

Appendix A

Table 1 Sectoral report for energy

(Sheet 1 of 3)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES							
(Gg)							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NM VOC	SO ₂
Total Energy	13,786.20	1.61	0.11	57.95	455.38	85.68	92.59
A Fuel Combustion Activities (Sectoral Approach)	13,786.20	1.61	0.11	57.95	455.38	85.68	92.59
1 Energy Industries	5,752.89	0.23	0.05	15.22	1.14	0.38	61.19
a Public Electricity and Heat Production							
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	2,830.60	0.06	0.02	6.43	0.32	0.16	23.46
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing, Beverages and Tobacco							
f Other							

Table 1 Sectoral report for energy

(Sheet 2 of 3)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES							
(Gg)							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂
3 Transport	3,929.40	1.14	0.03	34.46	453.55	85.05	2.56
a Civil Aviation	0.00	0.00	0.00	0.00	0.00	0.00	
b Road Transportation	3,929.40	1.14	0.03	34.46	453.55	85.05	
c Railways	0.00	0.00	0.00	0.00	0.00	0.00	
d Navigation	0.00	0.00	0.00	0.00	0.00	0.00	
e Other	0.00						
Pipeline Transport	0.00						
4 Other Sectors	1,273.30	0.18	0.01	1.84	0.37	0.09	5.37
a Commercial/Institutional	336.71	0.05	0.00	0.50	0.10	0.02	
b Residential	443.49	0.07	0.00	0.66	0.13	0.03	
c Agriculture/Forestry/Fishing	493.10	0.07	0.00	0.67	0.13	0.03	
5 Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B Fugitive Emissions from Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Solid Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00
a Coal Mining		0.00					
b Solid Fuel Transformation							
c Other							
2 Oil and Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00
a Oil		0.00		0.00	0.00	0.00	0.00
b Natural Gas		0.00					
c Venting and Flaring		0.00					

Table 1 Sectoral report for energy

(Sheet 3 of 3)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES							
(Gg)							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂
International Bunkers	408.12	0.00	0.00	0.00	0.00	0.00	0.00
Aviation	381.55	0.00	0.00	0.00	0.00	0.00	0.00
Marine	26.56	0.00	0.00	0.00	0.00	0.00	0.00
CO₂ Emissions from Biomass	0.00						

Table 2 Sectoral report for industrial processes

(Sheet 1 of 2)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES													
(Gg)													
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂	HFCs		PFCs		SF ₆	
								P	A	P	A	P	A
Total Industrial Processes	1,780.98	0.00	0.00	0.00	0.00	38.91	0.84	0.01	0.00	0.00	0.00	0.00	0.00
A Mineral Products	1,652.98	0.00	0.00	0.00	0.00	36.12	0.84	0.00	0.00	0.00	0.00	0.00	0.00
1 Cement Production	1,630.87						0.84						
2 Lime Production	21.73												
3 Limestone and Dolomite Use	0.00												
4 Soda Ash Production and Use	0.39												
5 Asphalt Roofing					0.00	0.04							
6 Road Paving with Asphalt						35.84							
7 Other	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Glass Production						0.24							
Concrete Pumice Stone							0.00						
B Chemical Industry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Ammonia Production	0.00				0.00	0.00	0.00						
2 Nitric Acid Production			0.00	0.00									
3 Adipic Acid Production			0.00	0.00	0.00	0.00							
4 Carbide Production	0.00	0.00											
5 Other		0.00		0.00	0.00	0.00	0.00						
C Metal Production	128.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Iron and Steel Production	128.00			0.00	0.00	0.00	0.00						
2 Ferroalloys Production	0.00												
3 Aluminium Production	0.00			0.00	0.00		0.00				0.00		
4 SF ₆ Used in Aluminium and Magnesium Foundries													0.00
5 Other	0.00												

Table 2 Sectoral report for industrial processes

(Sheet 2 of 2)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES													
(Gg)													
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂	HFCs		PFCs		SF ₆	
								P	A	P	A	P	A
D Other Production	0.00	0.00	0.00	0.00	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 Pulp and Paper				0.00	0.00	0.00	0.00						
2 Food and Drink						2.78							
E Production of Halocarbons and Sulphur Hexafluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 By-product Emissions									0.00		0.00		
2 Fugitive Emissions									0.00		0.00		
3 Other													
F Consumption of Halocarbons and Sulphur Hexafluoride	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
1 Refrigeration and Air Conditioning Equipment									0.00		0.00		
2 Foam Blowing									0.00		0.00		
Fire Extinguishers									0.00		0.00		0.00
4 Aerosols									0.00		0.00		
5 Solvents									0.00		0.00		
6 Other									0.00		0.00		0.00
G Other (please specify)													

P = Potential emissions based on Tier 1 Approach. A = Actual emissions based on Tier 2 Approach. This only applies in sectors where methods exist for both tiers.

