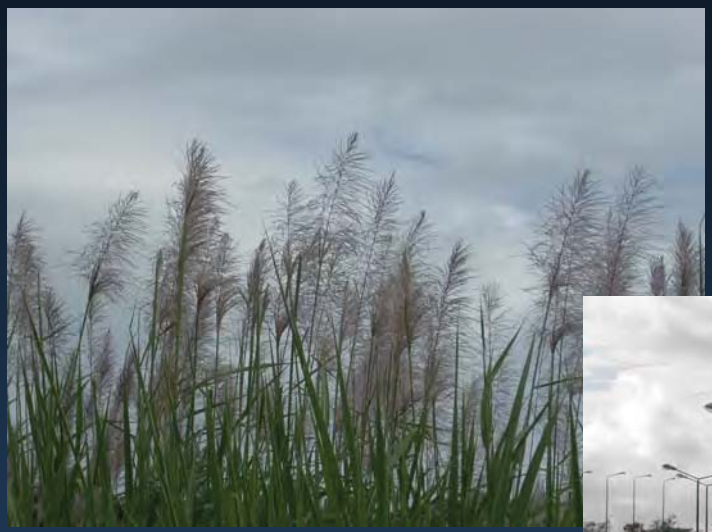
REPUBLIC OF MAURITIUS

NATIONAL GREENHOUSE GAS INVENTORY REPORT

(2000 – 2006)



NOVEMBER 2010

REPUBLIC OF MAURITIUS

NATIONAL GHG INVENTORY REPORT

OF

THE REPUBLIC OF MAURITIUS

2000 - 2006

November 2010

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ISBN

Cover

Top left : St Louis Thermal Plant (Photo by S Jauffur)
Top right : Managed forest (Photo by R Nayamuth)
Bottom left : Flowering sugarcane filed (Photo by R Nayamuth)
Bottom right : Traffic jam (Photo by S Jauffur)

Minister of Environment and Sustainable Development

Foreword

The Republic of Mauritius, as a signatory Party to the UN Framework Convention on Climate Change and in compliance with Article 4.1 submitted its first inventory of Green House Gases (GHG) as part of its Initial National Communication in April 1999. To meet its obligations, Mauritius embarked on the preparation of the GHG inventories within the exercise of preparation of its Second National Communication.

This National Inventory Report (NIR) contains the emission inventory for the period 2000-2006 under the UNFCCC and the Kyoto Protocol. The computations made and provided in the report are consistent with the Intergovernmental Panel on Climate Change (IPCC) Guidelines devised in 1996 and other Guidelines and Good Practice Guidance.

The NIR contains all anthropogenic emissions by sources and removals by sinks of GHG in Mauritius for the period 2000-2006 and covers the six direct gases included in the Kyoto Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) . The emissions of nitrogen oxides (NOx), carbon monoxide (CO) and the sulphur oxides (SOx), indirect greenhouse gases, are also reported. The detailed compilations of activities within the different socio-economic sectors and presented in this report gives our carbon footprint.

This document will be very useful for further greening the economy and enable Mauritius to adopt more sustainable and cleaner means of production without placing undue constraints on social or economic development as laid down in the “Maurice Ile Durable” concept. Already, measures adopted since the year 2000 have resulted in a reduction of the per capita emissions for the Republic of Mauritius despite its status of Small Island Developing State exempted it from having to reduce its emissions.

I have much pleasure in presenting this report to UNFCCC.

D. Virasawmy,

Minister

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ACKNOWLEDGEMENTS

The Mauritius Meteorological Services (MMS), on behalf of the Government of the Republic of Mauritius, was assigned the responsibility of preparing the **National Inventory of GreenHouse Gases** within the framework of the preparation of the **Second National Communication to the UNFCCC** for the Republic to meet its obligations as a signatory Party to the Convention. It wishes to acknowledge the valuable support, both financial and technical, from the Global Environment Facility (GEF) and its implementing agency, the United Nations Environment Programme (UNEP).

The Mauritius Meteorological Services is grateful to all international institutions, namely IPCC and the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat in providing very useful handbooks and guidelines for the preparation of the Inventory. MMS also puts on record the very special contribution of the UNFCCC through Mr D Revet, who kindly accepted to review this inventory and proposed improvements.

The MMS wishes to record its appreciation for the contribution of the representatives of the following institutions and private sector organizations, as well as independent consultants for the provision of inputs towards the computation of the GHG Inventory:

- Ministry of Environment and Sustainable Development
- Ministry of Finance and Economic Development
- Ministry of Agro Industry and Food Security
- Ministry of Industry and Commerce
- Ministry for Local Government and Outer Islands
- Ministry of Energy and Public Utilities
- Ministry of Public Infrastructure, National Development Unit, Land Transport and Shipping
- University of Mauritius
- Mauritius Sugar Industry Research Institute
- Agricultural Research and Extension Unit
- Central Electricity Board
- Central Statistics Office
- Wastewater Management Authority
- National Transport Authority
- Forestry Service

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ABBREVIATIONS AND ACRONYMS

AD	Activity Data
APD	Animal Production Division, Ministry of Agroindustry and Food Security
AREU	Agricultural Research and Extension Unit
BOD	Biochemical Oxygen Demand
CC	Climate Change
CEB	Central Electricity Board
CGE	Consultative Group of Experts
CH_4	Methane
CL	Cropland
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2-eq	Carbon dioxide equivalent
COD	Chemical Oxygen Demand
CS	Country Specific
CSO	Central Statistics Office
CTMC	Coal Terminal Management Company
DM	Dry mass
DOC	Degradable Organic Carbon
EF	Emission Factor
EPZ	Export processing Zone
FAOSTAT	Food and Agriculture Organization Statistics Database
FL	Forest Land
FLIS	Forest Land Information System
FM	Fresh mass
FOD	First Order Decay
FS	Forestry Service
GDP	Gross Domestic Product
GEF	Global Environment Facility
GFRA	Global Forest Resource Assessment
Gg	Gigagram (1000 t)
GHG	Greenhouse gas
GIS	Geographical Information System
GPG	Good Practice Guidance
GWh	Giga Watt hour
GWP	Global Warming Potential
ha	Hectare
HFC	Hydro Fluoro Carbon
HFO	Heavy Fuel Oil
hl	hectolitre
HYDRO	Hydroelectic power
IE	Included Elsewhere

INC	Initial National Communication
IPCC	Intergovernmental Panel on Climate Change
IPP	Independent Power Producer
km	kilometre
ktoe	kilo ton oil equivalent
kWh	kilo Watt Hour
l	Litre
LAVIMS	Land Administration Valuation Information Management System
LPG	Liquefied Petroleum Gas
LULUCF	Land Use, Land Use Change and Forestry
MCF	Methane Conversion Factor
MMS	Mauritius Meteorological Services
MoAIFS	Ministry of Agro-Industry and Food Security
MoESD	Ministry of Environment and Sustainable Development
MoHQL	Ministry of Health and Quality of Life
MoREPU	Ministry of Renewable Energy and Public Utilities
MSIRI	Mauritius Sugar Industry Research Institute
MSW	Municipal Solid Waste
MW	Mega Watt
MWh	Mega Watt hour
N	Nitrogen
N_2O	Nitrous oxide
NA	Not Applicable
NCC	National Climate Committee
NCV	Net calorific value
NE	Not Estimated
NH_3	Ammonia
NMVOC	Non-Methane Volatile Organic Compound
NO	Not Occurring
NO_x	Oxides of nitrogen
NSDI	National Spatial Data Infrastructure
NTA	National Transport Authority
O_2	Oxygen
ODS	Ozone Depleting Substances
OL	Other Land
OX	Oxidation Factor
PEA	Project Executing Agency
PET	Poly-Ethylene Terephthalate
PFC	PerFluoro Carbon
pH	power of Hydrogen
PIV	Protein Intake Value
QA	Quality assurance
QC	Quality Control
RSL	Road Service Licence
SF_6	Sulphur Hexafluoride
SIDS	Small Island Developing States

SNC	Second National Communication
SO_2	Sulphur dioxide
SOP	Solvent and Other Products use
STC	State Trading Corporation
SWDS	Solid Waste Disposal Site
t	Tonne
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UoM	University of Mauritius
WMA	Wastewater Management Authority
WW	Waste water
WWTP	Waste Water Treatment Plant

EXECUTIVE SUMMARY

INTRODUCTION

The Republic of Mauritius, a Small Island Developing State (SIDS), is situated in the South West Indian Ocean and covers a total land area of 2040 km^2 for a population of nearly 1.3 million.

Mauritius' diversified economy relies quite heavily on fossil fuels for its energy requirements. Renewable sources presently contributes some 21% of the demand and Government's declared policy is to increase this to 28% by the year 2020 and 35% by 2025.

As a signatory Party to the United Nations Framework Convention on Climate Change (UNFCCC), Mauritius has, pursuant to Article 4.1 (a) of the Convention, complied to the Convention with regards to national inventories of greenhouse gases.

THE INVENTORY PROCESS AND METHODOLOGICAL ISSUES

The present inventory, done under the Enabling Activities Programme of the Global Environment Facility (GEF) through its implementing agency the United Nations Environment Programme (UNEP), covers the period 2000 to 2006. Tier 2 and above was adopted and the scope of the inventory widened to all IPCC source categories apart from Solvent and Other Product use. The gases addressed were CO_2, CH_4, N_2O, NO_x, SO_2, SF_6, HFCs, PFCs, NMVOCs and the precursor CO.

Adoption of higher than Tier I level warranted a totally different institutional arrangement. Sectoral experts worked out and reported on the inventory in the electricity generation, road transport, agriculture, wastewater handling, agriculture and LULUCF source categories. The remaining activities were dealt with by the Statistician and his team of the CSO attached to the Ministry of Environment and Sustainable Development using Tier level I.

Activity data were sourced from the different institutions for the respective source categories and supplemented by the database of the Central statistics Office. The methodologies and emission factors adopted were from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) and/or amended and derived to better reflect national circumstances.

Since the source and sink categories are not numerous and with a view to providing maximum possibilities for meeting the main objective of the Convention and the sustainable development agenda of the country, all source and sink categories were treated with equal consideration except the Solvent and Other Product Use source category for which no computation was done.

QC and QA procedures were adopted throughout the inventory process and uncertainties associated with the estimates of emissions made. The assessment of completeness was made for individual activity areas within all categories and recalculations performed to compare previous and present inventory results, thus improving the precision of the estimates following better activity data, improved emission factors and methodologies. A consistent time series was built for all categories and sub-categories while throughout the inventory process, gaps and constraints were identified for planning improvements towards improving the quality of future inventories and further widening the scope.

TRENDS OF NATIONAL EMISSIONS

Total net GHG emissions increased by 74% from 1600 Gg CO_2-eq in 1990 to 2788 Gg CO_2-eq in 1999 with the energy sector contributing around 90% of the emissions during that period. Per capita emissions rose by 60% (5.3% annual average) during the same period, from 1.5 t CO_2-eq in 1990 to 2.4 t CO_2-eq in 1999. Concurrently, the GHG intensity index, an indicator of GHG emissions per unit of GDP produced, increased by 6.2% per year on average from 100.0 in 1990 to 169.8 in 1999.

During the period 2000 to 2006, the net GHG emissions rose by 22.8% from 3784 Gg CO2-eq to 4646 Gg CO2-eq with an annual average increase of 3.5%. Per capita emissions remained nearly constant in the range 3.3 to 3.6 t CO2-eq during that period while the GHG emission intensity index decreased from 100 in 2000 to 96.3 in 2006.

The main contributor to the national GHG emissions remained CO_2. In 2006, the share of the GHG emissions by gas was 66.4% CO_2, 28.5% CH_4, 3.8% N_2O, 1.3% HFCs and 0.005% PFCs. The share of CO_2 and CH_4 increased while that of N_2O, while HFCs and PFCs increased over the period 2000 to 2006. CO_2 emissions increased by 711 Gg from the 2000 level of 2524 Gg to 3235 Gg in 2006. Most of the emissions emanated from the energy sector from combustion of fossil fuels.

Methane emissions increased by 157 Gg CO_2-eq from 1234 Gg CO_2-eq to 1391 Gg CO_2-eq , the Waste sector contributing most of these emissions followed by the Agriculture sector.

Nitrous oxide contributed 186 Gg CO_2-eq (3.8%) of emissions in 2006. Emissions decreased by 116 Gg CO_2-eq from the 303 Gg CO_2-eq of the year 2000. Agriculture was the highest emitter of N_2O.

The combined emissions of HFCs and PFCs increased by 101 Gg CO2-eq from 39 Gg CO2-eq in 2000 to 140 Gg CO_2eq in 2006. As for SF_6, no estimation was made due to unavailability of proper records. Emissions occurred as leakages and were considered negligible.

Emissions of indirect GHGs such as SO_2, CO, NO_X and NMVOC have also been estimated and reported in the inventory but have not been included in the compilation of total emissions. Emissions of NO_x increased slightly from 13.7 Gg in the year 2000 to 15.1 Gg in 2006. CO emissions dropped by 21.5% from 62.4 Gg in 2000 to 49.0 Gg in 2006 while that of NMVOC and SO_2 did not differ much between the years 2000 and 2006.

ENERGY

This source category comprises both stationary and mobile fuel combustion activities only as fossil fuel extraction does not occur. Emissions from electricity generation, manufacturing industries and construction, transport and energy and other sectors have been covered. Other sectors included mechanized activities in the agriculture, fishing and forestry sectors, as well as the commercial, institutional and residential sub-sectors. Memo items that have been excluded from national totals, were emissions from International Bunkers and from biomass energy generation. Fuel woods and biomass-based fuels are neutral with regard to CO_2 emissions since an equivalent amount is absorbed from the atmosphere during the accumulation process.

During the inventory period, the share of liquid fossil fuels fell from 84% in the year 2000 to 82 % in 2006. That of LPG rose from 12% to 15 % while that of coal, the major source of solid fossil fuel, dropped from 4% to 3%.

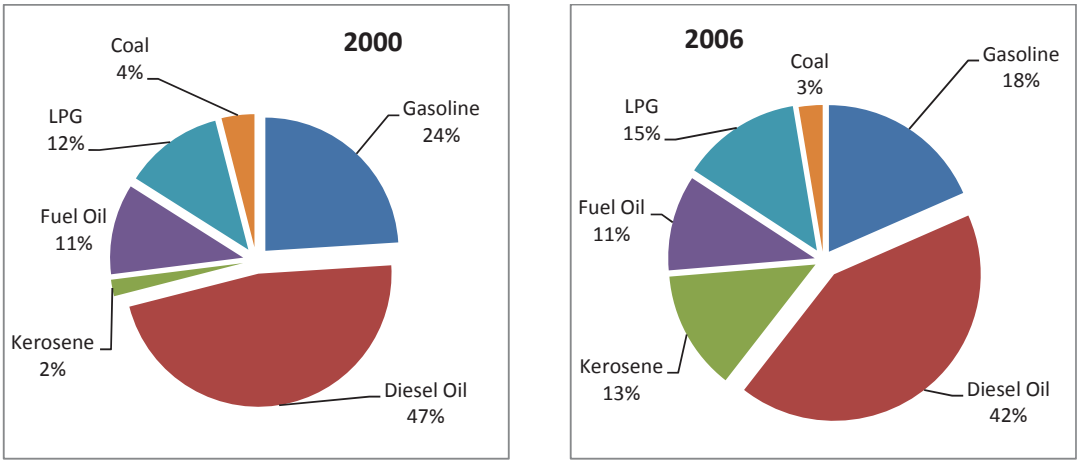


Figure ES 1 - Share of fossil fuels used in 2000 and 2006

The energy sector remained the largest source of emissions throughout the inventory period, contributing 64.7 % of total emissions in 2006. Fuel combustion resulted in 2315 Gg CO_2 -eq of GHG emissions in the year 2000. It increased by 839 Gg CO_2-eq to 3154 Gg CO_2 -eq in 2006 which represented 36.2% more emissions. On average the annual increase in emissions was 5.4% for the energy sector. Emissions from the Energy Industries recorded a net 63.1% increase from 1024 Gg in 2000 to 1670 Gg CO_2 -eq in 2006, mainly attributed to the increase in electricity demand in this sector. For the transport sector, emissions rose from 733 Gg CO_2-eq in 2000 to 857 Gg CO_2-eq in 2006 (16.9%). The Manufacturing sector witnessed a lower increase from 358 Gg CO_2-eq in 2000 to 410 Gg CO_2-eq in 2006 (14.5%) and the Commercial/Institutional sub-sector an increase of 16.9% over the period 2000 to 2006. In the year 2000, the Energy Industries contributed 44.2% of emissions followed by the Transport sub-sector with 31.7% and Manufacturing with 15.5% among the sub-sectors. The Residential sub-sector came next with 6.3% while the contribution of the Commercial/institutional and Agriculture/Forestry/Fishing sub-sectors made up for the remainder.

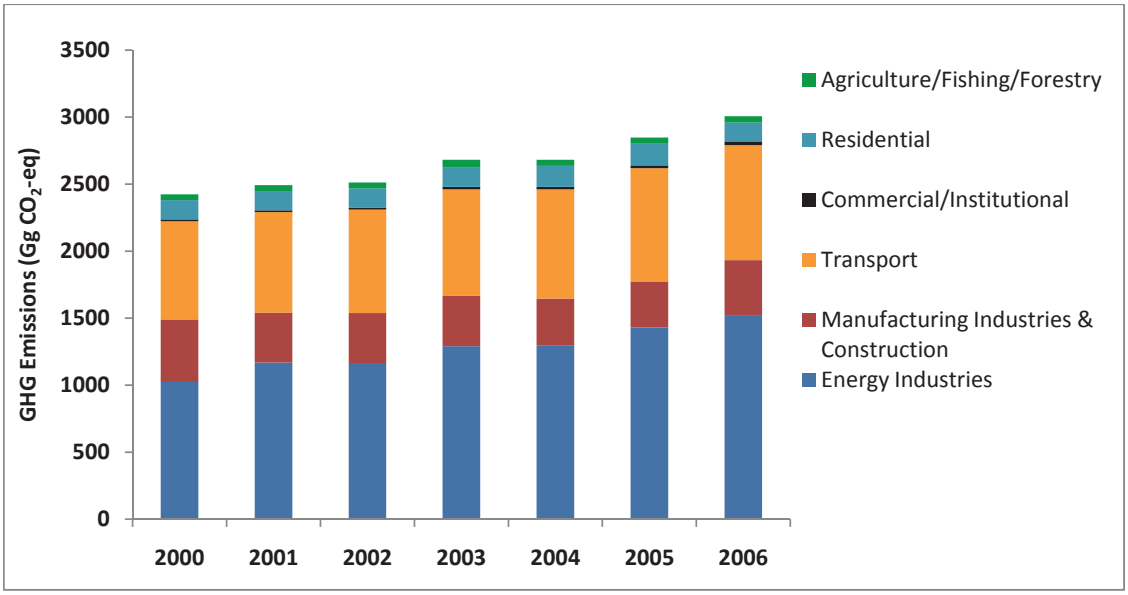


Figure ES 2 - Emissions (Gg CO_2-eq) from the Energy Sector for period 2000 to 2006

CO_2 represented more than 98% of the total aggregated emissions within the energy sector. Its emissions rose from 2286.71 Gg in 2000 to peak at 3114.96 Gg in 2006. This represented an increase of 36.2%.

Table ES 1 - Emissions (Gg) by gas for the Energy Sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2-eq	**2314.50**	**2502.64**	**2520.68**	**2692.10**	**2692.13**	**2855.01**	**3153.58**
CO_2	2286.71	2473.92	2491.69	2658.65	2657.24	2817.92	3114.96
CH_4	0.47	0.47	0.43	0.44	0.44	0.44	0.44
N_2O	0.06	0.06	0.06	0.08	0.08	0.09	0.09
NMVOC	13.46	13.70	13.24	13.08	12.17	12.58	12.47
CO	53.70	53.95	51.71	48.81	46.74	45.66	45.13
NO_x	12.70	12.71	13.03	13.57	13.31	13.50	14.97
SO_2	8.76	9.55	9.20	12.47	9.72	9.60	11.44

INDUSTRIAL PROCESSES

In Mauritius, production of lime, nitric acid, and food and drinks have processes that result in emissions of GHGs such as CO_2, CH_4 and N_2O. NMVOCs originate from road paving with asphalt and alcoholic and food industries while HFCs and PFCs emanate from the consumption of of substitutes for Ozone Depleting Substances (ODS)halocarbons. SF_6 is not produced or consumed but may leak from the sealed breakers where they have been used. Emissions from this source declined slightly from 146 Gg CO2-eq in 2000 to 142 Gg CO2-eq in 2006 following the gradual phasing out of nitric acid production and the cessation of its production in 2005 while increases were noted for consumption of ODS substitutes after the phasing out of CFC use in 2005. Industrial processes contributed 3.5% of the total emissions in 2006.

AGRICULTURE

The agriculture source category addresses emissions from enteric fermentation, manure management, agricultural soils and field burning of agricultural residues. In 2006, the share of emissions from agriculture amounted to 4.2% of total national emissions. Emissions from the Agriculture sector declined by 12.3%, from 235 Gg CO_2-eq in 2000 to 206 Gg CO_2-eq in 2006. Of these emissions, Agricultural Soils contributed the highest amount (59.57%), primarily because of the use of synthetic N fertilizers, followed by the Livestock sector with 37.87%.

LAND USE LAND USE CHANGE AND FORESTRY

The Land Use, Land-Use Change and Forestry (LULUCF) sector is unique in that it accounts for both emissions and removals of CO_2. The LULUCF sector comprised the sub-categories Forest Land, Cropland, Wetlands, Settlement and Other land. The area occupied by each category is given in Figure ES 3. The LULUCF sector represented a net removal of CO_2 from the atmosphere during the period 2000-2006. The net removal was much lower in the year 2000 as a result of higher emissions due to the conversion of some 300 ha of forest land to wetland for the commissioning of a dam.

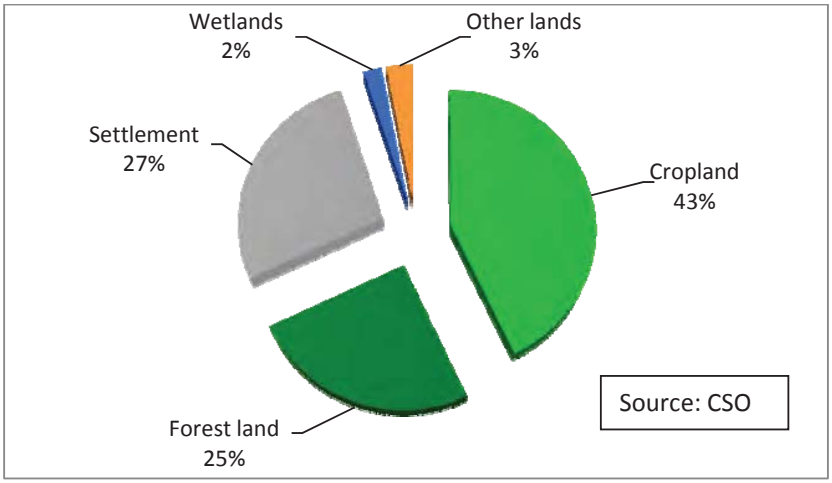
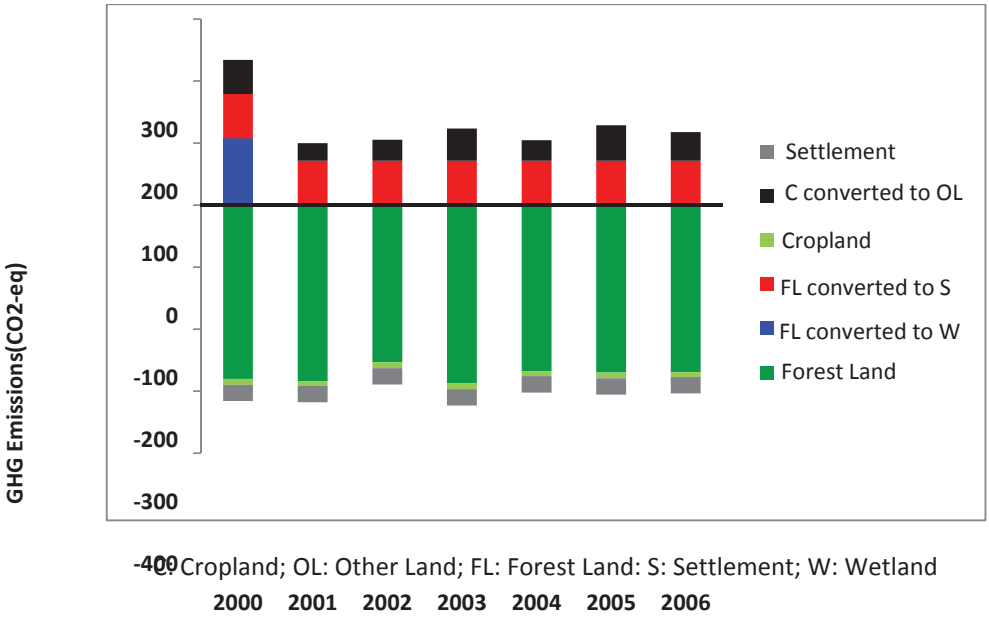


Figure ES 3 - Land occupation in Mauritius

GHG emissions are estimated at 118 Gg CO_2-eq and the removals at 304 Gg CO_2-eq for the year 2006. The removals represented 7% of total national emissions in 2000 and 6% in 2006. Emissions and removals by sub-category are illustrated in Figure ES 4.



C: Cropland; OL: Other Land; FL: Forest Land: S: Settlement; W: Wetland

Figure ES 4 - Emissions and removals (CO_2-eq) by sub-category in the LULUCF sector (2000 to 2006)

WASTE

Emissions of GHGs from the waste sector occurred from Solid Waste Disposal on Land, Wastewater Handling and Waste Incineration. This sector was the second largest emitter of GHGs during the period 2000 to 2006 and accounted for 1333 Gg CO_2-eq (27.3%) of total emissions in 2006. Emissions increased by 13.9% during that period. Emissions from solid waste disposal on land increased from 447 Gg CO_2-eq to 708 Gg CO_2-eq while that from wastewater handling regressed from 722 Gg CO_2-eq to 625 Gg CO_2-eq during the inventory period.

1. INTRODUCTION

1.1 NATIONAL CIRCUMSTANCES

The Republic of Mauritius, a Small Island Developing State (SIDS), comprises a main island (Mauritius) and several other outer islands dispersed in the South West Indian Ocean. The Republic of Mauritius has a total land area of 2040 km^2. Its population was nearly 1.3 million as at December 2009, giving thus a density of around 625 persons km^{-2} which ranks among the highest in the world.

Mainland Mauritius (1.23 million people, 1865 km^2) is situated between latitudes 19°50'S and 20°30'S and longitudes 57°18'E and 57°46'E. Rodrigues Island (37 700 people, 104 km^2) is the second largest island and is situated at 720 km to the North East of Mauritius. Other outer islands (71.2 km^2) that are only scarcely-populated (289 people) are St Brandon situated at 350 km North North-West of Mauritius and Agalega situated at 1000 km North of Mauritius.

Mauritius enjoys a maritime tropical climate with a mean summer temperature of 24.7°C and a mean winter temperature of 20.4°C. The long term mean annual rainfall is 2100 mm with summer rainfall accounting for about 70% of the total. The island is exposed to tropical cyclones, occurring mostly during summer, and drought spells. Analysis of long-term climate data showed an increasing temperature trend and a decreasing one for rainfall. Mauritius, as a SIDS, is highly vulnerable to climate change. The changing climate, increasing climate extremes and variability, and sea level rise are already impacting on the economy and welfare of the population. Natural resources are under increasing stress with the result that ecosystem services are decreasing. Thus, in order to maintain its sustainable development and cope with climate change, Mauritius will have to resort to heavy financial investments and adopt the latest technological and technical means.

The economy of the island is based on three main engines. The primary sector, agriculture including sugar milling and non-sugar activities, contributed to 4.3% of Gross Domestic Product (GDP) in 2008. The secondary sector, manufacturing (excluding sugar milling) and other export oriented enterprises accounted for 19.5% of GDP. The tertiary sector's share, that makes up for the difference, rose by almost 10% during the last decade to reach 76.2% following increased activities in the tourism, financial, global business, and information and communication technology sectors (CSO, 2009).

Mauritius does not have any known fossil energy reserve and is thus highly dependent on imports to meet its energy requirements. The total energy needs of the country grew by about 5% annually during the last decade to reach 1 404 071 kilo-tonnes oil-equivalent (ktoe) in 2008. Fossil fuels accounted for 81% of the energy demand and the remainder was generated from renewable sources; namely bagasse from the sugar industry and some hydro.

Energy generated from renewable sources has remained almost constant in absolute terms (around 21% overall) during the past decade while the share from fossil fuels rose by about 43 % during the same period. The Government's declared energy policy (MREPU, 2009) is to increase the share of renewables from the 20% in 2009 to 28% by the year 2020 and 35% by 2025.

1.2 COMMITMENTS UNDER THE CONVENTION

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted on 09 May 1992 at the UN Conference on Environment and Sustainable Development in Rio de Janeiro, Brazil. The Republic of Mauritius signed the Convention on 10 June 1992 and was the first country to ratify it in September the same year. The Convention came into force on 21 March 1994. As a signatory Party to the Convention, Mauritius has, pursuant to Article 4 of the Convention, to honour its commitments and obligations, taking into account it's common but differentiated responsibilities and its specific national and regional development priorities, objectives and circumstances.

Under Article 4.1 (a) of the Convention, each party has to develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the Conference of the Parties. Mauritius has so far complied to the Convention with regards to national inventories of greenhouse gases.

2 THE INVENTORY PROCESS

2.1 OVERVIEW OF GHG INVENTORIES

The process of preparation of national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases (GHG) started in 1995 in Mauritius under the US Country Studies Program for Climate Change for the year 1990. Because of the then limited capacity and data availability, a top down approach was adopted and the sectors covered were energy, livestock within agriculture, solid waste and forestry. Gases included carbon dioxide (CO_2), methane (CH_4), Nitrous oxide (N_2O), oxides of nitrogen (NO_x) and the precursor carbon monoxide (CO). The energy and transport sectors accounted for 65% of emissions with the industrial activities responsible for 17%. The results were partially presented in the National Climate Change Action Plan of December 1998.

Funding under the Enabling Activities Programme of the Global Environment Facility (GEF) through its implementing agency the United Nations Environment Programme (UNEP), provided the framework for the preparation of an improved national GHG inventory. UNEP provided the financial and technical support for the preparation of the Initial National Communication (INC) of the Republic of Mauritius, which included the National Inventory of greenhouse gases. This inventory was undertaken for the base year 1995 and the results presented in the *Initial National Communication of Mauritius* (NCC, 1999), submitted to the UNFCCC in April 1999. This inventory and subsequent ones were compiled using the *Revised 1996 IPCC Guidelines for national Greenhouse Gas Inventories* (IPCC, 1997). As from the year 2000, the National Inventory of GHGs has been compiled annually by the Central Statistics Office and published in the Digest of Environment Statistics. GHG inventories for the period 1996-1999 have also been worked out and archived to enable the analysis of the evolution of GHG emissions. These inventories have all been compiled using the sectoral bottom-up approach, Tier level 1, and the GHG Inventory software. The reference approach has also been used for the energy sector to enable comparison of the two methods. The gases addressed were CO_2, CH_4, N_2O, NO_x, SO_2, SF_6, HFCs, PFCs, NMVOCs and the precursor CO.

The present GHG inventory report is submitted on a stand-alone basis as an accompanying document to the Second National Communication (SNC). It provides data on GHG emissions by sources and removals by sinks for the years 2000 to 2006. The trends of emissions for the period 2000 – 2006 are presented separately from those for the period 1990 – 1999 as the methodologies adopted as well as data sets and emission factors (EF) were different for the latter years. It is to be noted that only one of the outer islands of the Republic, namely Rodrigues has been included in the inventory since the others are inhabited permanently by very few people dedicated to systematic observation and fishing. Thus, GHG emissions are negligible on account of restricted human and economic activities. This inventory is exhaustive, covering all source categories, except Solvent and Other Product Use, at a detailed level. A quantum leap has been realized in the preparation of this inventory as Tier level 2 or higher has been adopted for most sectors, namely the highest emitting one, the energy sector.

2.2 INSTITUTIONAL ARRANGEMENTS AND INVENTORY PREPARATION

The Mauritius Meteorological Services (MMS), acting as Project Executing Agency (PEA), was allocated the task of implementing the process for the preparation of the SNC, inclusive of the National Inventory and the report thereon. The Director of the MMS acted as Project Coordinator to ensure provision of

the necessary administrative and logistic support. Technical and scientific issues relating to the different thematic areas of the SNC, including the compilation of the GHG inventory, rested with the Technical Coordinator. A GHG inventory team comprising representatives of the main sectors responsible for emissions and sinks was constituted. The representative of the Central Statistics Office (CSO) Unit attached to the Ministry of Environment and Sustainable Development (MoESD) acted as Team Leader. The outputs from the sectoral experts were merged to produce the consolidated national version while respecting the reporting format of the Intergovernmental Panel for Climate Change (IPCC) and the UNFCCC for the sake of comparability. The hands-on training delivered by the UNFCCC within the mandate of the Consultative Group of Experts (CGE) in collaboration with UNEP and other organizations for compiling the GHG inventory, inclusive of running the GHG Inventory Software, has been useful for the preparation of the inventory at Tier 1 level. When adopting higher Tiers, the software had to be supplemented with other workings but still proved useful for summarizing the sectoral results within the required reporting format. In the case of Mauritius, additional worksheets were created to enable the adoption of higher Tiers. Additionally, when an inventory is compiled at higher Tiers, only experts, conversant with the different IPCC source categories, are able to effectively complete the exercise. Thus, the usual institutional arrangement adopted had to be reviewed to extend the adoption of higher than Tier 1 to all source categories. It will also be a good practice to keep the process ongoing from one inventory to the next to enable improvements in activity data (AD) collection and development of emission factors (EFs) for inventories of better quality to meet the reporting requirements of the Convention.

