749E-05	6.89784E-05	0.000485902	2.40859E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0054543	12.5	297	297.262931	4.02223E-10	2.521E-08	7.075E-08	7.48705E-06	1.25065E-06	5.762E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0018474	12.5	75	76.0345316	3.019E-12	8.539E-09	2.396E-08	6.40388E-07	4.23607E-07	5.8954E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	95.442979	4	5	6.40312424	5.71462E-05	0.0002487	0.001238	0.001243693	0.007003173	5.05912E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.8276174	4	110	110.072703	1.2698E-06	2.157E-06	1.074E-05	0.000237256	6.07268E-05	5.99783E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0140161	4	79	79.101201	1.88077E-10	3.653E-08	1.818E-07	2.88569E-06	1.02844E-06	9.38489E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	20.558985	4	5	6.40312424	2.65157E-06	3.883E-05	0.0002667	0.000194155	0.001508525	2.31334E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1801234	4	110	110.072703	6.01471E-08	3.394E-07	2.336E-06	3.73386E-05	1.32166E-05	1.56885E-09
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0030505	4	79	79.101201	8.90875E-12	5.749E-09	3.957E-08	4.54141E-07	2.2383E-07	2.56344E-13
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	151.26741	5	3.5	6.10327781	0.000130417	0.001023	0.0019621	0.00358042	0.013874146	0.000205311
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.1982878	5	12	13	1.2496E-07	1.485E-05	2.851E-05	0.000178187	0.000201625	7.24034E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.294202	5	9.62	10.8417895	3.01246E-08	8.382E-06	1.679E-05	8.06383E-05	0.000118703	2.0593E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	318.29745	5	3.5	6.10327781	0.000577442	0.002133	0.0041287	0.007465609	0.029194029	0.000908027
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	4.6682705	5	12	13	5.63526E-07	3.151E-05	6.055E-05	0.000378164	0.000428171	3.26338E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.6852692	5	9.62	10.8417895	1.29686E-07	1.697E-05	3.483E-05	0.000163256	0.000246291	8.73119E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	631.92726	5	3.5	6.10327781	0.00227602	0.0045534	0.0081968	0.015937056	0.057959946	0.003613345
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	9.4730496	5	12	13	2.3205E-06	6.952E-05	0.0001229	0.000834205	0.000868862	1.45082E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	4.4201556	5	9.62	10.8417895	3.51393E-07	2.625E-05	5.733E-05	0.000252514	0.000405414	2.28123E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	210.64242	5	3.5	6.10327781	0.000252891	0.0015178	0.0027323	0.005312217	0.019319982	0.000401481
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	3.1576832	5	12	13	2.57833E-07	2.317E-05	4.096E-05	0.000278068	0.000289621	1.61202E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.4733852	5	9.62	10.8417895	3.90436E-08	8.75E-06	1.911E-05	8.41712E-05	0.000135138	2.5347E-08

**Annex 22 (p) - Uncertainties for the period 1994 to 2009 – Level and Trend assessments - Base year- 1994, Year T-2009**

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1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	630.8186	5	3.5	6.10327781	0.00226804	0.0059955	0.0081824	0.020984189	0.05785826	0.003787914
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	10.292303	5	12	13	2.73922E-06	9.782E-05	0.0001335	0.001173828	0.000944003	2.26901E-09
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.6972206	5	9.62	10.8417895	8.74295E-09	6.626E-06	9.044E-06	6.37464E-05	6.39486E-05	8.15303E-09
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.2008984	5	3.5	6.10327781	2.76084E-08	1.704E-05	2.855E-05	5.96427E-05	0.000201865	4.43067E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0311752	5	12	13	2.51316E-11	2.414E-07	4.044E-07	2.89657E-06	2.85937E-06	1.65661E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0217786	5	9.62	10.8417895	8.53058E-12	1.686E-07	2.825E-07	1.62218E-06	1.99752E-06	6.62157E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	50.056773	5	3.5	6.10327781	1.42813E-05	0.0001725	0.0006493	0.000603607	0.004591174	2.14432E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.989249	5	12	13	9.27571E-07	2.063E-05	7.769E-05	0.000247614	0.00054933	3.63076E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0588724	5	9.62	10.8417895	6.23364E-11	2.028E-07	7.636E-07	1.95123E-06	5.39974E-06	3.29645E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	149.01544	10	3.5	10.5948101	0.000381386	3.286E-05	0.0019329	0.000115023	0.027335193	0.000747226
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.2178568	10	90	90.5538514	1.86089E-06	1.156E-07	1.58E-05	1.0408E-05	0.000223402	5.00168E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2887499	10	50	50.9901951	3.3169E-08	2.742E-08	3.745E-06	1.37095E-06	5.29679E-05	2.80748E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	488.52796	20	7	21.1896201	0.016396106	6.438E-05	0.0063367	0.00045065	0.17922983	0.032123535
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.860198	20	100	101.98039	0.001148067	4.012E-06	0.0003484	0.000401178	0.009854397	9.72701E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.1343524	20	500	500.39984	0.00101	8.857E-07	6.66E-05	0.00044287	0.001883677	3.74437E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	115.88283	5	7	8.60232527	0.00015205	0.0001143	0.0015031	0.000799885	0.010628695	0.000113609
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.3040417	5	75	75.1664819	7.99153E-08	2.47E-07	3.944E-06	1.85282E-05	2.78865E-05	1.12095E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2460825	5	297	297.042085	8.17547E-07	1.571E-07	3.192E-06	4.66471E-05	2.25705E-05	2.68538E-09
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	255.26625	20	3	20.2237484	0.004077797	0.0016582	0.0033111	0.004974704	0.093651399	0.008795332
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7263373	20	50	53.8516481	2.34094E-07	4.679E-06	9.421E-06	0.000233939	0.000266477	1.25737E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.6433273	20	90	92.1954446	5.38268E-07	4.144E-06	8.345E-06	0.000372965	0.000236022	1.94809E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	38.194645	5	3.5	6.10327781	8.3147E-06	0.0002932	0.0004954	0.001026106	0.003503187	1.33252E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.6231758	5	12	13	1.00421E-08	4.783E-06	8.083E-06	5.74001E-05	5.71573E-05	6.56173E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0422151	5	9.62	10.8417895	3.20519E-11	3.24E-07	5.476E-07	3.1172E-06	3.87194E-06	2.47089E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	13.552	5	2	5.38516481	8.1493E-07	0.0001218	0.0001758	0.000243651	0.00124298	1.60437E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	258.688	10	50	50.9901951	0.026622046	0.0033555	0.0033555	0.167773036	0.047453381	0.030399615
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	9.0830667	15	50	52.2015325	3.43991E-05	0.000111	0.0001178	0.005548727	0.002499278	3.70348E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	21.218267	15	100	101.118742	0.000704366	3.464E-05	0.0002752	0.003463644	0.005838376	4.60835E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	1.02046E-06	1.821E-06	3.745E-05	3.6418E-05	0.001059293	1.12343E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2718.2512	20	20	28.2842712	0.90445023	0.0047372	0.0352586	0.094743668	0.997264713	1.003513271
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	189.3633	20	30	36.0555128	0.007132643	0.0012849	0.0024562	0.038548495	0.069473101	0.006312498
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	188.20095	20	30	36.0555128	0.007045349	0.0001001	0.0024412	0.003002447	0.069046661	0.004776456
3.A.1.e - Camels	CH <sub>4</sub>	0	0.022218	0	0	0	0	2.882E-07	2.882E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	14.439978	20	30	36.0555128	4.14755E-05	0.000115	0.0001873	0.003450626	0.0052977	3.99724E-05

**Annex 22 (p) - Uncertainties for the period 1994 to 2009 – Level and Trend assessments - Base year- 1994, Year T-2009**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	36.52383	20	30	36.0555128	0.000265345	5.785E-05	0.0004738	0.001735414	0.013399765	0.000182565
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.012683	20	30	36.0555128	2.03989E-07	8.039E-06	1.314E-05	0.000241169	0.00037153	1.96198E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	3.50995E-08	2.649E-07	5.449E-06	7.94754E-06	0.000154114	2.38143E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.97369E-10	1.987E-08	4.086E-07	5.95967E-07	1.15566E-05	1.33911E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	118.43986	20	30	36.0555128	0.002790324	0.0002064	0.0015363	0.006190525	0.043452897	0.001926477
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	51.78579	20	30	36.0555128	0.000533433	9.022E-05	0.0006717	0.002706688	0.018999032	0.000368289
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	7.574532	20	30	36.0555128	1.14122E-05	1.398E-05	9.825E-05	0.000419541	0.002778924	7.89843E-06
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.2808418	20	30	36.0555128	1.36398E-05	2.781E-05	0.0001074	0.000834432	0.003038053	9.92604E-06
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0012365	20	30	36.0555128	3.04112E-13	1.604E-08	1.604E-08	4.81154E-07	4.53636E-07	4.37296E-13
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	1.756864	20	30	36.0555128	6.13953E-07	4.757E-06	2.279E-05	0.000142696	0.000644554	4.35811E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.3828596	20	30	36.0555128	3.82097E-06	1.942E-05	5.685E-05	0.000582565	0.001607972	2.92495E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.012683	20	30	36.0555128	2.03989E-07	8.039E-06	1.314E-05	0.000241169	0.00037153	1.96198E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.7874723	20	30	36.0555128	1.23347E-07	1.021E-05	1.021E-05	0.000306431	0.000288906	1.77366E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.5312645	20	30	36.0555128	5.6141E-08	4.238E-06	6.891E-06	0.000127134	0.000194909	5.41525E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2213124	20	30	36.0555128	9.7425E-09	1.213E-06	2.871E-06	3.63815E-05	8.11945E-05	7.91616E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-101627.97	20	10	22.3606798	790.1544872	0.0252145	1.3182237	0.252144884	37.28499699	1390.234578
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.0011157	0.0018372	0.0015664	0.018372354	0.04430491	0.002300468
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.145323176	0.0007518	0.0178772	0.007517786	0.505644802	0.002733183
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	20	10	22.3606798	6.044582623	0.0026599	0.1152965	0.026598685	3.261078597	10.63534111
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000196155	9.746E-05	0.0006568	0.000974553	0.018577082	0.000346058
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.52898E-06	1.526E-05	9.169E-05	0.000152605	0.001296638	1.70456E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	2994.2709	20	20	28.2842712	1.097457443	0.0010522	0.0388389	0.021043095	1.098530096	1.207211184
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	1300.0336	20	10	22.3606798	0.129298852	0.0004567	0.0168628	0.004567195	0.476952843	0.227504874
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	9.100654	20	10	22.3606798	6.33623E-06	0.0001051	0.000118	0.001051042	0.003338824	1.22524E-05
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	6.7520982	20	20	28.2842712	5.58063E-06	7.798E-05	8.758E-05	0.001559609	0.002477192	8.56886E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.1657407	10	20	22.3606798	2.10157E-09	2.461E-06	2.15E-06	4.9225E-05	3.04032E-05	3.34746E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1566.2318	20	20	28.2842712	0.300273882	0.0018255	0.0203157	0.036510453	0.574614916	0.331515315
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	11.846217	20	20	28.2842712	1.71777E-05	0.0001383	0.0001537	0.002766878	0.004346109	2.65443E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	108.62192	20	20	28.2842712	0.001444244	0.0001971	0.0014089	0.003942727	0.03985092	0.001603641
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	53.876329	30	60	67.0820393	0.001998591	0.0005842	0.0006988	0.035053461	0.029649005	0.002107809
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44828666	16.03159	40	100	107.703296	0.00045617	9.311E-05	0.0002079	0.009311	0.011763253	0.000225069
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	3.1129471	40	100	107.703296	1.71995E-05	1.808E-05	4.038E-05	0.001807969	0.002284139	8.48605E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.8223349	40	100	107.703296	5.89427E-06	1.058E-05	2.364E-05	0.001058394	0.001337147	2.90816E-06
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	24.025304	20	0	20	3.53275E-05	1.125E-05	0.0003116	0	0.008814339	7.76926E-05

**Annex 22 (p) - Uncertainties for the period 1994 to 2009 – Level and Trend assessments - Base year- 1994, Year T-2009**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M	
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)	
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	9.9487538	20	30	36.0555128	1.96878E-05	5.894E-05	0.000129	0.001768128	0.003649972	1.64486E-05	
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	16.299105	25	30	39.0512484	6.19888E-05	0.0001728	0.0002114	0.005184368	0.007474715	8.2749E-05	
Total		Sum(C): -77094.629	-80842.966			Sum(H): 798.856						Sum(M): 1403.998	
								Uncertainty in total inventory: 28.264					Trend uncertainty: 37.470



**Annex 22 (q) - Uncertainties for the period 1994 to 2010 – Level and Trend assessments - Base year- 1994, Year T-2010**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	3.5115761	0.2	7	7.00285656	8.19454E-08	3.596E-05	4.555E-05	0.000251709	1.28832E-05	6.35234E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0084387	0.2	297	297.000067	8.51199E-10	8.641E-08	1.095E-07	2.56643E-05	3.09596E-08	6.58656E-10
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0028583	0.2	75	75.0002667	6.22729E-12	2.927E-08	3.707E-08	2.19514E-06	1.04863E-08	4.81873E-12
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	31.985111	0.2	7	7.00285656	6.79855E-06	1.773E-05	0.0004149	0.000124087	0.000117346	2.91677E-08
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.1572207	0.2	297	297.000067	2.95463E-07	8.713E-08	2.039E-06	2.58788E-05	5.76807E-07	6.70045E-10
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0071003	0.2	75	75.0002667	3.8428E-11	3.935E-09	9.21E-08	2.95132E-07	2.60494E-08	8.77816E-14
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	79.492773	6.5	7	9.55248659	7.81373E-05	0.0005344	0.0010311	0.003741127	0.009478331	0.000103835
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.2006626	6.5	297	297.071119	4.8153E-07	1.341E-06	2.603E-06	0.000398252	2.3926E-05	1.59177E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0679664	6.5	75	75.2811397	3.54757E-09	4.542E-07	8.816E-07	3.40636E-05	8.10398E-06	1.226E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	20.473423	6.5	7	9.55248659	5.18303E-06	0.0002474	0.0002656	0.001731589	0.002441151	8.95762E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.3463444	6.5	297	297.071119	1.43452E-06	4.185E-06	4.492E-06	0.001242856	4.12964E-05	1.5464E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.1759653	6.5	75	75.2811397	2.37792E-08	2.126E-06	2.282E-06	0.000159457	2.09812E-05	2.58669E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	88.254989	13	7	14.7648231	0.000230094	8.115E-05	0.0011448	0.000568081	0.02104619	0.000443265
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4338115	13	500	500.168971	6.37978E-06	3.989E-07	5.627E-06	0.000199453	0.000103451	5.04836E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1959149	13	100	100.84146	5.28912E-08	1.802E-07	2.541E-06	1.80151E-05	4.67199E-05	2.50729E-09
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.1909594	12.5	7	14.3265488	1.33512E-07	9.682E-06	2.842E-05	6.7777E-05	0.000502383	2.56983E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0056367	12.5	297	297.262931	3.8046E-10	2.473E-08	7.311E-08	7.34334E-06	1.2925E-06	5.55952E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0019092	12.5	75	76.0345316	2.85565E-12	8.375E-09	2.476E-08	6.28096E-07	4.37781E-07	5.86157E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	98.126028	4	5	6.40312424	5.34961E-05	0.0002216	0.0012728	0.001108028	0.007200043	5.30683E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.850883	4	110	110.072703	1.18869E-06	1.922E-06	1.104E-05	0.000211376	6.24339E-05	4.85777E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0144101	4	79	79.101201	1.76064E-10	3.254E-08	1.869E-07	2.57091E-06	1.05735E-06	7.72756E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	22.048482	4	5	6.40312424	2.70092E-06	4.389E-05	0.000286	0.000219435	0.001617818	2.66549E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.1932617	4	110	110.072703	6.13226E-08	3.848E-07	2.507E-06	4.23321E-05	1.41807E-05	1.99309E-09
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.003273	4	79	79.101201	9.08287E-12	6.517E-09	4.245E-08	5.14875E-07	2.40156E-07	3.22771E-13
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	163.85957	5	3.5	6.10327781	0.000135531	0.0011275	0.0021254	0.003946304	0.015029091	0.000241447
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.374025	5	12	13	1.29071E-07	1.627E-05	3.079E-05	0.000195275	0.000217744	8.55446E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.4084067	5	9.62	10.8417895	3.15957E-08	9.338E-06	1.827E-05	8.98269E-05	0.000129178	2.47559E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	343.66682	5	3.5	6.10327781	0.000596172	0.0023372	0.0044577	0.008180059	0.031520891	0.00106048
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	5.0403474	5	12	13	5.81805E-07	3.452E-05	6.538E-05	0.000414263	0.000462297	3.85332E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.8992942	5	9.62	10.8417895	1.33893E-07	1.863E-05	3.761E-05	0.000179206	0.000265921	1.02829E-07
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	696.13107	5	3.5	6.10327781	0.002446123	0.0051581	0.0090296	0.018053522	0.063848676	0.004402583
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	10.450846	5	12	13	2.50126E-06	7.886E-05	0.0001356	0.000946314	0.000958545	1.81432E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	4.8010844	5	9.62	10.8417895	3.67156E-07	2.924E-05	6.228E-05	0.000281324	0.000440352	2.73054E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	232.04369	5	3.5	6.10327781	0.000271791	0.0017193	0.0030099	0.006017689	0.021282892	0.000489174
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	3.4836155	5	12	13	2.77918E-07	2.629E-05	4.519E-05	0.000315437	0.000319515	2.0159E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.6003615	5	9.62	10.8417895	4.07951E-08	9.748E-06	2.076E-05	9.37748E-05	0.000146784	3.03393E-08