Table 3 Sectoral report for solvent and other product use

(Sheet 1 of 1)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES			
(Gg)			
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	N ₂ O	NMVOC
Total Solvent and Other Product Use	0.00	0.00	3.97
A Paint Application			0.98
B Degreasing and Dry Cleaning			2.45
C Chemical Products, Manufacture and Processing			
D Other Ink			0.54

Table 4 Sectoral report for agriculture

(Sheet 1 of 2)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES					
(Gg)					
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CH ₄	N ₂ O	NO _x	CO	NMVOC
Total Agriculture	0.60	2.99	0.03	0.77	0.00
A Enteric Fermentation	6.03				
1 Cattle	2.62				
2 Buffalo	0.00				
3 Sheep	0.87				
4 Goats	2.09				
5 Camels and Llamas	0.02				
6 Horses	0.11				
7 Mules and Asses	0.31				
8 Swine	0.02				
9 Poultry	0.00				
10 Other					
B Manure Management	0.51	0.34			
1 Cattle	0.12				
2 Buffalo	0.00				
3 Sheep	0.03				
4 Goats	0.07				
5 Camels and Llamas	0.00				
6 Horses	0.01				
7 Mules and Asses	0.03				
8 Swine	0.05				
9 Poultry	0.20				

Table 4 Sectoral report for agriculture

(Sheet 2 of 2)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES					
(Gg)					
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CH ₄	N ₂ O	NO _x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.00			
11 Liquid Systems		0.00			
12 Solid Storage and Dry Lot		0.34			
13 Other		0.00			
C Rice Cultivation	0.00				
1 Irrigated	0.00				
2 Rainfed	0.00				
3 Deep Water	0.00				
4 Other					
D Agricultural Soils		2.65			
E Prescribed Burning of Savannas	0.00	0.00	0.00	0.00	
F Field Burning of Agricultural Residues	0.06	0.00	0.03	0.77	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane					
5 Other					
G Other					

Table 5 Sectoral report for land-use change and forestry

(Sheet 1 of 1)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES						
(Gg)						
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ Emissions	CO ₂ Removals	CH ₄	N ₂ O	NO _x	CO
Total Land-Use Change and Forestry	0.00	-143.87	2.90	0.02	0.72	25.34
A Changes in Forest and Other Woody Biomass Stocks	0.00	-807.60				
1 Tropical Forests						
2 Temperate Forests						
3 Boreal Forests						
4 Grasslands/Tundra						
5 Other						
B Forest and Grassland Conversion	663.73		2.90	0.02	0.72	25.34
1 Tropical Forests	0.00					
2 Temperate Forests	663.73					
3 Boreal Forests	0.00					
4 Grasslands/Tundra	0.00					
5 Other	0.00					
C Abandonment of Managed Lands		0.00				
1 Tropical Forests		0.00				
2 Temperate Forests		0.00				
3 Boreal Forests		0.00				
4 Grasslands/Tundra		0.00				
5 Other		0.00				
D CO₂ Emissions and Removals from Soil	0.00	0.00				
E Other						

Table 6 Sectoral report for waste

(Sheet 1 of 1)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES						
(Gg)						
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂	CH ₄	N ₂ O	NO _x	CO	NMVOC
Total Waste	2.96	78.68	0.26			
A Solid Waste Disposal on Land	0.00	78.10	0.00			
1 Managed Waste Disposal on Land						
2 Unmanaged Waste Disposal Sites						
3 Other						
B Wastewater Handling	0.00	0.59	0.26			
1 Industrial Wastewater		0.00				
2 Domestic and Commercial Wastewater		0.59	0.26			
3 Other						
C Waste Incineration	2.96					
D Other						

Table 7a Summary report for national greenhouse gas inventories

(Sheet 1 of 3)

SECTORAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES														
(Gg)														
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ Emissions	CO ₂ Removals	CH ₄	N ₂ O	NO _x	C	NMVOC	SO ₂	HFCs		PFCs		SF ₆	
									P	A	P	A	P	A
Total National Emissions and Removals	15,570.15	-143.87	89.76	3.38	58.69	481.49	128.56	93.43	0.01	0.00	0.00	0.00	0.00	0.00
1 Energy	13,786.20	0.00	1.61	0.11	57.95	455.38	85.68	92.59						
A Fuel Combustion (Sectoral Approach)	13,786.20		1.61	0.11	57.95	455.38	85.68	92.59						
1 Energy Industries	5,752.89		0.23	0.05	15.22	1.14	0.38	61.19						
2 Manufacturing Industries and Construction	2,830.60		0.06	0.02	6.43	0.32	0.16	23.46						
3 Transport	3,929.40		1.14	0.03	34.46	453.55	85.05	2.56						
4 Other Sectors	1,273.30		0.18	0.01	1.84	0.37	0.09	5.37						
5 Other	0.00		0.00	0.00	0.00	0.00	0.00	0.00						
B Fugitive Emissions from Fuels	0.00		0.00		0.00	0.00	0.00	0.00						
1 Solid Fuels			0.00		0.00	0.00	0.00	0.00						
2 Oil and Natural Gas			0.00		0.00	0.00	0.00	0.00						
2 Industrial Processes	1,780.98	0.00	0.00	0.00	0.00	0.00	38.91	0.84	0.01	0.00	0.00	0.00	0.00	0.00
A Mineral Products	1,652.98					0.00	36.12	0.84						
B Chemical Industry	0.00		0.00	0.00	0.00	0.00	0.00	0.00						
C Metal Production	128.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D Other Production	0.00				0.00	0.00	2.78	0.00						
E Production of Halocarbons and Sulphur Hexafluoride									0.00	0.00	0.00	0.00	0.00	0.00
F Consumption of Halocarbons and Sulphur Hexafluoride									0.01	0.01	0.01	0.01	0.01	0.01
G Other	0.00		0.00	0.00	0.00	0.00	0.00	0.00				0.00		0.00

P = Potential emissions based on Tier 1 Approach. A = Actual emissions based on Tier 2 Approach.

Table 7a Summary report for national greenhouse gas inventories

(Sheet 2 of 3)

SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES														
(Gg)														
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO ₂ Emissions	CO ₂ Removals	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂	HFCs		PFCs		SF ₆	
									P	A	P	A	P	A
3 Solvent and Other Product Use	0.00			0.00			3.97							
4 Agriculture			6.60	2.99	0.03	0.77								
A Enteric Fermentation			6.03											
B Manure Management			0.51	0.34										
C Rice Cultivation			0.00											
D Agricultural Soils				2.65										
E Prescribed Burning of Savannas			0.00	0.00	0.00	0.00								
F Field Burning of Agricultural Residues			0.06	0.00	0.03	0.77								
G Other			0.00	0.00										
5 Land-Use Change & Forestry	0.00	-143.87	2.90	0.02	0.72	25.34								
A Changes in Forest and Other Woody Biomass Stocks	0.00	-807.60												
B Forest and Grassland Conversion	663.73		2.90	0.02	0.72	25.34								
C Abandonment of Managed Lands		0.00												
D CO ₂ Emissions and Removals from Soil	0.00	0.00												
E Other	0.00	0.00	0.00	0.00	0.00	0.00								
6 Waste	2.96		78.68	0.26	0.00	0.00	0.00	0.00						
A Solid Waste Disposal on Land			78.10											
B Wastewater Handling			0.59	0.26										
C Waste Incineration	2.96													
D Other			0.00	0.00										
7 Other														

Table 7b Short summary report for national greenhouse gas inventories

(Sheet 1 of 1)

SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES															
(Gg)															
GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO ₂ Emissions	CO ₂ Removals	CH ₄	N ₂ O	NO _x	CO	NMVOC	SO ₂	HFCs		PFCs		SF ₆	
										P	A	P	A	P	A
Total National Emissions and Removals		15,570.15	-143.87	89.76	3.38	58.69	481.49	128.56	93.43	0	0	0	0	0	0
1 Energy	Reference Approach	13,786.22													
	Sectoral Approach	13,786.20	1.61	0.11	57.95	455.38	85.68	92.59	93						
A Fuel Combustion		13,786.20		1.61	0.11	57.95	455.38	85.68							
B Fugitive Emissions from Fuels		0.00		0.00		0.00	0.00	0.00	0.00						
2 Industrial Processes		1,780.98		0.00	0.00	0.00	0.00	38.91	0.84	0	0	0	0	0	0
3 Solvent and Other Product Use		0.00			0.00			3.97							
4 Agriculture			6.60	2.99	0.03	0.77									
5 Land-Use Change & Forestry		0.00	-143.87	2.90	0.02	0.72	25.34								
6 Waste		2.96	78.68	0.26											
7 Other		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Memo Items:															
International Bunkers		408.12		0.00	0.00	0.00	0.00	0.00	0.00						
Aviation		381.55	0.00	0.00	0.00	0.00	0.00	0.00	0						
Marine		26.56	0.00	0.00	0.00	0.00	0.00	0.00	0						
CO ₂ Emissions from Biomass		0													

P = Potential emissions based on Tier 1 Approach. A = Actual emissions based on Tier 2 Approach.