As Tier 2 and above were adopted for the inventory, the compilation for the respective sectors was undertaken by experts from relevant institutions as it required an in-depth scientific and technical knowledge of the specific sectoral processes. This process was closely mentored by the Technical Coordinator to make up for lack of capacity, further train national experts and strengthen capacity as required by the Convention. Representatives came from the following institutions,

Central Electricity Board (CEB);
National Transport Authority (NTA);
Central Statistics Office (CSO);
Forestry Service of the Ministry of Agro-Industry and Food Security; and
Wastewater Management Authority (WMA).

Freelance consultants were contracted to support the official representatives and to complement for inadequate capacity in some sectors. Other Institutions, Departments and Organizations collaborated in drawing up the inventory, namely by supplying the required AD or other information.

The inventory preparation started in November 2007 after the launching of the SNC project. A workplan with timeframe and responsibilities was drawn for the preparation of the Inventory using the Tier 1 approach. After AD were collected and processed, sectoral experts of the inventory team calculated emissions and performed recalculations. The *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) were used with the most appropriate IPCC default EFs. Following the mid-term review by the Senior Task Manager from UNEP, it was decided to improve the quality of the inventory by adopting higher Tier levels as data were available to a satisfactory level of disaggregation. Thus, data availability and appropriateness for higher Tiers were scrutinized, further data collected and processing done anew. Default EFs were likewise assessed and these were derived or amended in some cases to

reflect national circumstances and conditions, with the objective of calculating emissions as accurately as possible. The results were reviewed during regular working sessions for identifying improvement areas relative to data availability and quality, appropriateness of EFs, gaps and constraints among others. Drawbacks and shortcomings were addressed to improve the quality of the inventory. The different steps adopted for the preparation of the inventory can be summarized as follows:

- Drawing up of workplan with timeline and deliverables;
- Allocation of tasks to sectoral experts;
- Collection, quality control and validation of activity data;
- Selection of Tier level within each category and sub-category;
- Selection of emission factors (EFs) and Derivation of local EFs wherever necessary;
- Designing of appropriate MS Excel worksheets for detailed calculations;
- Computation of GHG emissions;
- Uncertainty analysis;
- Implementing QA/QC activities;
- Assessment of completeness;
- Recalculations;
- Trend analysis;
- Gaps, constraints, needs and improvements; and
- Report writing.

The institutional arrangement for the compilation of the inventory and reporting for the different sectors are shown in Figure 2.1 and the responsibility allocation is given in Table 2.1.

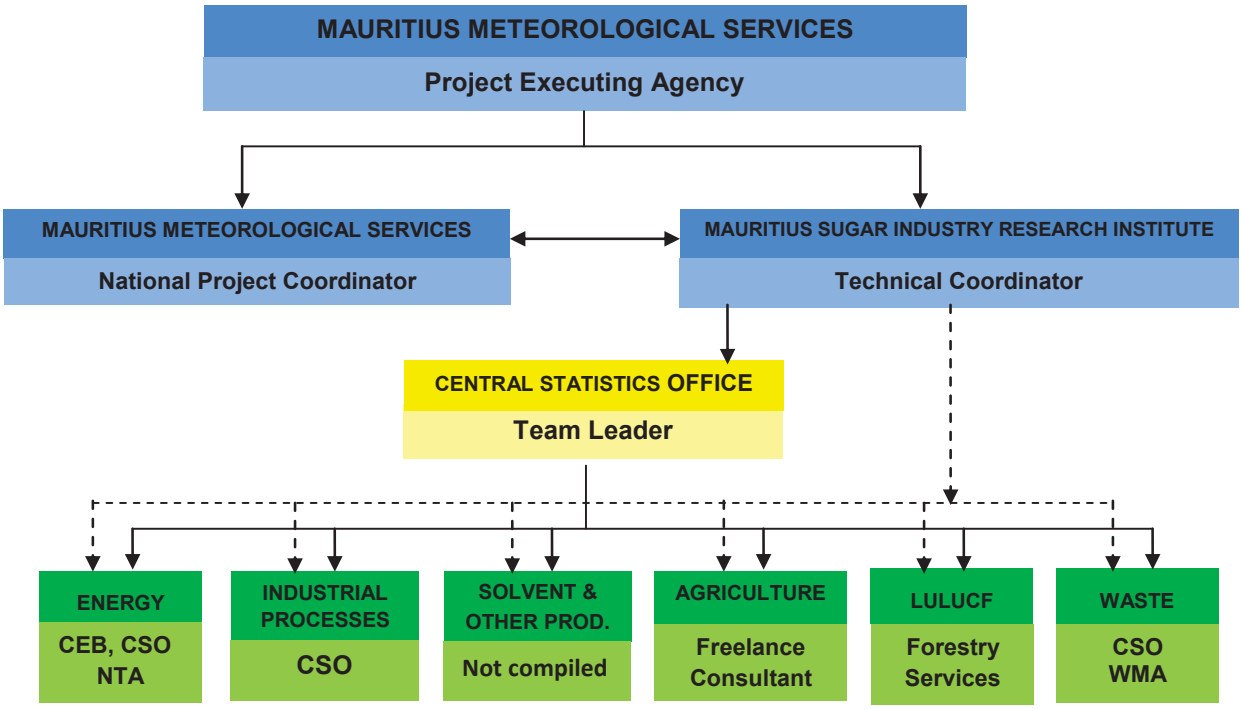


Figure 2.1 - Institutional arrangements and responsibilities

Table 2.1 – Institutional involvement in the national inventory process

IPCC SOURCE CATEGORY	INSTITUTION	
	COMPILING	COLLABORATING
ENERGY		
Public Electricity	CEB	CSO, IPP, STC, CTMC
Manufacturing Industries	CSO	
Aviation	CSO	Civil Aviation, MMS, Air Mauritius
Road Transport	NTA	CSO
Navigation	CSO	MSC, AFRC
Others – Agric/Fishing	Consultant / CSO	MSIRI
Memo Items	CSO, CEB	WMA
INDUSTRIAL PROCESSES	CSO	
AGRICULTURE	Consultant	AREU, MSIRI
LULUCF	FS	CSO, MSIRI
WASTE		
Solid	CSO	Ministry of local Government and Outer Islands
Waste Water Handling	WMA	UoM

2.3 KEY SOURCE CATEGORY ANALYSIS

Key Source Category Analysis gives the characteristics of the emission sources and sinks. According to the *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000), key categories are those which contribute 95% of the total annual emissions, when ranked from the largest to the smallest emitter in the last reported year. Alternatively, a key source is one that is prioritized within the national inventory system because its estimate has a significant influence on a country's total inventory of direct GHGs in terms of the absolute level of emissions, the trend in emissions, or both (IPCC, 2000). Thus, it is a good practice to identify key categories, as it helps prioritize efforts and improve the overall quality of the national inventory.

Based on the previous inventory for the year 2006 (CSO, 2007), the Energy sector contributed 84% of the total national emissions (exclusive of LULUCF). Within the Energy sector, the Energy Industries produced the largest share of emissions followed by Transport (Figure 2.2). However, in the case of Mauritius, since the source and sink categories are not numerous and with a view to providing maximum possibilities for meeting the main objective of the Convention and the sustainable development agenda of the country, all source and sink categories were treated with equal consideration except the Solvent and Other Product Use source category. Emissions from this category did occur but have not been included since imports, exports and local consumption data were not yet organized in an adequate format for use in GHG compilations.

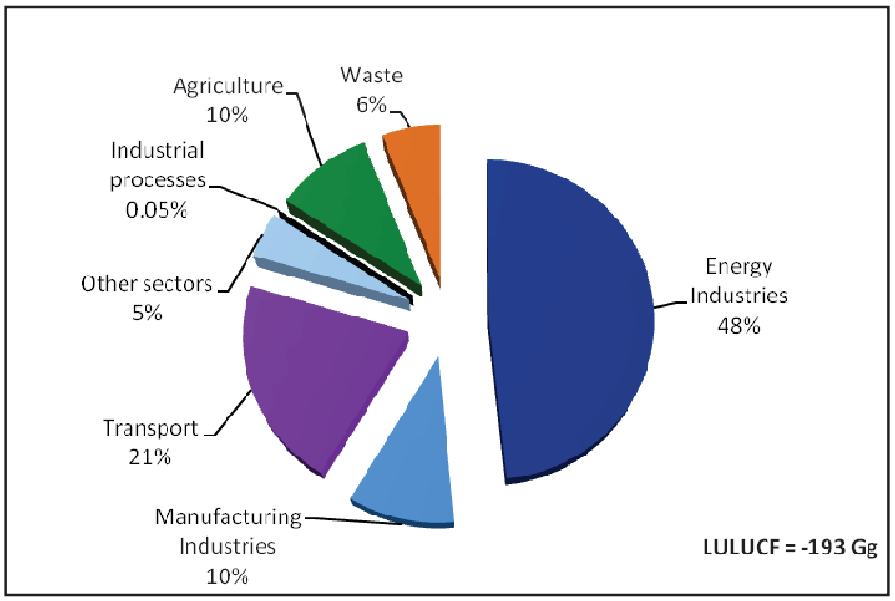


Figure 2.2 – Sectoral emissions and removals from the previous inventory (2006)

2.4 METHODOLOGICAL ISSUES

This section gives an overview of the methodologies adopted for all sectors and sub-sectors covered in the inventory process. These procedures are described in detail in the respective chapter covering the individual IPCC Key Source Categories. Preparation of the GHG inventory in Mauritius has to be treated in three distinct phases. These three phases evolved to capture and integrate scientific and technological advancements over the years. The advancements enabled inventories to be compiled more accurately following recalculations at higher Tier levels with improved methods and EFs.

The first phase consisted in the preparation of the first inventory for the year 1990, which, though restricted in scope, factually reflected the national situation as it addressed the major sources and sink categories. The second phase covered the period 1995 to 2006, during which, emissions were compiled using the Tier 1 approach due to insufficient capacity and unavailability of disaggregated data amongst others. The third phase, presented in this National Inventory Report, concerns the period 2000 to 2006. Tier 2 level has been predominantly adopted. The scope of the inventory for the period 2000 to 2006 has also been widened with additional sub sectors such as wastewater handling and processes such as agricultural soils being included. The LULUCF sector has been exhaustively addressed as opposed to only forestry before.

The gases that play a key role in contributing to the intensification of the greenhouse effect have been assessed as per the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). These gases are CO_2, CH_4, N_2O, HFCs, PFCs and SF_6. Based on the global warming potential (IPCC, 2001) of the latter gases (Table 2.2), emissions were converted to the common unit of carbon dioxide equivalent (CO_2-eq). Additional gases that indirectly affect global warming, namely oxides of nitrogen (NOx), carbon monoxide (CO), non-methane volatile organic compounds (NMVOCs) and sulphur dioxide (SO_2), have also been computed and reported in the inventory.

Table 2.2 – Global warming potential used in aggregated emissions

GHG		Global Warming Potential
Carbon dioxide	CO_2	1.0
Methane	CH_4	21.0
Nitrous oxide	N_2O	310.0
Hydro-fluorocarbons	HFCs (R134a) (R404a) (R407c) (R12)	 1300 3780 1653 1990
Per-fluorocarbons	PFCs (Perfluoropropane)	7000

The present national GHG inventory was prepared in accordance with the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC 1997) and supplemented by the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) as well as the *IPCC Good Practice Guidance on Land Use Land Use Change and Forestry* (IPCC, 2003). The IPCC 2006 Guidelines has been used to some extent for reporting in the LULUCF sector.

Generally, the method adopted to calculate emissions involved multiplying AD by the relevant appropriate EF, as depicted in the following equation:

Emissions (E) = Activity Data (AD) x Emission Factor (EF)

Default EFs were assessed for their appropriateness prior to being used; namely on the basis of the situations under which they have been developed and the extent to which these were representative of national ones. Country specific EFs have been derived for the livestock sector since the default ones did not reflect the national context and data available allowed for their computation.

Country-specific AD are readily available as a good statistical system exists whereby data pertaining to most of the socio-economic sectors are collected, verified and processed to produce official national statistics reports. Thus data collected at national level from numerous public and private institutions, organizations and companies, and archived by the CSO provided the basis and starting point. Additional and/or missing data required to meet the level of disaggregation for higher than the Tier I level, were sourced directly from both public and private sector operators by the team members and coordinators. Some of those which provided the necessary data were the Central Electricity Board (CEB), petroleum companies, Independent Power Producers (IPP), aircraft operators, agriculture- and fisheries-related institutions, waste-related institutions and manufacturing companies amongst others. Data gaps were filled through personal efforts of the experts and/or from results of surveys, scientific studies and by statistical modelling. All the data and information collected during the inventory process have been stored in organized databases under the responsibility of the Institutions concerned to respect confidentiality and ownership. The inventory results for all years are kept by the Project Executing Agency and the CSO.

In a few isolated cases, due to the restricted timeframe and lack of a declared National framework for data collection and archiving to meet the requirements for preparing GHG inventories, derived data and estimates were used to fill in the gaps. These were considered reliable and sound since they were based on scientific

findings and other observations. Estimates used included fuel use for navigation, domestic aviation, food consumption and forest areas by type.

The general methodologies used and all the processes adopted for the inventory preparations are ummarized in Table 2.3. Methodologies from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) were used as such or after being adapted to reflect national circumstances and conditions, and according to the level of details of data required for the different Tier levels. The emissions have been calculated using different worksheets, either separately or within the UNFCCC Software version 1.3.2, according to the Tier level adopted for each source category. In several sectors a combination of methods were applied to enable at least some of the processes to be treated at Tier 2 level.

2.5 QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

QC and QA procedures, as defined in the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) were adopted throughout the inventory process. QC was implemented through,

- Routine and consistent checks to ensure data integrity, reliability and completeness;
- Routine and consistent checks to identify errors and omissions;
- Accuracy checks on data acquisition and calculations and the use of approved standardized procedures for emissions calculations, estimation of uncertainties, documentation, archiving and reporting; and
- Technical and scientific reviews of data used, methods adopted and results obtained.

QA was ascertained by;

- Confirming the data quality and reliability from different sources wherever possible;
- Reviewing of the AD and EFs adopted within each source category by peers as a first step;
- Confirming that the latest scientific understanding was used in the assessment of EFs; and
- Reviewing by the team of sectoral experts.

Finally, when the compilation of the inventory was nearing completion, a two-day workshop was held under the guidance of a UNFCCC Inventory Expert, to identify any shortcoming and to ascertain that all IPCC procedures had been strictly adhered to.

Even if QA/QC procedures have been followed throughout the inventory process, systematic records as per the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) have not been kept. This stems from the fact that since inception of the process, the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) have been consistently adopted and followed. Moreover, it is less restrictive with regard to this aspect.

Table 2.3 - Description of inventory methodology

Sectors	Source category description	Methodological issues	Uncertainties and time-series consistency	Source specific QA/QC and verification	Source specific recalculations	Source–specific planned improvements
ENERGY	KEY CATEGORY					
A. Fuel Combustion (Sectoral Approach)	COMPILED					
1. Energy Industries	Public electricity and Independent Power Producers (IPPs) that are co generators or Combined Heat and Power (CHP) plants	Combined Tier 1 and Tier 2 approaches using disaggregated AD and most appropriate EFs - mainly IPCC defaults	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Data suppliers to be made aware of calculations procedures so that more details are obtained with higher degree of accuracy.
2. Manufacturing Industries and Construction	Included fuel consumed in Construction, Food Processing, Beverages & Tobacco (bakery, beverages) and Other (sugar, tea, textile). Fossil fuels are used for steam generation.	Combined Tier 1 and Tier 2 approaches using disaggregated AD and most appropriate EFs - mainly IPCC defaults	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Survey of industries required for AD (type of generators, age, efficiency) and local EFs to be derived
3. Transport Civil Aviation	Comprised fuel combustion for police activities and flights between Mauritius & Rodrigues.	Tier 1 adopted	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	No recalculations since this sub-category was not reported earlier	Setting up of an effective archiving system to capture landing and take-off data
3. Transport Road Transportation	Fuel combustion in road transport (Goods vehicles, buses, cars, motorcycles). Train do not occur in Mauritius	Combined Tier 1 and Tier 2 approaches using disaggregated AD and most appropriate EFs - mainly IPCC defaults	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Refinement in data archiving. Determination of CS EFs. Use of models for quality assessment
3. Transport Navigation	Comprised inter-island cruises for transport of cargo and passengers to and from outer islands of Mauritius	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations was not done since this sub-category was not reported earlier	Setting-up of an archiving system on type of vessel, engine capacity, age and fuel consumption

Sectors	Source category description	Methodological issues	Uncertainties and time-series consistency	Source specific QA/QC and verification	Source specific recalculations	Source–specific planned improvements
4. Other sectors (Commercial/Institutional)	Fuel combustion in commercial/institutional buildings, mainly hotels. Some charcoal and LPG also used .	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations not done since this sub-category was not reported earlier	Setting-up of an effective archiving system
4. Other sectors (Residential)	Fuel used at household level, comprised mainly LPG, with some kerosene, charcoal, wood and wood waste	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations not done since this sub-category was not reported earlier	Setting-up of an effective archiving system
4. Other Sectors (Agriculture/Fishing/Forestry)	MINOR SUB-CATEGORY Fuel consumed by mobile sources for infield agronomic operations in sugarcane production predominantly as well as fuel consumed in fishing activities	Tier 1 approach. Aggregate fuel consumption derived from fuel consumed per unit (area of t cane) for each individual operation	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Improved databasing and archiving
B. Fugitive emissions from fuels	NOT OCCURRING					
2. INDUSTRIAL PROCESSES						
A. Mineral Products	Comprised Lime production used locally in sugar manufacture	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	No planned improvements
B. Chemical Industry	Comprised f nitric acid production that decreased steadily until cessation of activity in 2005	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	No planned improvements
C. Metal Production	NOT OCCURRING					
D. Other Production (Food and Beverages)	Comprised mainly of NMVOCs from production of Meat/Fish/Poultry, Sugar, Margarine/oils/solid cooking fats, Cakes/biscuits, bread, beer and spirit	Tier 1	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Extend data collection to include more industries for completeness

Sectors	Source category description	Methodological issues	Uncertainties and time-series consistency	Source specific QA/QC and verification	Source specific recalculations	Source–specific planned improvements
E. Production of Halocarbons and sulphur hexafluoride	NOT OCCURRING					
F. Consumption of halocarbons and sulphur hexafluoride	Emissions of HFCs and PFCs used in refrigeration & air conditioning units, in fire extinguishers and during foam blowing. Emissions of SF6 used in sealed breakers not compiled	Tier 1A	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations not applicable and not done	To Improve HFC and PFC emissions
G. Other (please specify)	NOT OCCURRING					
3. Solvent and Other Product Use	NOT COMPILED					
4. AGRICULTURE	KEY CATEGORY					
A. Enteric Fermentation	Predominantly occurring in the small breeders sector. Herd size owned by meat producers drastically reduced in 2004.	Tier 2 approach. CS EFs derived	AD and EF Uncertainty and Time series consistency assessed	Activity data cross-checked against other sources	Recalculations done	Centralization of all survey data by subcategory within each species.
B. Manure Management	Predominantly occurring in the small breeders sector. Herd size owned by meat producers drastically reduced in 2004.	Tier 2 approach. CS EFs derived	AD and EF Uncertainty and Time series consistency assessed	Activity data cross-checked against other sources	Recalculations done	Centralization of all survey data by subcategory within each species.
C. Rice Cultivation	NOT OCCURRING					
D. Agricultural Soils	N-Fertilizer application records are not kept and the imports data were used as the consumption figure.	Tier 1 approach.	AD and EF Uncertainty and Time series consistency assessed	Activity data cross-checked against other sources	Recalculation not done as minor source	Better archiving of AD
E. Prescribed burning of savannahs	NOT OCCURRING					
F. Field Burning of Agricultural Residues	Largest share pertained to the sugarcane sector and emissions limited to this sector even if some residue from the foodcrops sector is also burnt	Tier 1 approach. Area burnt not available for a few years were interpolated.	AD and EF Uncertainty and Time series consistency assessed	Activity data cross-checked against other sources	Recalculation not done as minor source	No planned improvements
G. Other (please specify)	NOT OCCURRING					

Sectors	Source category description	Methodological issues	Uncertainties and time-series consistency	Source specific QA/QC and verification	Source specific recalculations	Source–specific planned improvements
5. LAND USE, LAND USE CHANGE AND FORESTRY						
A. Changes in Forest and other Woody Biomass Stocks	Forest lands comprise about 25% of the total area and act as storehouse of carbon and woody biomass increment leads to sink of carbon dioxide	Tier 2 level used with disaggregated activity data	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF	Recalculations done	To use remote sensing and GIS to improve accuracy of data
B. Forest and Grassland Conversion	Mainly Forest lands converted to settlement. Only in 2000 forests were lost to wetland	Tier 2 level used with disaggregated activity data	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF	Recalculations not done since this sub-category was not reported earlier	To use remote sensing and GIS to improve accuracy of data
C. Abandonment of Managed Lands	Included in section 5. E (Other)					
D. CO_2 Emissions and Removals from Soil	NOT ESTIMATED					
E. Other (Cropland converted to Other Land)	Abandonment of Sugarcane lands	Tier 2 level used with disaggregated activity data	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF	Recalculations not done since this sub-category was not reported earlier	To use remote sensing and GIS to improve accuracy of data
6. WASTE	KEY CATEGORY					
A. Solid Waste Disposal on Land	Solid waste is disposed predominantly in a landfill site with some methane being captured and flared.	Tier 1 level used	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Refine AD collection and archiving
B. Waste-water Handling	Comprised Industrial wastewater (sugar and poultry), Domestic and Commercial Wastewater. Hotel sector treated separately.	Combined Tier 1 and Tier 2 approaches used with disaggregated AD and most appropriate Efs - mainly IPCC defaults	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations not done since this sub-category was not reported earlier	Refine data collection and archiving with actual & detailed metering of WW output. Derive CS EFs.
C. Waste Incineration	Comprised incineration Clinical Waste only	Tier 1 method used	AD and EF Uncertainty and Time series consistency assessed	Proper validation made for both AD and EF by sector	No Recalculations done	Refine data collection and archiving

Sectors	Source category description	Methodological issues	Uncertainties and time-series consistency	Source specific QA/QC and verification	Source specific recalculations	Source–specific planned improvements
D. Other (please specify)	NOT OCCURRING					
7. OTHER (Please specify	NOT OCCURRING					
MEMO ITEMS						
International bunkers	Comprised International Aviation and Marine Bunkering	Tier 1 method used	Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Refinement in data archiving
Aviation	Comprised emissions from fuel delivered to bunkers	Tier 1 method used	Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Refinement in data archiving
Marine	Comprised emissions from fuel delivered to bunkers	Tier 1 method used	Time series consistency assessed	Proper validation made for both AD and EF by sector	Recalculations done	Refinement in data archiving
CO_2 Emissions from Biomass	Comprised sugarcane biomass burnt for electricity generation for sale to the national grid, CH_4 from flared from landfill and CH4 converted to electricity from waste water handling					

2.6 UNCERTAINTY ASSESSMENT

The uncertainties, associated with annual estimates of emissions, are reported according to the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The *Tier 1 Method for Uncertainty assessment,* which is essentially an expanded and more comprehensive version of the method described in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) was adopted. It is relatively easy to implement, and the spreadsheet that was adopted for calculations and reporting was extracted from the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The *Tier 2 method* uses Monte Carlo techniques to estimate uncertainties at the source level, the gas level and for the inventory as a whole, and it requires the adoption of the advanced software. The latter technique was not adopted due to unavailability of the software and lack of skills to run same.

In the present inventory, the uncertainty levels associated with the AD and EFs were adopted after thorough discussions between the respective sectoral experts and in-line with uncertainty levels outlined in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). Data and totals on uncertainties presented in Annex I are sometimes slightly lower because of rounding off at 2 decimal places compared to keeping records up to 4 decimal places elsewhere.

2.7 ASSESSMENT OF COMPLETENESS

An assessment of the completeness of the inventory was made for individual processes within each source category and the results are presented within the sections covering the individual sectors. The methodology adopted was according to the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) with the following notation keys used:

- X - Estimated
- NO - Not Occurred
- NE - Not Estimated
- NA - Not Applicable
- IE - Included Elsewhere
- C - Confidential

2.8 RECALCULATIONS

Recalculations were carried out for emissions calculated in previous inventories. These are normally carried out if AD and/or EFs are revised or if new updated methodologies are applied.

Previous inventories for the period 2000 to 2006 have been compiled and published by the CSO. The latter inventories were carried out mostly using the Tier 1 level and many sub-categories or even sectors were not compiled. The present NIR, being an exhaustive one, also reports on recalculations made and the comparison of the results with those of the previous inventories.

2.9 TIME SERIES CONSISTENCY

This inventory covers the period 2000 to 2006 and AD within each of the source categories considered were abstracted from the same sources for all years. The same EFs have been used and the QA/QC procedures were kept constant for the whole inventory period. This enabled a consistent time series to be built with a good level of confidence in the trends of the emissions.

2.10 GAPS & CONSTRAINTS AND PLANNED IMPROVEMENTS

In order to reduce uncertainties and to further the adoption of higher Tier levels in future inventories, more disaggregated data for the various sectors as well as country-specific EFs would have to be adopted. The evaluation of the completed inventory enabled the identification of areas that will have to be reviewed and improved in terms of data collection as well as research to be undertaken for developing EFs. The development of specific sectoral databases for GHG inventory purposes will prove useful.

The institutional arrangements adopted for the preparation of the inventory, namely with one person leading the process and supported by sectoral representatives did not work smoothly. The major drawback remained the commitments of the sectoral experts, given that their demanding day to day responsibilities left them with inadequate time to devote to the inventory compilation. Adoption of Tier 2 level, which is even more demanding with regards to time and the in-depth knowledge of the processes within each sector, further complicated the process. Thus there is need to develop an alternative institutional arrangement that will ensure a smoother flow during future inventory preparations. Concurrently, local EFs will have to be developed. This remains an intricate process requiring not only the basic scientific knowledge of the GHG emitting activity but also the impact of the latest technologies being adopted and their contribution within the process for more precision. It is proposed that the inventory be entrusted to persons having the necessary sectoral expertise. The sectoral results can thereafter be consolidated to produce the national inventory and document.

3 TRENDS IN GREENHOUSE GAS EMISSIONS

3.1 OVERVIEW

The trends of GHG emissions for Mauritius have been divided into two periods. The first covers the period 1990 to 1999 whereby data were compiled using the simple Tier 1 approach and the second period is from 2000 to 2006 when availability of more disaggregated data enabled the adoption of higher Tier methods, namely a combination of Tier 1 and 2. The period 2000 to 2006 also included additional sectors and sub-sectors that were not covered previously, such as wastewater handling and, land use and land use change.

3.2 THE PERIOD 1990 TO 1999

The data on total net GHG emissions for the period 1990 to 1999 indicate an increase of 74% from 1600 Gg CO_2-eq in 1990 to 2788 Gg CO_2-eq in 1999 with an average annual increase rate of 6.5%. The Energy sector remained the highest emitter of GHGs during this decade with its emissions representing around 90% of the national total. Emissions from the waste sector almost doubled during the same period with an annual increase of 6.5%. Removals increased slightly by 1.9% on average for the period 1990 – 1999.

Per capita emissions rose by 60% (5.3% annually) during the same period, from 1.5 t CO_2-eq in 1990 to 2.4 t CO_2-eq in 1999. Concurrently, the GHG intensity index, an indicator of GHG emissions per unit of GDP, increased by 6.2% per year from 100.0 in 1990 to 169.8 in 1999 (Table 3.1). Over the period 1990 to 1999, the GHG emissions intensity has risen faster than the Per Capita emission (Figure 3.1).

Table 3.1 – GHG emissions (CO_2-eq) for the period 1990 to 1999

		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Annual Change (%)
Energy	Gg	1416	1493	1631	1713	1827	1779	2018	2064	2258	2533	6.8
Industrial Processes	Gg	79	82	82	85	85	88	95	99	105	102	2.9
Agriculture	Gg	253	255	254	252	253	231	251	292	270	293	1.9
LULUCF	Gg	(195)	(204)	(209)	(211)	(216)	(221)	(223)	(223)	(224)	(224)	1.6
Waste	Gg	47	62	65	68	70	72	77	79	81	84	6.9
NET EMISSIONS	Gg	**1600**	**1689**	**1824**	**1906**	**2019**	**1948**	**2219**	**2312**	**2490**	**2788**	**6.5**
PER CAPITA EMISSION	t	1.5	1.6	1.7	1.7	1.8	1.7	1.9	2.0	2.1	2.4	5.3
PER GDP EMISSION	t / MUR M	40.6	41.0	43.4	46.0	49.2	45.4	53.3	55.5	59.5	68.9	6.2
GHG EMISSION INTENSITY INDEX (Base yr=1990)		100	101.1	107.0	113.4	121.2	116.7	131.3	136.7	146.7	169.8	6.2

Note: Bracketed figures are removals.

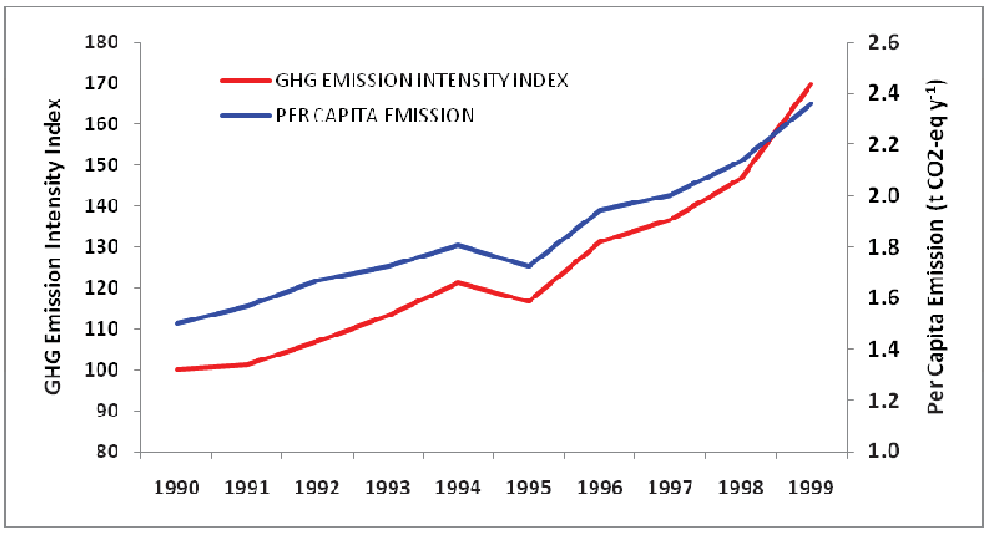


Figure 3.1 - GHG emissions intensity index and per capita GHG emissions (1990 - 1999)

3.3 THE PERIOD 2000 TO 2006

The trend for the period 2000 to 2006 indicates that the net GHG emissions rose by 22.8% from 3784 Gg CO_2-eq in 2000 to 4646 Gg CO_2 -eq in 2006 with an annual average increase of 3.5%. Per capita emissions of GHG remained nearly constant between the range 3.3 to 3.6 t CO_2-eq during the period 2000 to 2006. The GHG emission intensity index decreased from 100 in 2000 to 96.3 in 2006 (Table 3.2) and (Figure 3.2). This is attributed to measures implemented to reduce emissions towards meeting the ultimate objective of the Convention. The uncertainty level associated with total national emissions varied between 5.05% and 5.68%, indicative of the quality of the inventory resulting from good AD, the use of appropriate EFs and the consistency in time series.