## Annex 22 (q) - Uncertainties for the period 1994 to 2010 – Level and Trend assessments - Base year- 1994, Year T-2010

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	698.7433	5	3.5	6.10327781	0.002464516	0.0067396	0.0090634	0.023588706	0.064088268	0.004663733
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	11.400549	5	12	13	2.97652E-06	0.00011	0.0001479	0.001319522	0.001045651	2.83452E-08
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.7722952	5	9.62	10.8417895	9.50033E-09	7.449E-06	1.002E-05	7.16585E-05	7.08344E-05	1.01525E-06
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.2982872	5	3.5	6.10327781	2.66627E-08	1.758E-05	2.981E-05	6.15425E-05	0.000210797	4.8223E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0325547	5	12	13	2.42708E-11	2.491E-07	4.223E-07	2.98884E-06	2.98589E-06	1.78487E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0227423	5	9.62	10.8417895	8.23838E-12	1.74E-07	2.95E-07	1.67386E-06	2.08591E-06	7.15282E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	51.759622	5	3.5	6.10327781	1.35232E-05	0.0001647	0.0006714	0.000576428	0.004747358	2.28697E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	6.0357582	5	12	13	8.34296E-07	1.767E-05	7.829E-05	0.00021199	0.000553596	3.51408E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0593296	5	9.62	10.8417895	5.6068E-11	1.736E-07	7.696E-07	1.67051E-06	5.44167E-06	3.24024E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	150.78607	10	3	10.4403065	0.00033583	6.313E-05	0.0019559	0.000189379	0.027659996	0.000765111
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.2313444	10	90	90.5538514	1.68478E-06	6.912E-07	1.597E-05	6.2205E-05	0.000225876	5.48895E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2919478	10	50	50.9901951	3.00299E-08	1.639E-07	3.787E-06	8.19367E-06	5.35545E-05	2.93522E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	488.65506	20	297	297.672639	2.867164712	0.0003267	0.0063384	0.097027209	0.17927646	0.041554328
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.867347	20	75	77.6208735	0.000589355	1.746E-05	0.0003485	0.001309282	0.00985702	9.88751E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.1357596	20	999	999.20018	0.003568489	3.21E-06	6.662E-05	0.003206864	0.001884194	1.38342E-05
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	93.52659	5	7	8.60232527	8.77146E-05	0.0002627	0.0012131	0.001838708	0.008578196	7.69663E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2417069	5	75	75.1664819	4.47297E-08	7.929E-07	3.135E-06	5.94711E-05	2.21692E-05	4.02828E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.1923175	5	297	297.042085	4.42225E-07	7.303E-07	2.495E-06	0.00021691	1.76392E-05	4.7361E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	265.78038	20	3	20.2237484	0.003915067	0.001833	0.0034475	0.005498919	0.097508796	0.009538203
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7562369	20	50	53.8516481	2.24742E-07	5.174E-06	9.809E-06	0.000258686	0.000277446	1.43895E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.6698098	20	90	92.1954446	5.16764E-07	4.582E-06	8.688E-06	0.000412419	0.000245738	2.30477E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	40.807575	5	3.5	6.10327781	8.40578E-06	0.0003144	0.0005293	0.001100411	0.003742843	1.52198E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.6658078	5	12	13	1.01521E-08	5.13E-06	8.636E-06	6.15567E-05	6.10674E-05	7.51846E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0451031	5	9.62	10.8417895	3.2403E-11	3.475E-07	5.85E-07	3.34293E-06	4.13683E-06	2.82885E-11
<b>2.A - Mineral Industry</b>												
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	15.246	5	2	5.38516481	9.1344E-07	0.0001404	0.0001978	0.000280841	0.001398353	2.03426E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	260.90336	10	50	50.9901951	0.023982956	0.0033842	0.0033842	0.169209816	0.047859763	0.030922519
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	8.1935333	15	50	52.2015325	2.47901E-05	9.901E-05	0.0001063	0.004950397	0.002254516	2.95893E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	16.2316	15	100	101.118742	0.000365053	4.511E-05	0.0002105	0.004510866	0.004466254	4.02953E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	9.03754E-07	4.28E-06	3.745E-05	8.55929E-05	0.001059293	1.12943E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2582.547	20	20	28.2842712	0.723030238	0.0010649	0.0334984	0.021298739	0.947477925	0.898168055
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	144.78041	20	30	36.0555128	0.003692606	0.0020975	0.001878	0.062924689	0.053116648	0.006780895
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	177.49904	20	30	36.0555128	0.005550158	0.0001853	0.0023024	0.005559274	0.065120371	0.004271568
3.A.1.e - Camels	CH <sub>4</sub>	0	0.041538	0	0	0	0	5.388E-07	5.388E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	18.844056	20	30	36.0555128	6.2555E-05	7.682E-05	0.0002444	0.002304681	0.006913457	5.31074E-05

## Annex 22 (q) - Uncertainties for the period 1994 to 2010 – Level and Trend assessments - Base year- 1994, Year T-2010

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	29.73348	20	30	36.0555128	0.000155742	5.627E-05	0.0003857	0.001688105	0.01090854	0.000121846
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.333458	20	30	36.0555128	3.13236E-07	1.188E-05	1.73E-05	0.000356421	0.000489216	3.66368E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.4200694	20	30	36.0555128	3.10853E-08	6.226E-07	5.449E-06	1.8679E-05	0.000154114	2.41E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.74797E-10	4.669E-08	4.086E-07	1.4007E-06	1.15566E-05	1.35518E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	122.64774	20	30	36.0555128	0.002649918	0.0001777	0.0015909	0.005330017	0.044996676	0.00205311
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	50.156232	20	30	36.0555128	0.000443163	3.268E-05	0.0006506	0.000980392	0.018401184	0.000339565
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	5.7912162	20	30	36.0555128	5.90817E-06	4.414E-05	7.512E-05	0.001324288	0.002124666	6.26794E-06
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	7.8099575	20	30	36.0555128	1.07451E-05	1.672E-05	0.0001013	0.000501695	0.002865296	8.46162E-06
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0023117	0	0	0	0	2.998E-08	2.998E-08	0	0	0
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.2926935	20	30	36.0555128	9.25988E-07	4.692E-07	2.974E-05	1.40772E-05	0.000841137	7.0771E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.5680176	20	30	36.0555128	2.24268E-06	6.506E-06	4.628E-05	0.000195179	0.001309025	1.75164E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.333458	20	30	36.0555128	3.13236E-07	1.188E-05	1.73E-05	0.000356421	0.000489216	3.66368E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	1.0369101	20	30	36.0555128	1.89407E-07	1.345E-05	1.345E-05	0.000403495	0.000380419	3.07527E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.4898124	20	30	36.0555128	4.22642E-08	3.534E-06	6.353E-06	0.00010602	0.000179701	4.35327E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.2040445	20	30	36.0555128	7.33437E-09	8.849E-07	2.647E-06	2.6548E-05	7.48593E-05	6.30871E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-105865.4	20	10	22.3606798	759.3606157	0.0004375	1.3731877	0.004375284	38.83961317	1508.51557
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-120.76219	20	10	22.3606798	0.000988102	0.0020503	0.0015664	0.020503252	0.04430491	0.002383308
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-1378.2395	20	10	22.3606798	0.128703208	0.0019179	0.0178772	0.019178907	0.505644802	0.256044496
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	8888.744	20	10	22.3606798	5.353290475	0.0100529	0.1152965	0.100529177	3.261078597	10.64473973
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	50.635677	20	10	22.3606798	0.000173721	0.0001447	0.0006568	0.001446773	0.018577082	0.000347201
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	7.0685113	10	10	14.1421356	1.35412E-06	2.196E-05	9.169E-05	0.000219561	0.001296638	1.72948E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	2554.9375	20	20	28.2842712	0.707653332	0.0092513	0.0331403	0.185026834	0.937348628	0.91285738
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	1109.2866	20	10	22.3606798	0.083373405	0.0040158	0.0143886	0.040158243	0.406972093	0.167238969
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	7.3609844	20	10	22.3606798	3.67123E-06	0.0001416	9.548E-05	0.001416404	0.002700578	9.29932E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	5.4613756	20	20	28.2842712	3.23343E-06	0.0001051	7.084E-05	0.002101759	0.002003655	8.43202E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.0800563	10	20	22.3606798	4.34241E-10	3.861E-06	1.038E-06	7.72271E-05	1.46854E-05	6.17969E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1457.9194	20	20	28.2842712	0.230423623	0.0007375	0.0189108	0.01474992	0.534877551	0.286311555
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	17.335965	20	20	28.2842712	3.25804E-05	0.0002086	0.0002249	0.004171861	0.006360173	5.78562E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	112.56905	20	20	28.2842712	0.001373719	0.0001725	0.0014601	0.003449332	0.041299031	0.001717508
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	58.804528	30	60	67.0820393	0.002108648	0.000641	0.0007628	0.03845838	0.032361072	0.002526286
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	16.779209	40	100	107.703296	0.000442559	9.562E-05	0.0002176	0.009561781	0.012311823	0.000243009
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	3.2581167	40	100	107.703296	1.66863E-05	1.857E-05	4.226E-05	0.001856665	0.002390658	9.16245E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	1.9073179	40	100	107.703296	5.7184E-06	1.087E-05	2.474E-05	0.001086901	0.001399503	3.13996E-06
<b>4.D - Wastewater Treatment and Discharge</b>												

**Annex 22 (q) - Uncertainties for the period 1994 to 2010 – Level and Trend assessments - Base year- 1994, Year T-2010**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M	
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)	
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	23.957987	20	0	20	3.11122E-05	8.429E-06	0.0003108	0	0.008789642	7.72578E-05	
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	10.269909	20	30	36.0555128	1.858E-05	5.871E-05	0.0001332	0.001761421	0.003767797	1.72989E-05	
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	16.39321	25	30	39.0512484	5.55351E-05	0.0001956	0.0002126	0.005869416	0.007517871	9.09684E-05	
Total													
		Sum(C): -77094.629	-85904.318				Sum(H): 769.511					Sum(M): 1521.797	
								Uncertainty in total inventory: 27.740					Trend uncertainty: 39.010

**Annex 22 (r) - Uncertainties for the period 1994 to 2011 – Level and Trend assessments - Base year- 1994, Year T-2011**  
(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	3.8470989	0.2	7	7.00285656	1.0799E-07	4.075E-05	4.99E-05	0.000285238	1.41141E-05	8.15598E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.009245	0.2	297	297.000067	1.1217E-09	9.792E-08	1.199E-07	2.90829E-05	3.39177E-08	8.45814E-10
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0031314	0.2	75	75.0002667	8.2061E-12	3.317E-08	4.062E-08	2.48754E-06	1.14882E-08	6.18798E-12
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	9.1159398	0.2	7	7.00285656	6.0632E-07	0.0002946	0.0001182	0.002062342	3.34443E-05	4.25437E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0448088	0.2	297	297.000067	2.635E-08	1.448E-06	5.812E-07	0.00043011	1.64393E-07	1.84994E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0020236	0.2	75	75.0002667	3.4271E-12	6.54E-08	2.625E-08	4.90513E-06	7.42421E-09	2.40604E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	75.584574	6.5	7	9.55248659	7.7562E-05	0.0005064	0.0009804	0.003544952	0.009012337	9.37889E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1906143	6.5	297	297.071119	4.7707E-07	1.268E-06	2.472E-06	0.000376648	2.27279E-05	1.4238E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0645629	6.5	75	75.2811397	3.5147E-09	4.295E-07	8.375E-07	3.22157E-05	7.69817E-06	1.09711E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	22.401653	6.5	7	9.55248659	6.813E-06	0.0002732	0.0002906	0.00191248	0.002671064	1.07922E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.3789638	6.5	297	297.071119	1.8857E-06	4.622E-06	4.916E-06	0.001372691	4.51858E-05	1.88632E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.1925381	6.5	75	75.2811397	3.1257E-08	2.348E-06	2.497E-06	0.000176115	2.29573E-05	3.15436E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	121.15536	6.5	7	9.55248659	0.00019928	0.0005565	0.0015715	0.003895201	0.014445975	0.000223859
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.5955311	6.5	297	297.071119	4.6567E-06	2.735E-06	7.725E-06	0.000812355	7.10082E-05	6.64963E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.2689495	6.5	75	75.2811397	6.099E-08	1.235E-06	3.489E-06	9.2644E-05	3.20682E-05	9.61127E-09
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.0833718	12.5	7	14.3265488	1.3255E-07	9.142E-06	2.702E-05	6.39945E-05	0.000477714	2.32306E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0053677	12.5	297	297.262931	3.7879E-10	2.344E-08	6.962E-08	6.96262E-06	1.23079E-06	4.9993E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0018181	12.5	75	76.0345316	2.8431E-12	7.94E-09	2.358E-08	5.95532E-07	4.16882E-07	5.28449E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	119.27061	4	5	6.40312424	8.6776E-05	0.0005439	0.0015471	0.002719276	0.008751536	8.39839E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	1.0342347	4	110	110.072703	1.9282E-06	4.716E-06	1.342E-05	0.000518749	7.58874E-05	2.7486E-07
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0175153	4	79	79.101201	2.8559E-10	7.987E-08	2.272E-07	6.30942E-06	1.28519E-06	4.14605E-11
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	28.405274	4	5	6.40312424	4.9219E-06	0.0001374	0.0003684	0.000686959	0.00208425	4.81601E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.248278	4	110	110.072703	1.1112E-07	1.195E-06	3.22E-06	0.000131484	1.82175E-05	1.76199E-08
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0042047	4	79	79.101201	1.6458E-11	2.024E-08	5.454E-08	1.59921E-06	3.08522E-07	2.65265E-12
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	135.70937	5	3.5	6.10327781	0.00010207	0.0008079	0.0017603	0.002827726	0.012447173	0.000162928
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	1.9699443	5	12	13	9.7576E-08	1.169E-05	2.555E-05	0.000140331	0.000180682	5.23388E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	1.1630946	5	9.62	10.8417895	2.3658E-08	6.563E-06	1.509E-05	6.31378E-05	0.000106678	1.53666E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CO <sub>2</sub>	146.72173	285.21124	5	3.5	6.10327781	0.00045082	0.0016757	0.0036995	0.005864966	0.026159384	0.000718711
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	N <sub>2</sub> O	2.1349353	4.1830157	5	12	13	4.3996E-07	2.481E-05	5.426E-05	0.000297717	0.000383663	2.35833E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fue	CH <sub>4</sub>	1.3130934	2.4061423	5	9.62	10.8417895	1.0125E-07	1.31E-05	3.121E-05	0.000126002	0.00022069	6.45805E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	655.73611	5	3.5	6.10327781	0.00238304	0.0048109	0.0085056	0.016838076	0.060143677	0.003900783
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	9.8817776	5	12	13	2.4553E-06	7.407E-05	0.0001282	0.000888792	0.00090635	1.61142E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	4.356387	5	9.62	10.8417895	3.319E-07	2.498E-05	5.651E-05	0.000240338	0.000399565	2.17414E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	218.5787	5	3.5	6.10327781	0.00026478	0.0016036	0.0028352	0.00561255	0.020047892	0.000433419
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	3.2939259	5	12	13	2.7281E-07	2.469E-05	4.273E-05	0.000296263	0.000302117	1.79046E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.452129	5	9.62	10.8417895	3.6877E-08	8.328E-06	1.884E-05	8.01125E-05	0.000133188	2.41571E-08
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	703.21384	5	3.5	6.10327781	0.00274062	0.0069037	0.0091214	0.024162921	0.064498303	0.004743878
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	11.473489	5	12	13	3.31E-06	0.0001126	0.0001488	0.001351642	0.001052341	2.93436E-06

**Annex 22 (r) - Uncertainties for the period 1994 to 2011 – Level and Trend assessments - Base year- 1994, Year T-2011**