Table 3.2 – GHG emissions pattern for the period 2000 to 2006

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
NET EMISSIONS (CO_2-eq)	**3784**	**3912**	**3930**	**4104**	**4111**	**4192**	**4646**	3.5
UNCERTAINTY (%)	**5.60**	**5.68**	**5.51**	**5.67**	**5.14**	**5.20**	**5.05**	-
PER CAPITA EMISSION (t)	3.3	3.3	3.3	3.4	3.3	3.3	3.6	1.8
PER GDP EMISSION (t/MUR M)	51.6	51.6	50.0	50.0	47.1	47.1	49.7	-0.6
GHG EMISSION INTENSITY INDEX (Base yr = 1990)	100.0	100.0	96.9	96.8	91.3	91.2	96.3	-0.6

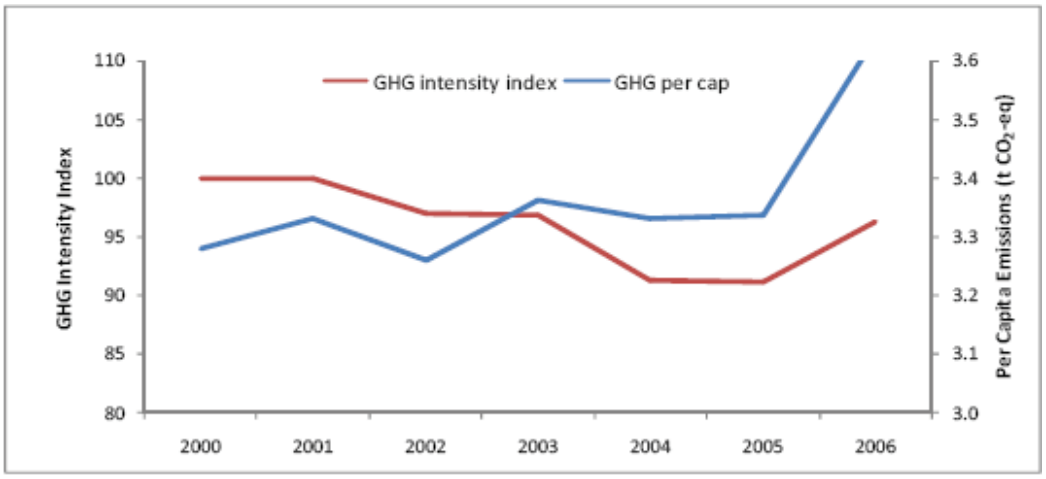


Figure 3.2 - GHG emissions intensity index and per capita GHG emissions (2000 – 2006)

3.4 TREND OF EMISSIONS BY SOURCE CATEGORIES

According to the UNFCCC reporting guidelines and the IPCC methodological guidelines, total national emissions have been calculated for five sectors: Energy, Industrial Processes, Agriculture, LULUCF and Waste. Emissions from the Solvents and Other Products (SOP) source category occurred but they have not been estimated as they are minimal and reliable activity data could not be organized within the project timeframe. The total national GHG emissions and removals by source category are presented in Table 3.3 and Figure 3.3.

Table 3.3 - Emissions of GHG (Gg CO_2-eq) by source category (2000 – 2006)

SOURCE	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
Energy	2315	2503	2521	2692	2692	3154	3154	5.4
Industrial Processes	145.8	103.8	149.0	126.5	133.0	35.5	141.8	38.4
Agriculture	235	243	219	224	217	212	206	-2.1
LULUCF Emission	234	100	106	124	105	129	118	4.3*
Removal	*-316*	*-31*	*-289*	*-323*	*-302*	*-306*	*-304*	*-0.4*
Waste	1170	1281	1226	1261	1265	1266	1333	2.3
TOTAL	**4100**	**4230**	**4219**	**4427**	**4413**	**4498**	**4950**	**3.2**
NET	**3704**	**3912**	**3930**	**4104**	**4111**	**4192**	**4646**	**3.5**

* Excludes the year 2000 because of abnormally high emissions due to construction of a dam

3.4.1 Energy

The energy sector remained the largest source of emissions throughout the period, contributing 3154 Gg CO_2-eq (64.7 %) of total emissions in 2006 (Table 3.3 and Figure 3.3). During the period 2000 to 2006, energy emissions increased by 839 Gg CO_2-eq (36.2%) from the 2000 level of 2315 Gg CO_2-eq. This growth in emissions resulted from the electricity generation and transport sub-sectors. During the period 2000 to 2006, the average annual increase of GHG emissions was calculated at 5.4%.

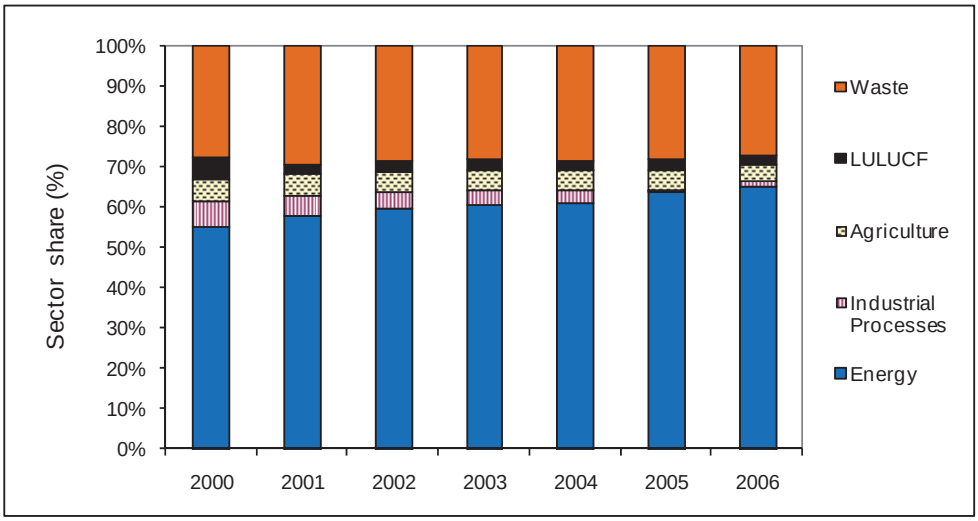


Figure 3.3 – Share of GHG emissions by sector (2000 – 2006)

3.4.2 Industrial Processes

Industrial processes contributed 2.9% of the total emissions in 2006. Emissions from this source declined significantly from 146 Gg CO_2 -eq in 2000 to 142 Gg CO_2-eq in 2006 (Table 3.3). This represented a decreased of 76.5% annually following the gradual phasing out of nitric acid production. The cessation of its production as from 2005 contributed to the sudden drop in emissions as from this year.

3.4.3 Agriculture

Emissions from the Agriculture sector also declined, from 235 Gg CO_2-eq in 2000 to 206 Gg CO_2-eq in 2006 representing a decrease of 12.3% from the 2000 level. In 2006, the share of GHG emissions from agriculture amounted to 4.2% of total national emissions.

3.4.4 LULUCF

In the LULUCF sector, GHG emissions are estimated at 118 Gg CO_2-eq while the removals are calculated at 304 Gg CO_2-eq for the year 2006. The removals from the LULUCF sector represented 7.5% of the total national emissions in 2000 and 6.2% in 2006. LULUCF removals fluctuated between 316 Gg CO_2-eq and 304 Gg CO_2-eq during the period 2000 to 2006. These fluctuations stemmed from the differences in rates of biomass accumulation which is function of the weather experienced. The high emissions of the year 2000 were due to the conversion of forestland to a dam.

3.4.5 Waste

The waste sector was the second largest emitter of GHGs during the period 2000 to 2006. It accounted for 1,333 Gg CO2-eq (27.3%) of total emissions in 2006. Emissions from the waste sector increased from the 2000 level of 1,170 Gg CO2-eq to 1,333 Gg CO2-eq in 2006, representing 13.9% more.

3.5 TRENDS IN EMISSIONS OF DIRECT GHGs

The share of emissions by gas did not change significantly during the period 2000 to 2006. The main contributor to the national GHG emissions remained CO2. In 2006, the share of the GHG emissions was as follows: 66.4% CO2, 28.5% CH4, 3.8% N2O, 1.3% HFCs and 0.005% PFCs. The trend of the aggregated emissions and removals, by gas is given in Table 3.4 and Figure 3.4. The share of CO2 and CH4 has increased while that of N2O, HFCs and PFCs has decreased over the period 2000 to 2006.

Table 3.4 - Aggregated emissions and removals of GHGs by gas (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
CO_2 (Gg)	2524	2577	2600	2785	2764	2949	3235	**4.3**
CH_4 (CO_2-eq)	1234	1350	1281	1319	1324	1323	1391	**2.1**
N_2O (CO_2-eq)	303	275	287	300	291	192	186	***-6.7***
HFCs (CO_2-eq)	36	23	49	22	30	33	139	**66.2**
PFCs (CO_2-eq)	3	6	3	1	3	1	1	**6.1**
SF6 (CO_2-eq)	NE	NE	NE	NE	NE	NE	NE	-
Total GHG emissions (CO_2-eq)	**4100**	**4230**	**4219**	**4427**	**4413**	**4498**	**4950**	**3.2**
Removals (CO_2)	*-316*	*-318*	*-289*	*-323*	*-302*	*-306*	*-304*	***-0.4***
NET EMISSIONS (CO_2-eq)	**3784**	**3912**	**3930**	**4104**	**4111**	**4192**	**4646**	**3.5**

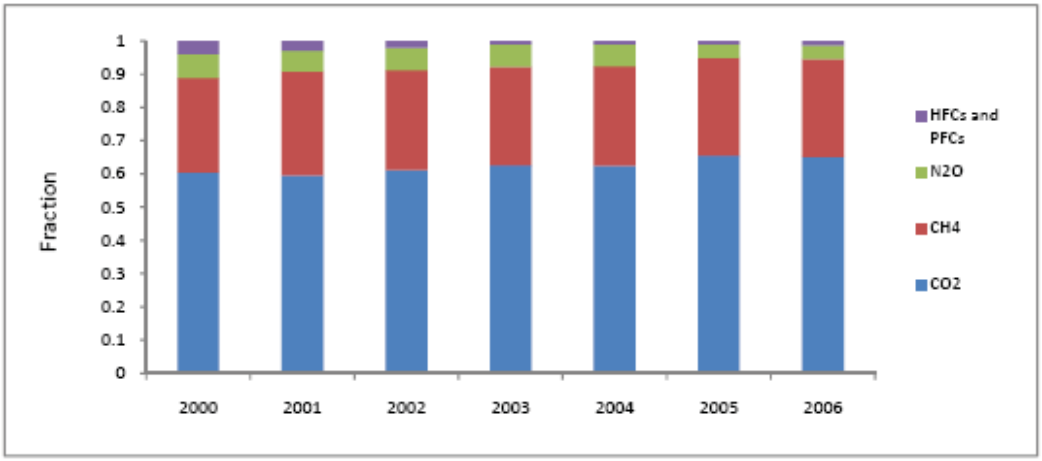


Figure 3.4 - Aggregated emissions (Gg CO_2-eq) by gas (2000 – 2006)

3.5.1 Carbon dioxide (CO_2)

The most significant anthropogenic GHG was CO_2. In 2006, it contributed the largest share of national emissions at 3235 Gg (66.4%). CO_2 emissions increased by 711 Gg from the 2000 level of 2524 Gg (Table 3.5) to 3235 Gg in 2006.

The sector that emitted the highest amount of CO_2 was the Energy Sector followed by the LULUCF sector (Table 3.5). Annual change in the latter sector excludes 2000 as emissions abnormally high due to the conversion of forest to a dam.

Table 3.5 – CO_2 emissions (Gg) by source category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL EMISSIONS	**2524**	**2577**	**2600**	**2785**	**2764**	**2949**	**3235**	**4.3**
TOTAL NET EMISSIONS	**2208**	**2259**	**2311**	**2462**	**2462**	**2644**	**2931**	**4.9**
Energy	2286.7	2473.9	2491.7	2658.6	2657.2	2817.9	3115.0	5.4
Industrial Processes	2.6	2.5	2.3	2.2	1.8	1.8	1.9	-4.6
LULUCF - Emissions	234.0	100.1	105.5	123.7	104.7	128.8	117.6	4.3
LULUCF - Removal	-316.0	-318.0	-289.4	-323.4	-302.3	-305.5	-303.7	-0.4
Waste	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5

3.5.2 Methane (CH_4)

Methane was the next contributor in national emissions after CO_2. It contributed 1,391 Gg CO_2-eq (28.5%) of the total emissions of 2006. Methane emissions increased by 157 Gg CO_2-eq from the 2000 level of 1,234 Gg CO_2-eq (Table 3.6). The Waste sector contributed most of these emissions followed by the Agriculture sector.

Table 3.6 – CH_4 emissions by source category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL (Gg CO_2–eq)	**1233.73**	**1350.26**	**1281.03**	**1318.80**	**1324.08**	**1322.52**	**1390.80**	**2.1**
TOTAL (Gg)	**58.75**	**64.30**	**61.00**	**62.8**	**63.05**	**62.98**	**66.23**	**2.1**
Energy	0.467	0.467	0.425	0.442	0.436	0.437	0.442	-0.8
Agriculture	3.989	4.101	3.611	3.545	3.364	3.511	3.514	-1.9
LULUCF - Emissions	0.008	0.011	0.011	0.010	0.011	0.003	0.004	4.4
Waste	54.285	59.719	56.954	58.804	59.240	59.026	62.268	2.4

3.5.3 Nitrous Oxide (N_2O)

Nitrous oxide contributed 186 Gg CO_2-eq (3.8%) of emissions in 2006. Emissions decreased by 116 Gg CO_2-eq from the 2000 level of 303 Gg CO_2-eq (Table 3.7). Agriculture was the highest emitter of N_2O.

Table 3.7 – N_2O emissions by source category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL (Gg CO_2-eq)	**302.87**	**274.97**	**286.56**	**300.11**	**290.75**	**191.98**	**186.40**	-6.7
TOTAL (Gg)	**0.977**	**0.887**	**0.924**	**0.968**	**0.938**	**0.619**	**0.601**	-6.7
Energy	0.058	0.061	0.065	0.078	0.083	0.090	0.095	8.6
Industrial Processes	0.336	0.233	0.305	0.327	0.315	0.000	0.000	-32.7
Agriculture	0.488	0.507	0.461	0.481	0.474	0.466	0.427	-2.1
LULUCF – Emissions	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-
Waste	0.095	0.086	0.094	0.082	0.066	0.084	0.080	-1.7

3.5.4 HFCs, PFCs and SF6

The combined emissions of HFCs and PFCs increased by 101 Gg CO2-eq from 39 Gg CO2-eq in 2000 to 140 Gg CO2-eq in 2006 (Table 3.8). As for SF6, no estimation was made due to unavailability of proper records. Emissions occurred as leakages and were considered negligible.

Table 3.8 – HFCs and PFCs emissions from Industrial Processes (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL (Gg CO_2-eq)	39	29	52	23	33	34	140	92.2
HFCs (Gg)	0.0234	0.0127	0.0290	0.0112	0.0143	0.0188	0.0270	116.2
PFCs (Gg)	0.0004	0.0008	0.0004	0.0002	0.0004	0.0002	0.0001	-33.9

3.6 EMISSIONS TRENDS FOR INDIRECT GHGs AND SO_2

Emissions of indirect GHGs such as SO_2, CO, NO_x and NMVOC have also been estimated and reported in the inventory. Indirect GHGs have not been included in the compilation of total emissions. Emissions of these gases for the period 2000 to 2006 are given in Table 3.9 and Figure 3.5.

Table 3.9 – Emissions (Gg) of indirect GHGs and SO_2 (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
NO_x	13.6	13.5	13.8	14.3	14.0	13.7	15.1	2.0
CO	62.4	63.4	58.5	54.8	51.6	49.7	49.0	-3.9
NMVOC	22.2	22.2	23.3	21.6	20.0	21.8	21.2	-0.6
SO_2	8.8	9.5	9.2	12.5	9.7	9.6	11.4	6.1

Emissions of NO_x increased slightly from 13.6 Gg in the year 2000 to 15.1 Gg in 2006 with an average annual increase of 2.0%. Carbon monoxide emissions dropped by 21.5% from 62.4 Gg in 2000 to 49.0 in 2006. Emissions of NMVOC and SO_2 fluctuated throughout that period with no major difference between the years 2000 and 2006.

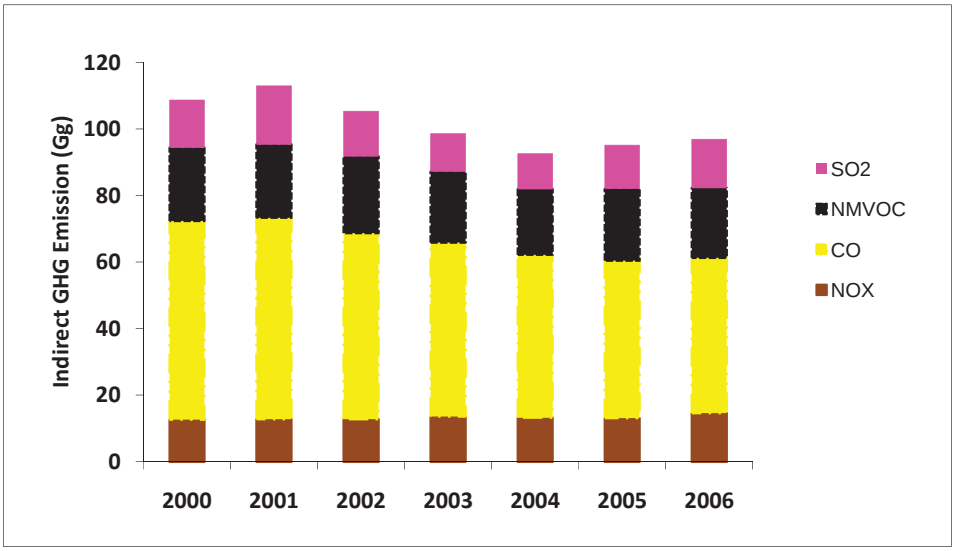


Figure 3.5 - Emissions (Gg) of indirect GHGs and SO_2 (2000 – 2006)

3.6.1 NO_x

Emissions of NOx increased by an average of 1.8% over the inventory period from 13.6 Gg in the year 2000 to 15.1 Gg in 2006. The major source of NO_x emissions remained the energy sector for all inventory years with 99.1% of the total emissions in the year 2006. The energy sector witnessed an increase over the period while the opposite occurred in the agriculture sector.

Table 3.10 – NO_x emissions (Gg) by source category (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL	**13.6**	**13.5**	**13.8**	**14.3**	**14.0**	**13.7**	**15.1**	**1.8**
Energy	12.70	12.71	13.03	13.57	13.31	13.50	14.97	2.9
Industrial Processes	0.45	0.31	0.41	0.44	0.42	0	0	-32.7
Agriculture	0.40	0.44	0.31	0.28	0.22	0.19	0.18	-11.6
LULUCF - Emissions	0.0008	0.0011	0.0011	0.0010	0.0011	0.0003	0.0004	-0.2

3.6.2 CO

National CO emissions regressed by 3.9% on average annually during the inventory period 2000 to 2006. The decrease concerned all emitting sources and was 21.5% below the 2000 level. In 2006, 92.1% of the total CO emissions originated from the energy sector with agriculture contributing 7.7%.

Table 3.11 – CO emissions (Gg) by source category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL	**62.4**	**63.4**	**58.5**	**54.8**	**51.6**	**49.7**	**49.0**	**-3.9**
Energy	53.70	53.95	51.71	48.81	46.74	45.66	45.13	-2.8
Agriculture	8.52	9.28	6.60	5.87	4.69	3.95	3.75	-12.0
LULUCF - Emissions	0.12	0.17	0.17	0.16	0.18	0.04	0.07	7.6

3.6.3 NMVOC

The two main emission sources were energy and Industrial processes. NMVOC emissions varied throughout the inventory period. In 2006, NMVOC emissions fell by 4.5 % below the 2000 level.

Table 3.12 – NMVOC emissions (Gg) by source category (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL	**22.2**	**22.2**	**23.3**	**21.6**	**20.0**	**21.8**	**21.2**	**-0.6**
Energy	13.46	13.70	13.24	13.08	12.17	12.58	12.47	-1.2
Industrial Processes	8.79	8.54	10.06	8.50	7.80	9.23	8.74	0.7

3.6.4 SO_2

The energy sector was the sole contributor of SO_2. Emissions fluctuated during the inventory period 2000 – 2006, attributable to changes in sulphur content of coal.

Table 3.13 – SO_2 emissions (Gg) by source category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
Energy	8.8	9.5	9.2	12.5	9.7	9.6	11.4	6.1

4. ENERGY

4.1 OVERVIEW

In Mauritius, Fuel Combustion is the only activity occurring as there is no extraction of fuels that would result in fugitive emissions.

This source category comprises both stationary and mobile fuel combustion activities. Emissions from electricity generation, manufacturing industries and construction, transport and energy and other sectors have been covered. Other sectors included mechanized activities in the agriculture, fishing and forestry sectors, as well as the commercial, institutional and residential sub-sectors. Memo items that have been excluded from national totals were emissions from International Bunkers. Fuel woods and biomass-based fuels are neutral with regard to CO_2 emissions since an equivalent amount is absorbed from the atmosphere during the accumulation process. Other gases emitted from these feedstocks have been accounted for in the inventory.

In addition to CO_2, incomplete combustion of fossil fuels releases small amounts of NO_x, CO and NMVOCs. These indirect greenhouse gases participate in the process of creation and destruction of the ozone layer. In the framework of the IPCC methodology, the calculation of SO_2 emissions is also recommended. All these gases have been assessed and their emissions included in the inventory.

An energy balance is compiled annually to follow energy production and consumption in the country. Data on production, imports, exports, stock change and consumption of fuels are reported both in physical units (t) and energy units (ktoe). During the inventory period, the share of liquid fossil fuels fell from 84% in the year 2000 to 82 % in 2006. That of LPG rose from 12% to 15 % while that of coal, the major source of solid fossil fuel, dropped from 4% to 3%.

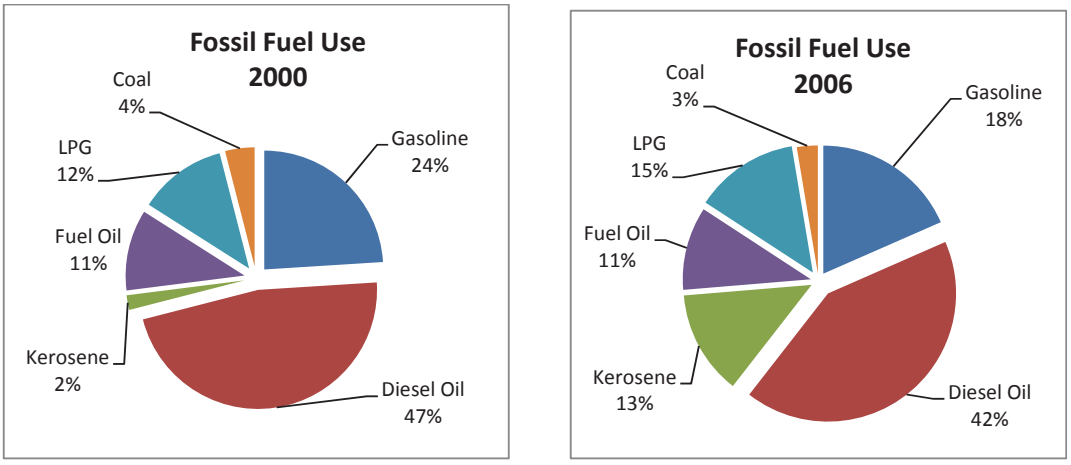


Figure 4.1 - Share of fossil fuels used in 2000 and 2006

There is no production processes involving fuels being used as feedstock in Mauritius and only bitumen is used in road paving, and lubricants in the transport sector and in the industrial processes. Thus only the carbon stored in these products and used during these two activities has been considered and accounted for in the inventory.

4.1.1 Key Categories

Key Source Categories assessment in the energy sector has not been performed as all emitting sources have been considered.

4.1.2 Completeness

The completeness assessment for source categories occurring in Mauritius in the energy combustion sector is presented in Table 4.1.

Table 4.1 - Source categories in the Energy Sector (2000 to 2006)

	CO_2	CH_4	N_2O	NO_x	CO	NMVOC	SO_2
1.A.1 Energy Industries	X	X	X	X	X	X	X
1.A.2 Manufacturing Industry and Construction	X	X	X	X	X	X	X
1.A.3 Transport	X	X	X	X	X	X	X
1.A.4 Other Sectors (Commercial, Institutional, Residential , Agriculture, etc)	X	X	X	X	X	X	X
1.A.5 Other (Other Works and Needs in Energy and Military Transport)	X	X	X	X	X	X	X
Memo Items. International Bunkers	X	X	X	X	X	X	X
Memo Items. Emissions from Biomass	X	IE	IE	IE	IE	IE	IE

X = Estimated, NA = Not Applicable, NO = Not Occurring, NE = Not Estimated, IE = Included Elsewhere

4.1.3 Overall Summary

Fuel combustion in the energy sector resulted in 2315 Gg CO_2 -eq of GHG emissions in the year 2000. It increased to 3154 Gg CO_2 -eq in 2006 which represented 36.2% more emissions. On average the annual increase in emissions was 5.4% for the energy sector. The Commercial/Institutional sub-sector witnessed the highest increase with an annual average of 16.4% during the period 2000 – 2006. In 2000, the Energy Industries contributed 44.2% of emissions followed by the Transport sub-sector with 31.7% and Manufacturing with 15.5% among the sub-sectors. The Residential sub-sector came next with 6.2% while the contribution of the Commercial/institutional and Agriculture/Forestry/Fishing sub-sectors made up for the remainder.

Emissions from the Energy Industries recorded a net 63.1% increase from 1024 Gg in 2000 to 1670 Gg CO_2 -eq in 2006, mainly attributed to the increase in electricity demand in this sector. For the transport sector, emissions rose from 733 Gg CO_2-eq in 2000 to 857 Gg CO_2-eq in 2006 (16.9%). The Manufacturing sector witnessed an increase from 358 Gg CO_2-eq in 2000 to 410 Gg CO_2-eq in 2006 (14.5%).

Table 4.2 - GHG emissions (Gg CO_2-eq) from the Energy Sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
TOTAL ENERGY	**2315**	**2503**	**2521**	**2692**	**2692**	**2855**	**3154**	**5.4**
Energy Industries	1024	1166	1165	1291	1294	1430	1670	8.7
Manufacturing Industries & Construction	358	385	384	385	363	352	410	2.5
Transport	733	749	771	797	815	845	857	2.6
Commercial/Institutional	12	13	14	17	19	21	30	16.4
Residential	145	145	145	149	157	162	140	-0.4
Agriculture/Forestry/Fishing	43	45	44	54	46	46	48	2.3

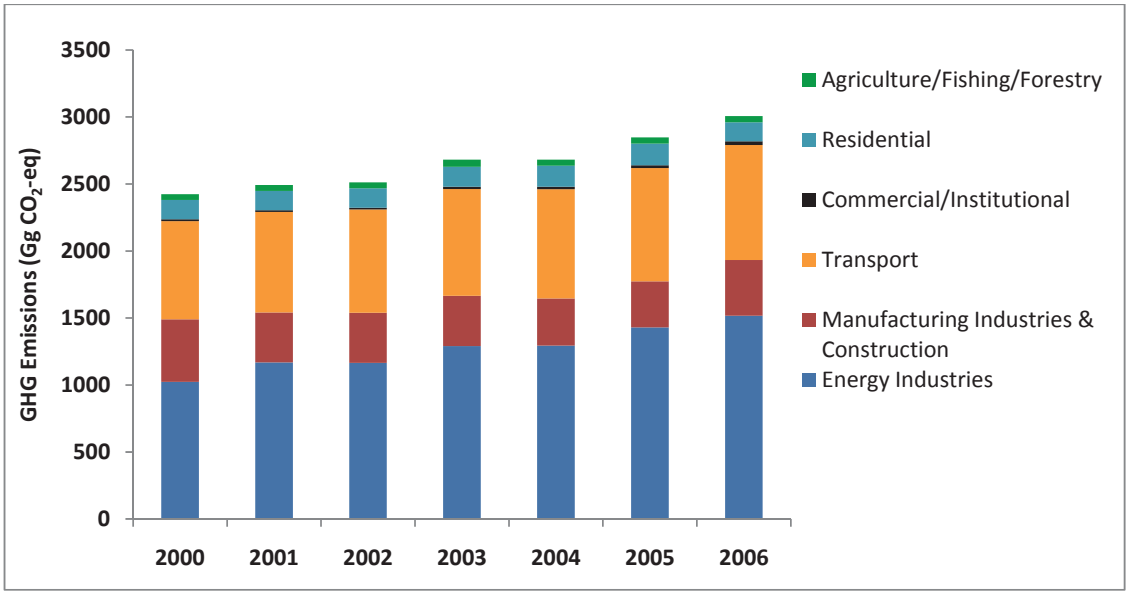


Fig 4.2 - Emissions (Gg CO_2-eq) from Energy Sector for period 2000 to 2006

CO_2 represented more than 98% of the total aggregated emissions within the energy sector. Its emissions rose from 2286.71 Gg in 2000 to peak at 3114.96 Gg in 2006. This represented an increase of 36.2% (Table 4.3).

Sectoral and Reference Approaches

The energy balance served as the basis for calculating GHG emissions by the Reference Approach as well as for the Tier 1 Sectoral Approach in previous inventories.

In the Reference Approach, the input data were production, import, export, international bunkering and changes in stock for primary and secondary fuels. In the Sectoral Approach, emissions were calculated from fuel consumed in the individual sectors and sub-sectors using disaggregated data and higher tier levels. A comparison of the results showed consistently lower CO_2 emissions by the Sectoral Approach. These results indicate the better precision obtained when adopting the Sectoral approach.

Table 4.3 - Emissions (Gg) by gas for the Energy Sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2-eq	2314.50	2502.64	2520.68	2692.10	2692.13	2855.01	3153.58
CO_2	2286.71	2473.92	2491.69	2658.65	2657.24	2817.92	3114.96
CH_4	0.47	0.47	0.43	0.44	0.44	0.44	0.44
N_2O	0.06	0.06	0.06	0.08	0.08	0.09	0.09
NMVOC	12.70	12.71	13.03	13.57	13.31	13.50	14.97
CO	53.70	53.95	51.71	48.81	46.74	45.66	45.13
NOx	13.46	13.70	13.24	13.08	12.17	12.58	12.47
SO_2	8.76	9.55	9.20	12.47	9.72	9.60	11.44

Note: International aviation and marine bunkers are excluded

Moreover the use of a higher Tier level with reliable AD also contributed to these improved results. Differences ranged from 3.5% to 5.3 8%, except for the year 2006 when higher emissions were obtained with the Sectoral approach (Table 4.4). As all calculations were found correct, the plausible explanation could be from the allocation of fuel within the energy balance. In fact, the increase is lower from 2005 to 2006 compared to the remaining years assessed.

Table 4.4 – Emissions (Gg CO_2-eq) for Reference and Sectoral Approaches (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Reference approach	2438	2610	2666	2809	2786	3006	3041
Sectoral approach	2315	2503	2521	2692	2692	2855	3154
Difference (%)	**5.3**	**4.3**	**5.8**	**4.3**	**3.5**	**5.3**	**-3.6**

4.2 ENERGY INDUSTRIES (Category 1 A 1)

In Mauritius, this source category is restricted to public electricity production only as combustion of fossil fuel for heat production does not occur. The electricity generating industries include power plants owned by the Central Electricity Board (CEB) that run mainly with Heavy Fuel Oil (HFO) and a few hydro plants located around the island, and the Independent Power Producers (IPPs) who are using mainly coal to complement the primary renewable fuel, bagasse, which is available only during part of the year.

The total generation capacity for the year 2000 was 615 MW. The installed capacity remained almost stagnant up to the year 2004 even if the electricity demand witnessed a sustained growth of 6% during the period 2000-2006. Additional demand was met by upgrading existing co-generation plants. As from 2005, new power generation units were commissioned to meet the increasing demands as biomass production regressed. In 2006, older units were replaced to raise the net generation capacity to 680 MW.

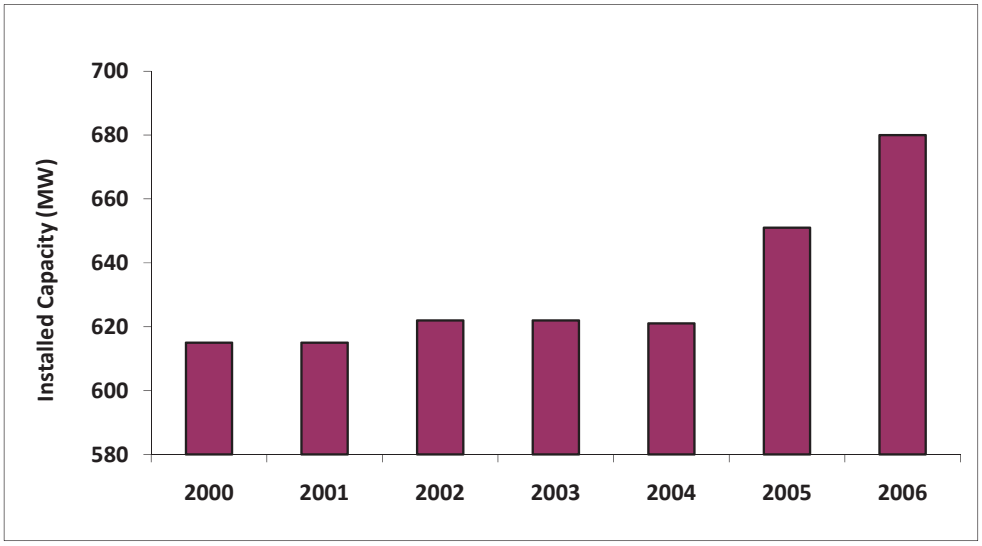


Figure 4.3 - Evolution of electricity generation capacity

4.2.1 Source Category Description

Fuel type significantly influences the amount of GHG emitted and the evolution of its consumption is presented in Figure 4.4. The share of coal has been increasing as from 2002 to the detriment of fuel oil. This change is attributed to the commissioning of larger more performing units for cogeneration to enhance the conversion efficiency of biomass, available during part of the year only. This measure is necessary to ensure economic viability while satisfying the base load demands. Other sources of generation that contributed slightly to the national needs are plants running on kerosene and diesel, and a small wind farm.