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2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.7772364	5	9.62	10.8417895	1.0565E-08	7.63E-06	1.008E-05	7.34029E-05	7.12876E-05	1.04699E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.3348591	5	3.5	6.10327781	3.0213E-08	1.862E-05	3.029E-05	6.51562E-05	0.000214152	5.01063E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0330727	5	12	13	2.7503E-11	2.637E-07	4.29E-07	3.16433E-06	3.03341E-06	1.92146E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.0231042	5	9.62	10.8417895	9.3354E-12	1.842E-07	2.997E-07	1.77214E-06	2.1191E-06	7.63108E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	46.853056	5	3.5	6.10327781	1.2166E-05	0.0001242	0.0006077	0.000434617	0.004297331	1.86559E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.4636003	5	12	13	7.5057E-07	1.301E-05	7.087E-05	0.000156137	0.000501118	2.75498E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0537055	5	9.62	10.8417895	5.0441E-11	1.279E-07	6.966E-07	1.23038E-06	4.92583E-06	2.57776E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	154.41417	10	3	10.4403065	0.00038668	7.609E-05	0.0020029	0.000228261	0.02832553	0.000802388
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.2603881	10	90	90.5538514	1.9381E-06	4.461E-07	1.635E-05	4.01485E-05	0.000231204	5.50672E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2988339	10	50	50.9901951	3.4545E-08	1.058E-07	3.876E-06	5.28838E-06	5.48177E-05	3.03295E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	488.75036	20	297	297.672639	3.14919401	2.123E-05	0.0063396	0.006305318	0.179311423	0.032192343
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.872708	20	75	77.6208735	0.00064733	6.846E-07	0.0003486	5.13417E-05	0.009858987	9.72023E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.1368147	20	999	999.20018	0.00391959	9.368E-09	6.663E-05	9.35912E-06	0.001884581	3.55173E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	98.307017	5	7	8.60232527	0.0001064	0.0001333	0.0012751	0.000933132	0.009016654	8.21708E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2556218	5	75	75.1664819	5.4928E-08	4.332E-07	3.316E-06	3.24875E-05	2.34455E-05	1.60513E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2048591	5	297	297.042085	5.5093E-07	4.205E-07	2.657E-06	0.000124878	1.87895E-05	1.59476E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	260.05714	20	3	20.2237484	0.00411536	0.0016662	0.0033732	0.004998589	0.095409066	0.009127876
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7401196	20	50	53.8516481	2.3635E-07	4.699E-06	9.6E-06	0.000234946	0.000271533	1.2893E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.6555345	20	90	92.1954446	5.4345E-07	4.162E-06	8.503E-06	0.000374571	0.000240501	1.98144E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	44.525803	5	3.5	6.10327781	1.0987E-05	0.0003724	0.0005775	0.001303547	0.004083877	1.83773E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.724994	5	12	13	1.3216E-08	6.057E-06	9.404E-06	7.26898E-05	6.6496E-05	9.70552E-09
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.055789	5	9.62	10.8417895	5.4431E-11	4.969E-07	7.236E-07	4.78063E-06	5.11693E-06	4.90373E-11
<b>2.A - Mineral Industry</b>												
2.A.1 - Cement production	CO <sub>2</sub>	0	147.68	35	0	35	0.00397491	0.0019156	0.0019156	0	0.094815776	0.008990031
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	14.62692	5	2	5.38516481	9.2311E-07	0.000135	0.0001897	0.000270014	0.001341571	1.87272E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	248.9786	10	50	50.9901951	0.02397976	0.0032295	0.0032295	0.161475969	0.045672301	0.028160448
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	8.9642667	15	50	52.2015325	3.2579E-05	0.0001093	0.0001163	0.005466852	0.00246659	3.59705E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00047596	1.455E-05	0.0002294	0.001454914	0.004866995	2.58044E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	9.9227E-07	2.375E-06	3.745E-05	4.74988E-05	0.001059293	1.12436E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	3044.8072	20	20	28.2842712	1.10346103	0.0085435	0.0394944	0.170869369	1.117070731	1.277043359
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	232.00727	20	30	36.0555128	0.01041104	0.0007846	0.0030094	0.023537186	0.085118204	0.007799108
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	182.33933	20	30	36.0555128	0.0064306	8.98E-06	0.0023651	0.000269391	0.066896164	0.004475169
3.A.1.e - Camels	CH <sub>4</sub>	0	0.066654	0	0	0	0	8.646E-07	8.646E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	17.209962	20	30	36.0555128	5.7286E-05	8.336E-05	0.0002232	0.002500685	0.006313945	4.61193E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	22.06302	20	30	36.0555128	9.415E-05	0.0001356	0.0002862	0.004067799	0.008094422	8.20667E-05
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	0.921165	20	30	36.0555128	1.6412E-07	6.78E-06	1.195E-05	0.0002034	0.000337955	1.55585E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.413E-08	3.455E-07	5.449E-06	1.03657E-05	0.000154114	2.38586E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	1.9192E-10	2.591E-08	4.086E-07	7.77301E-07	1.15566E-05	1.3416E-10

## Annex 22 (r) - Uncertainties for the period 1994 to 2011 – Level and Trend assessments - Base year- 1994, Year T-2011

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	132.66854	20	30	36.0555128	0.00340429	0.0003722	0.0017209	0.011164556	0.048673079	0.002493716
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	58.007061	20	30	36.0555128	0.00065081	0.0001627	0.0007524	0.004881491	0.021281475	0.00047673
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.2802906	20	30	36.0555128	1.6658E-05	6.557E-06	0.0001204	0.000196725	0.003404728	1.16309E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.0229303	20	30	36.0555128	1.245E-05	2.335E-05	0.0001041	0.000700382	0.002943431	9.15432E-06
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0037094	20	30	36.0555128	2.6614E-12	4.812E-08	4.812E-08	1.44346E-06	1.36091E-06	3.93566E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.0938787	20	30	36.0555128	8.48E-07	7.737E-07	2.716E-05	2.32105E-05	0.000768197	5.90665E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	2.6475624	20	30	36.0555128	1.3558E-06	3.618E-06	3.434E-05	0.000108538	0.000971331	9.55264E-07
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	0.921165	20	30	36.0555128	1.6412E-07	6.78E-06	1.195E-05	0.0002034	0.000337955	1.55585E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	0.716307	20	30	36.0555128	9.9241E-08	9.291E-06	9.291E-06	0.000278738	0.000262797	1.46757E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.4310687	20	30	36.0555128	3.594E-08	2.901E-06	5.591E-06	8.70213E-05	0.000158149	3.25839E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.1795732	20	30	36.0555128	6.237E-09	6.479E-07	2.329E-06	1.94377E-05	6.58813E-05	4.71818E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-104485.04	20	10	22.3606798	812.130166	0.0438076	1.355283	0.438076407	38.3331921	1469.625527
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-62.193408	20	10	22.3606798	0.00028774	0.0026449	0.0008067	0.026449275	0.022817351	0.001220196
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-900.5177	20	10	22.3606798	0.06032564	0.00721	0.0116807	0.072100082	0.330379522	0.114349051
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	9755.9385	20	10	22.3606798	7.0803629	0.0069353	0.126545	0.069353224	3.579232607	12.81571592
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	12.770945	20	10	22.3606798	1.2133E-05	0.0005992	0.0001657	0.005992458	0.00468537	5.78622E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	0	10	10	14.1421356	0	0.0001085	0	0.001084555	0	1.17626E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2739.4518	20	20	28.2842712	0.89323292	0.0049217	0.0355336	0.098433339	1.005042748	1.019800048
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	1189.3978	20	10	22.3606798	0.10523779	0.0021364	0.0154278	0.021363982	0.436363098	0.190869173
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	7.8628528	20	10	22.3606798	4.5992E-06	0.0001243	0.000102	0.001243079	0.002884702	9.86675E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	5.8337295	20	20	28.2842712	4.0507E-06	9.223E-05	7.567E-05	0.001844568	0.002140263	7.98316E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.4302235	10	20	22.3606798	1.3769E-08	9.043E-07	5.58E-06	1.80865E-05	7.89196E-05	6.55543E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1756.7448	20	20	28.2842712	0.36732861	0.0040362	0.0227869	0.080724276	0.644509842	0.421909345
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	19.175829	20	20	28.2842712	4.3767E-05	0.0002332	0.0002487	0.004664016	0.007035177	7.12468E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	121.16742	20	20	28.2842712	0.00174747	0.0003428	0.0015717	0.006855416	0.044453578	0.002023117
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	64.105248	30	60	67.0820393	0.00275136	0.0007153	0.0008315	0.042917259	0.035278143	0.003086439
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	18.45875	20	100	101.98039	0.00052721	0.000123	0.0002394	0.012297283	0.006772097	0.000197084
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	3.584243	20	100	101.98039	1.9878E-05	2.388E-05	4.649E-05	0.002387833	0.001314977	7.43091E-06
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	2.0982338	20	30	36.0555128	8.5153E-07	1.398E-05	2.722E-05	0.000419355	0.000769794	7.68442E-07
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	23.884007	0	0	0	0	5.18E-06	0.0003098	0	0	0
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	10.870697	0	0	0	0	6.991E-05	0.000141	0	0	0
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	15.489421	25	30	39.0512484	5.4436E-05	0.0001887	0.0002009	0.005662061	0.007103397	8.25172E-05
<b>Total</b>												
		Sum(C): -77094.629	-81983.470				Sum(H): 824.960					Sum(M): 1485.577
							Uncertainty in total inventory: 28.722					Trend uncertainty: 38.543

**Annex 22 (s) - Uncertainties for the period 1994 to 2012 – Level and Trend assessments - Base year- 1994, Year T-2012**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	17.562258	0.2	7	7.00285656	2.3521E-06	0.0002188	0.0002278	0.001531941	6.44319E-05	2.35099E-06
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.0015946	0.0422039	0.2	297	297.000067	2.4432E-08	5.259E-07	5.474E-07	0.000156197	1.54836E-07	2.43975E-08
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0142949	0.2	75	75.0002667	1.7875E-10	1.781E-07	1.854E-07	1.33599E-05	5.24446E-08	1.78491E-10
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	78.941354	0.2	7	7.00285656	4.7524E-05	0.0006201	0.001024	0.004340845	0.000289618	1.89268E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.388031	0.2	297	297.000067	2.0654E-06	3.048E-06	5.033E-06	0.000905301	1.4236E-06	8.19571E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.017524	0.2	75	75.0002667	2.6862E-10	1.377E-07	2.273E-07	1.03244E-05	6.42915E-08	1.06597E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	77.543342	6.5	7	9.55248659	8.5324E-05	0.0005422	0.0010058	0.00379535	0.00924589	9.98912E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1960249	6.5	297	297.071119	5.2734E-07	1.365E-06	2.543E-06	0.000405312	2.33731E-05	1.64824E-07
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0663955	6.5	75	75.2811397	3.8851E-09	4.622E-07	8.612E-07	3.46674E-05	7.91668E-06	1.2645E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	22.440135	6.5	7	9.55248659	7.1455E-06	0.0002741	0.0002911	0.001918631	0.002675652	1.08403E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.0212933	0.3796148	6.5	297	297.071119	1.9777E-06	4.637E-06	4.924E-06	0.001377106	4.52634E-05	1.89847E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.0108184	0.1928688	6.5	75	75.2811397	3.2783E-08	2.356E-06	2.502E-06	0.000176682	2.29967E-05	3.17452E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	88.226579	6.5	7	9.55248659	0.00011045	0.0001515	0.0011444	0.001060681	0.010519708	0.000111789
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4336719	6.5	297	297.071119	2.581E-06	7.448E-07	5.625E-06	0.000221208	5.17089E-05	5.16068E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1958518	6.5	75	75.2811397	3.3805E-08	3.364E-07	2.54E-06	2.52274E-05	2.33524E-05	1.18176E-09
1.A.2.m - Non-specified Industry - Biomass	CO <sub>2</sub>	0	0.0471744	5	18.6941667	19.3512756	1.2959E-10	6.119E-07	6.119E-07	1.1439E-05	4.3268E-06	1.49572E-10
1.A.2.m - Non-specified Industry - Biomass	N <sub>2</sub> O	0	0.0005223	5	281.818182	281.862533	3.3701E-12	6.775E-09	6.775E-09	1.90922E-06	4.79039E-08	3.64741E-12
1.A.2.m - Non-specified Industry - Biomass	CH <sub>4</sub>	0	0.0002654	5	245.454545	245.505466	6.5998E-13	3.442E-09	3.442E-09	8.44841E-07	2.43383E-08	7.14349E-13
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.3690733	12.5	7	14.3265488	1.7914E-07	1.324E-05	3.073E-05	9.26723E-05	0.000543225	3.03681E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0060911	12.5	297	297.262931	5.0983E-10	3.384E-08	7.901E-08	1.00497E-05	1.39669E-06	1.02948E-10
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0020631	12.5	75	76.0345316	3.8267E-12	1.146E-08	2.676E-08	8.5958E-07	4.73072E-07	9.62676E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.730587	108.69832	4	5	6.40312424	7.5332E-05	0.0004287	0.0014099	0.002143276	0.00797579	6.82069E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.6306708	0.9425589	4	110	110.072703	1.6739E-06	3.717E-06	1.223E-05	0.000408867	6.91607E-05	1.71956E-07
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.0106807	0.0159627	4	79	79.101201	2.4793E-10	6.295E-08	2.071E-07	4.97295E-06	1.17127E-06	2.61021E-11
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	25.063561	4	5	6.40312424	4.0052E-06	9.91E-05	0.0003251	0.00049549	0.00183905	3.62762E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.2193233	4	110	110.072703	9.0631E-08	8.64E-07	2.845E-06	9.50415E-05	1.60929E-05	9.29188E-09
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0037143	4	79	79.101201	1.3424E-11	1.463E-08	4.818E-08	1.15597E-06	2.72542E-07	1.41054E-12
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	141.66223	5	3.5	6.10327781	0.00011625	0.000906	0.0018375	0.003170864	0.012993165	0.000178877
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.0046691	2.0572512	5	12	13	1.1123E-07	1.313E-05	2.668E-05	0.000157557	0.00018869	6.0428E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.6179237	1.213315	5	9.62	10.8417895	2.6909E-08	7.401E-06	1.574E-05	7.11972E-05	0.000111284	1.74533E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	146.72173	297.86107	5	3.5	6.10327781	0.00051393	0.001884	0.0038636	0.006594142	0.027319618	0.000789844
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	2.1349353	4.3685429	5	12	13	5.0154E-07	2.786E-05	5.666E-05	0.000334321	0.00040068	2.72315E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	1.3130934	2.5128608	5	9.62	10.8417895	1.1542E-07	1.488E-05	3.259E-05	0.000143128	0.000230478	7.36058E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	267.86954	683.26045	5	3.5	6.10327781	0.00270426	0.0052487	0.0088626	0.018370455	0.062668191	0.004264776
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	3.922926	10.335892	5	12	13	2.8076E-06	8.114E-05	0.0001341	0.000973673	0.000948001	1.84675E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	2.2853972	4.3644398	5	9.62	10.8417895	3.4818E-07	2.578E-05	5.661E-05	0.000247973	0.000400303	2.21734E-07
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	227.75348	5	3.5	6.10327781	0.00030047	0.0017495	0.0029542	0.006123332	0.020889397	0.000473862
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.307646	3.4452972	5	250	250.049995	0.00011541	2.705E-05	4.469E-05	0.006761604	0.000316	4.58191E-05



**Annex 22 (s) - Uncertainties for the period 1994 to 2012 – Level and Trend assessments - Base year- 1994, Year T-2012**

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2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.7617993	1.4548133	5	250	250.049995	2.0579E-05	8.592E-06	1.887E-05	0.002148069	0.000133434	4.63201E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.79107	744.90686	5	3.5	6.10327781	0.00321425	0.007493	0.0096622	0.026225501	0.068322358	0.005355722
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.6234333	12.153743	5	12	13	3.882E-06	0.0001223	0.0001576	0.00146702	0.001114733	3.39478E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.1777164	0.8233181	5	9.62	10.8417895	1.239E-08	8.282E-06	1.068E-05	7.96687E-05	7.55142E-05	1.20495E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.2569191	5	3.5	6.10327781	2.9506E-08	1.786E-05	2.927E-05	6.25108E-05	0.000207003	4.67579E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.0119834	0.0319687	5	12	13	2.6859E-11	2.53E-07	4.147E-07	3.03586E-06	2.93215E-06	1.7814E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.0083714	0.022333	5	9.62	10.8417895	9.1168E-12	1.767E-07	2.897E-07	1.70019E-06	2.04837E-06	7.08645E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	50.537795	5	3.5	6.10327781	1.4795E-05	0.0001825	0.0006555	0.000638905	0.004635293	2.18941E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.8932829	5	12	13	9.1275E-07	1.985E-05	7.644E-05	0.000238198	0.000540528	3.48909E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.0412307	0.0579291	5	9.62	10.8417895	6.134E-11	1.951E-07	7.514E-07	1.87703E-06	5.31322E-06	3.17536E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	154.41417	10	3	10.4403065	0.00040416	0.0001182	0.0020029	0.000354651	0.02832553	0.000802461
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.1528879	1.2603881	10	90	90.5538514	2.0257E-06	7.938E-07	1.635E-05	7.14417E-05	0.000231204	5.85592E-08
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2988339	10	50	50.9901951	3.6106E-08	1.882E-07	3.876E-06	9.41033E-06	5.48177E-05	3.09353E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.14421	486.12162	20	297	297.672639	3.2562458	8.376E-05	0.0063055	0.024875588	0.178346998	0.032426447
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.319862	26.724841	20	75	77.6208735	0.00066917	5.034E-06	0.0003466	0.000377531	0.009804738	9.62754E-05
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.8311752	5.1077108	20	999	999.20018	0.00405049	1.07E-06	6.625E-05	0.001069098	0.001873903	4.65448E-06
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	93.714295	5	7	8.60232527	0.00010106	0.0001621	0.0012156	0.001134576	0.008595412	7.51684E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2470762	5	75	75.1664819	5.3636E-08	4.62E-07	3.205E-06	3.46534E-05	2.26617E-05	1.71441E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2010967	5	297	297.042085	5.5488E-07	4.02E-07	2.608E-06	0.000119387	1.84445E-05	1.45934E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	313.03828	20	3	20.2237484	0.00623258	0.0008688	0.0040604	0.002606259	0.114846645	0.013196544
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.890371	20	50	53.8516481	3.5751E-07	2.437E-06	1.155E-05	0.000121868	0.000326657	1.21557E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.7886143	20	90	92.1954446	8.2205E-07	2.159E-06	1.023E-05	0.000194292	0.000289325	1.21458E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	50.466637	5	3.5	6.10327781	1.4753E-05	0.000454	0.0006546	0.00158895	0.004628766	2.39502E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261	0.821726	5	12	13	1.7746E-08	7.385E-06	1.066E-05	8.86244E-05	7.53682E-05	1.35346E-08
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.0164349	0.0632326	5	9.62	10.8417895	7.3086E-11	5.985E-07	8.202E-07	5.75714E-06	5.79965E-06	6.67806E-11
<b>2.A - Mineral Industry</b>												
2.A.1 - Cement production	CO <sub>2</sub>	0	222.56	35	0	35	0.00943582	0.0028868	0.0028868	0	0.14289138	0.020417946
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	15.3153	5	2	5.38516481	1.0578E-06	0.0001451	0.0001987	0.000290265	0.001404709	2.05746E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	249.98824	10	50	50.9901951	0.02526748	0.0032426	0.0032426	0.162130775	0.045857508	0.028389299
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.5030667	8.9804	15	50	52.2015325	3.4175E-05	0.0001097	0.0001165	0.005484902	0.002471029	3.61901E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.00049747	9.215E-06	0.0002294	0.000921457	0.004866995	2.45367E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	2.8873215	20	20	28.2842712	1.0371E-06	1.504E-06	3.745E-05	3.0083E-05	0.001059293	1.12301E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.0409	3201.565	20	20	28.2842712	1.27515836	0.0112544	0.0415277	0.225087191	1.174581614	1.430306212
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	281.18087	20	30	36.0555128	0.01598322	6.376E-05	0.0036472	0.0019128	0.103158883	0.010645414
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	202.97582	20	30	36.0555128	0.00832878	0.0003106	0.0026328	0.00931842	0.074467224	0.0056322
3.A.1.e - Camels	CH <sub>4</sub>	0	0.045402	0	0	0	0	5.889E-07	5.889E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	17.631054	20	30	36.0555128	6.2842E-05	7.119E-05	0.0002287	0.002135721	0.006468434	4.64019E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	24.06411	20	30	36.0555128	0.00011707	0.0001004	0.0003121	0.003012449	0.008828576	8.70186E-05

## Annex 22 (s) - Uncertainties for the period 1994 to 2012 – Level and Trend assessments - Base year- 1994, Year T-2012

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.45803	20	30	36.0555128	4.2976E-07	1.386E-05	1.891E-05	0.000415701	0.000534918	4.58945E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.4200694	0.4200694	20	30	36.0555128	3.5673E-08	2.188E-07	5.449E-06	6.56504E-06	0.000154114	2.37942E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.0315	20	30	36.0555128	2.0059E-10	1.641E-08	4.086E-07	4.92297E-07	1.15566E-05	1.33798E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.777575	139.49875	20	30	36.0555128	0.00393399	0.0004902	0.0018094	0.014707125	0.05117893	0.002835582
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	60.993471	20	30	36.0555128	0.00075207	0.0002143	0.0007912	0.006430413	0.022377121	0.000542086
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	11.247235	20	30	36.0555128	2.5573E-05	3.456E-05	0.0001459	0.001036784	0.004126355	1.81017E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.9309359	20	30	36.0555128	1.6125E-05	3.689E-05	0.0001158	0.001106664	0.003276558	1.19605E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0025267	20	30	36.0555128	1.2906E-12	3.277E-08	3.277E-08	9.83228E-07	9.26996E-07	1.82606E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.0251064	2.1451116	20	30	36.0555128	9.3023E-07	5.016E-07	2.782E-05	1.50485E-05	0.000786993	6.19584E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	2.8876932	20	30	36.0555128	1.6858E-06	3.268E-07	3.746E-05	9.80426E-06	0.001059429	1.12249E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.45803	20	30	36.0555128	4.2976E-07	1.386E-05	1.891E-05	0.000415701	0.000534918	4.58945E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	1.1337786	20	30	36.0555128	2.5987E-07	1.471E-05	1.471E-05	0.00044119	0.000415958	3.67669E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.1950694	0.592682	20	30	36.0555128	7.1013E-08	5.056E-06	7.688E-06	0.000151675	0.000217442	7.02862E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.1218921	0.2468975	20	30	36.0555128	1.2323E-08	1.558E-06	3.203E-06	4.67387E-05	9.05811E-05	1.03894E-08
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-103522.16	20	10	22.3606798	833.270683	0.0597842	1.3427934	0.597841624	37.97993182	1442.832635
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-62.193408	20	10	22.3606798	0.00030075	0.0025695	0.0008067	0.025694591	0.022817351	0.001180844
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-900.5177	20	10	22.3606798	0.06305274	0.006797	0.0116807	0.067970157	0.330379522	0.113770571
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.9453	9755.9385	20	10	22.3606798	7.40044078	0.0095537	0.126545	0.095536588	3.579232607	12.82003329
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.452788	12.770945	20	10	22.3606798	1.2681E-05	0.0005825	0.0001657	0.005825215	0.00468537	5.58858E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.8627261	0	10	10	14.1421356	0	0.0001061	0	0.001060842	0	1.12539E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.7647	2860.474	20	20	28.2842712	1.01792429	0.0024664	0.0371034	0.049328922	1.049443054	1.103764066
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.3292	1241.9425	20	10	22.3606798	0.11992852	0.0010706	0.0161093	0.010706354	0.455640542	0.207722929
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.405947	7.985182	20	10	22.3606798	4.9578E-06	0.0001178	0.0001036	0.001177733	0.002929582	9.96951E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.172154	5.9244898	20	20	28.2842712	4.3666E-06	8.738E-05	7.685E-05	0.001747602	0.002173561	7.77848E-06
3.C.3 - Urea application	CO <sub>2</sub>	0.3390073	0.5092582	10	20	22.3606798	2.0165E-08	2.032E-06	6.606E-06	4.06346E-05	9.34176E-05	1.0378E-08
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.4235	1880.1537	20	20	28.2842712	0.43977057	0.0060473	0.0243876	0.120946101	0.689785751	0.490432341
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.1259054	19.842218	20	20	28.2842712	4.898E-05	0.0002422	0.0002574	0.004843683	0.00727966	7.64547E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	128.02508	20	20	28.2842712	0.00203906	0.0004586	0.0016606	0.009171857	0.046969497	0.002290257
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.426141	68.138841	30	60	67.0820393	0.00324901	0.0007701	0.0008838	0.046208939	0.037497893	0.003541358
<b>4.C - Incineration and Open Burning of Waste</b>												
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.4428267	20.129374	40	100	107.703296	0.00073092	0.0001472	0.0002611	0.014718893	0.014770022	0.000434799
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.6393928	3.9086378	40	100	107.703296	2.7559E-05	2.858E-05	5.07E-05	0.002858051	0.002867981	1.63938E-05
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.9597088	2.2881362	40	100	107.703296	9.4443E-06	1.673E-05	2.968E-05	0.001673117	0.001678931	5.61813E-06
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.084251	23.646501	20	0	20	3.4781E-05	8.759E-06	0.0003067	0	0.008675365	7.5262E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.1543788	11.514139	20	30	36.0555128	2.6801E-05	7.981E-05	0.0001494	0.002394234	0.004224276	2.35769E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.248514	19.674385	25	30	39.0512484	9.1796E-05	0.0001259	0.0002552	0.003777964	0.009022607	9.56805E-05
<b>Total</b>												

**Annex 22 (s) - Uncertainties for the period 1994 to 2012 – Level and Trend assessments - Base year- 1994, Year T-2012**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
		Sum(C) : -77094.629	-80190.932				Sum(H): 846.933					Sum(M): 1459.133
							Uncertainty in total inventory: 29.102					Trend uncertainty: 38.199

**Annex 22 (t) - Uncertainties for the period 1994 to 2013 – Level and Trend assessments - Base year- 1994, Year T-2013**  
 (rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	9.1119614	0.2	7	7.00285656	3.93015E-07	0.0001068	0.0001182	0.0007478	3.34297E-05	5.60322E-07
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.021897	0.2	297	297.000067	4.0824E-09	2.567E-07	2.84E-07	7.62457E-05	8.0335E-08	5.81342E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0074167	0.2	75	75.0002667	2.98664E-11	8.695E-08	9.62E-08	6.52151E-06	2.72102E-08	4.25308E-11
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	6.284751	0.2	7	7.00285656	1.86965E-07	0.0004311	8.152E-05	0.003017435	2.30573E-05	9.10545E-06
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0308923	0.2	297	297.000067	8.12545E-09	2.119E-06	4.007E-07	0.000629298	1.13337E-07	3.96016E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0013951	0.2	75	75.0002667	1.0568E-12	9.569E-08	1.81E-08	7.17675E-06	5.11843E-09	5.15057E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	59.55657	6.5	7	9.55248659	3.12411E-05	0.000184	0.0007725	0.001288261	0.007101235	5.20872E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1508794	6.5	297	297.071119	1.93917E-07	4.619E-07	1.957E-06	0.000137184	1.79901E-05	1.9143E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0511043	6.5	75	75.2811397	1.42864E-09	1.564E-07	6.629E-07	1.17337E-05	6.09343E-06	1.74809E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	23.102767	6.5	7	9.55248659	4.70106E-06	0.0002781	0.0002997	0.001946785	0.002754661	1.13781E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.3908244	6.5	297	297.071119	1.30112E-06	4.705E-06	5.069E-06	0.001397314	4.66E-05	1.95466E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.198564	6.5	75	75.2811397	2.15679E-08	2.39E-06	2.576E-06	0.000179274	2.36758E-05	3.26998E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	88.997151	6.5	7	9.55248659	6.97621E-05	0.0001058	0.0011544	0.000740888	0.010611587	0.000113155
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4374596	6.5	297	297.071119	1.63016E-06	5.203E-07	5.674E-06	0.000154514	5.21605E-05	2.65954E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.1975624	6.5	75	75.2811397	2.13509E-08	2.35E-07	2.563E-06	1.76214E-05	2.35564E-05	8.65416E-10
1.A.2.m - Non-specified Industry - Biomass	CO <sub>2</sub>	0	0.052416	5	18.6941667	19.3512756	9.93074E-11	6.799E-07	6.799E-07	1.271E-05	4.80756E-06	1.84657E-10
1.A.2.m - Non-specified Industry - Biomass	N <sub>2</sub> O	0	0.0005803	5	281.818182	281.862533	2.58252E-12	7.527E-09	7.527E-09	2.12135E-06	5.32266E-08	4.50296E-12
1.A.2.m - Non-specified Industry - Biomass	CH <sub>4</sub>	0	0.0002948	5	245.454545	245.505466	5.05743E-13	3.824E-09	3.824E-09	9.38717E-07	2.70425E-08	8.81922E-13
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.4144675	6.5	7	9.55248659	5.13464E-08	9.118E-06	3.132E-05	6.38251E-05	0.000287889	8.69539E-08
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0062073	6.5	297	297.071119	3.28221E-10	2.318E-08	8.052E-08	6.88469E-06	7.40132E-07	4.79468E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.0021025	6.5	75	75.2811397	2.41809E-12	7.852E-09	2.727E-08	5.88866E-07	2.5069E-07	4.09609E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	108.69832	4	5	6.40312424	4.67589E-05	0.0001644	0.0014099	0.000822065	0.00797579	6.4289E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.9425589	4	110	110.072703	1.03899E-06	1.426E-06	1.223E-05	0.000156823	6.91607E-05	2.93767E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0159627	4	79	79.101201	1.53891E-10	2.414E-08	2.071E-07	1.9074E-06	1.17127E-06	5.01005E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	25.184227	4	5	6.40312424	2.51001E-06	3.98E-05	0.0003267	0.000199024	0.001847904	3.45436E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.2203921	4	110	110.072703	5.68049E-08	3.445E-07	2.859E-06	3.78923E-05	1.61714E-05	1.69734E-09
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0037324	4	79	79.101201	8.41372E-12	5.834E-09	4.841E-08	4.60875E-07	2.7387E-07	2.87411E-13
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	145.32732	5	3.5	6.10327781	7.59374E-05	0.0007026	0.0018851	0.002459274	0.013329325	0.000183719
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.1110048	5	12	13	7.26942E-08	1.018E-05	2.738E-05	0.000122123	0.00019362	5.24026E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.244235	5	9.62	10.8417895	1.75647E-08	5.557E-06	1.614E-05	5.34586E-05	0.00011412	1.58813E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	305.64939	5	3.5	6.10327781	0.000335898	0.001452	0.0039646	0.005081986	0.028033957	0.000811729
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	4.4827693	5	12	13	3.27804E-07	2.159E-05	5.815E-05	0.000259023	0.000411157	2.36143E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.5785657	5	9.62	10.8417895	7.54385E-08	1.096E-05	3.345E-05	0.000105434	0.000236504	6.70506E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	697.58278	5	3.5	6.10327781	0.001749655	0.0044612	0.0090484	0.015614358	0.063981826	0.004337482
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	10.552552	5	12	13	1.8165E-06	6.97E-05	0.0001369	0.000836367	0.000967873	1.63629E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	4.4559163	5	9.62	10.8417895	2.25274E-07	1.866E-05	5.78E-05	0.000179512	0.000408694	1.99255E-07