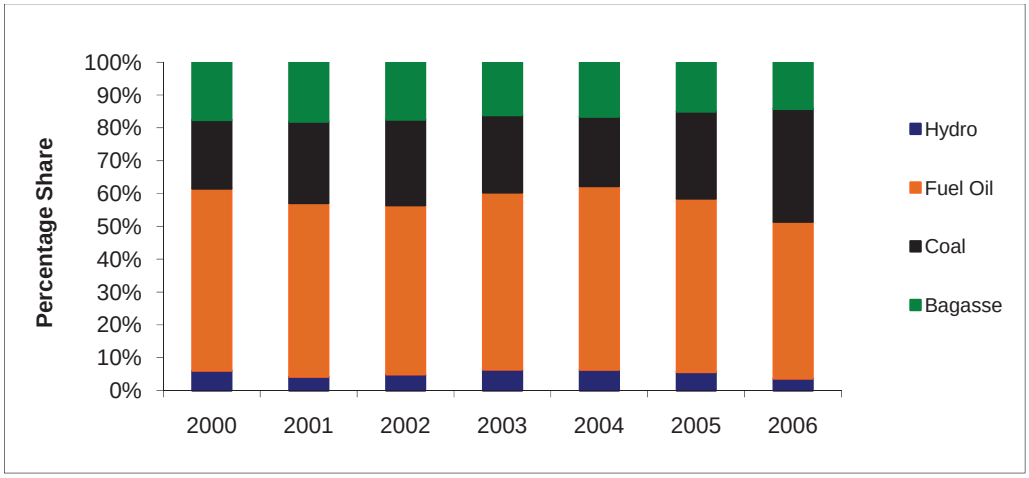


Figure 4.4 – Share by major fuel type used for electricity generation for the period 2000 to 2006

4.2.2 Methodological Issues

The methods adopted for compiling emissions of all GHGs were according to the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and were, to the extent possible, in accordance with *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The GHG emissions from thermal power plants and cogeneration coal/bagasse plants for the period 2000-2006 were calculated on a per plant basis from recorded activity data.

Activity Data

The exact quantities of fuel consumed by each boiler or gas turbine have been used to calculate the emissions. These data included monthly fuel consumption and detailed fuel characteristics, namely net calorific value, and sulphur and ash contents amongst others. Oxidation factors vary from plant to plant depending on age and maintenance. These factors have been considered during the inventory process. To improve the accuracy of calculations, the oxidation factors provided for in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) have been assessed.

AD concerning the different types of fuel have been collected from the organizations responsible for the consumption and/or importation. For HFO, kerosene and diesel oil, the electricity producer maintains a record of fuel consumed by each power plant. Similarly, the IPPs provided data on coal and bagasse consumed by each plant to the CEB and the CSO as part of their commitments.

Table 4.5 – Fuel input (ktoe) for electricity production (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
TOTAL	**490.6**	**537.3**	**532.5**	**556**	**571.8**	**615.8**	**674.7**
Fuel oil	168.5	177.9	172.4	196.3	211.3	215	217.5
Diesel oil	3.4	3.2	3.5	3.9	4.0	2.3	2.6
Kerosene	13.6	3.9	5.7	10.3	17.2	18.4	1.9
Coal	141.7	169.5	177.9	178	169.4	211.2	286.9
Bagasse	163.4	182.8	173.1	167.5	174.9	168.9	165.9

Tier Level

The approach adopted is considered to be a mix of Tiers 2 and 3.

Emission Factors

Calorific Values for HFO, Diesel and Kerosene were obtained from the suppliers. Test analysis reports submitted with each fuel consignment are verified locally through testing by accredited laboratories. The calorific value of coal has been calculated from data obtained with each consignment imported by the Coal Terminal Management Company (CTMC). The annual average of the calorific values have been calculated and used for calculating emissions for the inventory period. Default IPCC emission factors, based on the average carbon content of each fossil fuel used, were adopted for computing the GHG emissions. These and the NCVs are presented in Table 4.6.

Table 4.6 - EFs used for calculating CO_2 emissions from stationary combustion

Fuel	NCV [TJ/t]	EF [t C/TJ]	Source
Kerosene	0.04459	19.60	Table 1-2, 1-3, IPCC (1997)
Diesel Oil	0.04333	20.20	Table 1-2, 1-3, IPCC (1997)
Heavy fuel oil	0.04019	21.10	Table 1-2, 1-3, IPCC (1997)
Bituminous coal	0.02572	23.26	CTMC

SO_2 emissions have been calculated from the sulphur content of the fuels as per section 1.4.2.6 of the IPCC Guidelines. EFs for the remaining GHGs have been taken from Tables 1-15 to 1-19 of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997).

Table 4.7 - EFs for Non-CO_2 gases (kg Tj^{-1}) from stationary combustion

FUEL	CH_4	N_2O	NO_x	CO	NMVOC
IPCC (1997), Table No.	1-15	1.16	1.17	1.18	1.19
Coal	1	1.4	300	20	5
HFO	3	0.6	200	15	5
Diesel	3	0.6	200	15	5
Kerosene	3	0.6	200	15	5
Bagasse	30	4	100	4000	50
Fuelwood	30	4	100	2000	50

4.2.3 Results

Aggregated emissions from the energy industries increased from 1024 Gg CO_2-eq in the year 2000 to 1670 Gg CO_2-eq in 2006 which represented an increase of 63.1%. The share from electricity production increased from 44.2 % to 53.0% during the same period (Table 4.8).

Table 4.8 – GHG Emissions (Gg CO_2 -eq) from Public electricity and Heat Production (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
ENERGY SECTOR	2315	2503	2521	2692	2692	2855	3154	5.4
Energy Industries	1024	1166	1165	1291	1294	1430	1670	8.7
% Energy sector	**44.2**	**46.6**	**46.2**	**47.9**	**48.0**	**50.1**	**53.0**	

Carbon dioxide was the major gas emitted and its emissions rose by 641 Gg from 1021 Gg in the year 2000 to plummet at 1663 Gg in 2006 (Table 4.9).

Table 4.9 - Emissions (Gg) by gas from Public electricity and Heat Production (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	1021	1163	1159	1285	1288	1424	1663
CH_4	0.026	0.028	0.027	0.034	0.036	0.032	0.04
N_2O	0.008	0.014	0.015	0.016	0.016	0.017	0.023
NO_x	3.323	3.543	3.742	4.048	3.99	4.114	5.394
CO	0.238	0.248	0.262	0.284	0.282	0.287	0.379
NMVOC	0.069	0.071	0.075	0.082	0.083	0.081	0.105
SO_2	4.714	5.342	5.449	6.001	5.840	6.241	7.905

4.2.4 Time-series Consistency and Uncertainty

Emissions from the electricity generation sector have been calculated using the same data source for all years covering the period 2000-2006. Moreover, the methodology used, inclusive of the EFs, has been kept constant for all the inventory years, thereby maintaining consistency in the time series throughout the inventory period 2000-2006.

Based on the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) and the quality of records available locally, the uncertainty was assumed at 1% for activity data. The uncertainty associated with EF has been assumed to be 3% for CO_2. For Non-CO_2 EFs, the uncertainty has been assumed to be 50% for both CH_4 and N_2O. The combined uncertainty was thus 3.16 % for CO_2 and 50.01% for CH_4 and N_2O (Table 4.10).

Table 4.10 – AD and EF uncertainty in the Public electricity and Heat Production subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
$1CO_2$	1.0	3.0	3.16
CH_4	1.0	50.0	50.01
N_2O	1.0	50.0	50.01

4.2.5 QA/QC and Verification

A systematic QA/QC was carried out at each step of the inventory process, verification being made of all data used, and the computation exercise. The main quality control check for activity data concerned consistency and reliability. Consumption data used by the power plants were crosschecked with those archived by the CSO. EFs were scrutinized for their appropriateness before adoption. Calculations done with the GHG software and separate worksheets were team reviewed.

4.2.6 Recalculations

Recalculations concerned adoption of Tier 2 or higher level for this inventory as opposed to Tier 1 previously used for the period 2000 - 2006. A comparison of the results is given in Table 4.11. The difference stemming from the recalculations varied from 11.6% to 17.4%. Emissions were consistently

overestimated in the previous exercises. The advantage of moving to higher tiers is clearly apparent as precision is gained with the use of disaggregated activity data.

Table 4.11 – Recalculations results (Gg CO_2 -eq) for period 2000 – 2006

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	1201.8	1339.3	1347.0	1439.9	1452.3	1652.5	1949.8
Present Inventory	1023.6	1167.6	1164.5	1290.7	1293.7	1430.2	1670.4
% Difference between present and previous	-17.4	-14.7	-15.7	-11.6	-12.3	-15.5	-16.7

4.2.7 Planned Improvements

Gaps in activity data resulting from confidentiality or other reasons will be looked into. This will provide basic data of improved quality for calculation of EFs for the various types of fuel. Default EFs from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) have been used throughout the exercise. Additionally, a country specific EF is planned, especially for the local feedstock bagasse to further improve the quality of the inventory.

4.3 MANUFACTURING INDUSTRIES AND CONSTRUCTION (Category 1 A 2)

4.3.1 Source Category Description

Emissions from this category occurred mainly from burning of fuels in boilers for production of heat and steam in the textile industry. The IPCC sub-categories 'Iron and Steel', 'Non-Ferrous Metals', 'Chemicals' and 'Pulp, Paper and Print', where direct fuel combustion is involved, do not occur in Mauritius. Therefore, only the activities falling under the sub-category 'Food Processing, Beverages and Tobacco' have been covered. 'Construction' and 'Textile Industries' have been included under the 'Others' sub-category.

Textile Industries, which burned fossil fuels in boilers for generating steam, dominated the 'Manufacturing Industries and Construction' sub-category. 'Food Processing, Beverages and Tobacco' comprised Sugar manufacture, Tea industries, Bakeries and Foods industries that burned fossil fuels for their activities. The Construction sector has also been included in this category where fuel is combusted in machines.

4.3.2 Methodological Issues

The methodology applied for the different sub-categories have been adopted from *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). They are the same as those used for the Public Electricity and Heat Production sub-category. However, some of the non-CO_2 emissions have been adopted from the Emissions Factor Data Base (EFDB) for higher accuracy.

Activity Data

Each activity area has been treated on an individual basis within the Food processing, Beverages and Tobacco sub-categories.

Table 4.12 – Fuel Consumption (t) in Manufacturing Industries

		2000	2001	2002	2003	2004	2005	2006
Diesel / Gas Oil	**TOTAL**	**41600**	**37533**	**37409**	**41273**	**43372**	**41127**	**49636**
	Sugar Industry	1118.3	1063.4	1039.4	1065.8	1028	1087.1	1527.9
	Tea Industry	1379	549	323	253	212	-	-
	EPZ	14197	12695	12454	15069	16654	11954	19200
	Construction	2860	3010	3200	3530	3550	3390	3560
	Bakery, Food and other miscellaneous industries	22046	20216	20393	21355	21928	24696	25348
Fuel Oil / Heavy Oil	**TOTAL**	**49000**	**60630**	**61439**	**55615**	**49857**	**49318**	**60687**
	Sugar Industry	369	477	313	564	358	350	300
	Tea Industry	229	594	496	517	450	400	420
	EPZ	40692	50806	52100	46366	40204	42150	45220
	Construction	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Bakery, Food and other miscellaneous industries	7710	8753	8530	8168	8845	6418	14747
LPG / Gas	**TOTAL**	**3689**	**3650**	**3502**	**2964**	**2756**	**3904**	**3965**
	Sugar Industry	**0**	15	2	47	**0**	0	0
	Tea Industry	373	378	285	164	**0**	0	0
	EPZ	2374	2267	2118	1707	1696	3493	766
	Construction	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Bakery, Food and other miscellaneous industries	942	990	1097	1046	1060	411	3199
Coal	**TOTAL**	**24464**	**25781**	**25888**	**29000**	**24220**	**23162**	**21666**
	Sugar Industry	0	0	0	0	0	0	0
	Tea Industry	0	0	0	0	0	0	0
	EPZ	17125	18047	18122	20300	16954	16213	15166
	Construction	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Bakery, Food and other miscellaneous industries	7339.2	7734.3	7766.4	8700	7266	6948.6	6499.8
Bagasse	**TOTAL**	**531800**	**529000**	**442722**	**510246**	**518379**	**476198**	**463563**
	Sugar Industry	526800	524000	437722	505246	513379	471198	458563
	Tea Industry	2000	2000	2000	2000	2000	2000	2000
	EPZ*[1]	1500	1500	1500	1500	1500	1500	1500
	Construction	0	0	0	0	0	0	0
	Bakery, Food and other miscellaneous industries	1500	1500	1500	1500	1500	1500	1500
Fuel wood	**TOTAL**	**1500**	**1500**	**1450**	**1430**	**1415**	**1400**	**1425**
	Sugar Industry	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Tea Industry	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	EPZ	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Construction	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Bakery, Food and other miscellaneous industries	1500	1500	1450	1430	1415	1400	1425

Note 1: imputed value

Tier Level

The data utilized in the energy balance have been disaggregated by activity type to enable the use of Tier 2.

Emission Factors

The IPCC default EFs that have been mostly used for calculating emissions are presented in Tables 4.13 and 4.14. Due to the unavailability of an EF for bagasse, the one developed by Australia has been adopted as the bagasse is considered similar to that used in Mauritius. The carbon EF for coal was derived from data obtained from the CTMC, which supplied the local market.

Table 4.13 – CO_2 emission and Conversion Factors for fuels in Manufacturing Industries

FUEL	NCV (TJ/t)	EF (TC/TJ)	SOURCE
Coal	0.02572	23.26	CS
HFO	0.04019	21.1	Table 1.3 & 1.4, IPCC (1997)
Diesel	0.04333	20.2	Table 1.3 & 1.4, IPCC (1997)
LPG	0.04731	17.2	Table 1.3 & 1.4, IPCC (1997
Bagasse	0.00752	25.9	Australia NIR 2006, Table 3.2, pp 41
Fuelwood	0.01550	25.6	Table 1.3 & 1.4, IPCC (1997)

Table 4.14 – Non-CO_2 emission and Conversion Factors for fuels in Manufacturing Industries

	EF by Gas (Kg/TJ)				
Fuel	**CH_4**	**N_2O**	**NO_X**	**CO**	**NMVOC**
Diesel	2	0.6	200	10	5
HFO	2	0.6	200	10	5
LPG	0.9	4	-	-	-
Coal	10	1.4	300	150	20
Bagasse	30	4	100	4000	50
Fuelwood	30	4	100	2000	50

4.3.3 Results

Activities in the Manufacturing and Construction sub-sector led to 358 Gg of CO_2 -eq emissions in the year 2000 which increased by 11.4% to 410 Gg in 2006 (Table 4.15). All activity areas witnessed and increase over the study period apart from tea production (table 4.17). Aggregated emissions in this sector represented 13.8% of total aggregated emissions in the Energy sector.

Table 4.15 – GHG Emissions (Gg CO_2-eq) from Manufacturing and Construction (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Energy Sector	2315	2503	2521	2692	2692	2855	3154
Manufacturing Industries and Construction	358	385	384	385	363	352	410
% of Energy sector	**15.5**	**15.4**	**15.2**	**14.3**	**13.5**	**12.3**	**13.0**

CO_2 remained the major gas emitted in this source category. It fluctuated between the years 2000 to 2006. Higher emissions (401.64 Gg) were recorded in 2006 against 349.27 Gg in the year 2000 (Table 4.16). Emissions by gas and activity area are given in Table 4.17.

Table 4.16 – Emissions (Gg) by gas from Manufacturing and Construction (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	349.27	376.16	376.51	376.61	353.89	343.81	401.64
CH_4	0.14	0.14	0.12	0.13	0.13	0.12	0.12
N_2O	0.02	0.02	0.02	0.02	0.02	0.02	0.02
NO_x	1.78	1.46	1.39	1.45	1.39	1.33	1.47
CO	4.16	4.15	3.49	4.00	4.06	3.74	3.65
NMVOC	0.24	0.24	0.20	0.23	0.23	0.21	0.21
SO_2	2.04	2.27	1.69	4.36	1.75	1.20	1.35

Table 4.17 – Emissions (Gg) by gas and activity area for Manufacturing and Construction (2000 – 2006)

		2000	2001	2002	2003	2004	2005	2006
SUGAR	CO_2	4.581	4.784	4.182	5.158	4.263	4.435	5.684
	CH_4	0.1190	0.1183	0.0989	0.1141	0.1159	0.1064	0.1036
	N_2O	0.0159	0.0158	0.0132	0.0152	0.0155	0.0142	0.0138
	NO_x	0.4088	0.4072	0.3407	0.3942	0.3978	0.3666	0.3605
	CO	3.9622	3.9411	3.2922	3.8002	3.8612	3.5440	3.4492
	NMVOC	0.1984	0.1974	0.1649	0.1903	0.1933	0.1775	0.1728
	SO_2	0.2923	0.2911	0.2434	0.2815	0.2845	0.2620	0.2571
TEA	CO_2	6.188	4.689	3.395	2.879	2.058	1.231	1.293
	CH_4	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	N_2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NO_x	0.019	0.015	0.011	0.009	0.007	0.005	0.005
	CO	0.016	0.016	0.016	0.015	0.015	0.015	0.015
	NMVOC	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	SO_2	0.009	0.007	0.006	0.005	0.005	0.004	0.004
BAKERY, FOOD AND OTHER	CO_2	114.848	114.370	113.074	117.763	117.891	114.706	148.222
	CH_4	0.010	0.006	0.006	0.000	0.204	0.000	0.203
	N_2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NO_x	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NMVOC	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	SO_2	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MANUFACTURE OF TEXTILES	CO_2	214.569	242.754	245.694	239.594	218.385	212.654	235.131
	CH_4	0.006	0.006	0.006	0.006	0.006	0.006	0.006
	N_2O	0.002	0.002	0.002	0.002	0.002	0.003	0.002
	NO_x	1.000	0.681	0.688	0.677	0.615	0.600	0.654
	CO	0.044	0.048	0.048	0.048	0.044	0.043	0.046
	NMVOC	0.015	0.016	0.017	0.016	0.015	0.015	0.016
	SO_2	0.531	0.596	0.604	0.608	0.537	0.513	0.557
CONSTRUCTION	CO_2	9.087	9.563	10.167	11.216	11.297	10.789	11.311
	CH_4	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N_2O	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	NO_x	0.026	0.026	0.028	0.031	0.031	0.029	0.031
	CO	0.001	0.001	0.001	0.002	0.002	0.002	0.002
	NMVOC	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	SO_2	0.0170	0.0180	0.0192	0.0210	0.1350	0.1340	0.0210

4.3.4 Time-series Consistency and Uncertainty

Emissions from the Manufacturing and Construction sub-sector have been calculated using the same data sources for every year in the period 2000-2006. The methodology has also been kept constant for each of the inventory years and the time series consistency has been maintained throughout the reported period.

The levels of uncertainty for the assessment have been adopted after full consideration of the processes involved. The uncertainty associated with the AD has been estimated at 10% for all gases. With regards to EF uncertainty, 3% has been used for CO_2 AD and 50% for Non – CO_2 gases. The combined uncertainty was thus around 10% for CO_2 and around 50% for CH_4 and N_2O (Table 4.18).

Table 4.18 – AD and EF uncertainty in the Manufacturing and Construction subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
CO_2	10	3	10.44
CH_4	10	50	50.99
N_2O	10	50	50.99

4.3.5 QA/QC and Verification

For the Manufacturing and Construction sub-sector, the main quality control check was applied to the AD at the different steps when compiling emissions. EFs were scrutinized for their appropriateness before adoption. All data and computations were regularly checked for consistency and accuracy. Final verification was done by independent members of the inventory team.

4.3.6 Recalculations

Some of the emissions published in the inventories for the period 2000-2006 were recalculated. The differences between the two methods are presented in Table 4.19 below. The previous exercise both underestimated and overestimated emissions depending on the year. It varied from -7.1% in the year 2000 to1.1% more in the years 2005.

Table 4.19 – Recalculations results (Gg CO_2 -eq) for period 2000 – 2006

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	383.5	385.7	393.9	395.7	371.6	348.4	407.0
Present Inventory	358.1	385.0	384.2	385.2	362.6	352.1	409.5
% Difference present to previous	**-7.1**	**-0.2**	**-2.5**	**-2.7**	**-2.5**	**1.1**	**0.6**

4.3.7 Planned Improvements

Data on actual consumption by each industrial unit and other parameters such as type of technology, age and physical characteristics such as carbon content of biomass are not collected. This needs to be implemented for each industry type and a database for all fuels consumed by plant type have to be developed. Country specific EFs can also be determined for future inventories. Air Emission monitoring from industries are occasional and this also can be envisaged. As this will involve quite onerous investments and many stakeholders from the private sector, it may be difficult to achieve.

4.4 TRANSPORT (Category 1A3)

4.4.1 Key Category

The transport sub-category includes emissions from fuel combustion for the transport of passengers and freight in three distinct areas: road transportation; domestic aviation and domestic navigation as well as those from use of pleasure crafts. Emissions from aircraft and marine vessels involved in international transport have been excluded from the total in the inventory.

4.4.2 Overall Summary

Transport represented the second largest source of GHG emissions in the energy sector. It emitted 732.7 Gg CO_2- eq in the year 2000 that represented 31.7% of total energy emissions. Emissions increased over the years to reach 856.6 Gg CO_2- eq, 27.2% of total energy emissions in 2006.

Table 4.20 - GHG emissions (Gg CO_2- eq) for the Transport sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
TOTAL ENERGY	**2314.5**	**2502.6**	**2520.7**	**2692.1**	**2692.1**	**2855.0**	**3153.6**
TOTAL TRANSPORT	**732.7**	**748.7**	**769.8**	**796.6**	**814.0**	**844.6**	**856.6**
Civil Aviation	18.2	19.7	20.4	19.7	17.7	17.4	17.3
Road Transport	687.5	702.6	723.8	749.7	771.1	799.4	814.3
National Navigation	26.9	26.4	25.7	27.2	25.2	27.8	25.0
Transport % Energy Sector	31.7	29.9	30.5	29.6	30.2	29.6	27.2

Emissions from road transportation, which dominated this sub-category, increased significantly over time while the share of Aviation increased to a lesser extent and that of Navigation stayed more or less constant (Figure 4.5).

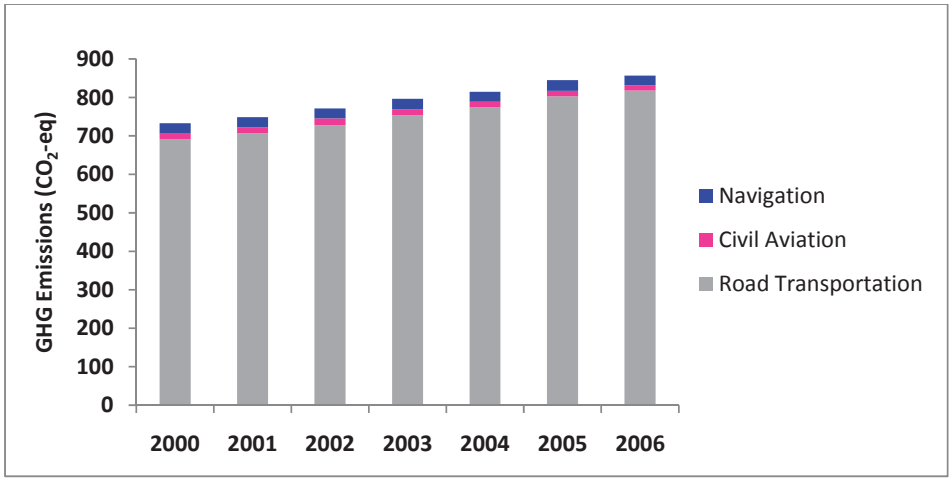


Figure 4.5 - GHG emissions (Gg CO_2-eq) from the Transport sector (2000 – 2006)

The main gas emitted was CO_2 and emissions increased from 720.77 Gg to 838.12 Gg during the period 2000 to 2006 (Table 4.21).

Table 4.21 - Emissions by gas (Gg) from the Transport sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	720.770	736.632	757.830	781.627	797.708	826.090	838.117
CH_4	0.204	0.203	0.179	0.174	0.163	0.175	0.171
N_2O	0.025	0.025	0.027	0.036	0.042	0.048	0.048
NO_x	6.652	6.743	6.931	6.939	6.905	7.116	7.147
CO	48.638	48.866	47.282	43.719	41.708	40.924	40.371
NMVOC	12.889	13.116	12.690	12.477	11.582	12.001	11.854
SO_2	1.607	1.538	1.666	1.698	1.721	1.739	1.758

4.4.3 Transport - Civil Aviation (Category 1A3a)

Civil aviation concerned mainly flights to and from Rodrigues, the outer island needing this connection, as well as police operations involving helicopters and military air vessels. Disaggregation of fuel consumption between domestic and international aviation was worked out from flight statistics (Landing and Take-Offs – LTO) provided by civil aviation authorities and the domestic carrier, Air Mauritius. Non-domestic emissions have been reported under memo items.

4.4.3.1 Source Category Description

Emissions from this sub-source category are from fuel combustion from aircrafts of the ATR, the SAAB 340 and the Beechcraft 1900D types which provided domestic air transport services. These aircrafts performed an average of 2 to 3 trips daily.

4.4.3.2 Methodological Issues

Activity Data

Fuel consumption data for each flight, cruise and LTO inclusive, was 2500 litres and was as per Table 4.22 during the inventory period. The data has remained almost constant as the number of flights performed was restricted by the number of aircrafts available.

Table 4.22 –Fuel consumption (t) in the Civil Aviation sub-category (2000 – 2006)

YEAR	2000	2001	2002	2003	2004	2005	2006
Fuel consumed	4375.6	4874.8	5229	5050.8	4493.5	4330.9	4317.2

Tier Level

GHG emissions for Civil Aviation were calculated using the Tier 1 level on the basis of fuel consumed and with default EFs for aviation fuel.

Emission Factors

EFs for both CO_2 and Non-CO_2 were fuel based and the fuel consumed was jet kerosene. The EFs (Table 4.23) were from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997).

Table 4.23 – EFs adopted in the Civil Aviation sub-category

Gas	SYMBOL	UNIT	EF	SOURCE
CO_2	NCV	TJ / t	0.04459	Table 1-3, IPCC (1997)
	Emission factor	t C / TJ	19.5	Table 1-4, IPCC (1997)
	Oxidation factor	%	99	Table 1-6 IPCC (1997)
CH4		Kg / TJ	0.5	Table 1-7, IPCC (1997)
N2O		Kg / TJ	2	Table 1-8, IPCC (1997)
NOx		Kg / TJ	300	Table 1-9, IPCC (1997)
CO		Kg / TJ	100	Table 1-10, IPCC (1997)
NMVOC		Kg / TJ	50	Table 1-11, IPCC (1997)
SO_2		Kg / TJ	0.05	Section 1.4.2.6, IPCC (1997)

4.4.3.3 Results

GHG emissions from this sub-sector were 18.2 Gg of CO_2 -eq in 2000. It increased slightly up to 2002 with a decrease thereafter to slightly fall to 17.3 Gg of CO_2 -eq in the year 2006. It represented around 2.0 % of total emissions in the transport sub-category in the year 2006.

Table 4.24 – GHG Emissions (Gg CO_2 eq) in the Civil Aviation sub-sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Transport	732.7	748.7	769.8	796.6	814.0	844.6	856.6
Civil Aviation	18.2	19.7	20.4	19.7	17.7	17.4	17.3
% Civil Aviation	**2.5**	**2.6**	**2.6**	**2.5**	**2.2**	**2.1**	**2.0**

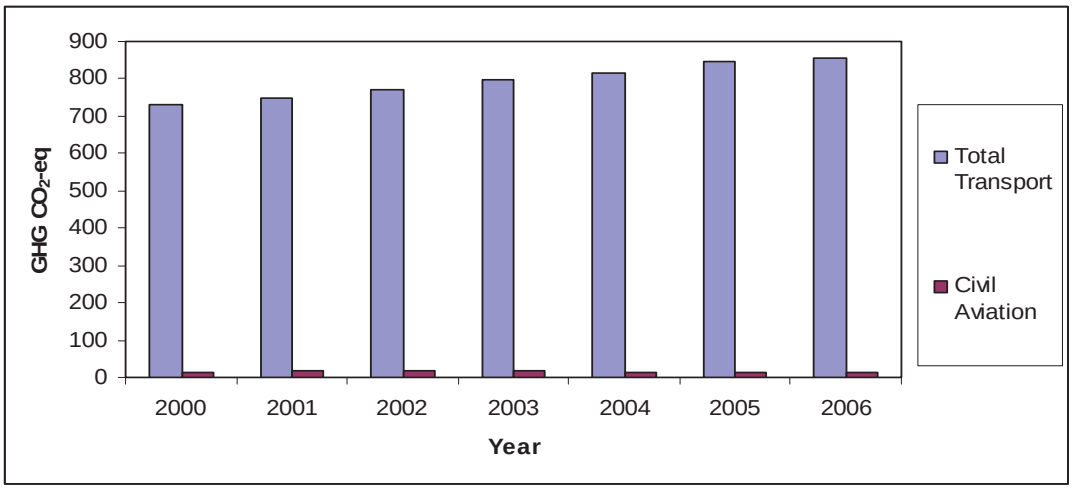


Figure 4.6 - GHG Emissions (Gg CO_2-eq) in the Civil Aviation sub-sector (2000 – 2006)

CO_2 dominated the emissions throughout the reporting period with slight variations for all gases.

Table 4.25 – Emissions by gas (Gg) in the Civil Aviation sub-sector (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	13.8107	15.3863	16.5043	15.9419	14.1828	13.6696	13.6264
CH_4	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
N_2O	0.0004	0.0004	0.0005	0.0005	0.0004	0.0004	0.0004
NO_x	0.0585	0.0652	0.0699	0.0676	0.0601	0.0579	0.0578
CO	0.0195	0.0217	0.0233	0.0225	0.0200	0.0193	0.0193
NMVOC	0.0098	0.0109	0.0117	0.0113	0.0100	0.0097	0.0096
SO_2	0.0044	0.0049	0.0052	0.0051	0.0045	0.0043	0.0043

4.4.3.4 Time-series Consistency and Uncertainty

Emissions from Civil Aviation have been calculated using the same data source for every year of the inventory period 2000-2006. The methodology used was constant for all inventory years. Thus time series consistency has been maintained throughout the inventory period 2000-2006.

Uncertainty was estimated by the GHG team of experts on levels recommended by the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). For AD 5% was adopted for all gases. For the EFs, 3 % was used for CO_2, 6 % for CH_4 and 30 % for N_2O. Estimated combined uncertainty was 5.83 % for CO_2, 7.81 % for CH_4 and 30.41 % for N_2O (Table 4.26).

Table 4.26 – AD and EF uncertainty in the Civil Aviation subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
CO_2	5.0	3.0	5.83
CH_4	5.0	6.0	7.81
N_2O	5.0	30.0	30.41

4.4.3.5 QA/QC and Verification

This category also had QA/QC checks performed on the AD and EFs used as well as on the calculation steps. Independent experts of the GHG inventory team verified all workings in the end.

4.4.3.6 Recalculations

There was no recalculation done since it is the first time that this sub-category is included.

4.4.3.7 Planned Improvements

The data on flights by aircraft types may be incomplete as there is no databasing with the CSO. The amount of fuel burned per flight is also not systematically recorded. Detailed data collection of these parameters will permit the use of higher tiers for calculations and enhance the quality of the inventory. Planned improvements will therefore consist in the setting up of an effective archiving system to capture LTO data by aircraft type and fuel consumed per flight.

4.4.4 Transport - Road Transportation (Category 1A3b)

4.4.4.1 Source Category Description

Road transportation is the only mode of land transport in Mauritius. It catered for both passenger and freight transport. The fleet of vehicles grew at an average rate of 4.6% per annum and increased from 244,000 in 2000 to 319,000 vehicles in 2006. Motorization rate has gone up by over 30% during the inventory period from 200 to 265 vehicles per thousand people. The share of transport in total energy demand was just over 48%.

Fuel consumption for a number of off-road vehicles used in the agricultural sector and their emissions have been allocated to the agriculture/forestry/fishing sub-category within energy industries to prevent double counting. Emissions from mobile utility vehicles/engines such as tractors, construction equipments, unregistered tractors/backhoe loaders, forklifts and bulldozers have been accounted for under the Manufacturing Industries and Construction source category.

4.4.4.2 Methodological Issues

Activity Data

The fleet of vehicles has been categorised as per Table 4.27 and the different groups have been further subdivided to attribute appropriate operation data to each group. This enabled more accurate emission calculations to be effected.