**Annex 22 (t) - Uncertainties for the period 1994 to 2013 – Level and Trend assessments - Base year- 1994, Year T-2013**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	232.52759	5	3.5	6.10327781	0.000194406	0.001487	0.0030161	0.005204651	0.021327275	0.000481941
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	3.5175174	5	12	13	2.01834E-07	2.323E-05	4.563E-05	0.000278788	0.000322624	1.81809E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.4853054	5	9.62	10.8417895	2.50304E-08	6.22E-06	1.927E-05	5.98371E-05	0.000136231	2.21394E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	760.32073	5	3.5	6.10327781	0.002078522	0.0071088	0.0098622	0.024880631	0.069736109	0.005482171
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	12.405233	5	12	13	2.51033E-06	0.000116	0.0001609	0.00139179	0.0011378	3.23167E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.8403545	5	9.62	10.8417895	8.01238E-09	7.857E-06	1.09E-05	7.55832E-05	7.70768E-05	1.16536E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.2773402	5	3.5	6.10327781	1.86473E-08	1.505E-05	2.954E-05	5.268E-05	0.000208876	4.64044E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.032258	5	12	13	1.69744E-11	2.132E-07	4.184E-07	2.55844E-06	2.95868E-06	1.52994E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.022535	5	9.62	10.8417895	5.76174E-12	1.489E-07	2.923E-07	1.43282E-06	2.0669E-06	6.32504E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	46.72929	5	3.5	6.10327781	7.85126E-06	5.778E-06	0.0006061	2.02214E-05	0.004285979	1.837E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.3527376	5	12	13	4.67383E-07	2.401E-06	6.943E-05	2.88094E-05	0.00049095	2.41861E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0526157	5	9.62	10.8417895	3.141E-11	2.36E-08	6.825E-07	2.27022E-07	4.82588E-06	2.33407E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	154.41417	10	3	10.4403065	0.000250862	0.0003893	0.0020029	0.001167914	0.02832553	0.0008037
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.2603881	10	90	90.5538514	1.25735E-06	3.395E-06	1.635E-05	0.000305532	0.000231204	1.46805E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2988339	10	50	50.9901951	2.24113E-08	8.049E-07	3.876E-06	4.02448E-05	5.48177E-05	4.62462E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	483.63329	20	297	297.672639	2.000529004	0.001624	0.0062732	0.48233376	0.177434086	0.264128711
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.584872	20	75	77.6208735	0.000411018	8.877E-05	0.0003448	0.006657935	0.009753387	0.000139457
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.0801614	20	999	999.20018	0.002487108	1.684E-05	6.59E-05	0.016822639	0.001863796	0.000286475
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	94.15338	5	7	8.60232527	6.33196E-05	0.0005274	0.0012213	0.003691566	0.008635685	8.82027E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2470234	5	75	75.1664819	3.32782E-08	1.45E-06	3.204E-06	0.000108761	2.26568E-05	1.23423E-08
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2000059	5	297	297.042085	3.40688E-07	1.227E-06	2.594E-06	0.00036435	1.83444E-05	1.33088E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	224.84299	20	3	20.2237484	0.001995798	0.0033402	0.0029165	0.01002054	0.082489793	0.006904977
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.6395395	20	50	53.8516481	1.1449E-07	9.457E-06	8.296E-06	0.000472859	0.000234633	2.78648E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.5664493	20	90	92.1954446	2.63254E-07	8.376E-06	7.347E-06	0.000753872	0.000207817	6.11511E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	51.874338	5	3.5	6.10327781	9.67534E-06	0.0004182	0.0006729	0.001463776	0.00475788	2.47801E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.844647	5	12	13	1.16378E-08	6.801E-06	1.096E-05	8.16149E-05	7.74705E-05	1.26627E-08
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0649964	5	9.62	10.8417895	4.79308E-11	5.616E-07	8.431E-07	5.40282E-06	5.96143E-06	6.4729E-11
<b>2.A - Mineral Industry</b>												
2.A.1 - Cement production	CO <sub>2</sub>	0	270.4	35	0	35	0.00864538	0.0035074	0.0035074	0	0.17360635	0.030139165
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	16.00445	5	2	5.38516481	7.16992E-07	0.0001397	0.0002076	0.000279318	0.001467917	2.2328E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	214.86928	10	50	50.9901951	0.011586617	0.0027871	0.0027871	0.139354247	0.039415333	0.020973175
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	9.2458667	15	50	52.2015325	2.24852E-05	0.0001113	0.0001199	0.005565686	0.002544074	3.74492E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.000308784	7.348E-05	0.0002294	0.007347753	0.004866995	7.76771E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	3.849762	20	20	28.2842712	1.14444E-06	4.897E-07	4.994E-05	9.79444E-06	0.00141239	1.99494E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	2903.9075	20	20	28.2842712	0.651163696	0.000763	0.0376668	0.0152594	1.065377798	1.135262702

### Annex 22 (t) - Uncertainties for the period 1994 to 2013 – Level and Trend assessments - Base year- 1994, Year T-2013

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	229.81959	20	30	36.0555128	0.006627536	0.0017293	0.002981	0.05187964	0.084315596	0.009800617
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	177.78023	20	30	36.0555128	0.003965929	0.0006415	0.002306	0.019246344	0.065223533	0.004624531
3.A.1.e - Camels	CH <sub>4</sub>	0	0.049266	0	0	0	0	6.39E-07	6.39E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	15.22017	20	30	36.0555128	2.90681E-05	0.0001832	0.0001974	0.005496467	0.005583935	6.13915E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	26.0652	20	30	36.0555128	8.52511E-05	0.0001856	0.0003381	0.005566529	0.009562731	0.000122432
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.45047	20	30	36.0555128	2.63995E-07	1.24E-05	1.881E-05	0.000371919	0.000532145	4.21502E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.5600925	20	30	36.0555128	3.93638E-08	7.125E-08	7.265E-06	2.13745E-06	0.000205485	4.22288E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.042	20	30	36.0555128	2.21348E-10	5.343E-09	5.448E-07	1.60283E-07	1.54088E-05	2.37458E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	126.5292	20	30	36.0555128	0.002008906	3.324E-05	0.0016412	0.000997104	0.046420696	0.002155875
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	55.322757	20	30	36.0555128	0.000384048	1.453E-05	0.0007176	0.000435941	0.020296665	0.000412145
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	9.1927836	20	30	36.0555128	1.06041E-05	2.207E-05	0.0001192	0.000662032	0.003372624	1.18129E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	7.8223299	20	30	36.0555128	7.67804E-06	1.248E-06	0.0001015	3.7439E-05	0.002869835	8.23736E-06
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0027418	20	30	36.0555128	9.43272E-13	3.556E-08	3.556E-08	1.06691E-06	1.00589E-06	2.1501E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	1.8517874	20	30	36.0555128	4.30289E-07	1.066E-05	2.402E-05	0.000319818	0.000679379	5.63839E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	3.127824	20	30	36.0555128	1.22762E-06	6.557E-06	4.057E-05	0.000196701	0.001147528	1.35551E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.45047	20	30	36.0555128	2.63995E-07	1.24E-05	1.881E-05	0.000371919	0.000532145	4.21502E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	1.1278998	20	30	36.0555128	1.59632E-07	1.463E-05	1.463E-05	0.000438902	0.000413801	3.63866E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	0.4151908	20	30	36.0555128	2.16308E-08	2.045E-06	5.385E-06	6.13463E-05	0.000152324	2.6966E-08
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.1729588	20	30	36.0555128	3.75373E-09	1.56E-07	2.243E-06	4.68123E-06	6.34547E-05	4.04841E-09
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-121400.46	20	10	22.3606798	711.2877362	0.0522244	1.5746941	0.522244431	44.5390761	1984.002039
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-62.193408	20	10	22.3606798	0.000186678	0.0034786	0.0008067	0.034785881	0.022817351	0.001730689
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-900.5177	20	10	22.3606798	0.039137146	0.0117721	0.0116807	0.117721297	0.330379522	0.123008933
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	9755.9385	20	10	22.3606798	4.593489831	0.0219881	0.126545	0.219881304	3.579232607	12.85925384
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	12.770945	20	10	22.3606798	7.87138E-06	0.000784	0.0001657	0.007839902	0.00468537	8.34168E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	0	10	10	14.1421356	0	0.0001347	0	0.001346505	0	1.81308E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	796.74653	20	20	28.2842712	0.049019061	0.0399046	0.0103347	0.798091264	0.292308233	0.722393769
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	345.92636	20	10	22.3606798	0.005775266	0.0173218	0.004487	0.173217808	0.126912538	0.046111201
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	2.161753	20	10	22.3606798	2.25536E-07	0.0002529	2.804E-05	0.002529146	0.000793098	7.02559E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	1.6038812	20	20	28.2842712	1.98641E-07	0.0001876	2.08E-05	0.003752925	0.000588428	1.44307E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.3384791	10	20	22.3606798	5.52928E-09	1.415E-06	4.39E-06	2.83023E-05	6.20901E-05	4.65621E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1678.3168	20	20	28.2842712	0.217506633	0.001511	0.0217696	0.030220635	0.615736368	0.380044561
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	15.339027	20	20	28.2842712	1.81685E-05	0.0001797	0.000199	0.003593647	0.005627541	4.45835E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	116.09073	20	20	28.2842712	0.001040686	1.99E-05	0.0015058	0.000397955	0.042591058	0.001814157
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	72.38873	30	60	67.0820393	0.002276088	0.0007947	0.000939	0.047679682	0.039836675	0.003860313
<b>4.C - Incineration and Open Burning of Waste</b>												

**Annex 22 (t) - Uncertainties for the period 1994 to 2013 – Level and Trend assessments - Base year- 1994, Year T-2013**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	20.436092	40	100	107.703296	0.000467615	0.0001205	0.0002651	0.012049347	0.014995078	0.000370039
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	3.9681951	40	100	107.703296	1.76311E-05	2.34E-05	5.147E-05	0.00233969	0.002911682	1.3952E-05
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	2.3230013	40	100	107.703296	6.04215E-06	1.37E-05	3.013E-05	0.001369666	0.001704513	4.78135E-06
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	22.496144	20	0	20	1.95394E-05	8.64E-05	0.0002918	0	0.008253325	6.81174E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	11.878717	20	30	36.0555128	1.77059E-05	6.581E-05	0.0001541	0.001974306	0.004358032	2.28903E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	15.403404	25	30	39.0512484	3.49251E-05	0.000284	0.0001998	0.008518874	0.00706395	0.000122471
Total												
		Sum(C): -77094.629	-101784.741				Sum(H): 718.892					Sum(M): 1999.629
							Uncertainty in total inventory: 26.812					Trend uncertainty: 44.717

**Annex 22 (u) - Uncertainties for the period 1994 to 2014 – Level and Trend assessments - Base year- 1994, Year T-2014**

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
<b>1.A - Fuel Combustion Activities</b>												
1.A.1.a.i - Electricity Generation - Liquid Fuels	CO <sub>2</sub>	0.6635502	4.7145176	1.5	7	7.15891053	1.19812E-07	5.027E-05	6.115E-05	0.000351866	0.000129724	1.40638E-07
1.A.1.a.i - Electricity Generation - Liquid Fuels	N <sub>2</sub> O	0.00159458	0.0113295	1.5	500	500.00225	3.37515E-09	1.208E-07	1.47E-07	6.03978E-05	3.11739E-07	3.64799E-09
1.A.1.a.i - Electricity Generation - Liquid Fuels	CH <sub>4</sub>	0.0005401	0.0038374	1.5	100	100.011249	1.54918E-11	4.091E-08	4.978E-08	4.09146E-06	1.05589E-07	1.67512E-11
1.A.1.a.i - Electricity Generation - Solid Fuels	CO <sub>2</sub>	29.93144	0.671187	0.2	7	7.00285656	2.32363E-09	0.0004823	8.706E-06	0.00337633	2.46243E-06	1.13996E-05
1.A.1.a.i - Electricity Generation - Solid Fuels	N <sub>2</sub> O	0.147126	0.0032992	0.2	297	297.000067	1.00984E-10	2.371E-06	4.279E-08	0.000704147	1.21039E-08	4.95823E-07
1.A.1.a.i - Electricity Generation - Solid Fuels	CH <sub>4</sub>	0.0066444	0.000149	0.2	75	75.0002667	1.31341E-14	1.071E-07	1.933E-09	8.03035E-06	5.46629E-10	6.44866E-11
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CO <sub>2</sub>	34.36326	59.862991	6.5	7	9.55248659	3.43938E-05	0.0002127	0.0007765	0.001489217	0.007137771	5.31655E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	N <sub>2</sub> O	0.0873084	0.1515447	6.5	297	297.071119	2.13173E-07	5.334E-07	1.966E-06	0.000158411	1.80695E-05	2.54204E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Liquid Fuels	CH <sub>4</sub>	0.0295722	0.0513297	6.5	75	75.2811397	1.57051E-09	1.807E-07	6.658E-07	1.35493E-05	6.1203E-06	2.21042E-10
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CO <sub>2</sub>	1.2587076	22.648161	6.5	7	9.55248659	4.92299E-06	0.0002731	0.0002938	0.00191185	0.002700456	1.09476E-05
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	N <sub>2</sub> O	0.02129328	0.383134	6.5	297	297.071119	1.36255E-06	4.62E-06	4.97E-06	0.001372239	4.5683E-05	1.88513E-06
1.A.2.i - Mining (excluding fuels) and Quarrying - Other Fossil F	CH <sub>4</sub>	0.01081836	0.1946568	6.5	75	75.2811397	2.25861E-08	2.347E-06	2.525E-06	0.000176057	2.32099E-05	3.15348E-08
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CO <sub>2</sub>	73.58934	89.767722	6.5	7	9.55248659	7.73399E-05	4.288E-05	0.0011644	0.000300152	0.010703466	0.000114654
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	N <sub>2</sub> O	0.3617235	0.4412473	6.5	297	297.071119	1.80724E-06	2.108E-07	5.723E-06	6.25976E-05	5.26122E-05	6.6865E-09
1.A.2.i - Mining (excluding fuels) and Quarrying - Solid Fuels	CH <sub>4</sub>	0.163359	0.199273	6.5	75	75.2811397	2.36701E-08	9.518E-08	2.585E-06	7.13886E-06	2.37603E-05	6.15517E-10
1.A.2.m - Non-specified Industry - Biomass	CO <sub>2</sub>	0	0.0471744	5	18.6941667	19.3512756	8.76521E-11	6.119E-07	6.119E-07	1.1439E-05	4.3268E-06	1.49572E-10
1.A.2.m - Non-specified Industry - Biomass	N <sub>2</sub> O	0	0.0005223	5	281.818182	281.862533	2.27942E-12	6.775E-09	6.775E-09	1.90922E-06	4.79039E-08	3.6474E-12
1.A.2.m - Non-specified Industry - Biomass	CH <sub>4</sub>	0	0.0002654	5	245.454545	245.505466	4.46386E-13	3.442E-09	3.442E-09	8.44842E-07	2.43383E-08	7.1435E-13
1.A.2.m - Non-specified Industry - Liquid Fuels	CO <sub>2</sub>	1.29636	2.3376234	12.5	7	14.3265488	1.17968E-07	9.054E-06	3.032E-05	6.33793E-05	0.000536013	2.91327E-07
1.A.2.m - Non-specified Industry - Liquid Fuels	N <sub>2</sub> O	0.003348	0.0060111	12.5	297	297.262931	3.35832E-10	2.305E-08	7.797E-08	6.84446E-06	1.37834E-06	4.87465E-11
1.A.2.m - Non-specified Industry - Liquid Fuels	CH <sub>4</sub>	0.001134	0.002036	12.5	75	76.0345316	2.52068E-12	7.806E-09	2.641E-08	5.85425E-07	4.66857E-07	5.60678E-13
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CO <sub>2</sub>	72.7305865	108.69832	4	5	6.40312424	5.09518E-05	0.0002168	0.0014099	0.001083809	0.00797579	6.47879E-05
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	N <sub>2</sub> O	0.63067082	0.9425589	4	110	110.072703	1.13216E-06	1.88E-06	1.223E-05	0.000206756	6.91607E-05	4.75311E-08
1.A.3.a.i - International Aviation (International Bunkers) - Liquid	CH <sub>4</sub>	0.01068072	0.0159627	4	79	79.101201	1.67691E-10	3.183E-08	2.071E-07	2.51472E-06	1.17127E-06	7.69567E-12
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CO <sub>2</sub>	16.7509	25.304893	4	5	6.40312424	2.76136E-06	5.343E-05	0.0003282	0.000267133	0.001856758	3.51891E-06
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	N <sub>2</sub> O	0.146816	0.2214608	4	110	110.072703	6.25005E-08	4.64E-07	2.873E-06	5.10411E-05	1.62498E-05	2.86925E-09
1.A.3.a.ii - Domestic Aviation - Liquid Fuels	CH <sub>4</sub>	0.0024864	0.0037505	4	79	79.101201	9.25732E-12	7.858E-09	4.865E-08	6.20801E-07	2.75198E-07	4.61128E-13
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CO <sub>2</sub>	69.045102	166.1483	5	3.5	6.10327781	0.000108155	0.0010224	0.0021551	0.003578465	0.015239011	0.000245033
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	N <sub>2</sub> O	1.00466908	2.4163731	5	12	13	1.03787E-07	1.486E-05	3.134E-05	0.000178332	0.000221628	8.09212E-08
1.A.3.b.i.1 - Passenger cars with 3-way catalysts - Liquid Fuels	CH <sub>4</sub>	0.61792366	1.4198881	5	9.62	10.8417895	2.49253E-08	8.28E-06	1.842E-05	7.96554E-05	0.000130231	2.33051E-08
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CO <sub>2</sub>	146.721732	349.89396	5	3.5	6.10327781	0.000479655	0.0021315	0.0045385	0.007460294	0.03209204	0.001085555
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	N <sub>2</sub> O	2.13493528	5.1316769	5	12	13	4.68097E-07	3.154E-05	6.656E-05	0.000378467	0.000470674	3.64771E-07
1.A.3.b.i.2 - Passenger cars without 3-way catalysts - Liquid Fu	CH <sub>4</sub>	1.31309338	2.9518285	5	9.62	10.8417895	1.07724E-07	1.675E-05	3.829E-05	0.000161102	0.00027074	9.92539E-08
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CO <sub>2</sub>	267.869535	802.22075	5	3.5	6.10327781	0.002521414	0.0060114	0.0104057	0.021039784	0.07357915	0.005856564
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	N <sub>2</sub> O	3.922926	12.135495	5	12	13	2.61777E-06	9.305E-05	0.0001574	0.001116639	0.001113059	2.48578E-06
1.A.3.b.ii.1 - Light-duty trucks with 3-way catalysts - Liquid Fuel	CH <sub>4</sub>	2.2853972	5.1240788	5	9.62	10.8417895	3.24611E-07	2.897E-05	6.646E-05	0.00027871	0.000469977	2.98558E-07