Table 4.27 - Vehicle category split for road transportation

CATEGORY	TYPE OF VEHICLE
Passenger vehicles	Car
	Taxi car
	Dual purpose vehicle
Light commercial vehicles	Contract bus, i.e, motor car ≤ 14 seats
	Goods vehicles < 3.5 t
Medium duty trucks	Goods vehicles 3.5 t < 10 t
Heavy duty trucks	Goods vehicles 10 t < 20 t
	Goods vehicles ≥ 20 t
	Tractor
	Road roller
	Other motorized heavy vehicles
Buses	Contract bus, i.e, motor car > 14 seats
	Heavy motor car
	Bus (operating under road service licence)
Motor cycle	Auto cycle ≤ 50 c.c
	Motor cycle 51 c.c < 125 c.c
	Motor cycle ≥ 125 c.c

Activity data

Fuel consumption for the different categories of vehicles was calculated from real AD obtained from transport operators and sample surveys. The number of vehicles in operation and their categorization by fuel type was worked out from the database of the NTA. Details of registered vehicles by fuel type for the inventory period were as follows:

Table 4.28 - Vehicles by sub-category (2000 – 2006)

	FUEL	2000	2001	2002	2003	2004	2005	2006
Total number of vehicles registered		**244969**	**256294**	**267627**	**278750**	**294671**	**308923**	**325084**
Private cars	**TOTAL**	**48747**	**51285**	**55921**	**60937**	**69147**	**76174**	**83199**
	Gasoline	34588	36338	39028	41440	47388	47093	52196
	Diesel	13427	13853	15262	16107	18074	18033	20203
	LPG	732	1094	1631	3390	3685	11048	10800
Dual purpose vehicles	**TOTAL**	**34912**	**36984**	**38129**	**39383**	**40667**	**42026**	**43221**
	Gasoline	24566	26025	26830	27712	28615	29573	30411
	Diesel	10346	10959	11299	11671	12052	12453	12810
Taxi cars	**TOTAL**	**5039**	**5318**	**5801**	**5979**	**6482**	**6798**	**6860**
	Gasoline	3460	3649	4031	4049	4287	4523	4155
	Diesel	1483	1564	1631	1735	1837	1872	2179
	LPG	96	105	139	195	358	403	526
Light commercial vehicles	Diesel	**20608**	**22822**	**24164**	**25111**	**26182**	**27039**	**27626**
Medium duty trucks	Diesel	**6666**	**6931**	**7158**	**7344**	**7533**	**7713**	**7872**
Heavy duty trucks	Diesel	**7349**	**7473**	**7699**	**8018**	**8188**	**8353**	**8461**
Heavy motor car	Diesel	**916**	**923**	**944**	**958**	**1020**	**1045**	**1118**
Contract bus	Diesel	**652**	**639**	**650**	**636**	**610**	**686**	**731**
Bus RSL	Diesel	**1798**	**1825**	**1858**	**1882**	**1906**	**1933**	**1941**
Total two – wheelers		**118282**	**122094**	**125303**	**128502**	**132936**	**137156**	**144055**
Auto cycle	Gasoline	92493	95413	97668	99474	101475	103126	104865
Motor cycle	Gasoline	25789	26681	27635	29028	31461	34030	39190

Table 4.29 - Fuel Consumption (t) for road transport (2000 – 2006)

FUEL	2000	2001	2002	2003	2004	2005	2006
Gasoline	84503	84592	84368	84553	86495	88051	86904
Diesel	131640	136142	142414	129019	133820	155574	161281
LPG	618	810	1173	2114	2659	6683	6796

Tier Level

Since disaggregated data were available, emissions for the transport sector have been calculated using Tier 2 level. The computations have taken into account:

- Vehicle age and emission abatement technology;
- Fuel type and fuel consumption by engine capacity;
- Fuel combustion and emission control technologies; and
- Vehicle kilometres travelled.

Emission factors

Emission and conversion factors adopted for calculating CO_2 emissions were obtained from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and are given in Table 4.31.

Table 4.30 – Emission and Conversion Factors for CO_2 emissions in Road Transportation

	UNIT	VALUE	SOURCE
NCV - Gasoline	**TJ / t**	0.04480	Table 1-3, IPCC (1997)
NCV - Diesel	**TJ / t**	0.04333	Table 1-3, IPCC (1997)
NCV - LPG	**TJ / t**	0.04731	Table 1-3, IPCC (1997)
CO_2 EF – Gasoline	t C / TJ	18.9	Table 1-2, IPCC (1997)
CO_2 EF – Diesel	t C / TJ	20.2	Table 1-2, IPCC (1997) Vol 2
CO_2 EF - LPG	t C / TJ	17.2	Table 1-2, IPCC (1997) Vol 2

The estimation of non-CO_2 emissions has been effected using EFs appropriate for the combustion and emission control technologies of the various categories of vehicles and fuel type. Data on emission control technology type and vehicle registration years are presented in Table 4.31.

Table 4.31 - Emission Control Technology Type and Vehicle Registration year

	Technology	Year of Registration
Gasoline Passenger Vehicles	Uncontrolled	1994
	Non-catalyst controls	September 2002
	3 – way catalyst	2006
Diesel Passenger Vehicles	Uncontrolled	1996
	Moderate Control	2005
	Advance control	2006
Light and Heavy duty vehicles	Uncontrolled	1996
	Moderate Control	2005
	Advance control	2006
Motorcycles	Uncontrolled	2006

The choice of US versus European default factors have been dictated mainly by the emission control technologies corresponding with the fleet of vehicles in Mauritius. The fuel efficiency of the vehicles has been another determining factor in the choice of default EFs used and are given in Table 4.32.

Table 4.32 - EFs for Non-CO_2 Gases for fuel combustion in Road Transportation

VEHICLE	FUEL	TECHNOLOGY	EF (kg/TJ)						Source
			CH_4	N_2O	NO_X	CO	NMVOC	SO_2	
Car	Gasoline	Non catalyst control	30	2	700	9300	1700	0.1	Table 1-36, IPCC (1997)
		Uncontrolled	20	1	600	13000	1500	0.1	
Car	Diesel	Moderate	2	3	156	167	49	0.25	Table 1-30, IPCC (1997)
		Uncontrolled	3	3	150	137	54	0.25	
Car	LPG		20	0	900	2600	600	0	Table 1-45, IPCC (1997)
Contract bus	Diesel	Moderate	1	4	400	400	100	0.25	Table 1-38, IPCC (1997)
		Uncontrolled	1	4	400	400	100	0.25	
Goods vehicles	Diesel	Moderate	6	3	1000	900	200	0.25	Table 1-39, IPCC (1997)
		Uncontrolled	6	3	1000	900	200	0.25	
Two-Wheeler	Gasoline	Autocycle	100	1	60	13000	8300	0.1	Table 1-42, IPCC (1997
		Motorcycle	100	2	60	17000	12000	0.1	

4.4.4.3 Results

GHG emissions from road transportation were estimated at 814.3 (Gg) CO_2 eq in 2006 representing an increase of 16.9% over the year 2000. It accounted for about 30% of national CO_2 emissions and road transportation was responsible for some 95% of total emissions within this sub-sector (Figure 4.6 and Table 4.34). The average annual increase from 2000 to 2006 for Road Transportation was 2.9%

Table 4.33 - GHG emissions (Gg CO_2-eq) from Road Transportation (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006	Average annual change (%)
Total Transport	732.7	748.7	769.8	796.6	814.0	844.6	856.6	2.6
Road Transport	687.5	702.6	723.8	749.7	771.1	799.4	814.3	2.9
% Road Transport	**93.8**	**93.8**	**94.0**	**94.1**	**94.7**	**94.6**	**95.1**	

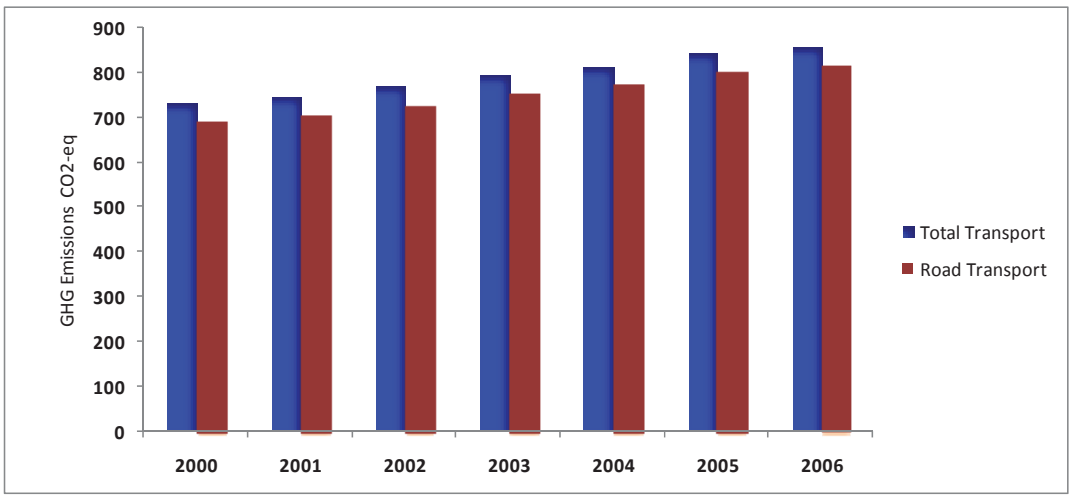


Figure 4.7 – GHG emission from Road Transport sub-category (2000 – 2006)

Table 4.34 - GHG emissions by gas (Gg) in the Road Transportation (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	680.078	694.946	715.710	738.597	758.341	784.665	799.506
CH_4	0.203	0.201	0.177	0.172	0.162	0.173	0.169
N2O	0.024	0.025	0.026	0.036	0.041	0.047	0.048
NO_x	6.043	6.139	6.338	6.316	6.331	6.488	6.581
CO	48.252	48.485	46.910	43.327	41.346	40.525	40.012
NMVOC	12.806	13.034	12.609	12.392	11.503	11.915	11.777
SO_2	0.827	0.756	0.881	0.913	0.937	0.954	0.980

4.4.4.4 Time-series Consistency and Uncertainty

AD used throughout the inventory period were reliable and consistent. The same methodology has been consistently applied with only slight variations in EFs to cater for changes linked with new emission control technologies.

The amount of fuel consumed has been obtained from reliable fleet data, vehicle kilometers from real AD sought from operators and surveys carried out while fuel efficiency of vehicles took into consideration the effect of age and usage. The amount of fuel consumed has been crosschecked with the amount allocated to the transport sector in the national energy balance and was found to be within a good range of consistency. The other perceived uncertainty may have arisen from the lack of data on hot/cold starts in the workings as from September 2002 to 2006 as gasoline driven vehicles from that month onwards were equipped with catalytic convertors and were using unleaded fuel. These do not operate efficiently until they have reached fully heated conditions. The percentage uncertainty in AD is estimated at 5% for all gases.

EFs adopted were specific to the type of fuel consumed and emission control technology. Uncertainties associated with the gases were attributed to lack of data under hot/cold operating conditions and the year the emission control technology was introduced. The uncertainties for EFs are estimated to be of the order of 3% for CO_2, 6% for CH_4 and 30% for N_2O. The combined uncertainties were estimated at 5.83% for CO_2, 7.81% for CH_4 and 30.41% for N_2O.

The Table below gives the estimate of uncertainty worked out on the basis of the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000).

Table 4.35 – AD and EF uncertainty in the Road Transportation subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
$1CO_2$	5	3	5.83
CH_4	5	6	7.81
N_2O	5	30	30.41

4.4.4.5 QA/QC and Verification

Quality control activities for the inventory preparation were performed by way of constant interaction and information sharing among members of the Inventory team. With regards to data collection, methodology selection and use, analysis of worksheets and GHG compilations stages, regular consultations were held between the team responsible for inventory preparation, the team leader and the Technical coordinator to ascertain accuracy and relevance.

In each case, data gathered has been verified by cross checking with other critical sources to verify reliability.

The final draft of the inventory was subject to a full audit by a team of experts from the energy sector during the course of a 2-day working session called for that specific purpose.

4.4.4.6 Recalculations

Recalculations have been performed for the full inventory period, the difference being Tier 2 as opposed to Tier 1 that was used previously. The results are quite close with the difference ranging from a maximum of 6.0% underestimation to 6.8% overestimation. Underestimation occurred only in the year 2000 while for the remaining 6 years, the results showed higher values. These are however considered very satisfactory with regard to fuel allocation in the energy balance.

Table 4.36 - Recalculations results (Gg CO_2 -eq) for period 2000 – 2006

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	728.5	692.8	701.3	714.1	718.7	792.8	799.4
Present Inventory	687.5	702.6	723.8	749.7	771.1	799.4	814.3
% Difference present to previous	**-6.0**	**1.4**	**3.1**	**4.7**	**6.8**	**0.8**	**1.8**

4.4.4.7 Planned Improvements

The present GHG inventory process has realized a significant leap forward as a result of the better reliability, quality and availability of AD used in the road transport sector. This has enabled GHG emissions to be calculated using Tier 2. Data gaps still exist for some parameters and have contributed to a low level of uncertainty.

The planned improvements are:

- Data gaps and uncertainties reduction;
- Further activity data collection improvement;
- Determine and use country specific EFs; and
- Use of models for refining compilations.

4.4.5 Transport - Navigation (Category 1A3d)

4.4.5.1 Source Category Description

Navigation comprised of inter-island cruises transporting both cargo and passengers to the outer islands of Mauritius mainly. It involved mainly two passenger – cum cargo vessels used for inter island maritime transport and also included fossil fuel burnt by pleasure crafts in the tourism industry and for private purposes. Fuels used were gasoline, diesel and fuel oil.

4.4.5.2 Methodological Issues

Activity Data

AD for this sub-category consisted of fuel consumption estimated from data provided by the different groups of operators. These data related to the number of registered boats and vessels but did not cater for details concerning intensity of activity and engine capacity among others.

Table 4.37 - Fuel consumption (t) in the Navigation sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Gasoline[1]	2900	2707	2479	2958	2339	3175	2231
Diesel[1,2]	1488	1191	1196	1196	1196	1196	1185
Fuel Oil[2]	4301	4301	4301	4301	4301	4301	4355

***Note 1**: Figures worked out from information obtained from AFRC and MTPA;*
***Note 2**: From Mauritius Shipping Corporation Ltd*

Tier Level

The GHG emissions were calculated using the Tier 1 approach on the basis of fuel consumption.

Emission Factors

EFs used were default values provided in IPCC (1997) for this sub-category. Those adopted for the GHG compilations are given in Table 4.38.

Table 4.38 – Emission and conversion factors adopted in the Navigation sub-category

	CO_2		CH_4	N_2O	NO_X	CO	NMVOC	SO_2
	NCV	Carbon EF)						
UNIT	TJ / t	t C/TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ
IPCC (1997) Table No.	1-3	1-4	1-7	1-8	1-9	1-10	1-11	Section 1.4.2.6
Gasoline	0.04480	18.9	5	0.6	1500	1000	200	0.3
Diesel	0.04333	20.2*	5	0.6	1500	1000	200	0.1
Fuel Oil	0.04019	21.1	5	0.6	1500	1000	200	1.0

*IPCC (1997), Vol 2

4.4.5.3 Results

Navigation emitted 26.9 Gg of CO_2-eq in the year 2000, representing 3.7% of the total for the transport category. From the year 2000 to 2006, emissions from this subsector fluctuated with a reduction of 7.0% recorded in 2006 (Table 4.39). Emissions by gas are given in Table 4.40.

Table 4.39 - GHG emissions (Gg CO_2-eq) in the Navigation sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Transport	732.7	748.7	769.8	796.6	814.0	844.6	856.6
National Navigation	26.9	26.4	25.7	27.2	25.2	27.8	25.0
% National Navigation	**3.7**	**3.5**	**3.3**	**3.4**	**3.1**	**3.3**	**2.9**

Table 4.40 - Emissions by gas (Gg) in the Navigation sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	26.881	26.300	25.615	27.088	25.185	27.755	24.984
CH_4	0.0018	0.0018	0.0017	0.0019	0.0017	0.0019	0.0017
N_2O	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
NO_x	0.5509	0.5382	0.5232	0.5554	0.5138	0.5699	0.5090
CO	0.3673	0.3588	0.3488	0.3702	0.3425	0.3800	0.3394
NMVOC	0.0735	0.0718	0.0698	0.0740	0.0685	0.0760	0.0679
SO_2	0.7756	0.7772	0.7793	0.7802	0.7790	0.7807	0.7736

4.4.5.4 Time-series Consistency and Uncertainty

AD were based on average vessel trips statistics which were well maintained by the same relevant authorities for the entire period of the inventory. Moreover fuel consumed was practically constant as the same distance was covered between the two islands. The same EFs were adopted throughout the reporting period. Thus the time series is considered consistent for both AD and EFs.

Uncertainty levels were estimated by the GHG expert group after analyzing possible responsible sources. A value of 10% was attributed for all gases for AD since they were estimates. Uncertainties for EFs were estimated to be of the order of 3% for CO_2, 6% for CH_4 and 30% for N_2O. The combined uncertainties reached 10.44 % for CO_2, 11.66 % for CH_4 and 31.62 % for N_2O

Table 4.41 – AD and EF uncertainty in the Navigation subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
CO_2	10	3	10.44
CH_4	10	6	11.66
N_2O	10	30	31.62

4.4.5.5 QA/QC and Verification

QA/QC procedures were applied throughout the different stages of the compilation process. AD were crosschecked from different sources for accuracy and reliability. Calculations were scrutinized to ensure that no mistakes crept in the workings.

4.4.5.6 Recalculations

Since this sub-sector was considered for the first time, no recalculations were made.

4.4.5.7 Planned Improvements

Planned improvements aim at setting up proper data collection and archiving. A more detailed database is needed on type of vessel, engine capacity, age and fuel consumption as well as detailed statistics on fuel consumption by pleasure crafts in order to better calculate emissions.

4.5 Energy Other Sectors (Category 1A4)

4.5.1 Key Source Category

The three sub-categories Commercial/Institutional, Residential and Agriculture/Forestry/Fishing have been covered in the inventory.

4.5.2 Summary

Total aggregated emissions in this source category varied between 200.0 and 228.1 Gg CO_2-eq during the period 2000 to 2006. Emissions in the Other Sectors sub-category represented around 8% of the total emissions of the energy category except for the year 2006 when it was only 6.9%.

Table 4.42 - GHG emissions (Gg CO_2-eq) in the Energy-Other sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Energy	2314.50	2502.64	2520.68	2692.10	2692.13	2855.01	3153.58
Energy- other sectors	200.0	202.5	202.1	219.6	222.0	228.1	217.0
% Energy- other Sectors	**8.6**	**8.1**	**8.0**	**8.2**	**8.2**	**8.0**	**6.9**

The total emissions from this source category in 2000 were as follows: 196.1 Gg of CO_2 , 0.1 Gg of CH_4, 0.01 Gg of N_2O, 0.95 Gg of NOx, 0.67 Gg of CO, 0.27 Gg of NMVOC and 0.40 Gg of SO_2. CO_2 emissions constituted the major gas throughout the inventory period and increased from 196 Gg in the year 2000 to 212 GG in 2006 (Table 4.43).

The detailed emissions on a per activity basis are given in Table 4.44. The Residential sub-sector was the highest emitter during the inventory period.

Table 4.43 - Emissions by gas (Gg) in the Energy-Other sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	196.081	198.429	198.052	215.347	217.667	223.744	213.532
CH_4	0.1016	0.1016	0.1002	0.1029	0.1047	0.1085	0.1112
N_2O	0.0059	0.0063	0.0063	0.0067	0.0070	0.0067	0.0070
NO_x	0.9465	0.9712	0.9654	1.1350	1.0255	0.9449	0.9532
CO	0.6645	0.6810	0.6720	0.8007	0.6937	0.7113	0.7303
NMVOC	0.2675	0.2701	0.2663	0.2946	0.2757	0.2830	0.2952
SO_2	0.3988	0.3976	0.3917	0.4078	0.4011	0.4159	0.4321

Table 4.44 - Emissions by gas (Gg) and activity in the Energy-Other sub-category (2000 - 2006)

		2000	2001	2002	2003	2004	2005	2006
COMMERCIAL	CO_2	12.259	13.145	13.467	16.982	18.822	20.633	29.349
	CH_4	0.0038	0.0041	0.0042	0.0048	0.0052	0.0056	0.0071
	N_2O	0.0001	0.0001	0.0001	0.0002	0.0002	0.0000	0.0003
	NO_x	0.0205	0.0220	0.0226	0.0282	0.0312	0.0342	0.0482
	CO	0.0669	0.0735	0.0757	0.0789	0.0816	0.0864	0.0919
	NMVOC	0.0019	0.0020	0.0021	0.0024	0.0026	0.0028	0.0035
	SO_2	0.0060	0.0066	0.0068	0.0070	0.0072	0.0076	0.0079
RESIDENTIAL	CO_2	141.955	141.986	142.041	146.120	154.373	158.714	136.978
	CH_4	0.0950	0.0946	0.0931	0.0946	0.0966	0.1000	0.1011
	N_2O	0.0023	0.0023	0.0023	0.0023	0.0024	0.0025	0.0024
	NO_x	0.2458	0.2458	0.2460	0.2529	0.2661	0.2733	0.2435
	CO	0.0983	0.0983	0.0912	0.0908	0.0916	0.0964	0.0877
	NMVOC	0.1555	0.1546	0.1517	0.1538	0.1559	0.1617	0.1685
	SO_2	0.3326	0.3305	0.3226	0.3264	0.3299	0.3432	0.3559
AGRICULTURE /FORESTRY /FISHING	CO_2	41.868	43.298	42.544	52.245	44.473	44.397	46.156
	CH_4	0.0028	0.0029	0.0029	0.0035	0.0029	0.0029	0.0030
	N_2O	0.0035	0.0039	0.0039	0.0042	0.0044	0.0042	0.0043
	NO_x	0.6802	0.7034	0.6968	0.8539	0.7282	0.6374	0.6615
	CO	0.4993	0.5092	0.5051	0.6310	0.5205	0.5285	0.5507
	NMVOC	0.1101	0.1135	0.1125	0.1384	0.1172	0.1185	0.1232
	SO_2	0.0602	0.0605	0.0623	0.0744	0.0640	0.0651	0.0683

4.5.3 Commercial/Institutional (1A4a)

4.5.3.1 Source Category Description

Emissions under this sub-category are those emanating from fuel combustion in commercial and institutional buildings, mainly hotels. They are not significant as electricity in this sub-category is mostly

tapped from the public grid which covers the whole island and the units are quite small. The fossil fuels burned are charcoal and LPG, primarily for cooking purposes (including barbecues) and water heating for the bathrooms.

4.5.3.2 Methodological Issues

Activity Data

Table 4.45 - Fuel consumption (t) in the Commercial/Institutional sub-category (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
LPG	4150	4450	4559	5749	6372	6985	9936
Charcoal	300	330	340	350	360	380	393

Tier Level

GHG emissions were calculated using the Tier 1 approach.

Emission factors

For the Commercial/Institutional sub-category, EFs were default IPCC values for both fuels. EFs used for compiling the inventory in the Commercial/Institutional sub-sector are given in Table 4.46.

Table 4.46 – Emission and conversion factors adopted in the Commercial/Institutional sub-category

	CO_2		Oxidation factor	CH_4	N_2O	NO_X	CO	NMVOC
	NCV	Carbon (EF)						
UNIT	TJ / t	t C/TJ	-	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ
IPCC (1997) Table No.	1-3	**1-2*[1]**		1-7	2-4	1-9	1-10	1-11
LPG	0.04731	17.2	0.99	10	0.1*[2]	-	-	-
Charcoal	0.03	0	0.99	200	1	100	7000	100

*[1] – IPCC (1997) Vol 2

*2 – IPCC (2000) Vol 2

4.5.3.3 Results

The Commercial/Institutional sub-category witnessed an increase of 139% during the inventory period, from 12.37 Gg CO_2 -eq in the year 2000 to 29.59 Gg CO_2 -eq in the year 2006. This followed the development of the services sector of the economy with mainly more hotels being commissioned. The share of this sub-category within the energy sector increased from 6.2% to 13.6%. Emissions by gas are given in Table 4.48. CO_2 remained the main gas emitted throughout the inventory period.

Table 4.47 - GHG emissions (Gg CO_2-eq) in the Commercial/Institutional sub-category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Energy - Other sectors	200.04	202.52	202.11	219.58	222.04	228.10	216.99
Commercial/Institutional	12.37	13.26	13.59	17.14	18.99	20.75	29.59
% Commercial/Institutional	**6.2**	**6.5**	**6.7**	**7.8**	**8.6**	**9.1**	**13.6**

Table 4.48 - Emissions (Gg) by gas in the Commercial/Institutional sub-category (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	12.256	13.145	13.467	16.982	18.822	20.633	29.349
CH_4	0.0038	0.0041	0.0042	0.0048	0.0052	0.0056	0.0071
N_2O	0.0001	0.0001	0.0001	0.0002	0.0002	0.0000	0.0003
NO_x	0.0205	0.0220	0.0226	0.0282	0.0312	0.0342	0.0482
CO	0.0669	0.0735	0.0757	0.0789	0.0816	0.0864	0.0919
NMVOC	0.0019	0.0020	0.0021	0.0024	0.0026	0.0028	0.0035
SO_2	0.0060	0.0066	0.0068	0.0070	0.0072	0.0076	0.0079

4.5.3.4 Time-series consistency and Uncertainty

AD throughout the inventory period are considered of good quality and reliable as they are collected and archived at National level regularly. The same EFs on the basis of fuel types were used for all years. The time series is thus considered consistent.

Uncertainty levels were estimated by the GHG expert group after analyzing possible sources. A value of 10% was attributed for all gases for AD since they were estimates. Uncertainties for EFs were estimated to be of the order of 5% for CO_2, 10% for CH_4 and 30% for N_2O. The combined uncertainties reached 11.18% for CO_2, 14.14% for CH_4 and 31.62% for N_2O.

Table 4.49 – AD and EF uncertainty in the Commercial/Institutional subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
$1CO_2$	10	5	11.18
CH_4	10	10	14.14
N_2O	10	30	31.62

4.5.3.5 QA/QC and Verification

QA/QC procedures were applied by cross checking data from different sources for their quality and reliability. All steps in the calculation of emissions were verified and at the end cross-verified by an independent team.

4.5.3.6 Recalculations

The emissions were recalculated for previous inventory years since more disaggregated data were available. The bigger differences for the years 2005 and 2006 may be due to inaccurate AD.

Table 4.50 - Recalculations for period 2000 – 2006 Commercial/Institutional (Gg CO_2 -eq)

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	12.3	13.1	13.5	17.0	18.8	24.6	25.7
Present Inventory	12.4	13.3	13.6	17.1	19.0	20.8	29.6
% Difference present to previous	**0.9**	**0.9**	**0.9**	**1.0**	**0.9**	**-18.7**	**13.2**

4.5.3.7 Planned Improvements

Data need to be collected and archived in a proper database in a disaggregated way for more accurate estimation of emissions. Missing data should be collected and also quality of existing data, emission factors and methods need to be improved. Development of country specific emission factors is planned.

4.5.4 Residential (Category 1A4b)

4.5.4.1 Source Category Description

Emissions from fuel combustion in households concerned mostly LPG and small amounts of kerosene, wood and wood wastes, and charcoal. Fuel combustion activities in residences are the only activity accounted for in this sub-category and concerned the different types of fuel used locally.

4.5.4.2 Methodological Issues

Activity Data

Table 4.51 - Fuel consumption (t) in the Residential sub-category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Kerosene	9600	9480	8409	8265	8726	9765	3925
LPG	37710	37850	39023	40559	42850	43206	42099
Wood / Wood Waste	16000	15900	15880	15780	15940	16540	17473
Charcoal	150	150	130	125	120	130	123

Tier Level

GHG emissions were calculated using Tier 1 approach.

Emission factors

For the Residential sub-category, EFs adopted were IPCC default values for kerosene, charcoal, wood and LPG.

Table 4.52 – Emission and conversion factors for the Residential sub-category

	CO_2		CH_4	N_2O	NO_X	CO	NMVOC
	NCV	Carbon (EF)					
UNIT	TJ / t	t C/TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ	Kg / TJ
IPCC (1997) Table No.	1-3	1-4	1-7	1-8	1-9	1-10	1-11
Kerosene	0.04475	19.5	10	0.6	100	20	5
LPG	0.04731	17.2*[1]	12	2.1	-	63100	-
Wood / Wood Waste	0.0155	NA	300	4	100	5000	600
Charcoal	0.03	NA	200	1	100	7000	100

*[1] IPCC (1997, Vol 2, Tables 1-2 & 1-3 *2 IPCC (2006), Vol 2, Table 2-9

4.5.4.3 Results

The Residential sub-category constituted the main GHG emitter in the source category Other Sectors. It fluctuated at around 70% of the Energy Other sectors between the years 2000 and 2005 and fell to about 65% in 2006. Total emissions varied between 139.8 and 161.6 Gg CO_2 -eq during the inventory period 2000 to 2006 (Table 4.53). The main gas emitted was CO_2 for all inventory years (Table 4.54)

Table 4.53 – GHG Emissions (Gg CO_2-eq) from the Residential sub-category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Energy Other sectors	200.0	202.5	202.1	219.6	222.0	228.1	217.0
Residential	144.7	144.7	144.7	148.8	157.1	161.6	139.8
% Residential	**72.3**	**71.4**	**71.6**	**67.8**	**70.8**	**70.8**	**64.4**

Table 4.54 – Emissions by gas (Gg) from the Residential sub-category (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2	141.955	141.986	142.041	146.120	154.373	158.714	136.978
CH_4	0.095	0.095	0.093	0.095	0.097	0.100	0.101
N_2O	0.002	0.002	0.002	0.002	0.002	0.003	0.002
NO_x	0.246	0.246	0.246	0.253	0.266	0.273	0.244
CO	0.098	0.098	0.091	0.091	0.092	0.096	0.088
NMVOC	0.156	0.155	0.152	0.154	0.156	0.162	0.169
SO_2	0.333	0.331	0.323	0.326	0.330	0.343	0.356

4.5.4.4 Time-series Consistency and Uncertainty

Time series consistency has been maintained across the inventory period as the same sources and methods have been used for deriving AD while the same EFs have been adopted for all years.

The main sources of uncertainties concerned activity data relating to amounts of kerosene, wood/wood-wastes and charcoal burned as LPG consumption was well tracked through imports and sales by the dealers for domestic use. EFs were also quite uncertain for charcoal and wood/wood-wastes but not for LPG and kerosene as their quality norms were known and ensured when importing. Uncertainty levels were thus estimated by the GHG expert group after analyzing the different sources. A value of 10% was attributed for all gases for AD since the largest amount of fuel, LPG is known. Uncertainties for EFs were estimated to be of the order of 5% for CO_2, 10% for CH_4 and 50% for N_2O. The combined uncertainties reached 11.18% for CO_2, 14.14% for CH_4 and 50.99% for N_2O.

Table 4.55 – AD and EF uncertainty in the Residential subcategory

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
CO_2	10	5	11.18
CH_4	10	10	14.14
N_2O	10	50	50.99

4.5.4.5 QA/QC and Verification

AD used have been cross-checked from the supply side and consumed amounts by different methods. Computation steps have been verified along the inventory process and at the end by independent members of the inventory team.

4.5.4.6 Recalculations

Estimations from the previous inventory were comparable for three years out of seven but were overestimated for the remaining four years (Table 4.56).

Table 4.56 - Recalculations results (Gg CO_2-eq) for the Residential subcategory (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	157.37	161.87	143.49	147.57	155.81	174.17	160.00
Present Inventory	144.66	144.69	144.71	148.82	157.15	161.59	139.85
% Difference present to previous	**-8.8**	**-11.9**	**0.8**	**0.8**	**0.8**	**-7.8**	**-14.4**

4.5.4.7 Planned Improvements

Planned improvements will consist in enhancing AD quality by improving data collection and archiving. The EFs will be evaluated and amended or derived to better reflect national circumstances.

4.5.5 Agriculture/ Fishing /Forestry (1A4c)

This sub-category covered fossil fuel combustion activities within the agricultural, forestry and fishing sectors. Agriculture and fishing contributed most of the emissions with that from forest being negligible.

4.5.5.1 Source Category Description

This sub-category includes emissions from fuel combustion activities related to mechanized operations in the Agricultural sector, namely the sugarcane industry and for inshore and offshore fishing within the territorial waters of the Republic of Mauritius. Fuels consumed were diesel and gasoline for fishing and diesel oil in the agricultural machines.

4.5.5.1 Methodological Issues

Activity Data

AD relating to fuel consumption were derived from the energy balance and then allocated to the activity areas. The allocation was worked out from statistics such as area under mechanized operations within agriculture and number of vessel trips for fishing. Practically no fuel was burned in the forest sector.

Records of fuel consumed for infield agricultural operations are not kept routinely. The adoption of data published by the CSO was contemplated but the trend did not reflect the extension of mechanization activities. The AD were therefore computed on the basis of fuel consumption by agronomic operation and the area on which these operations were conducted. Such data were available from a few corporate growers and were extrapolated to island level (Table 4.57).

Table 4.57 - Fuel (t) consumed in Agriculture and Fishing (2000 – 2006)

YEAR	2000	2001	2002	2003	2004	2005	2006
Agriculture (Diesel)	2456	2791	2750	2929	3147	2995	3049
Fishing (Gasoline)	8925	9035	9100	11635	8905	9360	10010
Fishing (Diesel)	1632	1622	1486	1779	1874	1672	1519

Emission factors

For Agriculture and Fishing, EFs were default IPCC values for all three fossil fuels consumed.

Table 4.58 – Emission factors used for fuel consumed in Agriculture and Fishing

UNIT	NCV t TJ	Carbon (EF) t C/TJ	CH_4 Kg/TJ	N_2O Kg/TJ	NO_X Kg/TJ	CO Kg/TJ	NMVOC Kg/TJ
IPCC (1997) Table No.	1-3	1-4	1-49	1-49	1-49	1-49	1-49
AGRICULTURE - Diesel	0.0433	20.0	4	30	1200	370	170
IPCC (1997) Vol 3 Table No.	1-3	1-2*	1-7	1-8	1-9	1-10	1-11
FISHING - Diesel	0.0433	20.2*	5	0.6	800	1000	200
FISHING - Gasoline	0.0448	18.9*	20	0.6	800	1000	200

* IPCC (1997) Vol 2

Note: For Non-CO2- Fishing, the default EF values for oil has been used and is thus the same for both diesel and gasoline

Tier Level

GHG emissions were calculated using Tier 1 level for fuel combustion in both Agriculture and Fishing.