## Annex 22 (u) - Uncertainties for the period 1994 to 2014 – Level and Trend assessments - Base year- 1994, Year T-2014

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CO <sub>2</sub>	89.290092	267.40692	5	3.5	6.10327781	0.000280157	0.0020037	0.0034686	0.007013085	0.024526383	0.000650727
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	N <sub>2</sub> O	1.30764603	4.0451649	5	12	13	2.90864E-07	3.102E-05	5.247E-05	0.000372212	0.00037102	2.76198E-08
1.A.3.b.ii.2 - Light-duty trucks without 3-way catalysts - Liquid F	CH <sub>4</sub>	0.76179934	1.7080263	5	9.62	10.8417895	3.60679E-08	9.657E-06	2.215E-05	9.29034E-05	0.000156659	3.31731E-07
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CO <sub>2</sub>	160.791072	868.57812	5	3.5	6.10327781	0.002955794	0.0086287	0.0112664	0.03020055	0.079665404	0.00725865
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	N <sub>2</sub> O	2.62343328	14.171538	5	12	13	3.56986E-06	0.0001408	0.0001838	0.00168938	0.001299804	4.54349E-06
1.A.3.b.iii - Heavy-duty trucks and buses - Liquid Fuels	CH <sub>4</sub>	0.17771645	0.9600074	5	9.62	10.8417895	1.13941E-08	9.537E-06	1.245E-05	9.17442E-05	8.80512E-05	1.617E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	CO <sub>2</sub>	0.8460133	2.363577	5	3.5	6.10327781	2.18875E-08	1.678E-05	3.066E-05	5.87263E-05	0.000216786	5.04448E-08
1.A.3.b.iv - Motorcycles - Liquid Fuels	N <sub>2</sub> O	0.01198336	0.0334795	5	12	13	1.99239E-11	2.377E-07	4.343E-07	2.85208E-06	3.07072E-06	1.75636E-11
1.A.3.b.iv - Motorcycles - Liquid Fuels	CH <sub>4</sub>	0.00837144	0.0233884	5	9.62	10.8417895	6.7629E-12	1.66E-07	3.034E-07	1.59726E-06	2.14517E-06	7.15299E-12
1.A.3.c - Railways - Liquid Fuels	CO <sub>2</sub>	35.05671	48.686767	5	3.5	6.10327781	9.28706E-06	5.64E-05	0.0006315	0.000197402	0.004465518	1.99798E-05
1.A.3.c - Railways - Liquid Fuels	N <sub>2</sub> O	4.1945046	5.5769622	5	12	13	5.52856E-07	3.527E-06	7.234E-05	4.23202E-05	0.000511515	2.63439E-07
1.A.3.c - Railways - Liquid Fuels	CH <sub>4</sub>	0.04123067	0.0548198	5	9.62	10.8417895	3.71541E-11	3.467E-08	7.111E-07	3.33489E-07	5.02803E-06	2.53923E-11
1.A.3.d.i - International water-borne navigation (International bu	CO <sub>2</sub>	139.69015	154.41417	10	3	10.4403065	0.000273358	0.0002888	0.0020029	0.000866279	0.02832553	0.000803086
1.A.3.d.i - International water-borne navigation (International bu	N <sub>2</sub> O	1.15288789	1.2603881	10	90	90.5538514	1.3701E-06	2.565E-06	1.635E-05	0.00023085	0.000231204	1.06747E-07
1.A.3.d.i - International water-borne navigation (International bu	CH <sub>4</sub>	0.273346	0.2988339	10	50	50.9901951	2.4421E-08	6.082E-07	3.876E-06	3.04076E-05	5.48177E-05	3.9296E-09
1.A.4.b - Residential - Biomass	CO <sub>2</sub>	461.144208	481.28537	20	297	297.672639	2.158804575	0.0013225	0.0062428	0.39279564	0.176572687	0.185466328
1.A.4.b - Residential - Biomass	CH <sub>4</sub>	25.3198617	26.452802	20	75	77.6208735	0.000443436	7.226E-05	0.0003431	0.0054196	0.009704933	0.000123558
1.A.4.b - Residential - Biomass	N <sub>2</sub> O	4.83117516	5.0541665	20	999	999.20018	0.002682466	1.37E-05	6.556E-05	0.013685681	0.001854259	0.000190736
1.A.4.b - Residential - Liquid Fuels	CO <sub>2</sub>	102.10887	100.13758	5	7	8.60232527	7.8047E-05	0.0003762	0.0012989	0.002633746	0.009184552	9.12926E-05
1.A.4.b - Residential - Liquid Fuels	CH <sub>4</sub>	0.271782	0.2562855	5	75	75.1664819	3.90325E-08	1.134E-06	3.324E-06	8.50795E-05	2.35063E-05	7.79106E-09
1.A.4.b - Residential - Liquid Fuels	N <sub>2</sub> O	0.2231256	0.2017856	5	297	297.042085	3.77874E-07	1.043E-06	2.617E-06	0.000309797	1.85076E-05	9.63166E-08
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CO <sub>2</sub>	365.33844	271.52559	20	3	20.2237484	0.003171575	0.0024717	0.003522	0.00741498	0.099616583	0.009978446
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	CH <sub>4</sub>	1.036644	0.7719304	20	50	53.8516481	1.81754E-07	6.994E-06	1.001E-05	0.000349689	0.000283204	2.02487E-07
1.A.4.c.iii - Fishing (mobile combustion) - Liquid Fuels	N <sub>2</sub> O	0.9181704	0.6837097	20	90	92.1954446	4.1792E-07	6.194E-06	8.868E-06	0.000557505	0.000250838	3.73731E-07
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CO <sub>2</sub>	14.869647	60.024194	5	3.5	6.10327781	1.41159E-05	0.0005346	0.0007786	0.001871229	0.005505379	3.38107E-05
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.9773475	5	12	13	1.69791E-08	8.697E-06	1.268E-05	0.000104366	8.96417E-05	1.89278E-08
1.A.5.b.iii - Mobile (Other) - Liquid Fuels	CH <sub>4</sub>	0.01643487	0.0752078	5	9.62	10.8417895	6.99291E-11	7.059E-07	9.755E-07	6.79081E-06	6.89801E-06	9.36977E-11
<b>2.A - Mineral Industry</b>												
2.A.1 - Cement production	CO <sub>2</sub>	0	303.16	35	0	35	0.011841591	0.0039323	0.0039323	0	0.194639427	0.037884506
2.A.2 - Lime production	CO <sub>2</sub>	3.96704	16.69283	5	2	5.38516481	8.4994E-07	0.0001514	0.0002165	0.000302886	0.001531055	2.43587E-06
<b>2.C - Metal Industry</b>												
2.C.6 - Zinc Production	CO <sub>2</sub>	0	175.76336	10	50	50.9901951	0.008448123	0.0022798	0.0022798	0.113991961	0.032241796	0.014033701
<b>2.D - Non-Energy Products from Fuels and Solvent Use</b>												
2.D.1 - Lubricant Use	CO <sub>2</sub>	0.50306667	9.064	15	50	52.2015325	2.3547E-05	0.0001093	0.0001176	0.00546584	0.002494032	3.60956E-05
2.D.2 - Paraffin Wax Use	CO <sub>2</sub>	17.688	17.688	15	100	101.118742	0.000336474	6.075E-05	0.0002294	0.006074642	0.004866995	6.05889E-05
<b>3.A - Livestock</b>												
3.A.1.a.i - Dairy Cows	CH <sub>4</sub>	2.8873215	3.849762	20	20	28.2842712	1.24706E-06	2.568E-06	4.994E-05	5.13579E-05	0.00141239	1.99748E-06
3.A.1.a.ii - Other Cattle	CH <sub>4</sub>	2244.04092	3177.3573	20	20	28.2842712	0.849478277	0.0044006	0.0412137	0.088012734	1.165700341	1.366603527

## Annex 22 (u) - Uncertainties for the period 1994 to 2014 – Level and Trend assessments - Base year- 1994, Year T-2014

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
3.A.1.c - Sheep	CH <sub>4</sub>	275.0496	214.63638	20	30	36.0555128	0.006299125	0.0017283	0.0027841	0.051848841	0.078745221	0.008889112
3.A.1.d - Goats	CH <sub>4</sub>	172.11705	198.7061	20	30	36.0555128	0.005398783	0.0002462	0.0025774	0.007386672	0.07290076	0.005369084
3.A.1.e - Camels	CH <sub>4</sub>	0	0.05313	0	0	0	0	6.892E-07	6.892E-07	0	0	0
3.A.1.f - Horses	CH <sub>4</sub>	22.226778	20.881098	20	30	36.0555128	5.96184E-05	9.379E-05	0.0002709	0.002813673	0.007660801	6.66046E-05
3.A.1.g - Mules and Asses	CH <sub>4</sub>	30.57747	33.39609	20	30	36.0555128	0.000152498	6.845E-05	0.0004332	0.002053578	0.012252268	0.000154335
3.A.1.h - Swine	CH <sub>4</sub>	0.374703	1.44291	20	30	36.0555128	2.84677E-07	1.257E-05	1.872E-05	0.000377068	0.000529371	4.22414E-07
3.A.2.a.i - Dairy cows	N <sub>2</sub> O	0.42006938	0.5600925	20	30	36.0555128	4.28937E-08	3.736E-07	7.265E-06	1.12079E-05	0.000205485	4.23498E-08
3.A.2.a.i - Dairy cows	CH <sub>4</sub>	0.0315	0.042	20	30	36.0555128	2.41197E-10	2.802E-08	5.448E-07	8.40454E-07	1.54088E-05	2.38139E-10
3.A.2.a.ii - Other cattle	N <sub>2</sub> O	97.7775755	138.44407	20	30	36.0555128	0.00262073	0.0001917	0.0017958	0.005750726	0.050791991	0.002612897
3.A.2.a.ii - Other cattle	CH <sub>4</sub>	42.751548	60.53229	20	30	36.0555128	0.000501012	8.381E-05	0.0007852	0.002514396	0.022207925	0.000499514
3.A.2.c - Sheep	CH <sub>4</sub>	8.251488	8.5854552	20	30	36.0555128	1.00786E-05	2.401E-05	0.0001114	0.000720191	0.003149809	1.044E-05
3.A.2.d - Goats	CH <sub>4</sub>	5.8519797	8.7430682	20	30	36.0555128	1.0452E-05	1.74E-05	0.0001134	0.000522088	0.003207633	1.05615E-05
3.A.2.e - Camels	CH <sub>4</sub>	0	0.0029568	20	30	36.0555128	1.19541E-12	3.835E-08	3.835E-08	1.15059E-06	1.08478E-06	2.5006E-12
3.A.2.f - Horses	CH <sub>4</sub>	2.02510644	2.5405336	20	30	36.0555128	8.82518E-07	2.692E-07	3.295E-05	8.07673E-06	0.000932064	8.68809E-07
3.A.2.g - Mules and Asses	CH <sub>4</sub>	2.7519723	4.0075308	20	30	36.0555128	2.19597E-06	6.835E-06	5.198E-05	0.000205044	0.001470272	2.20374E-06
3.A.2.h - Swine	CH <sub>4</sub>	0.374703	1.44291	20	30	36.0555128	2.84677E-07	1.257E-05	1.872E-05	0.000377068	0.000529371	4.22414E-07
3.A.2.h - Swine	N <sub>2</sub> O	0	1.1220211	20	30	36.0555128	1.72138E-07	1.455E-05	1.455E-05	0.000436615	0.000411644	3.60083E-07
3.A.2.i - Poultry	CH <sub>4</sub>	0.19506942	2.1649509	20	30	36.0555128	6.4087E-07	2.488E-05	2.808E-05	0.000746446	0.000794271	1.18805E-06
3.A.2.i - Poultry	N <sub>2</sub> O	0.12189207	0.9018682	20	30	36.0555128	1.11214E-07	9.699E-06	1.17E-05	0.000290955	0.000330875	1.94133E-07
<b>3.B - Land</b>												
3.B.1.a - Forest land Remaining Forest land	CO <sub>2</sub>	-95039.297	-118470.94	20	10	22.3606798	738.1147473	0.0221884	1.5366952	0.221884064	43.46430278	1889.194849
3.B.1.b.i - Cropland converted to Forest Land	CO <sub>2</sub>	-250.24106	-62.193408	20	10	22.3606798	0.000203418	0.0032985	0.0008067	0.03298481	0.022817351	0.001608629
3.B.1.b.ii - Grassland converted to Forest Land	CO <sub>2</sub>	-1369.6171	-900.5177	20	10	22.3606798	0.042646627	0.0107865	0.0116807	0.107865121	0.330379522	0.120785513
3.B.3.b.i - Forest Land converted to Grassland	CO <sub>2</sub>	8671.94533	9755.9385	20	10	22.3606798	5.005394292	0.0157394	0.126545	0.157394005	3.579232607	12.83567893
3.B.5.b.i - Forest Land converted to Settlements	CO <sub>2</sub>	55.4527875	12.770945	20	10	22.3606798	8.57721E-06	0.0007441	0.0001657	0.007440773	0.00468537	7.73178E-05
3.B.5.b.ii - Cropland converted to Settlements	CO <sub>2</sub>	7.86272611	0	10	10	14.1421356	0	0.000129	0	0.001289912	0	1.66387E-06
<b>3.C - Aggregate sources and non-CO<sub>2</sub> emissions sources on land</b>												
3.C.1.a - Biomass burning in forest lands	CH <sub>4</sub>	2932.76466	1173.8915	20	20	28.2842712	0.115951418	0.032899	0.0152266	0.657980868	0.430674161	0.618419056
3.C.1.a - Biomass burning in forest lands	N <sub>2</sub> O	1273.32919	509.67277	20	10	22.3606798	0.013661017	0.0142808	0.006611	0.142808233	0.186987381	0.055358472
3.C.1.c - Biomass burning in grasslands	N <sub>2</sub> O	16.4059471	3.0934691	20	10	22.3606798	5.03259E-07	0.000229	4.013E-05	0.002290209	0.001134924	6.53311E-06
3.C.1.c - Biomass burning in grasslands	CH <sub>4</sub>	12.1721543	2.2951545	20	20	28.2842712	4.43245E-07	0.0001699	2.977E-05	0.003398373	0.00084204	1.2258E-05
3.C.3 - Urea application	CO <sub>2</sub>	0.33900729	0.2813294	10	20	22.3606798	4.16227E-09	1.912E-06	3.649E-06	3.82481E-05	5.16067E-05	4.12617E-09
3.C.4 - Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.42348	1795.1404	20	20	28.2842712	0.271154634	0.0009832	0.0232849	0.01966384	0.658596321	0.434135781
3.C.5 - Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	7.9370331	20	20	28.2842712	5.30074E-06	8.448E-05	0.000103	0.001689618	0.002911917	1.13341E-05
3.C.6 - Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.092281	130.16146	20	20	28.2842712	0.001425558	0.0002267	0.0016883	0.004534846	0.047753287	0.002300941
<b>4.A - Solid Waste Disposal</b>												
4.A - Solid Waste Disposal	CH <sub>4</sub>	8.42614095	76.862008	30	60	67.0820393	0.002796187	0.0008587	0.000997	0.051524966	0.042298392	0.004443976
<b>4.C - Incineration and Open Burning of Waste</b>												

## Annex 22 (u) - Uncertainties for the period 1994 to 2014 – Level and Trend assessments - Base year- 1994, Year T-2014

(rows with no activity have been deleted for ease of presentation of results)

A	B	C	D	E	F	G	H	I	J	K	L	M
2006 IPCC Categories	Gas	Base Year emissions or removals (Gg CO <sub>2</sub> equivalent)	Year T emissions or removals (Gg CO <sub>2</sub> equivalent)	Activity Data Uncertainty (%)	Emission Factor Uncertainty (%)	Combined Uncertainty (%)	Contribution to Variance by Category in Year T	Type A Sensitivity (%)	Type B Sensitivity (%)	Uncertainty in trend in national emissions introduced by emission factor uncertainty (%)	Uncertainty in trend in national emissions introduced by activity data uncertainty (%)	Uncertainty introduced into the trend in total national emissions (%)
4.C.2 - Open Burning of Waste	CH <sub>4</sub>	8.44282666	20.735474	40	100	107.703296	0.000524585	0.0001305	0.000269	0.013045358	0.015214751	0.00040167
4.C.2 - Open Burning of Waste	N <sub>2</sub> O	1.63939282	4.0263278	40	100	107.703296	1.97791E-05	2.533E-05	5.223E-05	0.002533091	0.002954337	1.51447E-05
4.C.2 - Open Burning of Waste	CO <sub>2</sub>	0.95970879	2.3570325	40	100	107.703296	6.77828E-06	1.483E-05	3.057E-05	0.001482884	0.001729484	5.19006E-06
<b>4.D - Wastewater Treatment and Discharge</b>												
4.D.1 - Domestic Wastewater Treatment and Discharge	N <sub>2</sub> O	22.0842512	22.008863	20	0	20	2.03791E-05	7.682E-05	0.0002855	0	0.008074553	6.51984E-05
4.D.1 - Domestic Wastewater Treatment and Discharge	CH <sub>4</sub>	5.15437885	12.364351	20	30	36.0555128	2.09034E-05	7.582E-05	0.0001604	0.00227458	0.0045362	2.57508E-05
4.D.2 - Industrial Wastewater Treatment and Discharge	CH <sub>4</sub>	28.2485139	14.38095	25	30	39.0512484	3.31723E-05	0.0002769	0.0001865	0.00830678	0.006595056	0.000112497
Total												
		Sum(C): -77094.629	-97506.801				Sum(H): 746.626					Sum(M): 1904.917
							Uncertainty in total inventory: 27.324					Trend uncertainty: 43.645

**Annex 23 - Approach 1 Level Assessment Year-1994**

A	B	C	D	E	F	G
IPCC Category code	IPCC Category	Greenhouse gas	1994 Ex,t (Gg CO <sub>2</sub> Eq)	Ex,t  (Gg CO <sub>2</sub> Eq)	Lx,t	Cumulative Total of Column F
3.B.1.a	Forest land Remaining Forest land	CO <sub>2</sub>	-95039.2971	95039.2971	0.822508888	0.822508888
3.B.3.b	Land Converted to Grassland	CO <sub>2</sub>	8671.945333	8671.945333	0.075050556	0.897559444
3.C.1	Emissions from biomass burning	CH <sub>4</sub>	2944.936813	2944.936813	0.025486686	0.92304613
3.A.1	Enteric Fermentation	CH <sub>4</sub>	2747.27384	2747.27384	0.02377603	0.946822159
3.B.1.b	Land Converted to Forest land	CO <sub>2</sub>	-1619.85819	1619.85819	0.014018914	0.960841074
3.C.4	Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.423481	1359.423481	0.011765006	0.97260608
3.C.1	Emissions from biomass burning	N <sub>2</sub> O	1289.735141	1289.735141	0.011161895	0.983767974
1.A.3.b	Road Transportation	CO <sub>2</sub>	734.5635463	734.5635463	0.006357213	0.990125187
1.A.4	Other Sectors - Liquid Fuels	CO <sub>2</sub>	467.44731	467.44731	0.00404548	0.994170667
3.A.2	Manure Management	N <sub>2</sub> O	98.31953694	98.31953694	0.000850897	0.995021565
3.C.6	Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.09228096	89.09228096	0.000771041	0.995792605
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CO <sub>2</sub>	73.58934	73.58934	0.000636872	0.996429478
3.B.5.b	Land Converted to Settlements	CO <sub>2</sub>	63.31551361	63.31551361	0.000547958	0.996977436
3.A.2	Manure Management	CH <sub>4</sub>	62.23336686	62.23336686	0.000538593	0.997516029
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CO <sub>2</sub>	35.65962	35.65962	0.000308613	0.997824642
1.A.3.c	Railways	CO <sub>2</sub>	35.05671	35.05671	0.000303395	0.998128037
4.D	Wastewater Treatment and Discharge	CH <sub>4</sub>	33.40289278	33.40289278	0.000289082	0.998417119
1.A.1	Energy Industries - Solid Fuels	CO <sub>2</sub>	29.93144	29.93144	0.000259039	0.998676158
1.A.4	Other Sectors - Biomass	CH <sub>4</sub>	25.3198617	25.3198617	0.000219128	0.998895287
4.D	Wastewater Treatment and Discharge	N <sub>2</sub> O	22.08425121	22.08425121	0.000191126	0.999086413
2.D	Non-Energy Products from Fuels and Solvent Use	CO <sub>2</sub>	18.19106667	18.19106667	0.000157433	0.999243846
1.A.3.a	Civil Aviation	CO <sub>2</sub>	16.7509	16.7509	0.000144969	0.999388815
1.A.5	Non-Specified - Liquid Fuels	CO <sub>2</sub>	14.869647	14.869647	0.000128688	0.999517503
1.A.3.b	Road Transportation	N <sub>2</sub> O	11.00559303	11.00559303	9.52469E-05	0.99961275
4.C	Incineration and Open Burning of Waste	CH <sub>4</sub>	8.442826658	8.442826658	7.30677E-05	0.999685817
4.A	Solid Waste Disposal	CH <sub>4</sub>	8.426140951	8.426140951	7.29233E-05	0.999758741
1.A.3.b	Road Transportation	CH <sub>4</sub>	5.164301457	5.164301457	4.4694E-05	0.999803435
1.A.4	Other Sectors - Biomass	N <sub>2</sub> O	4.83117516	4.83117516	4.1811E-05	0.999845246
1.A.3.c	Railways	N <sub>2</sub> O	4.1945046	4.1945046	3.6301E-05	0.999881546
2.A.2	Lime production	CO <sub>2</sub>	3.96704	3.96704	3.43324E-05	0.999915879
4.C	Incineration and Open Burning of Waste	N <sub>2</sub> O	1.639392825	1.639392825	1.4188E-05	0.999930067
1.A.4	Other Sectors - Liquid Fuels	CH <sub>4</sub>	1.308426	1.308426	1.13237E-05	0.99994139
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CO <sub>2</sub>	1.2587076	1.2587076	1.08934E-05	0.999952284
1.A.4	Other Sectors - Liquid Fuels	N <sub>2</sub> O	1.141296	1.141296	9.87724E-06	0.999962161

### Annex 23 - Approach 1 Level Assessment Year-1994

A	B	C	D	E	F	G
IPCC Category code	IPCC Category	Greenhouse gas	1994 Ex,t (Gg CO <sub>2</sub> Eq)	Ex,t  (Gg CO <sub>2</sub> Eq)	Lx,t	Cumulative Total of Column F
3.C.5	Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	1.12590542	9.74405E-06	0.999971905
4.C	Incineration and Open Burning of Waste	CO <sub>2</sub>	0.959708786	0.959708786	8.30571E-06	0.999980211
1.A.1	Energy Industries - Liquid Fuels	CO <sub>2</sub>	0.6635502	0.6635502	5.74263E-06	1.000000
1.A.2	Manufacturing Industries and Construction - Solid Fuels	N <sub>2</sub> O	0.3617235	0.3617235	3.1305E-06	0.999983341
3.C.3	Urea application	CO <sub>2</sub>	0.339007289	0.339007289	2.93391E-06	0.999986275
1.A.5	Non-Specified - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.24261003	2.09965E-06	0.999988375
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CH <sub>4</sub>	0.163359	0.163359	1.41378E-06	0.999989789
1.A.1	Energy Industries - Solid Fuels	N <sub>2</sub> O	0.147126	0.147126	1.27329E-06	0.999991062
1.A.3.a	Civil Aviation	N <sub>2</sub> O	0.146816	0.146816	1.27061E-06	0.999992333
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	N <sub>2</sub> O	0.0906564	0.0906564	7.84578E-07	0.999993117
1.A.3.c	Railways	CH <sub>4</sub>	0.041230665	0.041230665	3.56827E-07	0.999993474
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CH <sub>4</sub>	0.0307062	0.0307062	2.65744E-07	0.99999374
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	N <sub>2</sub> O	0.02129328	0.02129328	1.84281E-07	0.999993924
1.A.5	Non-Specified - Liquid Fuels	CH <sub>4</sub>	0.016434873	0.016434873	1.42234E-07	0.999994066
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CH <sub>4</sub>	0.01081836	0.01081836	9.36265E-08	0.99999416
1.A.1	Energy Industries - Solid Fuels	CH <sub>4</sub>	0.0066444	0.0066444	5.75034E-08	0.999994217
1.A.3.a	Civil Aviation	CH <sub>4</sub>	0.0024864	0.0024864	2.15183E-08	0.999994239
1.A.1	Energy Industries - Liquid Fuels	N <sub>2</sub> O	0.001594578	0.001594578	1.38001E-08	0.999994253
1.A.1	Energy Industries - Liquid Fuels	CH <sub>4</sub>	0.000540099	0.000540099	4.67424E-09	0.999994257
1.A.1	Energy Industries - Gaseous Fuels	CO <sub>2</sub>	0	0	0	1
<b>Total</b>						
			-77770.26178	115548.04879	1	

**Annex 23 - Approach 1 Level Assessment Year 2014**

A	B	C	D	E	F	G
IPCC Category code	IPCC Category	Greenhouse gas	2014 Ex,t (Gg CO <sub>2</sub> Eq)	Ex,t  (Gg CO <sub>2</sub> Eq)	Lx,t	Cumulative Total of Column F
3.B.1.a	Forest land Remaining Forest land	CO <sub>2</sub>	-118470.9438	118470.9438	0.84252867	0.84252867
3.B.3.b	Land Converted to Grassland	CO <sub>2</sub>	9755.9385	9755.9385	0.069381214	0.911909884
3.A.1	Enteric Fermentation	CH <sub>4</sub>	3650.322762	3650.322762	0.025959965	0.937869849
1.A.3.b	Road Transportation	CO <sub>2</sub>	2456.611612	2456.611612	0.017470661	0.955340511
3.C.4	Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1795.140442	1795.140442	0.012766483	0.968106994
3.C.1	Emissions from biomass burning	CH <sub>4</sub>	1176.186624	1176.186624	0.008364675	0.976471669
3.B.1.b	Land Converted to Forest land	CO <sub>2</sub>	-962.7111044	962.7111044	0.006846503	0.983318172
3.C.1	Emissions from biomass burning	N <sub>2</sub> O	512.7662362	512.7662362	0.003646635	0.986964807
1.A.4	Other Sectors - Liquid Fuels	CO <sub>2</sub>	371.6631751	371.6631751	0.002643153	0.98960796
2.A.1	Cement production	CO <sub>2</sub>	303.16	303.16	0.00215598	0.99176394
2.C.6	Zinc Production	CO <sub>2</sub>	175.76336	175.76336	0.001249975	0.993013915
3.A.2	Manure Management	N <sub>2</sub> O	141.0280559	141.0280559	0.001002948	0.994016863
3.C.6	Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	130.1614561	130.1614561	0.000925668	0.994942531
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CO <sub>2</sub>	89.76772226	89.76772226	0.0006384	0.995580931
3.A.2	Manure Management	CH <sub>4</sub>	88.06169547	88.06169547	0.000626268	0.996207198
4.A	Solid Waste Disposal	CH <sub>4</sub>	76.86200835	76.86200835	0.000546619	0.996753817
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CO <sub>2</sub>	62.20061391	62.20061391	0.000442352	0.997196169
1.A.5	Non-Specified - Liquid Fuels	CO <sub>2</sub>	60.02419387	60.02419387	0.000426873	0.997623042
1.A.3.c	Railways	CO <sub>2</sub>	48.6867672	48.6867672	0.000346245	0.997969287
1.A.3.b	Road Transportation	N <sub>2</sub> O	37.93372671	37.93372671	0.000269773	0.99823906
2.D	Non-Energy Products from Fuels and Solvent Use	CO <sub>2</sub>	26.752	26.752	0.000190252	0.998429312
4.D	Wastewater Treatment and Discharge	CH <sub>4</sub>	26.74530122	26.74530122	0.000190204	0.998619517
1.A.4	Other Sectors - Biomass	CH <sub>4</sub>	26.45280181	26.45280181	0.000188124	0.998807641
1.A.3.a	Civil Aviation	CO <sub>2</sub>	25.3048934	25.3048934	0.000179961	0.998987601
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CO <sub>2</sub>	22.6481607	22.6481607	0.000161067	0.999148668
4.D	Wastewater Treatment and Discharge	N <sub>2</sub> O	22.00886274	22.00886274	0.00015652	0.999305188
4.C	Incineration and Open Burning of Waste	CH <sub>4</sub>	20.73547427	20.73547427	0.000147464	0.999452652
2.A.2	Lime production	CO <sub>2</sub>	16.69283	16.69283	0.000118714	0.999571367
3.B.5.b	Land Converted to Settlements	CO <sub>2</sub>	12.770945	12.770945	9.0823E-05	0.99966219
1.A.3.b	Road Transportation	CH <sub>4</sub>	12.18721735	12.18721735	8.66717E-05	0.999748861
3.C.5	Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	7.937033062	7.937033062	5.64457E-05	0.999805307
1.A.3.c	Railways	N <sub>2</sub> O	5.576962248	5.576962248	3.96616E-05	0.999844969
1.A.4	Other Sectors - Biomass	N <sub>2</sub> O	5.054166547	5.054166547	3.59437E-05	0.999880912
1.A.1	Energy Industries - Liquid Fuels	CO <sub>2</sub>	4.714517592	4.714517592	3.35282E-05	1

**Annex 23 - Approach 1 Level Assessment Year 2014**

A	B	C	D	E	F	G
IPCC Category code	IPCC Category	Greenhouse gas	2014 Ex,t (Gg CO <sub>2</sub> Eq)	Ex,t  (Gg CO <sub>2</sub> Eq)	Lx,t	Cumulative Total of Column F
4.C	Incineration and Open Burning of Waste	N <sub>2</sub> O	4.026327806	4.026327806	2.8634E-05	0.999909546
4.C	Incineration and Open Burning of Waste	CO <sub>2</sub>	2.357032501	2.357032501	1.67625E-05	0.999926309
1.A.4	Other Sectors - Liquid Fuels	CH <sub>4</sub>	1.028215873	1.028215873	7.31235E-06	0.999933621
1.A.5	Non-Specified - Liquid Fuels	N <sub>2</sub> O	0.97734752	0.97734752	6.95059E-06	0.999940572
1.A.4	Other Sectors - Liquid Fuels	N <sub>2</sub> O	0.885495391	0.885495391	6.29737E-06	0.999946869
1.A.1	Energy Industries - Solid Fuels	CO <sub>2</sub>	0.671187	0.671187	4.77327E-06	0.999951642
1.A.2	Manufacturing Industries and Construction - Solid Fuels	N <sub>2</sub> O	0.441247261	0.441247261	3.13801E-06	0.999954781
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	N <sub>2</sub> O	0.38313396	0.38313396	2.72473E-06	0.999957505
3.C.3	Urea application	CO <sub>2</sub>	0.2813294	0.2813294	2.00073E-06	0.999959506
1.A.3.a	Civil Aviation	N <sub>2</sub> O	0.221460826	0.221460826	1.57496E-06	0.999961081
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CH <sub>4</sub>	0.199272956	0.199272956	1.41717E-06	0.999962498
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CH <sub>4</sub>	0.19465677	0.19465677	1.38434E-06	0.999963882
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	N <sub>2</sub> O	0.15755586	0.15755586	1.12049E-06	0.999965003
1.A.5	Non-Specified - Liquid Fuels	CH <sub>4</sub>	0.075207824	0.075207824	5.34855E-07	0.999965538
1.A.3.c	Railways	CH <sub>4</sub>	0.05481979	0.05481979	3.89861E-07	0.999965928
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CH <sub>4</sub>	0.053365695	0.053365695	3.7952E-07	0.999966307
1.A.1	Energy Industries - Liquid Fuels	N <sub>2</sub> O	0.011329461	0.011329461	8.05716E-08	0.999966388
1.A.1	Energy Industries - Liquid Fuels	CH <sub>4</sub>	0.003837398	0.003837398	2.72904E-08	0.999966415
1.A.3.a	Civil Aviation	CH <sub>4</sub>	0.003750546	0.003750546	2.66727E-08	0.999966442
1.A.1	Energy Industries - Solid Fuels	N <sub>2</sub> O	0.003299175	0.003299175	2.34627E-08	0.999966465
1.A.2	Manufacturing Industries and Construction - Biomass	N <sub>2</sub> O	0.000522288	0.000522288	3.71435E-09	0.999966469
1.A.2	Manufacturing Industries and Construction - Biomass	CH <sub>4</sub>	0.000265356	0.000265356	1.88713E-09	0.999966471
1.A.1	Energy Industries - Solid Fuels	CH <sub>4</sub>	0.000148995	0.000148995	1.05961E-09	0.999966472
1.A.1	Energy Industries - Gaseous Fuels	CO <sub>2</sub>	0	0	0	1
<b>Total</b>						
			-98253.76394	140613.54579	1	