4.4.5.3 Results

Total emissions in the Agriculture/Forestry/Fishing sub-category increased slightly from 43.0 Gg CO_2 -eq in the year 2000 to 47.6 Gg CO_2 -eq in 2006. Emissions fluctuated during the period, result of the reduced activities in the sugarcane sector and the fact that fishing is dependent on the weather. On average, Agriculture contributed about 22% of the total of this sub-category and Fishing about 78% (Table 4.59). CO_2 was the major gas emitted throughout the inventory period (Table 4.60)

Table 4.59 – Emissions by sub-category (Gg CO_2 -eq) from Agriculture/Fishing (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Total Agriculture/Fishing	43.0	44.6	43.8	53.6	45.9	45.8	47.6
Agriculture	8.73	9.91	9.78	10.40	11.18	10.64	10.84
Agriculture % total	20.7	22.6	22.5	19.6	24.1	23.1	22.8
Fishing	33.52	33.84	33.62	42.61	35.20	35.47	36.62
Agriculture % total	79.3	77.4	77.5	80.4	75.9	76.9	77.2

Table 4.60 – Emissions by gas (Gg) from Agriculture/Forestry/Fishing (2000 – 2006)

		2000	2001	2002	2003	2004	2005	2006
Agriculture	**CO_2**	7.7260	8.7791	8.6515	9.2145	9.8982	9.4223	9.5901
	CH_4	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
	N_2O	0.0032	0.0036	0.0036	0.0038	0.0041	0.0039	0.0040
	NO_x	0.1277	0.1451	0.1430	0.1523	0.1636	0.1557	0.1585
	CO	0.0394	0.0447	0.0441	0.0470	0.0504	0.0480	0.0489
	NMVOC	0.0181	0.0206	0.0203	0.0216	0.0232	0.0221	0.0225
	SO_2	-	-	-	-	-	-	-
Fishing	**CO_2**	33.404	33.691	33.479	42.430	35.052	34.879	36.471
	CH_4	0.0026	0.0025	0.0025	0.0025	0.0025	0.0235	0.0025
	N_2O	0.0002	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003
	NO_x	0.3683	0.3759	0.0000	0.4667	0.3454	0.3843	0.4015
	CO	0.4596	0.4593	-0.0001	0.5830	0.4696	0.4800	0.5021
	NMVOC	0.0919	0.0924	-0.0003	0.1164	0.0938	0.0959	0.1005
	SO_2	0.0530	0.4280	0.1240	0.0670	0.0580	0.0580	0.0600

4.5.5.4 Time-series consistency and Uncertainty

Time series consistency over the inventory period was maintained as AD quality and EFs were constant for all years. Data regarding planting, harvesting and loading are accurate as these are collected and

published in the Annual Report of the MSIRI and are reliable. The number of applications and the area that was treated with fertilizer and herbicide has been assumed to be equal to the area that was mechanically harvested. It is probable that there would be some differences between the assumed value and the actual situation. In the latter case but these would have minor impacts on the emissions due to the relatively small amount of fuel consumed in these operations. For Fishing, ADs were from the same sources, namely the national energy balance and vessel trips statistics, which were well maintained by the relevant authorities. Moreover the same method has been applied throughout the inventory period.

Some approximation resulted from the extrapolation of fuel consumption by agronomic operation and the level of uncertainty in the AD was assumed to be 10%. The EFs uncertainty was assumed as per Table 4.64 of the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The combined uncertainties reached 11.18% for CO_2, 14.14% for CH_4 and 31.62% for N_2O.

Table 4.61 – AD and EF uncertainty in Agriculture/Fishing/Forestry

Gas	UNCERTAINTY		
	Activity data	Emission factor	Combined
CO_2	10	3	10.44
CH_4	10	6	11.66
N_2O	10	30	31.62

4.5.5.5 QA/QC and verification

Activity data, namely fuel consumed, were derived from the energy balance and disaggregated for the activities within this sub-category. These were cross-checked using other methods, studies and surveys conducted with the operators concerned. EFs were scrutinized the most representative ones were adopted. All steps of the computations were followed for assuring that there are no mistakes and at last all worksheets were verified by independent persons from the inventory team.

4.5.5.6 Recalculations

Recalculations were performed as the approach shifted from the Tier 1 to higher tiers with the availability of more disaggregated data.

Table 4.62 – Recalculated emissions (Gg CO_2-eq) for Agriculture/Fishing/Forestry (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	7.63	7.67	7.72	7.66	7.55	7.79	8.02
Present Inventory	8.72	9.91	9.78	10.40	11.18	10.64	10.84
% Difference present to previous	-13	-23	-21	-26	-32	-27	-26

4.5.5.7 Planned Improvements

The GHG inventory improvements plan for the Agriculture/Forestry/Fishing sub-category are to reduce data gaps, improve data collection and archiving, explore possibilities to develop country specific EFs or improve default IPCC ones to better reflect the national context

5. INDUSTRIAL PROCESSES

5.1 OVERVIEW

Apart from fuel combustion in industrial production activities, GHGs are also emitted as by-products of non-energy industrial processes in which raw materials are chemically transformed to final products. In Mauritius, production of lime, nitric acid, and food and drinks have processes that involved emissions. During these processes different GHGs such as CO_2, CH_4 and N_2O are released in the atmosphere. NMVOCs originated from road paving with asphalt and alcoholic and food industries. Other GHGs such as HFCs, PFCs resulted from the consumption of halocarbons. SF_6 is not produced or consumed but may have leaked from the sealed breakers where they have been used.

5.1.1 Key Source Category

Key source category analysis was not conducted as activities occurring in the Industrial Processes Sector were considered exhaustively.

5.1.2 Completeness

The assessment of completeness in the sub-categories occurring in Mauritius is given in Table 5.1.

Table 5.1 – Source categories in the Industrial Processes Sector (2000 to 2006)

Greenhouse gas source and sink categories	CO_2	CH_4	N_2O	NO_x	CO	NMVOC	SO_2
2. A. Mineral products							
2.A.1. Cement Production	NO	NO	NO	NO	NO	NO	NO
2.A.2. Lime Production	X	NA	NA	NA	NA	NA	NA
2.A.3. Limestone and Dolomite Use	NO	NO	NO	NO	NO	NO	NO
2.A.4. Soda Ash Production and Use	NO	NO	NO	NO	NO	NO	NO
2.A.5. Asphalt Roofing	NA	NA	NA	NA	NA	NE	NA
2.A.6. Road Paving with Asphalt	NA	NA	NA	NA	NA	X	NA
2.A.7. Other	NO	NO	NO	NO	NO	NO	NO
2.A.7.1. Glass production	NO	NO	NO	NO	NO	NO	NO
2. B. Chemical Industry							
2.B.1. Ammonia Production	NO	NO	NO	NO	NO	NO	NO
2.B.2. Nitric Acid Production	NA	NA	X	X	NA	NA	NA
2.B.3. Adipic Acid Production	NO	NO	NO	NO	NO	NO	NO
2.B.4. Carbides Production	NO	NO	NO	NO	NO	NO	NO
2.B.5. Other Production	NO	NO	NO	NO	NO	NO	NO
2.C. Metal Production							
1. Iron and Steel Production	NO	NO	NO	NO	NO	NO	NO
2. Ferroalloys Production	NO	NO	NO	NO	NO	NO	NO
3. Aluminium Production	NO	NO	NO	NO	NO	NO	NO
4. SF6 Used in Aluminium and Magnesium Foundries	NO	NO	NO	NO	NO	NO	NO
5. Other (please specify)	NO	NO	NO	NO	NO	NO	NO
2.D. Other Production	NO	NO	NO	NO	NO	NO	NO
1. Pulp and Paper	NO	NO	NO	NO	NO	NO	NO
2. Food and Drink	NO	NO	NO	NO	NO	X	NO
G. Other (please specify)	NO	NO	NO	NO	NO	NO	NO
F-gases	NA	NA	NA	NA	NA	NA	NA

Explanatory notes: HFCs PFCs was estimated as potential emissions from imports/exports while SF6 was not accounted for.
X = Estimated, NA = Not Applicable, NO = Not Occurring, NE = Not Estimated, IE = Included Elsewhere

5.1.3 Overall Summary

Generally, CO_2 emissions from Industrial Processes regressed during the period 2000 to 2006, due to the decline in the manufacture of lime. Emissions from other sources also fell down drastically, namely on account of the phasing out of nitric acid production. Thus aggregated emissions which stood at 277.97 Gg CO2 –eq in the year 2000 fell to 64.96 in 2006. The total annual emissions of GHGs from Industrial Processes during the period 2000-2006 are presented in Table 5.2.

Table 5.2 – GHG emissions (Gg CO_2-eq) from the Industrial Processes Sector (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
TOTAL	145.8	103.8	149.0	126.5	133.0	35.5	141.8
A. Mineral Products (Lime Production)	2.57	2.51	2.30	2.19	1.79	1.84	1.90
B. Chemical Industry (Nitric Acid Production)	104.19	72.20	94.64	101.31	97.71	0.00	0.00
F. Consumption of Halocarbons and SF6	36	23	49	22	30	33	139
G. Other (PFCs)	3	6	3	1	3	1	1

Emissions of direct and indirect GHGs are presented in Table 5.3. Except for NMVOCs that are emitted from the Food and Drink sub-category, emissions of the other gases regressed during the period 2000 to 2006. Some activities were phased out while the policy is to minimize the consumption of ozone depleting substances.

Table 5.3 – Emissions by gas (Gg) from the Industrial Processes Sector (2000 - 2006)

SOURCE CATEGORY	GHG	2000	2001	2002	2003	2004	2005	2006
A. 2 Mineral Products (Lime Production)	**CO2**	2.57	2.51	2.30	2.19	1.79	1.84	1.90
A.6 Mineral Products (Road paving with asphalt)	**NMVOC**	6.14	5.86	7.38	5.87	5.17	6.50	6.11
B.2 Chemical Industry (Nitric Acid Production)	**N2O**	0.34	0.23	0.31	0.33	0.32	0.00	0.00
	NOX	0.45	0.31	0.41	0.44	0.42	0.00	0.00
D.2 Other Production (Food & Drink)	**NMVOC**	2.64	2.69	2.68	2.64	2.64	2.74	2.63
F.1 Consumption of Halocarbons and SF6	**HFC**	0.0330	0.0550	0.0370	0.0210	0.0190	0.0030	0.0270
G. Other (Consumption of PFCs)	**PFC**	0.0384	0.0009	0.0004	0.0002	0.0004	0.0002	0.0001

Note: No HFC was imported as from 2005

5.2 MINERAL PRODUCTS (Category 2.A)

Within this category only two activities occurred during the inventory period. They were lime production and Road Paving with Asphalt. Emissions from these activities have been calculated and are reported in the respective sections.

5.2.1 – Lime Production (Category 2.A.2)

5.2.1.1 Source Category Description

The only activity in this sub-category was the production of lime that emitted CO_2. Lime is produced, as hydrated lime and its production is shrinking as it is used mainly in sugar manufacture which is also declining.

5.2.1.2 Methodological Issues

Activity Data

AD (Table 5.4) were those obtained from the sole manufacturer for the inventory period.

Table 5.4 - Lime production (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Lime Produced (t)	3424	3353	3073	2919	2383	2449	2530

Tier Level

Tier level 1 has been used in the compilation process.

Emission factor

EFs used are default ones provided in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). Lime production emits CO_2 through the thermal decomposition (calcination) of the calcium carbonate ($CaCO_3$) in limestone to produce quicklime (CaO). High-calcium limes are slaked and converted to hydrated lime, $Ca(OH)_2$. Calculation of CO_2 emissions from lime production is obtained by applying an EF in t of CO_2 released per t of quicklime produced. The emission factors were adopted on the basis of the calcination reaction, depending on the type of raw material used in the process.

The hydrated lime was converted to an amount of quicklime equivalent by first multiplying by the default correction factor of 0.97 and then multiplying by 56/74 (0.75) which is the EF expressed in t CO_2 t^{-1} hydrated lime produced. The value 56 and 74 are the molecular mass of the compounds. These EFs are the default factors from Table 3.4 of the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000)

5.2.1.3 Results

CO_2 emissions from lime manufacturing were 2.57 Gg in the year 2000, which is considered a negligible amount of the total CO_2 emissions. It decreased to 1.9 Gg in 2006 (Table 5.5).

Table 5.5 – Emissions from Lime production (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
CO_2 (Gg)	2.568	2.515	2.305	2.189	1.787	1.837	1.898

5.2.1.4 Time-series Consistency and Uncertainty

The manufacturers have kept particularly good records of production. Emissions from Lime Production have been calculated using the same method and recorded AD sets for all years of the inventory. This has led to a consistent time series.

Uncertainty levels were based on values reported in IPCC (2000) for AD and EF. Values adopted were estimated at 2% and 15% respectively to give a combined uncertainty of 15.13%.

5.2.1.5 QA/QC and Verification

QA/QC were mainly focused on calculations and consistency of emission estimates due to the limited sources concerned. All compilations were verified at the end by the GHG inventory team.

5.2.1.6 Recalculations

EFs were revised to include new values from the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). Thereupon, CO_2 emissions were

Table 5.6 – Comparison of CO_2 emissions (Gg) from two inventories for Lime Production (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	2.790	2.700	2.500	2.400	1.900	2.000	2.100
Present Inventory	2.568	2.515	2.305	2.189	1.787	1.837	1.898
% Difference present to previous	**-8.6**	**-7.4**	**-8.5**	**-9.6**	**-6.3**	**-8.9**	**-10.7**

recalculated for the period 2000 to 2006. Emissions were consistently overestimated in the previous inventories. The recalculated values are given in Table 5.6 above.

5.2.1.7 Planned Improvements

No improvements are planned for this activity.

5.2.2 – Road paving with Asphalt (Category 2.A.5)

5.2.2.1 Source Category Description

There existed no asphalt producing plant in Mauritius but asphalt was used in road surfacing.

5.2.2.2 Methodological Issues

Activity Data

AD were available with regard to amount of asphalt (Table 5.7) used during the inventory period.

Table 5.7 – Asphalt used for road paving (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006
Quantity of asphalt used (t)	19197	18304	23064	18340	16150	20308	19099

Tier Level

Tier level 1 has been used in the compilation process.

Emission factor

EFs used are default ones provided in Table 2.4 of the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997).

5.2.2.3 Results

Emissions of NMVOC for the years 2000 – 2006 are given in Table 5.8. It fluctuated between 5.17Gg to 7.38 Gg.

Table 5.8 – Emissions (Gg) from Road Paving with Asphalt (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006
NMVOC (Gg)	6.143	5.857	7.381	5.869	5.168	6.499	6.112

5.2.2.4 Time-series Consistency and Uncertainty

The imports and re-exports have been particularly well kept. Emissions from Road surfacing have been calculated using the same method and recorded AD sets for all years of the inventory. This has led to a consistent time series.

5.2.2.5 QA/QC and Verification

QA/QC were on calculations and consistency of emission estimates. All compilations were verified at the end by the GHG inventory team.

5.2.2.6 Recalculations

No recalculations were performed as emissions from the Road Paving with Asphalt sub-category were compiled using the same dataset in the earlier-published inventory.

5.2.2.7 Planned Improvements

No improvements are planned for this activity.

5.3. CHEMICAL INDUSTRY (Category 2B) - NITRIC ACID PRODUCTION

5.3.1 Source Category Description

The chemical industry was almost inexistent in Mauritius except for the production of Nitric acid in quite restricted amounts in only one plant. The production decreased steadily as from the year 2000 and was phased out in 2005.

5.3.2 Methodological Issues

Activity Data

Data on nitric acid production were collected by survey from the manufacturer.

Table 5.9 – Nitric Acid production (2000 to 2006)

	2000	2001	2002	2003	2004	2005	2006
Nitric Acid Produced (t)	37343	25873	33926	36307	35025	0	0

Tier Level

Tier level I was adopted.

Emission factor

Emissions of N_2O from nitric acid production have been calculated by multiplying annual nitric acid production by an EF which reflected the process type, adopted from the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000).

Table 5.10 - EFs adopted for emissions from Nitric Acid Production

	UNIT	EF	SOURCE - REMARKS
Factor for direct N_2O emission	kg N_2O-N/kg N	9.0	Tab 3.8, IPCC (2000), Row 6 average value
Factor for direct NO_x emission	Kg NO_x/t	12	Section 2.9.4 (IPCC 1997)

5.3.3 Results

Aggregated emissions during the production period from the year 2000 to 2004 varied between 71.3 Gg CO_2 –eq and 105.4 Gg CO_2 –eq. The contributing gas was N_2O (Table 5.11).

Table 5.11 – Emissions from Nitric Acid production (2000 to 2006)

		2000	2001	2002	2003	2004	2005	2006
Total emissions	Gg CO_2-eq	104.191	72.199	94.643	101.308	97.712	NO	NO
N_2O emissions	N_2O (Gg)	0.336	0.233	0.305	0.327	0.315	NO	NO
NO_x emissions	$NO_{x\,(}$Gg)	0.448	0.311	0.407	0.436	0.420	NO	NO

5.3.4 Time-series Consistency and Uncertainty

Emissions from Nitric Acid Production have been calculated using updated data sets for all years. The method was revisited to find an updated EF by referring to the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The average EF value adopted from the range given therein turned out to be similar to the one used in the previous inventories. The time series is considered consistent.

Uncertainty on emissions of N_2O based on values reported in the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) associated with AD and EF was estimated at 1% and 5% respectively. The combined uncertainty amounted to 5.1%.

5.3.5 QA/QC and Verification

Activities related to quality control were mainly focused on completeness and consistency of emission estimates. The final results were verified by the GHG inventory team in the end.

5.3.6 Recalculations

Source-specific recalculations in the sub-sector Nitric Acid Production were carried out and the results compared to those of previous inventories. Emissions for the year 2001 only were found to be significantly different, most probably due to the use of updated time series data on nitric acid production.

Table 5.12 - Comparison of emissions from Nitric Acid Production from two inventories (2000 – 2006)

		2000	2001	2002	2003	2004	2005	2006
Nitric Acid Production								
Previous Inventory	**Gg N_2O**	0.340	0.300	0.310	0.330	0.320	0.00	0.00
Present Inventory	**Gg N_2O**	0.336	0.233	0.305	0.327	0.315	0.00	0.00
% Difference present to previous	**%**	**-1.2**	**-28.8**	**-1.5**	**-1.0**	**-1.5**	0	0

5.3.7 Planned Improvements

No improvements are planned due to the cessation of activity in this source category.

5.4 OTHER PRODUCTION - FOOD AND DRINK (Category 2D)

Some industrial processes generate emissions of short-lived ozone and aerosol precursor gases such as CO, NOx, NMVOCs and SO_2. These gases contribute indirectly to the greenhouse effect.

5.4.1 Source Category Description

This category involved the release of NMVOCs from Food and Drink production processes. Activities concerned the production of meat, fish and poultry, sugar, margarine and solid cooking fats, cakes, biscuits and cereals, bread, wine, beer, spirits and brandy. Emissions from these activities have been estimated.

5.4.2 Methodological issues

Emissions of indirect GHGs from the production of food and drink have been calculated by multiplying annual production by the appropriate default EF. Almost all sources of emissions which occurred locally have been covered.

Activity Data

AD for the Food Production category by activity area is given in Table 5.13.

Table 5.13 – Activity Data for the Food Production sub-category (2000 – 2006)

	UNIT	2000	2001	2002	2003	2004	2005	2006
Meat, Fish, Poultry	t	83807	97554	111600	114929	125233	131259	165312
Sugar	t	42338	41752	40740	40101	40147	40125	40100
Margarine, Oils, Solid cooking fat	t	64311	64124	65902	80407	77851	84613	71844
Cakes & Biscuits	t	11969	12351	12470	13593	13593	14022	14075
Bread	t	67825	69992	70664	77028	77028	79461	79759
Beer	hl	357522	386000	375900	400810	363700	374620	370000
Spirit	hl	65587	67510	66030	50143	51786	52424	53000

Tier Level

The Tier 1 approach was used for the calculation of emissions.

Emission Factor

Emissions of indirect GHGs from the production of food and drink have been calculated by multiplying annual production quantities with appropriate emission factors provided in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). The AD for food and drink production were extracted from the Digests of Agricultural Statistics (CSO, 2000 – 2006) and Digests of Industrial Statistics (CSO, 2000 – 2006).

Table 5.14 - EFs adopted for Food Production activities

FOOD TYPE	EF (Kg NMVOC/t food)	SOURCE
Meat, Fish, Poultry	0.3	Table 2-25, IPCC (1997)
Sugar	10	Table 2-25, IPCC (1997)
Margarine, Oils, solid cooking fat	10	Table 2-25, IPCC (1997)
Cakes & Biscuits	1	Table 2-25, IPCC (1997)
Bread	8	Table 2-25, IPCC (1997)
Beer	0.035 kg/hl	Table 2.24, (IPCC 1997)
Spirit	15 kg/hl	Table 2.24, (IPCC 1997)

5.4.3 Results

NMVOC emissions did not vary much over the inventory period. A slight increase occurred in the Food production area in mainly bread and meat production which was counterbalanced by a reduction in emissions from activities related to the production of spirits.

Table 5.15 - NMVOC emissions (Gg) from Food Production activities (2000 – 2006)

		2000	2001	2002	2003	2004	2005	2006
FOOD	**TOTAL FOOD PRODUCTION**	**1.63**	**1.63**	**1.66**	**1.86**	**1.85**	**1.93**	**1.82**
	Meat, Fish, Poultry	0.02	0.03	0.03	0.03	0.04	0.04	0.05
	Sugar	0.42	0.42	0.40	0.40	0.40	0.40	0.40
	Margarine, Oils, Solid cooking fat	0.64	0.64	0.66	0.80	0.78	0.85	0.72
	Cakes & Biscuits	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Bread	0.54	0.56	0.56	0.62	0.62	0.63	0.64
DRINK	**TOTAL BEVERAGES**	**1.00**	**1.09**	**1.06**	**0.78**	**0.79**	**0.81**	**0.81**
	Beer	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Spirit	0.99	1.08	1.05	0.77	0.78	0.80	0.80

5.4.4 Time-series Consistency

Emissions from Food and Drink have been calculated using the same method and data sets for every year of the inventory period. The time series is therefore considered consistent.

5.4.5 QA/QC and Verification

During the preparation of the inventory, activities related to quality control were mainly focused on completeness and consistency of emission estimates. The final emissions were verified by the GHG inventory team.

5.4.6 Recalculations

Source-specific recalculation in this sub-sector was not carried out as the method and data used were the same.

5.4.7 Planned Improvements

The coverage of activities on production of food and drinks did not cover all activities completely. Some units were not accounted for as reliable data was not available. It is planned to extend data collection to include more industries for a better completeness and improvement of the quality of the inventory.

5.5 CONSUMPTION OF HALOCARBONS AND SF6 (Category 2F)

5.5.1 Source Category Description

Hydro fluorocarbon are used as substitutes of Ozone Depleting Substances (ODS) in refrigeration and air conditioning systems and fire extinguishers. They are not produced in Mauritius and are imported. Therefore this sub-sector comprises emissions of synthetic gases from their use.

Emissions of SF_6 were deemed not accountable since the gas, used in breakers, is sealed for life. These breakers have been installed in the 1990s and have not exceeded their lifetime during the period of assessment.

5.5.2 Methodological Issues

Activity Data

Activity data were from import and export statistics obtained from the National Ozone Unit (NOA) secretariat from the balance of the amounts imported and re-exported. Stocks were assumed negligible as lacking materials were immediately imported after clearance from the National Ozone Unit secretariat. The gases covered were ODS such as R134a, R404a, R408a, R407c, R507 and R410a which contain some proportions of HFCs. The GWP was the weighted average calculated on the amounts used.

Table 5.16 – Imports and Exports of HFCs and PFCs for Consumption of Halocarbons (2000 – 2006)

		UNIT	2000	2001	2002	2003	2004	2005	2006
HFCs	Imports [1]	t	33	55	37	21	19	22	86
	Exports [1]	t	0	0	0	0	0	0	59
	Consumption	t	**33**	**55**	**37**	**21**	**19**	**22**	**27**
PFCs	Imports [2]	t	38	0.9	0.037	0.3	0.424	0.231	0.117
	Exports [2]	t	0	0	0	0	0.031	0	0
	Consumption	t	**38**	**0.9**	**0.037**	**0.3**	**0.393**	**0.231**	**0.117**

Tier Level

Tier 1a was adopted.

Emission factor

Emission Factors for the compilation of emissions from the Consumption of Halocarbons of HFCs corresponded to values recommended for the Tier 1a Level, Section 2.17, 3.2 (IPCC, 1997). Accordingly, potential emissions from HFCs consumption, based on imports and exports, were calculated for the period 2000-2006.

5.5.3 Results

HFC's potential emissions, calculated as a proxy for actual emissions, was around 0.03 Gg or between 36 to 139 Gg CO_2-eq. PFC's were used substantially only in the year 2000 and emissions were 3 Gg CO_2-eq or 1 Gg CO_2-eq.

Table 5.17 - Emissions of HFCs and PFCs (2000 – 2006) Gg CO_2 – eq

GAS	2000	2001	2002	2003	2004	2005	2006
HFCs (Gg CO_2-eq)	76.781	127.969	86.088	48.861	44.207	6.980	62.821
PFCs (Gg CO_2-eq)	93.216	2.185	0.971	0.486	0.971	0.486	0.243

5.5.4 Time-series Consistency and Uncertainty

The time series was consistent as data pertaining to imports and use are well regulated and recorded over the whole inventory period. Uncertainty estimates associated with estimation of potential emissions of R134a, R404a, R408a, R407c, R507 and R410a based on IPCC (2000). Uncertainty on emissions from the Consumption of HFCs and PFCs was estimated at 1% and 30% for AD and EF respectively. The combined uncertainty amounted to 30.02%

5.5.5 QA/QC and verification

During the preparation of the inventory, QA/QC activities were mainly focused on completeness and consistency of emission estimates. The final results were verified by the GHG inventory team.

5.5.6 Recalculations

No recalculations were carried out as emissions from this source category were calculated for the first time.

5.5.7 Planned Improvements

For the purpose of accurate emission calculations it is essential to capture more exactly the consumption data by different sectors. A database needs to be created whereby all the monthly imports, exports and use are archived. This database will prove useful for reporting to the ozone secretariat also.

6. AGRICULTURE

6.1 - OVERVIEW

The inventory has been restricted to two main islands Mauritius and Rodrigues only as they are the ones with a sedentary population practicing agriculture. The remaining outer islands are sparsely populated with fishing being the main activity and agriculture being mainly geared for home consumption.

6.1.1 – Key Category

GHG emissions in the Agriculture Sector comprise of the following subcategories:

- Livestock enteric fermentation,
- Livestock manure management,
- Agricultural soils, and
- Field burning of agricultural residues;

Histosols, Prescribed Burning of Savannas and Flooded Rice Cultivation are non-occurring.

6.1.2 –Completeness

This inventory covered all source categories occurring in Mauritius (Table 6.1).

Table 6.1 – Source categories in Agriculture Sector (2000 – 2006)

	CO_2	CH_4	N_2O	NO_x	CO	NMVOC	SO_2
4.A. Enteric Fermentation	NA	X	NO	NA	NA	NA	NA
4.B. Manure Management	NA	X	X	NA	NA	NA	NA
4.C. Rice Cultivation	NA	NO	NA	NA	NA	NA	NA
4.D. Agricultural soils							
4.D.1. Direct Soil Emissions	NA	NA	X	NA	NA	NA	NA
4.D.1.1. Synthetic Fertilizers	NA	NA	X	NA	NA	NA	NA
4.D.1.2. Animal Manure Applied to Soils	NA	NO	NO	NA	NA	NA	NA
4.D.1.3. N-fixing Crops	NA	NA	X	NO	NO	NA	NA
4.D.1.4. Crop Residue	NA	NA	X	NO	NO	NA	NA
4.D.1.5. Cultivation of Histosols	NO	NO	NO	NO	NO	NA	NA
4.D.1.6. Other emissions (Sludge to agricultural soils)	NO	NO	NO	NO	NO	NA	NA
4.D.2. Pasture, Range and Paddock Manure	NA	NA	X	NA	NA	NA	NA
4.D.3. Indirect Emissions	NA	NA	X	NA	NA	NA	NA
4.D.3.1. Atmospheric Deposition	NA	NA	NE	NA	NA	NA	NA
4.D.3.2. Nitrogen Leaching and Run-off	NA	NA	X	NA	NA	NA	NA
4.D.4. Other	NO	NO	NO	NO	NO	NA	NA
4.E. Prescribed Burning of Savannas	NO	NO	NO	NO	NO	NA	NA
4.F. Field Burning of Agricultural Residues	X	X	X	X	X	NA	NA

X = Estimated, NA = Not Applicable, NO = Not Occurring, NE = Not Estimated, IE = Estimated Elsewhere

6.1.3 – Overall Summary and Trend

The amount of GHG emitted by the Agriculture sector showed a decreasing trend from 243 Gg CO_2-eq in the year 2000 to 206 Gg CO_2-eq in year 2006 (Table 6.2). The share of Agriculture to the national GHG emissions gradually decreased from 6.00 in 2000 to 4.51 in 2006. Of the latter, Agricultural Soils contributed the highest share primarily due to the use of synthetic N fertilizers. The decreasing trend observed (Figure 6.1) is attributed to the decreasing area under crop production and a gradual shrinking of the livestock sector.

Table 6.2 – GHG emissions (Gg CO_2-eq) from Agriculture (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
Total Agriculture	**234.96**	**243.13**	**218.59**	**223.52**	**217.42**	**211.88**	**206.04**	-2.07
Agriculture % Total	***6.00***	***6.06***	***5.51***	***5.41***	***5.27***	***5.09***	***4.51***	***-4.57***
Enteric Fermentation	65.28	67.24	59.73	59.31	55.96	58.85	60.04	-1.22
Manure Management	18.50	18.46	18.62	17.97	17.56	19.25	18.00	-0.34
Agricultural Soils	139.19	144.37	130.94	137.98	137.30	128.22	122.73	-1.93
Field Burning of Agricultural Residues	12.00	13.06	9.30	8.26	6.61	5.56	5.27	-12.03

The largest contributor to GHG is the Agricultural Soils sub-category (about 61%) and this is explained by the intensive use of synthetic fertilizer in the crop production system and the high global warming potential of N_2O. The Livestock sector is the second GHG emitter (36%).

Figure 6.1 - GHG emissions (Gg CO_2-eq) from Agriculture sector

Emissions of all gases followed the same trend (Table 6.3).

Table 6.3 – Emissions by gas (Gg) from Agriculture Sector (2000 – 2006)

	GHG	2000	2001	2002	2003	2004	2005	2006
Total Agriculture	CH_4	3.989	4.101	3.611	3.545	3.364	3.511	3.514
	N_2O	0.488	0.507	0.461	0.481	0.474	0.446	0.427
	NO_x	0.404	0.440	0.313	0.278	0.222	0.187	0.178
	CO	8.525	9.278	6.602	5.871	4.689	3.952	3.753

6.2 – ENTERIC FERMENTATION AND MANURE MANAGEMENT

Since the emissions from both Enteric Fermentation and Manure Management sub-categories are based on the same activity data these will be reported jointly.

6.2.1 - Source Category Description

The livestock sector in Mauritius Island comprises of dairy cattle, sheep & goat, swine, poultry and deer. Presently, the players of the livestock sector comprises mainly of some 6000 small farmers but prior to 2004 there were a few large meat producers regrouped in the Meat Producers Association. About 500 to 600 heads are kept for research purposes by the Animal Production Division (APD) of the Ministry of Agro-Industry and Food Security, and the Agricultural Research and Extension Unit (AREU). Poultry production is conducted under intensive system by six large-scale units and some 260 small producers.

Other livestock of importance is Deer of which about 80% is produced primarily under rangelands with the remaining under a feedlot system. Horses are not bred locally. A few hundreds of adult horses are kept for races and hobby. A few asses are present, mainly in the small outer islands and they have been amalgamated with the Horse sub-category. Buffalo and camel are non-occurring.

6.2.2 - Metholodological Issues

Activity Data

Data by subcategory were available for the Small Breeder's sector and the research units for the whole inventory period. The total number of heads of cattle is published annually by the Central Statistics Office (CSO) as from 2003. Data for the years 2000 to 2002 were estimated. The activity data by sub-category for Mauritius were derived by applying the ratio of the different category (average for the period 2000 to 2006) from the Small Breeders' sector to the total data published by the CSO.

The poultry data were derived from the per capita consumption and population data published by the CSO using the following assumptions:

Broiler carcass weight = 1.75 kg;
Weight of egg = 60g; and
The number of eggs per layer = 275 per year.

As broiler production is undertaken under intensive system and the mature weight is reached after 45 days and some time was allowed for slaughter and cleaning and sterilizing of sheds, the total number of

heads was divided by 6 to simulate the annual population. This was necessary because the emission factors were computed on an annual basis for all livestock categories. This step was not necessary for the egg production sector as layers are kept for periods exceeding one year.

The activity data by livestock type, adopted for the GHG inventory, is given in Table 6.4 for Mauritius Island and Table 6.5 for Rodrigues Island.