**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
3.B.3.b	Land Converted to Grassland	CO <sub>2</sub>	8671.945333	9755.9385	0.029148493	0.260653923	0.260653923
1.A.3.b	Road Transportation	CO <sub>2</sub>	734.5635463	2456.611612	0.0165777	0.148242403	0.408896326
3.A.1	Enteric Fermentation	CH <sub>4</sub>	2747.27384	3650.322762	0.014077598	0.125885795	0.534782121
3.B.1.a	Forest land Remaining Forest land	CO <sub>2</sub>	-95039.2971	-118470.9438	0.013849272	0.123844036	0.658626157
3.B.1.b	Land Converted to Forest land	CO <sub>2</sub>	-1619.85819	-962.7111044	0.009379588	0.08387488	0.742501037
3.C.1	Emissions from biomass burning	CH <sub>4</sub>	2944.936813	1176.186624	0.008594682	0.076856032	0.819357069
3.C.4	Direct N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1359.423481	1795.140442	0.006869596	0.061429835	0.880786904
3.C.1	Emissions from biomass burning	N <sub>2</sub> O	1289.735141	512.7662362	0.003784333	0.033840559	0.914627464
2.A.1	Cement production	CO <sub>2</sub>	0	303.16	0.00262367	0.02346159	0.938089054
2.C.6	Zinc Production	CO <sub>2</sub>	0	175.76336	0.001521128	0.013602348	0.951691402
4.A	Solid Waste Disposal	CH <sub>4</sub>	8.426140951	76.86200835	0.000611479	0.005468014	0.957159416
3.A.2	Manure Management	N <sub>2</sub> O	98.31953694	141.0280559	0.00059373	0.005309302	0.962468718
3.C.6	Indirect N <sub>2</sub> O Emissions from manure management	N <sub>2</sub> O	89.09228096	130.1614561	0.00055851	0.00499435	0.967463068
1.A.5	Non-Specified - Liquid Fuels	CO <sub>2</sub>	14.869647	60.02419387	0.00042468	0.00379761	0.971260678
3.A.2	Manure Management	CH <sub>4</sub>	62.23336686	88.06169547	0.000365386	0.003267384	0.974528062
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CO <sub>2</sub>	35.65962	62.20061391	0.000310981	0.002780874	0.977308936
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CO <sub>2</sub>	73.58934	89.76772226	0.000307757	0.002752046	0.980060983
3.B.5.b	Land Converted to Settlements	CO <sub>2</sub>	63.31551361	12.770945	0.000293109	0.002621066	0.982682049
1.A.3.b	Road Transportation	N <sub>2</sub> O	11.00559303	37.93372671	0.000258134	0.002308303	0.984990352
1.A.4	Other Sectors - Liquid Fuels	CO <sub>2</sub>	467.44731	371.6631751	0.000236563	0.00211541	0.987105762
1.A.3.c	Railways	CO <sub>2</sub>	35.05671	48.6867672	0.00019787	0.001769406	0.988875168
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CO <sub>2</sub>	1.2587076	22.6481607	0.000187982	0.001680989	0.990556157
1.A.1	Energy Industries - Solid Fuels	CO <sub>2</sub>	29.93144	0.671187	0.000185003	0.001654351	0.992210508
4.C	Incineration and Open Burning of Waste	CH <sub>4</sub>	8.442826658	20.73547427	0.000125631	0.001123423	0.993333931
2.A.2	Lime production	CO <sub>2</sub>	3.96704	16.69283	0.000119177	0.001065712	0.994399643
2.D	Non-Energy Products from Fuels and Solvent Use	CO <sub>2</sub>	18.19106667	26.752	0.000115555	0.001033327	0.99543297
1.A.3.a	Civil Aviation	CO <sub>2</sub>	16.7509	25.3048934	0.000112212	0.001003435	0.996436405
1.A.3.b	Road Transportation	CH <sub>4</sub>	5.164301457	12.18721735	7.25509E-05	0.00064877	0.997085175
1.A.4	Other Sectors - Biomass	CH <sub>4</sub>	25.3198617	26.45280181	6.752E-05	0.000603783	0.997688958
3.C.5	Indirect N <sub>2</sub> O Emissions from managed soils	N <sub>2</sub> O	1.12590542	7.937033062	6.15127E-05	0.000550064	0.998239021
4.D	Wastewater Treatment and Discharge	N <sub>2</sub> O	22.08425121	22.00886274	4.96873E-05	0.000444317	0.998683339
1.A.1	Energy Industries - Liquid Fuels	CO <sub>2</sub>	0.6635502	4.714517592	3.65712E-05	0.00032703	0.999010369
4.C	Incineration and Open Burning of Waste	N <sub>2</sub> O	1.639392825	4.026327806	2.43944E-05	0.000218142	0.999228511



**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
1.A.3.c	Railways	N <sub>2</sub> O	4.1945046	5.576962248	2.15255E-05	0.000192487	0.999420997
4.D	Wastewater Treatment and Discharge	CH <sub>4</sub>	33.40289278	26.74530122	1.85224E-05	0.000165632	0.999586629
4.C	Incineration and Open Burning of Waste	CO <sub>2</sub>	0.959708786	2.357032501	1.42806E-05	0.000127701	0.999714331
1.A.4	Other Sectors - Biomass	N <sub>2</sub> O	4.83117516	5.054166547	1.29422E-05	0.000115733	0.999830064
1.A.5	Non-Specified - Liquid Fuels	N <sub>2</sub> O	0.24261003	0.97734752	6.91173E-06	6.18066E-05	0.99989187
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	N <sub>2</sub> O	0.02129328	0.38313396	3.18005E-06	2.84369E-05	0.999920307
1.A.2	Manufacturing Industries and Construction - Other Fossil Fuels	CH <sub>4</sub>	0.01081836	0.19465677	1.61567E-06	1.44478E-05	0.999934755
1.A.2	Manufacturing Industries and Construction - Solid Fuels	N <sub>2</sub> O	0.3617235	0.441247261	1.51276E-06	1.35275E-05	0.999948282
1.A.3.a	Civil Aviation	N <sub>2</sub> O	0.146816	0.221460826	9.80665E-07	8.76938E-06	0.999957052
1.A.1	Energy Industries - Solid Fuels	N <sub>2</sub> O	0.147126	0.003299175	9.09371E-07	8.13185E-06	0.999965184
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	N <sub>2</sub> O	0.0906564	0.15755586	7.85621E-07	7.02524E-06	0.999972209
1.A.2	Manufacturing Industries and Construction - Solid Fuels	CH <sub>4</sub>	0.163359	0.199272956	6.83181E-07	6.10919E-06	0.999978318
1.A.4	Other Sectors - Liquid Fuels	CH <sub>4</sub>	1.308426	1.028215873	5.57425E-07	4.98465E-06	0.999983303
1.A.5	Non-Specified - Liquid Fuels	CH <sub>4</sub>	0.016434873	0.075207824	5.46107E-07	4.88344E-06	0.999988186
1.A.4	Other Sectors - Liquid Fuels	N <sub>2</sub> O	1.141296	0.885495391	3.87712E-07	3.46703E-06	0.999991653
3.C.3	Urea application	CO <sub>2</sub>	0.339007289	0.2813294	2.73579E-07	2.44642E-06	0.9999941
1.A.2	Manufacturing Industries and Construction - Liquid Fuels	CH <sub>4</sub>	0.0307062	0.053365695	2.66097E-07	2.37952E-06	0.999996479
1.A.3.c	Railways	CH <sub>4</sub>	0.041230665	0.05481979	2.11589E-07	1.89208E-06	0.999998371
1.A.1	Energy Industries - Liquid Fuels	N <sub>2</sub> O	0.001594578	0.011329461	8.78844E-08	7.85887E-07	0.999999157
1.A.1	Energy Industries - Solid Fuels	CH <sub>4</sub>	0.0066444	0.000148995	4.10684E-08	3.67245E-07	0.999999524
1.A.1	Energy Industries - Liquid Fuels	CH <sub>4</sub>	0.000540099	0.003837398	2.97673E-08	2.66187E-07	0.999999791
1.A.3.a	Civil Aviation	CH <sub>4</sub>	0.0024864	0.003750546	1.6608E-08	1.48514E-07	0.999999939
1.A.2	Manufacturing Industries and Construction - Biomass	N <sub>2</sub> O	0	0.000522288	4.52009E-09	4.04199E-08	0.999999979
1.A.2	Manufacturing Industries and Construction - Biomass	CH <sub>4</sub>	0	0.000265356	2.2965E-09	2.05359E-08	1
1.A.1	Energy Industries - Gaseous Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.1	Energy Industries - Gaseous Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.1	Energy Industries - Gaseous Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.1	Energy Industries - Other Fossil Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.1	Energy Industries - Other Fossil Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.1	Energy Industries - Other Fossil Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.1	Energy Industries - Peat	CO <sub>2</sub>	0	0	0	0	1
1.A.1	Energy Industries - Peat	CH <sub>4</sub>	0	0	0	0	1
1.A.1	Energy Industries - Peat	N <sub>2</sub> O	0	0	0	0	1

**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
1.A.1	Energy Industries - Biomass	CO <sub>2</sub>	0	0	0	0	1
1.A.1	Energy Industries - Biomass	CH <sub>4</sub>	0	0	0	0	1
1.A.1	Energy Industries - Biomass	N <sub>2</sub> O	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Gaseous Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Gaseous Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Gaseous Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Peat	CO <sub>2</sub>	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Peat	CH <sub>4</sub>	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Peat	N <sub>2</sub> O	0	0	0	0	1
1.A.2	Manufacturing Industries and Construction - Biomass	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Liquid Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Liquid Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Liquid Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Solid Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Solid Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Solid Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Gaseous Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Gaseous Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Gaseous Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Other Fossil Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Other Fossil Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Other Fossil Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Peat	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Peat	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Peat	N <sub>2</sub> O	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Biomass	CO <sub>2</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Biomass	CH <sub>4</sub>	0	0	0	0	1
1.A.3.d	Water-borne Navigation - Biomass	N <sub>2</sub> O	0	0	0	0	1
1.A.3.e	Other Transportation	CO <sub>2</sub>	0	0	0	0	1
1.A.3.e	Other Transportation	CH <sub>4</sub>	0	0	0	0	1
1.A.3.e	Other Transportation	N <sub>2</sub> O	0	0	0	0	1
1.A.4	Other Sectors - Solid Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.4	Other Sectors - Solid Fuels	CH <sub>4</sub>	0	0	0	0	1

**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
1.A.4	Other Sectors - Solid Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.4	Other Sectors - Gaseous Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.4	Other Sectors - Gaseous Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.4	Other Sectors - Gaseous Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.4	Other Sectors - Other Fossil Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.4	Other Sectors - Other Fossil Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.4	Other Sectors - Other Fossil Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.4	Other Sectors - Peat	CO <sub>2</sub>	0	0	0	0	1
1.A.4	Other Sectors - Peat	CH <sub>4</sub>	0	0	0	0	1
1.A.4	Other Sectors - Peat	N <sub>2</sub> O	0	0	0	0	1
1.A.4	Other Sectors - Biomass	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Solid Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Solid Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.5	Non-Specified - Solid Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.5	Non-Specified - Gaseous Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Gaseous Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.5	Non-Specified - Gaseous Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.5	Non-Specified - Other Fossil Fuels	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Other Fossil Fuels	CH <sub>4</sub>	0	0	0	0	1
1.A.5	Non-Specified - Other Fossil Fuels	N <sub>2</sub> O	0	0	0	0	1
1.A.5	Non-Specified - Peat	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Peat	CH <sub>4</sub>	0	0	0	0	1
1.A.5	Non-Specified - Peat	N <sub>2</sub> O	0	0	0	0	1
1.A.5	Non-Specified - Biomass	CO <sub>2</sub>	0	0	0	0	1
1.A.5	Non-Specified - Biomass	CH <sub>4</sub>	0	0	0	0	1
1.A.5	Non-Specified - Biomass	N <sub>2</sub> O	0	0	0	0	1
1.B.1	Solid Fuels	CO <sub>2</sub>	0	0	0	0	1
1.B.1	Solid Fuels	CH <sub>4</sub>	0	0	0	0	1
1.B.1	Solid Fuels	N <sub>2</sub> O	0	0	0	0	1
1.B.2.a	Oil	CO <sub>2</sub>	0	0	0	0	1
1.B.2.a	Oil	CH <sub>4</sub>	0	0	0	0	1
1.B.2.a	Oil	N <sub>2</sub> O	0	0	0	0	1
1.B.2.b	Natural Gas	CO <sub>2</sub>	0	0	0	0	1

**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
1.B.2.b	Natural Gas	CH <sub>4</sub>	0	0	0	0	1
1.B.2.b	Natural Gas	N <sub>2</sub> O	0	0	0	0	1
1.C	Carbon dioxide Transport and Storage	CO <sub>2</sub>	0	0	0	0	1
2.A.3	Glass Production	CO <sub>2</sub>	0	0	0	0	1
2.A.4	Other Process Uses of Carbonates	CO <sub>2</sub>	0	0	0	0	1
2.B.1	Ammonia Production	CO <sub>2</sub>	0	0	0	0	1
2.B.2	Nitric Acid Production	N <sub>2</sub> O	0	0	0	0	1
2.B.3	Adipic Acid Production	N <sub>2</sub> O	0	0	0	0	1
2.B.4	Caprolactam, Glyoxal and Glyoxylic Acid Production	N <sub>2</sub> O	0	0	0	0	1
2.B.5	Carbide Production	CO <sub>2</sub>	0	0	0	0	1
2.B.5	Carbide Production	CH <sub>4</sub>	0	0	0	0	1
2.B.6	Titanium Dioxide Production	CO <sub>2</sub>	0	0	0	0	1
2.B.7	Soda Ash Production	CO <sub>2</sub>	0	0	0	0	1
2.B.8	Petrochemical and Carbon Black Production	CO <sub>2</sub>	0	0	0	0	1
2.B.8	Petrochemical and Carbon Black Production	CH <sub>4</sub>	0	0	0	0	1
2.B.9	Fluorochemical Production	SF <sub>6</sub> , PFCs, HFCs and other halogenated gases	0	0	0	0	1
2.C.1	Iron and Steel Production	CO <sub>2</sub>	0	0	0	0	1
2.C.1	Iron and Steel Production	CH <sub>4</sub>	0	0	0	0	1
2.C.2	Ferroalloys Production	CO <sub>2</sub>	0	0	0	0	1
2.C.2	Ferroalloys Production	CH <sub>4</sub>	0	0	0	0	1
2.C.3	Aluminium production	CO <sub>2</sub>	0	0	0	0	1
2.C.3	Aluminium production	PFCs (PFCs)	0	0	0	0	1
2.C.4	Magnesium production	CO <sub>2</sub>	0	0	0	0	1
2.C.4	Magnesium production	Sulphur Hexafluoride (SF <sub>6</sub> )	0	0	0	0	1
2.C.5	Lead Production	CO <sub>2</sub>	0	0	0	0	1
2.E	Electronics Industry	SF <sub>6</sub> , PFCs, HFCs and other halogenated gases	0	0	0	0	1
2.F.1	Refrigeration and Air Conditioning	HFCs, PFCs	0	0	0	0	1
2.F.2	Foam Blowing Agents	HFCs (HFCs)	0	0	0	0	1
2.F.3	Fire Protection	HFCs, PFCs	0	0	0	0	1
2.F.4	Aerosols	HFCs, PFCs	0	0	0	0	1
2.F.5	Solvents	HFCs, PFCs	0	0	0	0	1
2.F.6	Other Applications (please specify)	HFCs, PFCs	0	0	0	0	1

**Annex 23 - Approach 1 Trend Assessment Year 1994 - 2014**

A	B	C	D	E	F	G	H
IPCC Category code	IPCC Category	Greenhouse gas	1994 Year Estimate Ex0 (Gg CO <sub>2</sub> Eq)	2014 Year Estimate Ext (Gg CO <sub>2</sub> Eq)	Trend Assessment (Txt)	% Contribution to Trend	Cumulative Total of Column G
2.G	Other Product Manufacture and Use	SF6, PFCs	0	0	0	0	1
2.G	Other Product Manufacture and Use	N <sub>2</sub> O	0	0	0	0	1
3.B.2.a	Cropland Remaining Cropland	CO <sub>2</sub>	0	0	0	0	1
3.B.2.b	Land Converted to Cropland	CO <sub>2</sub>	0	0	0	0	1
3.B.3.a	Grassland Remaining Grassland	CO <sub>2</sub>	0	0	0	0	1
3.B.4.a.i	Peatlands remaining peatlands	CO <sub>2</sub>	0	0	0	0	1
3.B.4.a.i	Peatlands remaining peatlands	N <sub>2</sub> O	0	0	0	0	1
3.B.4.b	Land Converted to Wetlands	N <sub>2</sub> O	0	0	0	0	1
3.B.4.b	Land Converted to Wetlands	CO <sub>2</sub>	0	0	0	0	1
3.B.5.a	Settlements Remaining Settlements	CO <sub>2</sub>	0	0	0	0	1
3.B.6.b	Land Converted to Other land	CO <sub>2</sub>	0	0	0	0	1
3.C.2	Liming	CO <sub>2</sub>	0	0	0	0	1
3.C.7	Rice cultivations	CH <sub>4</sub>	0	0	0	0	1
3.D.1	Harvested Wood Products	CO <sub>2</sub>	0	0	0	0	1
4.B	Biological Treatment of Solid Waste	CH <sub>4</sub>	0	0	0	0	1
4.B	Biological Treatment of Solid Waste	N <sub>2</sub> O	0	0	0	0	1
<b>Total</b>							
			-77770.26178	-98253.76394	0.11183	1	