Table 6.4 – Activity data for livestock in Mauritius Island

		2000	2001	2002	2003	2004	2005	2006
CATTLE	**Cow**	3704	3823	3642	3355	2553	2931	2541
	Heifer	2395	2472	2355	2169	1650	1895	1643
	Bull	2148	2217	2112	1946	1480	1700	1473
	Calf	1861	1921	1830	1686	1283	1473	1277
	TOTAL	**10107**	**10434**	**9939**	**9156**	**6966**	**7998**	**6934**
PIG	**Sow**	2198	1690	1776	1842	2218	2566	2174
	Boar	343	264	277	288	346	401	340
	Piglet	4633	3563	3743	3884	4674	5408	4583
	Fattener	8544	6572	6904	7162	8621	9974	8453
	TOTAL	**15718**	**12089**	**12700**	**13176**	**15859**	**18348**	**15550**
SHEEP	**Ewe**	169	193	207	149	311	433	461
	Ram	164	187	201	145	301	419	447
	Follower	130	149	160	115	240	334	356
	TOTAL	**463**	**528**	**568**	**409**	**852**	**1187**	**1264**
GOAT	**Doe**	4407	4801	6819	6967	6592	7198	8131
	Buck	3892	4240	6023	6153	5822	6357	7181
	Follower	4560	4968	7056	7210	6821	7448	8414
	TOTAL	**12859**	**14010**	**19898**	**20330**	**19235**	**21003**	**23726**
POULTRY	**Broiler**	2465647	2601440	2816276	2875763	2983217	3095027	3361789
	Layer	676810	669678	700625	693057	708438	644705	621823
	TOTAL	**3142457**	**3271118**	**3516901**	**3568820**	**3691655**	**3739733**	**3983612**
DEER	**Rangelands**	55000	55700	56250	56800	57400	58500	59600
	Feedlot	15000	15000	15000	15500	15500	16000	16000
	TOTAL	**70000**	**70700**	**71250**	**72300**	**72900**	**74500**	**75600**
HORSE & ASS		567	590	610	637	655	680	655

Source: Agricultural Research and Extension Unit (AREU)
AREU cited by Digest of Agricultural Statistics, MFED
CSO (2001 – 2007)
Deer Farming Association

For Rodrigues Island, data were available from a census made in 2000 (Hoolmann, 2000). As the only destination for all livestock exported from Rodrigues is Mauritius, the data published by the CSO regarding Mauritian imports from Rodrigues were coupled with average adult weight to extrapolate the livestock population for the years 2001 to 2006 (Table 6.5). Estimation at sub-category level was not attempted. Poultry is also produced in Rodrigues Island but records were not available and ensuing emissions were not estimated. It is of note that the poultry population is small relative to that in Mauritius Island.

Table 6.5 – Activity data for livestock in Rodrigues Island

		2000	2001	2002	2003	2004	2005	2006
CATTLE	Cows	4400	4669	1850	1816	1534	1666	2206
	Others	6600	7003	2774	2724	2302	2498	3310
	TOTAL	**11000**	**11672**	**4624**	**4540**	**3836**	**4164**	**5516**
PIG		6000	7000	7000	6100	6500	7000	6000
SHEEP		3800	4890	3397	3760	4203	3343	3640
GOAT		3000	3734	2742	3162	2868	3390	4432

Tier Level

Detailed activity data being available for Mauritius Island, a Tier 2 level was adopted. The lower level of disaggregation regarding the data from Rodrigues Island restricted the compilation to a Tier 1 level only.

Emission factor

It is of note that the production level in Mauritius Island was not reflected in the default EFs. Thus, since detailed data were available on liveweight, growth rates, milk production, pregnancy rates and fodder characteristics, country-specific EFs were derived (Table 6.7).

Table 6.6 - EFs adopted for enteric fermentation and manure management

		MAURITIUS			RODRIGUES		
		Enteric Ferment.	Manure Management		Enteric Ferment.	Manure Management	
		CH_4 (kg/hd/y)	CH_4 (kg/hd/y)	N_2O (kg /hd/y)	CH_4 (kg/hd/y)	CH_4 (kg/hd/y)	N_2O (kg/hd/y)
CATTLE	Cow	88.56	4.64	2.33	58.69	3.42	1.31
	Heifer	49.51	1.84	1.51	47.64	1.96	1.23
	Bull	45.87	1.70	1.40			
	Calf	49.23	1.83	1.50			
SHEEP	Ewe	13.27	0.32	0.34	8.01	0.22	0.18
	Ram	7.71	0.19	0.20			
	Follower	3.95	0.11	0.12			
GOAT	Doe	11.98	0.29	0.30	7.04	0.20	0.16
	Ram	7.06	0.17	0.18			
	Follower	3.61	0.10	0.11			
DEER	Adult	36.73	0.89	0.81	7.04	0.20	0.16
	growing	12.26	0.30	0.27			
PIG	Sow	1.00	35.33	0.03	1.00	18.85	0.01
	Boar	1.00	19.08	0.01			
	Piglet	1.00	2.68	0.00			
	Fattener	1.00	10.71	0.01			
	Horse & Ass	18.00	1.64	1.22			
	Poultry		0.02	0.00	0.00	0.02	0.00

The EFs for livestock in Rodrigues Island were derived at the same level of disaggregation. But since the activity data were not as disaggregated, the EFs were averaged for each livestock category. The derived EFs were in-line with the EFs from IPCC (1997).

6.2.3 - Results

Table 6.7 – Emissions by gas (Gg) from Enteric Fermentation and Manure Management (2000 – 2006)

	GHG	2000	2001	2002	2003	2004	2005	2006
Enteric Fermentation	**CH_4**	3.108	3.202	2.844	2.824	2.665	2.802	2.859
Manure Management	**CH_4**	0.475	0.457	0.453	0.441	0.476	0.521	0.476
	N_2O	0.028	0.029	0.029	0.028	0.024	0.027	0.026

The CH_4 emissions from Enteric Fermentation (Table 6.8) show that the Cattle sub-category is the main emitter followed by the Deer sub-category.

Table 6.8 - CH_4 emission from Enteric Fermentation

	2000	2001	2002	2003	2004	2005	2006
TOTAL	**3.108**	**3.202**	**2.844**	**2.824**	**2.665**	**2.802**	**2.859**
Cattle	1.209	1.265	0.867	0.813	0.638	0.720	0.724
Sheep	0.034	0.044	0.032	0.034	0.041	0.037	0.040
Goats	0.118	0.132	0.169	0.175	0.165	0.182	0.210
Horses	0.010	0.011	0.011	0.012	0.012	0.012	0.012
Swine	0.022	0.019	0.020	0.019	0.022	0.025	0.022
Other (Deer)	1.715	1.732	1.746	1.771	1.786	1.825	1.852

The CH_4 emission from Manure Management emanated mainly from activities in the Pig industry followed by the Poultry one (Table 6.9). All manure is initially disposed of through the solid storage system and is the main source of N_2O emission from Manure Management. A small amount is emitted from liquid slurry from the Pig industry.

Table 6.9 - CH_4 and N_2O emissions from Manure Management

		2000	2001	2002	2003	2004	2005	2006
CH_4	**TOTAL**	**0.475**	**0.457**	**0.453**	**0.441**	**0.476**	**0.521**	**0.476**
	Cattle	0.056	0.058	0.039	0.037	0.029	0.033	0.033
	Sheep	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	Goats	0.003	0.003	0.004	0.004	0.004	0.004	0.005
	Horses	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	Swine	0.301	0.277	0.284	0.273	0.312	0.352	0.299
	Poultry	0.072	0.075	0.082	0.082	0.085	0.086	0.092
	Other (Deer)	0.042	0.042	0.043	0.043	0.044	0.044	0.045
N_2O	**TOTAL**	**0.028**	**0.029**	**0.029**	**0.028**	**0.024**	**0.027**	**0.026**
	Liquid Systems	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Solid Storage and Dry Lot	0.027	0.028	0.029	0.028	0.024	0.027	0.026

6.2.4 - Time Series Consistency and Uncertainty

Activity data adopted throughout the inventory period were of the same quality since they were collected and archived according to the same level of accuracy. Thus, time series consistency was maintained over the inventory period.

Livestock censuses are carried out on a fairly regular basis and adjustments are made annually based on slaughter and death rates by extension workers who interact closely with the production partners. Thus, the activity data contained some extrapolation and the level of uncertainty in the activity data was adopted as 10% Since the EFs adopted were locally-derived on good quality records, the level of uncertainty was adopted as 20% for CH_4 and 50% for N_2O. The combined uncertainty amounted to 22.36% for CH_4 and 50.99 for N_2O (Table 6.8).

Table 6.10 – Uncertainty with AD and EFs for Enteric Fermentation and Manure Management

	GHG	Uncertainty (%)		
		AD	EF	Combined
Enteric fermentation	CH_4	10	20	22.36
Manure Management	CH_4	10	20	22.36
Manure Management	N_2O	10	50	50.99

6.2.5 - QA/QC and Verification

QA/QC procedures were implemented at each stage. Data quality was ascertained by cross verifying from alternate sources, data entered and calculation procedures were confirmed. The process was peer-reviewed during joint working sessions and by an external reviewer.

6.2.6 - Recalculations

The GHG emission for the period 2000 to 2006 was compiled using the Tier 1 approach with default EFs and published by the CSO (CSO, 2001 to 2007). The computation was restricted to the livestock sector (enteric fermentation, manure management and agricultural soils subcategories). This inventory was compiled with country-specific EFs and included all sub-categories. The difference between the Tier 1 and Tier 2 emissions for the reported data was attributed to both a difference in activity data and EFs adopted (Table 6.11).

Table 6.11 – Recalculations results (Gg) from Enteric Fermentation and Manure Management

	2000	2001	2002	2003	2004	2005	2006
Enteric fermentation - CH_4							
Previous Inventory	0.470	NA	0.460	0.450	0.370	0.420	NA
Present Inventory	3.108	3.202	2.844	2.824	2.665	2.802	2.859
Manure Management – CH_4							
Previous Inventory	0.520	NA	0.590	0.590	0.620	0.640	NA
Present Inventory	0.475	0.457	0.453	0.441	0.476	0.521	0.476
Manure Management – N_2O							
Previous Inventory	-	NA	NA	-	-	-	NA
Present Inventory	0.028	0.029	0.029	0.028	0.024	0.027	0.026

NA – Not Available, - : Negligible

6.2.7 - Planned Improvements

Livestock censuses are made at irregular intervals and updating is carried out at different times of the year. Additionally, imports, consumption and production data are not centralized leading to some loss in accuracy. Planned improvements include,

- To keep detailed records of livestock data in Mauritius and Rodrigues Islands;
- To keep records of livestock imported for slaughtering purposes;
- To standardize the census adjustment date; and
- To rationalize and centralize data archiving.

6.3 - AGRICULTURAL SOILS

Emissions from the Agricultural Soils sub-sector comprise mainly GHG from the use of synthetic N fertilizer and of the emissions from manure deposited in rangelands. Leaching and runoff losses as well as atmospheric deposition are included. Residue decomposition was limited to residues from sugarcane, the major crop. Emissions from biological N fixation were assumed to be non-occurring as pulses are not produced and legumes produced are consumed fresh.

6.3.1 Source Category Description

Agriculture occupied 46% of the land area in 2000 and the percentage has gradually decreased to 43 in 2006 (Table 6.12). The sector is dominated by sugarcane production (about 90% of cultivated land) with about 70% of the sugarcane sector (43 000 ha) under corporate management (31 units) and the remaining 23 000 ha owned by some 23 500 individuals. Foodcrops, tea, tobacco, palm, fruit and flowers are produced on the remaining 10% of the cultivated land area and the production is dominated by some 12 000 small growers.

Table 6.12 – Land occupancy (ha) by agricultural activity

	2000	2001	2002	2003	2004	2005	2006
TOTAL ISLAND	**186500**	**186500**	**186500**	**186500**	**186500**	**186500**	**186500**
TOTAL AGRICULTURE	85682	85744	83486	82722	79710	79883	79327
Agriculture % Total	45.94	45.98	44.76	44.35	42.74	42.83	42.53
Sugarcane	***76960***	***76480***	***74780***	***74120***	***70790***	***71580***	***70800***
Potato	622	779	606	588	607	599	589
Tomato	788	934	947	1044	953	918	935
Banana	489	540	600	544	528	521	510
Onion	336	333	238	158	181	253	170
Pineapple	79	165	83	126	137	134	176
Ginger & Garlic	39	58	35	37	46	66	60
Legumes*[1]	624	628	685	868	838	710	713
Other vegetables	4406	4481	4068	3863	4263	3700	4054
Tea	670	660	680	681	674	670	688
Tobacco	395	386	399	378	348	287	249
Palm	300	300	365	315	345	445	383
Fruits & Others*[2]	NA	NA	NA	NA	NA	NA	320
Grazing lands*[3]	NA	NA	NA	NA	NA	NA	247

Source: CSO (2001 -2007) *[1] Includes bean, pea, groundnut and cowpea
*[2] Source: Agreco Consortium, 2006, *[3] AREU, 2006. Fodder Booklet NA – Not Available

Synthetic N-fertilizers are applied in sugarcane as well as foodcrops production systems. Consumption data for the sugarcane sector has been published by the Mauritius Chamber of Agriculture but these were not fully consistent. Manure, after decomposition in stacked piles, is used in the foodcrops sector run by the small growers but records are not available. Leaching and runoff losses were included. Atmospheric deposition was not estimated due to unavailability of records on thunderstorm frequency and intensity, and the associated amount of N in rainfall.

6.3.2 – Methodological Issues

Activity Data

The fertilizer consumption was estimated based on the area and the recommended application rates for each crop areas under different crops, the latter being compiled from various sources (Table 6.13). The cumulative value was compared with the annual fertilizer imports. The latter were slightly higher than the computed fertilizer consumption but the trend was similar in both sources. Assuming that the year to year carry-over is fairly constant, the difference was attributed to some over-fertilization in the production system. The imports data were, therefore, adopted as activity data.

Table 6.13 - Activity data for use of synthetic fertilizers

	2000	2001	2002	2003	2004	2005	2006
RECOMMENDED N RATE (t)							
Sugarcane*[1]	7388	7342	7179	7116	6796	6872	6797
Foodcrops*[2]	1136	1258	1185	1172	1196	1150	1182
TOTAL	***8524***	***8600***	***8364***	***8287***	***7992***	***8022***	***7979***
TOTAL N IMPORTS*[3]	**11550**	**11428**	**11028**	**10742**	**10499**	**9336**	**8614**

*[1] - Source : Recommendation Sheet No ---,MSIRI, Mauritius. Average yield - 80 t ha^{-1}

*[2] - Source : Agricultural Research and Extension Unit, Mauritius

*[3] - Source : Digest of Agricultural Statistics, Central Statistics Office, Includes N used elsewhere (Rodrigues, gardens, golf courses, pasture for deer & forage) & N as over-application in sugarcane & foodcrops)

The N content of manure produced under rangelands was included in the computation of N_2O emissions.

Tier Level

Even if detailed acreage data was available on a per crop basis, a Tier 1 level was adopted since the consumption data was not available on a per crop basis.

Emission factors

Default EFs were used (Table 6.14) only if available data did not allow for CS ones to be derived.

Table 6.14 - EFs adopted for emissions from agricultural soils

		SOURCE	UNIT	EF
EF1	**Factor for direct N_2O emission**	Table 4-18 (IPCC, 1996)	kg N_2O-N/kg N	0.0125
$FRAC_{GASFS}$	**Fraction of synthetic fertilizer that volatilizes**	CS (MSIRI, Unpbl.)	Kg N /Kg N	0.2
EF3	**Factor for AWMS**	Table 4-12 (GPG, 2000)	kg N_2O-N/kg N	0.02
EF4		Table 4-23 (IPCC, 1996)	kg N_2O-N/kg N	0.01
$FRAC_{GASM}$	**Fraction of total manure N excreted that volatilizes**	Table 4-19 (IPCC, 1996)	Kg N /Kg N	0.02
$FRAC_{LEACH}$	**Fraction of N that leaches**	CS (MSIRI, Unpb.)	Kg N /Kg N	0.05
EF5		Table 4-23 (IPCC, 1996)		0.025

CS – Country Specific

6.3.3 – Results

Direct, indirect and pasture range emissions of N_2O did not vary much over the inventory period 2000 – 2006 on account of quite limited activities and the absence of developments in this area.

Table 6.15 – Emissions of N_2O from Agricultural Soils (2000 – 2006)

	UNIT	2000	2001	2002	2003	2004	2005	2006
TOTAL	**Gg N_2O/yr**	**0.449**	**0.466**	**0.422**	**0.445**	**0.443**	**0.414**	**0.396**
Direct	Gg N_2O/yr	0.32	0.34	0.31	0.33	0.33	0.31	0.29
Indirect	Gg N_2O/yr	0.07	0.07	0.07	0.07	0.07	0.06	0.06
Pasture range	Gg N_2O/yr	0.06	0.06	0.04	0.03	0.05	0.05	0.05

6.3.4 – Uncertainty and Time Series Consistency

Fertilizer consumption by the sugarcane sector, the main fertilizer user, was reported for a few years by the Mauritius Chamber of Agriculture but the trend was not consistent over the years. The adoption of import figures as AD was therefore assumed to be associated with a level of uncertainty of 20 %. The uncertainty associated with EFs was assumed to be 50% as per the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). The resulting combined uncertainty amounted to 53.85%.

6.3.5 – QA/QC and Verification

QA/QC procedures were implemented at each stage. Data quality was ascertained by cross-verifying from different sources. Data used and calculation procedures were confirmed. The process was peer-reviewed during joint working sessions and by an external reviewer.

6.3.6 – Recalculations

The emissions from Agricultural Soils from the Tier 1 level exceed the Tier 2 level emissions by more than two-fold. This was attributed to the fact that under the Tier 1 compilation, it was assumed that all manure was deposited directly on the soil rather than the solid storage adopted in Mauritius and no allowance was made for the fraction of manure N that is emitted as NO_x and NH_3.

Table 6.16 – Recalculations results (Gg) for Agricultural Soils (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Agricultural soils – N_2O							
Previous Inventory	1.03	NE	1.11	1.13	1.10	1.22	NE
Present Inventory	0.449	0.466	0.422	0.445	0.443	0.414	0.396

NE – Not Estimated

6.3.7 – Planned Improvements

Fertilizer imports data are reported by the CSO but data were not collected on a per crop basis. Fertilizer was traded at a limited number of outlets and there existed a framework for recording fertilizer purchase for the purpose of replanting of sugarcane fields. This framework could have been used to gather more detailed information in the agricultural sector. The sugarcane sector occupied 90% of the arable land and the production was about 40 times that of the foodcrops sector. In the latter sector, residue is generally piled in a corner of the field and left to decay. Field burning of agricultural residues was considered of significance in the sugarcane sector only. Planned improvements are to consolidate AD collection and archiving.

6.4 – FIELD BURNING OF AGRICULTURAL RESIDUES

6.4.1 – Source Category Description

In the sugarcane sector, field burning of residues was generally adopted to avoid trashing before harvest. However, due to environmental concerns and the advent of green harvesters, the practice is being gradually phased out. It is to be noted that accidental and criminal fires do occur and some planters still practice pre-harvest burning to facilitate harvest.

6.4.2 – Methodological Issues

Activity Data

Available records indicate that field burning of sugarcane residues (intentional and accidental) has gradually decreased from 30% in 2000 to 14% in 2005. Data for missing years were interpolated. Parameter of relevance, e.g., dry matter content of leaves and leaf to cane ratio, available locally, are given in the Table 6.17. Dry matter content of cane (28.82%), leaf to cane, fresh mass basis (35.43%) and the fraction of extraneous mater to mill (22.2 in 2000 to 24.77% in 2006) were adopted from experimental data (Cheeroo-Nayamuth et al, 1994).

Table 6.17 – Biomass harvested and fraction of sugarcane area burnt

		2000	2001	2002	2003	2004	2005	2006
Area under cane (ha)	**Total*[1]**	**76960**	**76480**	**74780**	**74120**	**70790**	**71580**	**70800**
	Burnt*[2]	22753	21708	NA	NA	11139	10050	NA
Fraction area burnt		0.2956	0.2838	0.2400	0.2000	0.1574	0.1404	0.1400
Production, Fresh Mass ('000 t)	**Cane*[1]**	5,106	5,788	4,870	5,197	5,277	4,981	4,746
	Food + Other crops*[3]	121	137	111	111	119	104	115
Cane DM ('000 t)		1,471	1,668	1,404	1,498	1,521	1,435	1,368

*[1] – Source: MSIRI (2001 to 2007)
*[2] – Source: Agreco (2006
*[3] – Source: CSO (2001 to 2007)

Emission factor

Whenever available, country-specific parameters and ratios were adopted. Default EFs (Table 6.18) for the GHGs were adopted (IPCC, 1996).

Table 6.18 – EFs for pre-harvest burning of sugarcane residues

	SOURCE	UNIT	EF
Leaf : cane (FM basis)	CS (MSIRI, Unpublished)		0.3224
Leaf dry matter fraction	CS (MSIRI, Unpublished)		0.3543
Fraction oxidized	Ball-Coelho (1993)		0.785
Carbon fraction of residue	IPCC, 1997		0.45
Nitrogen : Carbon of residue	CS (MSIRI, Unpublished)		0.0167
EF for CH_4	Table 4-15 (IPCC, 1997)	CH_4 : C released	0.005
EF for CO	Table 4-15 (IPCC, 1997)	CO : C released	0.06
EF for N_2O	Table 4-15 (IPCC, 1997)	N_2O : C released	0.007
EF for NO_x	Table 4-15 (IPCC, 1997)	NO : C released	0.121

Tier Level

Since disaggregated data were not available, a Tier 1 level was adopted.

6.4.3 - Results

GHG emissions from burning of agricultural residues (Table 6.19) showed a decreasing trend from the year 2000 to 2006. This is in agreement with the gradual abandonment of the burning practice in the sugarcane industry.

Table 6.19 – Emissions (Gg) by gas from field burning of agricultural residues (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CH_4	0.41	0.44	0.31	0.28	0.22	0.19	0.18
CO	8.52	9.28	6.60	5.87	4.69	3.95	3.75
N_2O	0.01	0.01	0.01	0.01	0.01	0.01	0.00
NO_x	0.40	0.44	0.31	0.28	0.22	0.19	0.18

6.4.4 – Time Series Consistency and Uncertainty

Data on area burnt were available for a few years and this allowed interpolation with a fairly good level of confidence. The same assumptions and EFs were adopted over the whole inventory period. This ensured that the time series were consistent. Since there was some interpolation in the AD, the uncertainty associated with it was assumed to be 20%. As per the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) the uncertainty associated with CH_4 and N_2O were assumed to be 20% and 50% respectively. The resulting combined uncertainty amounted to 28.28% for CH_4 and 53.85 for N_2O.

6.4.5 – QA/QC and Verification

QA/QC procedures were implemented at each stage. Data quality was ascertained by cross verifying from alternate sources, data entered and calculation procedures were confirmed. The process was peer-reviewed during joint working sessions and by an external reviewer.

6.4.6 – Recalculations

There was no recalculation for this sub-category as it had not been compiled previously.

6.4.7 – Planned Improvements

Records of area burnt and weight of canes are made at mill balances. Additionally, separate analyses for quality are made on burnt cane consignments. But, these data are not systematically collected and archived. Recording and archiving data on area and tonnage of burnt cane are planned

7. LAND USE, LAND USE CHANGE & FORESTRY

7.1 OVERVIEW

The Land Use, Land-Use Change and Forestry (LUCUCF) sector is unique in that it accounts for both emissions and removals of carbon dioxide to and from the atmosphere. The LULUCF sector in Mauritius comprised the following categories:

- Forest Land
- Cropland
- Wetlands
- Settlement
- Other land

Grassland did not occur in Mauritius and the percentage area occupied by each of the other categories is given in Figure 7.1.

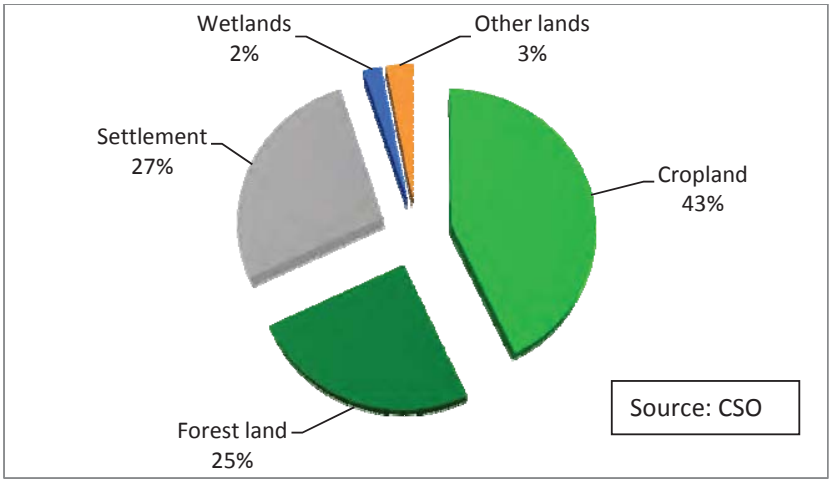


Figure 7.1 - Land Use in Mauritius (2005)

Forest Land plays an important role in sustainable development as a useful ecosystem offering valuable services. It is also of prime importance for the preservation of biodiversity. Unfortunately, most of the forests are in a degraded state with severe infestations of invasive alien species.

7.1.1 Key Category Analysis

Even if the LUCUCF sector is not a major player as a GHG emitter, all occurring categories was covered in this inventory.

7.1.2 - Completeness

This inventory covered all source categories occurring in Mauritius (Table 7.1).

Table 7.1 – Source categories in LULUCF Sector (2000-2006)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2	CH_4	N_2O	NO_x	CO
LULUCF	**X**	**X**	**X**	**X**	**X**
5.A. Forest Land					
5.A.1. Forest Land remaining Forest Land					
Carbon stock change	X	X	X	X	X
5(I) Direct N_2O emissions from N fertilization	NA	NA	NO	NA	NA
5(II) Non-CO_2 emissions from drainage of soils and wetlands	NA	NO	NO	NO	NO
5(V) Biomass burning (Forest Fires)	IE	X	X	X	X
5.A.2. Land converted to Forest Land	NO	NO	NO	NO	NO
5.B. Cropland	X	NE	NE	NE	NE
5.B.1. Cropland remaining Cropland	X	NE	NE	NE	NE
Carbon Stock Change	X	NE	NE	NE	NE
Biomass Burning	NE	NE	NE	NE	NE
5.B.2. Land converted to Cropland	NO	NO	NO	NO	NO
5.C. Grassland	NA	NA	NA	NA	NA
5.D. Wetlands	X	NE	NE	NE	NE
5.D.2.1. Forest Land Converted to Wetlands	X	NE	NE	NE	NE
5.E. Settlements					
5.E.1. Settlements remaining Settlements	X	NE	NE	NE	NE
5.E.2. Land converted to Settlements	X	NE	NE	NE	NE
5.E.2.1. Forest Land Converted to Settlements	X	NE	NE	NE	NE
5.F. Other Land*					
5.F.2. Cropland converted to Other Land	X	NE	NE	NE	NE
*** Estimate of emissions is not required on Other Land remaining Other Land as per GPG 2003**					

X = Estimated, NA = Not Applicable, NO = Not Occurring, NE = Not Estimated, EE = Included Elsewhere

7.1.3 Overall summary

The LULUCF sector represented a net removal of CO_2 from the atmosphere during the period 2000-2006 (Table 7.2). No clear trend is observed over the period except for the year 2000 when the net removal was much lower as a result of higher emissions due to the conversion of some 300 ha of forest land to wetland for the commissioning of a dam. The lowest removal occurred in 2002 due to the passage of a severe cyclone.

Table 7.2 - Emissions and removals (Gg CO_2 eq) in the LULUCF sector (2000-2006)

	2000	2001	2002	2003	2004	2005	2006	Annual change (%)
Emissions	234.15	100.34	105.82	123.92	104.95	128.90	117.75	4.3*
Removals	-315.98	-317.96	-289.37	-323.39	-302.33	-305.53	-303.70	-0.4
NET REMOVALS	**-81.83**	**-217.62**	**-183.55**	**-199.47**	**-197.38**	**-176.63**	**-185.95**	

* Excludes the year 2000 because of abnormally high emissions due to construction of a dam

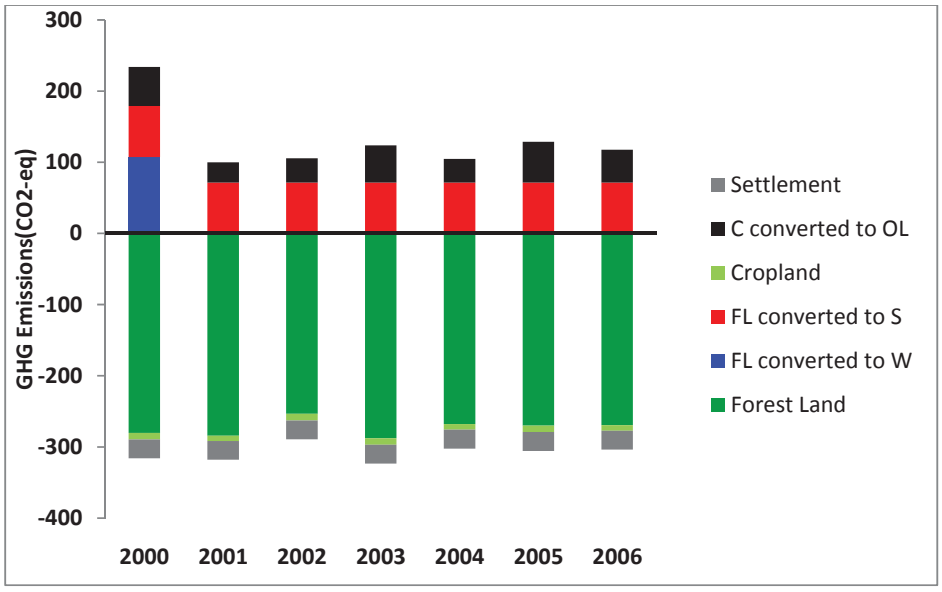
Emissions and removals in the LULUCF sector are mainly CO_2. Minor emissions of other gases resulted from forest fires (Table 7.3).

Table 7.3 - Emissions and removals by gas (Gg) in the LULUCF sector (2000-2006)

	2000	2001	2002	2003	2004	2005	2006	% Annual change
CO_2 emissions	*233.96*	*100.05*	*105.53*	*123.65*	*104.65*	*128.84*	*117.63*	*4.3**
CO_2 removals	*-315.98*	*-317.96*	*-289.37*	*-323.39*	*-302.33*	*-305.53*	*-303.70*	*-0.4*
Net CO_2 removals	-82.02	-217.91	-183.84	-199.74	-197.68	-176.69	-186.07	25.4
CH_4	0.0077	0.0109	0.0109	0.0101	0.0114	0.0027	0.0042	4.4
N_2O	0.0001	0.0002	0.0002	0.0002	0.0002	0.0000	0.0001	-16.7
NOx	0.0008	0.0011	0.0011	0.0010	0.0011	0.0003	0.0004	-0.2
CO	0.1214	0.1722	0.1723	0.1591	0.1800	0.0420	0.0657	4.5

* Excludes the year 2000 because of abnormally high emissions due to construction of a dam

CO_2 removal from Cropland and Settlement remained more or less constant. Emissions from conversion of cropland to other land fluctuated over the years. Forest Land remaining Forest land represented a net sink of CO_2 from living biomass, averaging about 273 Gg annually during the period 2000-2006.



C: Cropland; OL: Other Land; FL: Forest Land: S: Settlement

Fig 7.2 - Emissions and removals (CO_2 -eq) by subcategory in the LULUCF sector (2000 to 2006)

Table 7.4 - Emissions and removals (Gg) by sub-category in LULUCF sector (2000-2006)

	2000		2001		2002		2003		2004		2005		2006	
	E	R	E	R	E	R	E	R	E	R	E	R	E	R
TOTAL	**233.96**	**-315.98**	**100.05**	**-317.96**	**105.53**	**-289.37**	**123.65**	**-323.39**	**104.65**	**-302.33**	**128.84**	**-305.53**	**117.63**	**-303.70**
A. Forest Land		*-280.31*		*-284.31*		*-253.4*		*-287.66*		*-267.69*		*-269.95*		*-269.37*
B. Cropland		*-9.37*		*-7.29*		*-9.5*		*-9.26*		*-8.17*		*-9.1*		*-7.84*
C. Grassland														
D. Wetland	*107.48*		*0*		*0*		*0*		*0*		*0*		*0*	
E. Settlement	*71.49*	*-26.3*	*71.49*	*-26.36*	*71.49*	*-26.43*	*71.49*	*-26.47*	*71.49*	*-26.47*	*71.49*	*-26.48*	*71.49*	*-26.49*
F. Other Land	*54.99*		*28.56*		*34.04*		*52.16*		*33.16*		*57.35*		*46.14*	

E - Emission

R - Removal

7.2 METHODOLOGY

7.2.1 Source Category Description

Forest land

Forest Land is a key sink category in the country. It covered about 25% of the total land area in 2005. Forest land decreased from 56,723 ha in 1985 to 47,185 ha in 2005. The majority of the losses occurred from private forests and these were not accounted for in the Forest statistics until 2004. Private forest statistics were reviewed and updated on the basis of data obtained from the Remote Sensing Centre and a subsequent survey carried out by the Forestry Service in 2004. Thus data used for the years 2000 to 2003 did not reflect the exact situation. For the same reason, an average value was adopted for annual conversion of forest land for the period 1985-2005 in the inventory computation. Rodrigues suffered from deforestation and today there remains some 3300 ha which represent about 30 % of the island. All forest lands have been considered as Forest Land Remaining Forest Land when compiling the inventory.

Forest Land consists of both native and planted forests. It has been classified according to types and ecological zone as per the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). Timber exploitation is carried out mainly in planted forests under Pine and Eucalyptus species. Both these species are moderately resistant to cyclones and suffer substantial damage during their passages.

The amount of carbon stored through biomass increment exceeds by far the amount lost through commercial felling, fuelwood gathering and disturbances such as cyclones and fires. Timber exploitation is limited and will be further reduced in the future, in line with the National Forest Policy (2006). Forest fires occur mostly in dry lowland forests with an average of about 100 ha affected annually.

Cropland

Cropland comprises mostly sugarcane cultivation which covers about 46% of the total surface area (85,682 ha in the year 2000). Since the late 1990s, cropland has been declining due to abandonment and conversion of sugarcane lands.

Settlement

From 28,465 ha in 1985, the area under settlement increased rapidly to reach 51,015 ha in 2005. Since no annual update is made because of the lack of systematic data collection, an average value for the period 2000 – 2004 has been used for the inventory period 2000 to 2004 and the updated value for the years 2005 and 2006. The average value was based on available National Statistics.

Other Land

Other Land includes bare soils, rocky lands and unmanaged land that do not fall into any of the other five categories. According to the *IPCC Good Practice Guidance on Land Use Land Use Change and Forestry* (IPCC, 2003), this land-use category is included to allow the total of identified land areas to match the national area and there is no need to estimate emissions from it.

7.2.2 Methodological Issues

Carbon is in a constant cycling process as a result of biological and anthropogenic activities on forest land. Carbon stock change in dead organic matter and soil has not been computed because it is assumed that there is no significant change in forest types, disturbance, or management practices and that the average transfer rates into and out of the system are equal. The IPCC recommended methodology (IPCC, 2003) has been used for the calculation of CO_2 emissions and removals in the LULUCF sector.

Activity data

All forest data are available at the Forestry Service. The growing stock data were obtained in 2003 within the context of the Global Forest Resource Assessment (GFRA, 2005) for Mauritius and has been used for the years 2000 to 2006.

Data on settlement were worked out from statistics of various organizations for the Stocktaking and Stakeholders exercise on climate change activities in the years 2005 and 2006. Cropland data other than sugarcane were those collected by AREU and recorded annual data on land under sugarcane cultivation were obtained from the annual reports of the Mauritius Sugar Industry Research Institution (MSIRI, 2001 to 2007).

Tier Level

Tier level 2 has been adopted since disaggregated data were available.

Emission factors

Emission, Removal and other related factors from the *IPCC Good Practice Guidance on Land Use Land Use Change and Forestry* (IPCC, 2003) were used as well as some country-specific ones. The EFs adopted for this inventory are given in Tables 7.5 and 7.6.

Table 7.5 – EFs adopted in the LULUCF sector

		Unit	Values	SOURCE - REMARKS
Forest Fire, EF	CO_2 CO CH_4 NO_x		1531 112 7.1 0.6 to 0.8	Table 3A.1.16, IPCC, LULUCF
Combustion factor			0.63; 0.45; 0.72	Table 3A.1.12, IPCC, LULUCF
Annual Net Increment		m^3/ha/yr	0.5 to 21	Country-specific – GFRA (2005)
Basic wood density		t dm / m3 fresh volume	0.38 to 0.82	Country-specific – GFRA (2005)
Carbon fraction	CF	Fraction	0.47	Table4.3, IPCC (2006)
Biomass Expansion Factor	BEF_1		Conifer - 1.2 Broadleaf -1.5	Table 3A.1.10, IPCC (LUCUCF)
Root : Shoot			0.2 to 0.2.9	Table 4.4, IPCC (2006)
Biomass Expansion Factor	BEF_2		Conifer - 1.3 Broadleaf -3.4	Table 3A.1.10, IPCC (LUCUCF)
Fraction of Biomass left to decay	(f_{BL})		0,25	Table 3A.1.11, IPCC (LUCUCF)
Average Above Ground Biomass		t dm/ha	55 to 255	Country-specific – GFRA (2005)

7.2.3 Results

The LULUCF Sector represented a net sink of some 177 Gg CO_2-eq over the period 2000 to 2006 (Table 7.6). The low net removals for the year 2000 is attributed the construction a dam for surface storage.

Table 7.6 – Emissions and removals in the LULUCF sector (2000 to 2006)

	Gas	2000	2001	2002	2003	2004	2005	2006
NET REMOVAL	Gg CO_2-eq	**-81.829**	**-217.638**	**-183.659**	**-199.47**	**-197.41**	**-176.468**	**-185.951**
A. Forest Land Forest land remaining forest land	Gg CO_2	-280.31	-284.31	-253.44	-287.66	-267.69	-269.95	-269.37
	Gg CH_4	0.0077	0.0109	0.0109	0.0101	0.0114	0.0027	0.0042
	Gg N_20	0.0001	0.0002	0.0002	0.0002	0.0002	0.00004	0.00001
	Gg NO_x	0.0008	0.0011	0.0011	0.0010	0.0011	0.0003	0.0004
	Gg CO	0.1214	0.1722	0.1723	0.1591	0.1800	0.0420	0.0657
B. Cropland 1. Cropland remaining cropland		-9.37	-7.29	-9.5	-9.26	-8.17	-9.1	-7.84
D. Wetland *2. Land converted to wetland*		107.48	0	0	0	0	0	0
E.Settlement 1. Settlement remaining Settlement		-26.3	-26.36	-26.43	-26.47	-26.47	-26.48	-26.49
2.Land converted to settlement		71.49	71.49	71.49	71.49	71.49	71.49	71.49
F.Other Land *2.Land converted to other land*		54.99	28.56	34.04	52.16	33.16	57.35	46.14

7.2.4 Time Series Consistency and Uncertainty Analysis

Emissions/removals of GHGs have been computed using the same methodology and data sources for each year in the inventory period 2000-2006. Data were collected on the basis of quality, availability and reliability. These criteria were maintained for all the years to ensure a good time series consistency.

Uncertainty on the extent of forest area is considered low as from the year 2004 when the national forest statistics were updated. Regarding commercial roundwood felling, fuelwood gathering and other losses, the uncertainty is low as there are good annual records. Similarly there are good records of cropland, which comprises mostly of sugarcane, and the uncertainty is low. Finally, uncertainties for settlement and wetland are considered low. The uncertainty associated with the AD and EF for the different subcategories of the LUCUCF (Table 7.7) was at the same level over the period 2000 to 2006. The combined uncertainty for the different sub-categories ranged from 40.31% to 50.25%.

Table 7.7 – AD and EF uncertainty in the LULUCF sector

IPCC Source Category	Gas	UNCERTAINTY		
		Activity data	Emission factor	Combined
5.A Forest Land	**$1CO_2$**	10.0/ 30.0	40.0	50.00
5.B Cropland	**$1CO_2$**	5.0	40.0	40.31
5.D Wetlands	**$1CO_2$**	5.0	40.0	40.31
5.E Settlements	**$1CO_2$**	10.0	40.0	41.23
5.F Other Land	**$1CO_2$**	10.0	40.0	41.23
5.A Forest Land	**CH_4**	5.0	50.0	50.25
5.A Forest Land	**N_2O**	5.0	50.0	50.25

7.2.5 QA/QC and Verification

Quality Assurance/Control procedures were applied to ensure that the best available datasets have been used and errors eliminated during computation. Systematic checks were made on activity data, use of standard procedures and emissions/removals calculations. Moreover, data were cross-checked during working sessions by independent persons of the inventory team. All AD were checked for consistency and completeness.

7.2.6 Recalculations

The previous GHG inventories were compiled with aggregated data at Tier 1 level for Forest Land only**.** The present inventory has been compiled with disaggregated data and at Tier 2 level, and the methodology was constant with datasets from the same sources for all the years in the inventory period 2000-2006. Thus recalculations have been done and the percentage difference is shown in Table 7.8. Emissions were consistently underestimated in the previous inventories because of less precise AD.

Table 7.8 – Recalculations results (Gg CO_2) for Forest Land remaining Forest Land

	2000	2001	2002	2003	2004	2005	2006
Previous Inventory	-229.2	-234.5	-239.5	-237.9	-223.7	-223.7	-193.2
Present Inventory	-280.3	-284.3	-253.4	-287.7	-267.7	-270.0	-269.4
% Difference previous to present	18.2	17.5	5.5	17.3	16.4	17.1	28.3

7.2.7 Planned Improvements

The gaps and constraints were, amongst others:

- Activity data on private forests were not readily available;
- Inadequate human and institutional capacity;
- Insufficient research works for EF derivation;
- Inadequate financial, human and technological resources;
- Absence of an appropriate set up for continuous collaboration between stakeholders; and
- Reluctance of some stakeholders to share data.

University students under placement programme will be assigned specific tasks related to forest and GHG inventory, for e.g. determining carbon stock change in dead organic matter and soils on forest land, biomass expansion factor. to bridge some of the data gaps.

A Land Administration Valuation Information Management System (LAVIMS) is being set up at the Ministry of Housing and Lands and a Forest Land Information System (FLIS) at the Forestry Service. Significant improvement will be made through the application of remote sensing (satellite imagery) and Geographical Information System. There is an urgent need to set up a National Spatial Data Infrastructure (NSDI) in Mauritius for data sharing amongst all stakeholders involved in natural resource management.

8. WASTE

8.1 OVERVIEW

Emissions of GHGs from this sector occurred from Solid Waste Disposal on Land, Wastewater Handling and Waste Incineration. Most of the solid wastes were disposed of in a unique landfill and minor amounts of Poly-Ethylene Terephthalate (PET) were recycled. Some organic wastes were composted. Waste Incineration consisted mainly of Clinical Wastes. Minor amounts of waste, disposed in open dumps, have not been accounted for. Methane, the most important GHG in this sector is accounted for in this inventory as well as CO_2 emitted from incineration of clinical waste. N_2O has not been accounted for in Waste Incineration as EFs were not available. Wastewater handling comprised of effluents from Domestic, Commercial and Industrial activities.

8.1.1 Key Category

Solid Waste Disposal on Land has been identified as a key source for CH_4, but detailed calculations using higher tiers could not be carried out as data were not to the level of disaggregation required.

8.1.2 Completeness

Table 8.1 - Completeness in the Waste sector

	CO_2	CH_4	N_2O	NO_x	CO	NMVOC	SO_2
6.A Solid Waste Disposal on Land							
6.A.1 Managed Waste Disposal on Land	NO	NO	NO	NO	NO	NO	NO
6.A.2 Unmanaged Waste Disposal Sites	NO	NO	NO	NO	NO	NO	NO
6.A.2.1 Deep greater than 5m	NO	NO	NO	NO	NO	NO	NO
6.A.2.2 Shallow less than 5m	NO	NO	NO	NO	NO	NO	NO
6.A.3 Other	NO	NO	NO	NO	NO	NO	NO
6.B Wastewater Handling							
6.B.1 Industrial Wastewater	NO	X	NO	NO	NO	NO	NO
6.B.2 Domestic and Commercial wastewater	NO	X	X	NO	NO	NO	NO
6.B.3 Others (Hotels)	NO	X	NO	NO	NO	NO	NO
6.C Waste incineration							
6.C.1 Biogenic	X	NE	NE	NO	NO	NO	NO
6.C.2 Other (Biological treatment)	X	X	X	NO	NO	NO	NO
6.D Other	NO	NO	NO	NO	NO	NO	NO

X = Estimated, NA = Not Applicable, NO = Not Occurring, NE = Not Estimated, IE = Estimated Elsewhere

8.1.3 Overall Summary

Aggregated emissions from the waste sector increased from 1170 Gg CO_2–eq in the year 2000 to 1333 Gg CO_2–eq in 2006. This is due primarily to more waste being generated as a result of demographic growth but also higher consumption patterns following increases in purchasing power of the population.

Table 8.2 – GHG emissions (Gg CO_2-eq) from the Waste sector (2000 – 2006)

SOURCE CATEGORY	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
WASTE TOTAL	1170.00	1281.41	1225.62	1260.86	1264.99	1265.98	1332.95	2.3
Solid Waste disposal on land	447.32	527.28	583.82	606.38	582.96	625.08	707.66	8.2
Wastewater handling	722.15	753.60	641.27	653.98	681.54	640.41	624.77	-2.1
Waste Incineration	0.54	0.52	0.53	0.49	0.49	0.49	0.52	-0.5

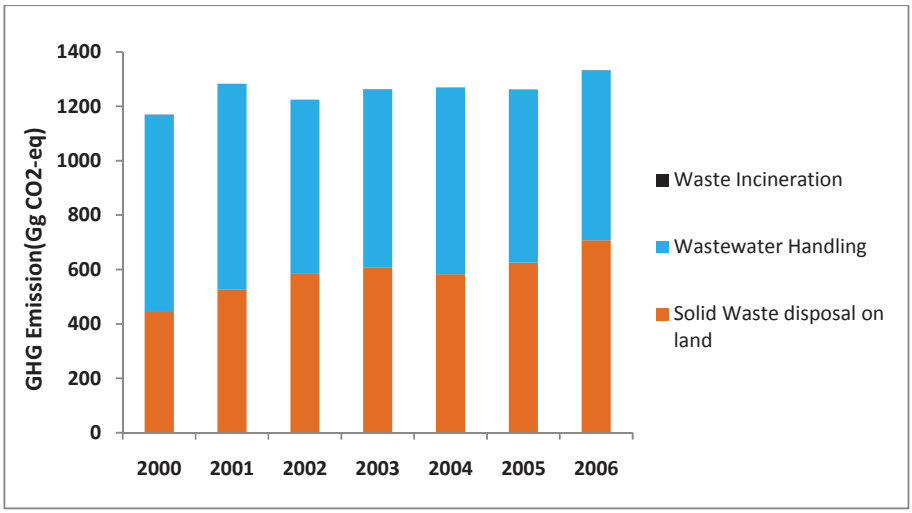


Figure 8.1 - GHG emissions (Gg CO_2-eq) from the Waste sector (2000 – 2006)

As expected CH_4 was the major GHG emitted from the waste sector. It increased by 2.4% on average over the inventory period from 54.28 Gg in the year 2000 to 62.27 Gg in 2006. CO_2 emissions remained more or less constant while that of N_2O regressed slightly.

Table 8.3 - Emissions by gas (Gg) from the Waste sector (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
CO_2	0.536	0.524	0.531	0.493	0.493	0.493	0.518	-0.5
CH_4	54.285	59.719	56.954	58.804	59.240	59.026	62.268	2.4
N_2O	0.095	0.086	0.094	0.082	0.066	0.084	0.084	-1.0

8.2 SOLID WASTE DISPOSAL ON LAND (Category 5A)

8.2.1. Source Category Description

Around 1000 t of Municipal Solid Waste (MSW) are generated daily. Waste generated from domestic and industrial activities constituted the major fraction of MSW. Around 92% was domestic wastes, 5% of commercial and industrial origin and 3% hazardous wastes (Figure 8.2). They were collected and transferred to the single landfill that exists in Mauritius.

8.2.2. Methodological Issues

The default methodology as per the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) was used to estimate emissions from solid waste disposal on land. CO_2 released from land disposal of solid waste were treated as net emissions and has not been accounted for in the inventory. Methane emissions for the period 2000 to 2006 are presented in this inventory. The choice of method for the compilation of emissions from solid waste disposal was based on the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) and the four outlined steps were followed.

Activity Data

Quality and composition of disposed MSW and the main characteristic of SWDSs in Mauritius have been evaluated for the entire time series. Historical data for the total amount of generated waste and disposed MSW for the period 2000-2006 have been derived on the basis of national rate of waste generation and fraction of MSW disposed at SWDS, which was normally above 90%. The total amount of MSW disposed of in the landfill, based on the assumption that more than 90% of generated wastes are landfilled, during the period 2000 – 2006 is presented in Figure 8.2. The data in fact corresponds to the weighbridge amount before disposal to the SWDS. They were obtained from the landfill operator which submitted their data to the Solid Waste Division of the Ministry of Local Government and Outer Islands.

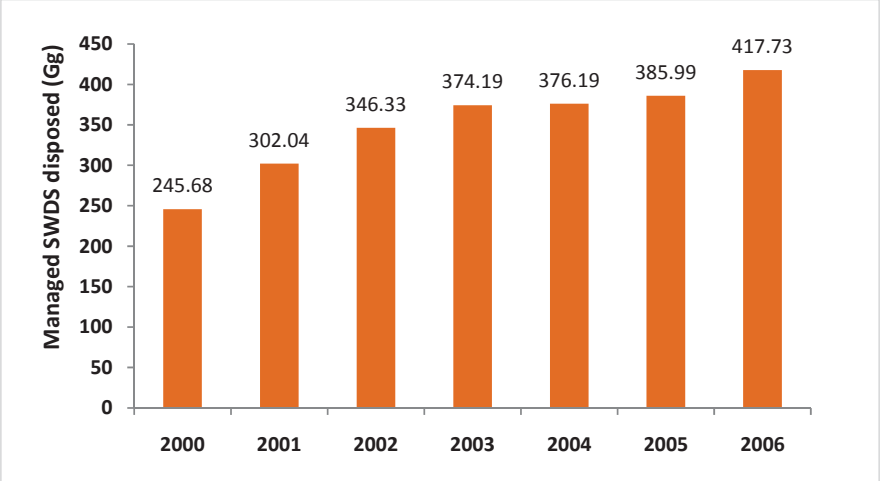


Figure 8.2 - Solid waste disposal for the period 2000 to 2006

Tier Level

Tier level 1 was adopted for computing the emissions.

Emission Factors

Most of the MSW was disposed of in the sole landfill. In that facility waste depth would have exceeded 5m. The methane correction factor (Table 8.4) based on criteria recommended by the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) and the waste composition amounted to 1.0. Information on CH_4 that is recovered and burned in a flare device has been calculated. Gas recovered over the period 2000 to 2006 varied from year to year. The managed SWDS was not covered with aerated material and thus a default value of 0 for oxidation factor has been adopted.

Table 8.4 – EFs adopted for Solid Waste

			SOURCE - REMARKS
Methane Correction factor	MCF	1	Table 6.2, IPCC (1997)
Fraction of DOC in MSW	DOC	0.18	CS, pp 6.7, Table 6.1, IPCC (1997)
Fraction of DOC actually degrades	DOC_F	0.77	CS, pp 6.6, Table 6.1, IPCC (1997)
Fraction of carbon released as CH_4	F	0.5	pp 6.5, eq. I, IPCC (1997)
Conversion ratio	R	16/12	pp 6.5, eq. 1, IPCC (1997)
Oxidation Factor	OX	0	pp 6.5, eq. 1, IPCC (1997)
One minus oxidation correction factor	1-OX	1	pp 6.5, IPCC (1997)

For this inventory report, it has been assumed that passive venting continued with minimal interference from most cells. Some of the gas that was recovered (Table 8.5) and flared has been accounted for.

Table 8.5 – Methane recovery from Solid waste Disposal on land (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
CH_4 recovered (Gg)	1.4	2.8	4.2	5.7	7.0	5.9	4.9

The quantity of CH_4 emitted during the decomposition process is directly proportional to the fraction of degradable organic carbon (DOC), which is defined as the carbon content of different types of organic biodegradable wastes such as paper and textiles, garden and park wastes, food wastes, wood and straw wastes. DOC was calculated from country-specific data on waste composition and quantities based on data compiled by the Solid Waste Division of the Ministry of Local Government and Outer Islands.

8.2.3 Results

The gas emitted consisted of approximately 50% CO_2 and CH_4 each by volume. CO_2 is not accounted for since it has been considered as being mainly of biomass origin. CH_4 emissions were 21.3 Gg in 2000 and increased to reach 33.7 Gg in 2006.

Aggregated emissions, the CH_4 portion, amounted to 447.3 Gg CO_2 -eq in the year 2000 and increased to 707.7 Gg CO_2 -eq in 2006 (Table 8.6 and Figure 8.3). The share of emissions from the solid waste sub-category increased over the inventory period from some 38% in 2000 to 53% in 2006.

Table 8.6 - GHG Emissions (Gg CO_2-eq) from Solid Waste Disposal (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
WASTE TOTAL	1,170.0	1,281.4	1,225.6	1,260.9	1,265.0	1,266.0	1,333.0	2.3
Solid waste disposal on land	447.3	527.3	583.8	606.4	583.0	625.1	707.7	8.2
% Solid waste disposal	**38.23**	**41.15**	**47.63**	**48.09**	**46.08**	**49.37**	**53.09**	

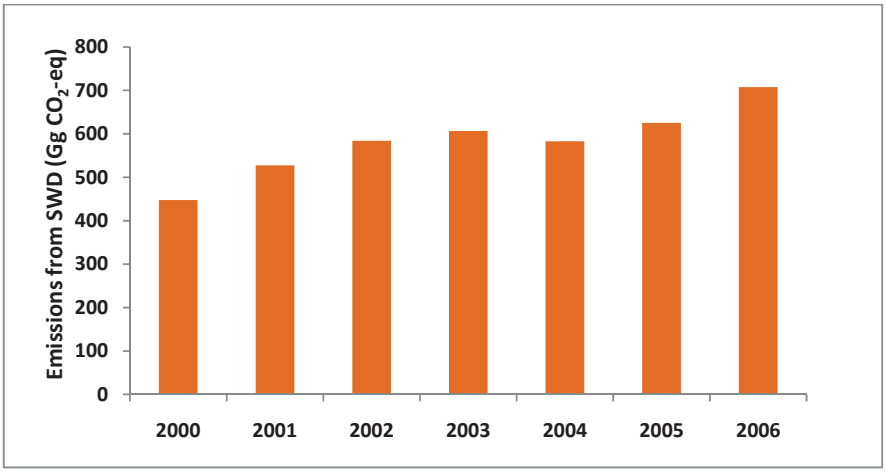


Figure 8.3 – Evolution of emission (Gg CO_2-eq) from Solid Waste Disposal on Land (2000 to 2006)

8.2.4 Time-series Consistency and Uncertainty

Emissions from Solid Waste Disposal on Land have been calculated using the same method for every year in the time series. Different sources of information were used for data checks.

The uncertainties associated with CH_4 emissions estimates are related primarily to assessment of the main characteristic of SWDSs as well as the usage of default IPCC methane generation rate constant (k=0.05). Another uncertainty originated from the estimation of degradable organic carbon (DOC) in MSW. Since there have been only a few exercises of waste characterization in Mauritius, these results were compared and adjusted to be representative of the local situation, using data from similar countries.

Uncertainty estimate associated with AD was assumed at 10% since regular collection of wastes is carried out throughout the country and the amount dumped is known. Uncertainty level associated with EF was estimated at 20%, accordingly to local conditions and from recommendations on uncertainty assessment in the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000. The Combined Uncertainty amounted to 22.36%.

8.2.5 QA/QC and Verification

During the preparation of the inventory, activities related to quality control were mainly focused on completeness and consistency of emission estimates. Compilations were crosschecked and validated. Finally experts of the GHG team made a last verification of the inventory process.

8.2.6 Recalculations

CH_4 emissions from the Solid Waste Disposal on Land sub-category have been previously computed and published in the Digest of Environment Statistics (CSO, 2001 to 2007). Severe underestimations are observed when comparing the published emissions with those from the present inventory. This could have resulted from the AD and the method of calculation.

Table 8.7 - CH_4 emissions (Gg) from the landfill (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Previous inventory	4.08	4.20	10.03	10.31	10.63	10.80	11.30
Present Inventory	21.30	25.11	27.80	28.88	27.76	29.77	33.70
% Difference present to previous inventory	80.8	83.3	63.9	64.3	61.7	63.7	66.5

8.2.7 Planned Improvements

As per Government policies, emphasis has been laid on infrastructure development for an integral system of waste management and the framework for effective waste management activities will be created. Consequently, more accurate data will be available for the calculation of CH_4 emissions. The more elaborated method of First Order Decay (FOD) could then be applied.

8.3 WASTEWATER HANDLING (Category 6B)

8.3.1 Source Category Description

Within the Wastewater Handling sub-category, wastewater was generated from activities in the Industrial, Domestic and Commercial, and Others (hotel) sectors. The Industrial and Hotel Wastewaters contributed to the emission of CH_4 during treatment while the Domestic and Commercial Wastewaters emitted N_2O as well. Wastewater treatment processes produced sludge which also contributed to the emission of GHGs.

Industrial Wastewater: Industries connected to the sewerage system are textile factories, dye houses, breweries, soft-drink bottling plants, wineries, slaughter houses, dairy processing units, fish and food canning plants. The sugar industry was the most important industrial sector discharging treated wastewater into the environment. The yearly volume of wastewater varied from 51.3×10^6 to 43.4×10^6 m^3 during the period 2000 - 2006. Two main poultry industries were operating. One pre-treated its wastewater before discharging it into the public sewerage system while the other carried out the

appropriate treatment before discharge into a water course. The yearly volume of wastewater varied from 220 160 m^3 to 309 600 m^3 during the period 2000 - 2006.

Domestic and Commercial Wastewater: Aerobic biological treatment processes, mainly of the activated sludge type, were used for public wastewater treatment. Sewerage coverage increased from 21.5 to 26% during the period 2000 to 2006. The remaining households mainly used on-site wastewater disposal systems consisting of septic tanks – absorption pits and cesspits. The volume of wastewater treated by septic tanks-absorption pits and cesspits was estimated to be of the order of 49.5 x 10^6 m^3 in 2006. Methane generated in one of the operational tertiary treatment plant was recovered and burnt on-site to produce electricity for running the system.

Others (Hotel Sector): The number of coastal tourist hotels ranged between 95 and 103 during the period 2000 to 2006. Forty two hotels operated on-site wastewater treatment plants, namely of the activated sludge process by 25 and septic tanks followed by rotating bio-contactors by 17. The resulting treated wastewater was used for irrigating lawns and golf courses. The remaining units, which are smaller, used septic tanks and absorption pit systems.

8.3.2 Methodological Issues

The methodology recommended in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) has been adopted for calculating CH_4 emissions for the wastewater handling sector.

Activity Data

AD relating to wastewater generated in the domestic, industrial and commercial sectors were sourced from operators of treatment plants and/or based on volume of metered water consumed and official statistics. Characteristics of the wastewater were obtained from actual laboratory analyses. The population for the period 2000-2006 was taken from national demography statistics. Data on the annual per capita Protein Intake Value (PIV), for the period 2000-2006, were adopted from the FAOSTAT Statistical Database (*Website: faostat.fao.org*). Statistical extrapolation has been made for generating missing data.

The AD used for computing CH_4 emissions from Industrial activities in the Wastewater handling sector are given in Table 8.8.

Table 8.8 - AD from Industrial Activities (2000 to 2006)

Industry	Product	UNIT	2000	2001	2002	2003	2004	2005	2006
Sugar	Total Industrial Output	t/yr	596300	645600	520900	537200	572316	519816	504857
	Wastewater produced	m^3/t output	86	86	86	86	86	86	86
Poultry	Total Industrial Output	t/yr	25600	27200	29305	30000	33000	33000	36000
	Wastewater produced	m^3/t output	8.6	8.6	8.6	8.6	8.6	8.6	8.6

The AD used for computing CH_4 emissions in the Sub-Category, Domestic and Commercial activities, are given in the Table 8.9.

Table 8.9 - AD for Domestic and Commercial Wastewater and Sludge Treatment (2000 - 2006)

Region or City/Treatment System/Gas Flaring	UNIT	2000	2001	2002	2003	2004	2005	2006
Plaine Wilhems	x1000 persons	101.62	105.80	108.50	110.91	114.79	118.83	124.59
Pt aux Sables+Port Louis	x1000 persons	139.07	144.79	148.88	151.79	162.03	173.52	176.92
5 x CHA Estate TPs	x1000 persons	7.11	7.11	7.11	7.11	7.11	7.11	7.11
Unsewered Areas	x1000 persons	903.30	905.60	909.56	916.58	912.76	906.80	900.01
Grand Baie	x1000 persons	-	-	-	-	3.50	6.96	6.96
On-site septic systems	Fraction	0.990	0.990	0.990	0.990	0.990	0.870	0.865
Aerobic systems	Fraction	0.010	0.010	0.010	0.010	0.010	0.130	0.135
Sludge treated by septic system	Fraction	0.990	0.990	0.990	0.990	0.988	0.985	0.985
Sludge treated by drying bed system	Fraction	0.010	0.010	0.010	0.010	0.012	0.015	0.015
Methane Flared	Kg CH_4	0	0	0	0	0	507 467	532 278

The AD used for computing CH_4 emissions in the Hotel Sub-Category are given in Table 8.10.

Table 8.10 – AD for Hotel activities (2000 to 2006)

Treatment System		UNIT	2000	2001	2002	2003	2004	2005	2006
Septic Systems	Population (Tourist Night)	x1000 persons	3078.2	3263.9	3316.7	3476.1	3844	3524.2	3512.2
	Fraction of Wastewater Treated by the Handling System	Fraction	0.48	0.50	0.49	0.50	0.48	0.47	0.48
	Methane Conversion for the Handling System	Fraction	0	0	0	0	0	0	0
Activated Sludge	Population (Tourist Night)	x1000 persons	3334.7	3263.9	3452.1	3476.1	3275.6	3974.1	4248.5
	Fraction of Wastewater Treated by the Handling System	Fraction	0.52	0.50	0.51	0.50	0.52	0.53	0.52
	Methane Conversion for the Handling System	Fraction	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Sludge Treated by the Handling System	Septic Tanks	Fraction	0.48	0.5	0.49	0.5	0.48	0.47	0.48
	Drying Beds	Fraction	0.52	0.5	0.51	0.5	0.52	0.53	0.52

The AD used for computing indirect N_2O emissions from Human Sewage is given in Table 8.11.

Table 8.11 - Activity Data for indirect N_2O emissions from Human Sewage (2000 – 2006)

	UNIT	2000	2001	2002	2003	2004	2005	2006
Population	No.	1186873	1199881	1210196	1222811	1233386	1243253	1252698
Per Capita Protein Consumption	kg/ /yr	31.86	28.65	30.80	29.28	26.52	21.10	26.57
Amount of sewage N applied to soils	kg N/yr	0	0	0	0	0	0	0

Tier Level

Reliable detailed data records allowed the adoption of the Tier 2 level in the compilation of this inventory.

Emission Factors (EF)

Default EFs from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) were supplemented with country-specific EFs and other scientific sources. The different EFs adopted are given in the tables 8.12 to 8.14.

Table 8.12 - EFs adopted for Industrial Wastewater and Sludge Treatment (2000 to 2006)

Industry	Components	UNIT	EFs	SOURCE
Sugar	Degradable Organic Component	Kg COD/m^3 wastewater	5	Arup SIGMA (2008)
	Degradable Organic Component removed as sludge	Fraction	0.5	Arup SIGMA (2008)
Poultry	Degradable Organic Component	kg COD/m^3 wastewater	3.5	*Pers. Comm., Producers*
	Degradable Organic Component removed as sludge	Fraction	0.5	*Pers. Comm., Producers*

Table 8.13 - EFs adopted for Domestic and Commercial Wastewater and Sludge Treatment (2000-2006)

	Treatment System/Medium	UNIT	EFs	SOURCE
Degradable Organic Component	--	kg BOD/1000 persons/yr	21900	p 6.20, IPCC (1997)
Fraction of Degradable Organic Component removed as Sludge	--	Fraction	0.5	p 6.20, IPCC (1997)
Methane Conversion Factor	On-site septic system	Fraction	0	Doorn & Liles (1999)
	Activated sludge system	Fraction	0.05	Doorn *et al.* (1997)
	Oxidation pond system	Fraction	0	Veenstra, 1999
Maximum Methane Producing Capacity	--	Kg CH_4/kg BOD	0.6	p 6.20, IPCC (1997)
Methane Emission Factor	Wastewater	Kg CH_4/kg BOD	0.00	p 6.20, IPCC (1997)
	Sludge	Kg CH_4/kg BOD	0.60	p 6.20, IPCC (1997)

Table 8.14 - EFs adopted for Hotel activities (2000-2006)

Treatment System	System Components	UNIT	EF	SOURCE
Septic Systems	Degradable Organic Component	Kg BOD/Tourist Night/yr	327624	Govt. of Mauritius (2005)
	Fraction of Degradable Organic Component Removed as Sludge	Fraction	0.5	Doorn *et al.* (1997)
Activated Sludge	Degradable Organic Component	Kg BOD/Tourist Night/yr	354926	p 6.20, IPCC (1997)
	Fraction of Degradable Organic Component Removed as Sludge	Fraction	0.5	Doorn *et al.* (1997)
	MCF for the Handling System in septic tank	Fraction	1	Doorn *et al.* (1997)
	MCF for the Handling System in drying beds	Fraction	0	Veenstra, 1999
	Maximum Methane Producing Capacity kg CH_4/kg BOD	Kg CH_4/Kg BOD	0.6	p 6.20, IPCC (1997)

Table 8.15 - EFs adopted for Human Sewage (2000-2006)

	UNIT	EF	SOURCE
Fraction of N in Protein, $Frac_{NPR}$	kg N/kg protein	0.16	*Website: faostat.fao.org*
Emission Factor, EF6	kg N_2O-N/kg sewage-N produced	0.001	p 6.28, IPCC (1997)

The Methane Conversion Factors (MCFs) applied for computation of GHG emissions are summarized in table 8.16.

Table 8.16 - MCFs adopted for Wastewater and Sludge Handling systems

		SYMBOL	UNIT		SOURCE - REMARKS
Wastewater Handling Systems	**On-site Septic System**	MCF	Fraction	0.00	Doorn and Liles (1999)
	Activated Sludge System	MCF	Fraction	0.05	Doorn *et al* (1997)
	Oxidation Pond System	MCF	Fraction	0.00	Allybokus (Pers. Comm, 2009)
Sludge Handling Systems	**On-site Septic System**	MCF	Fraction	1.00	Doorn and Liles (1999)
	Oxidation Pond System	MCF	Fraction	0.90	Allybokus (Pers. Comm, 2009)
	Anaerobic Sludge Digestion	MCF	Fraction	0.65	Veenstra, 1999
	Sludge Drying Bed	MCF	Fraction	0.00	Allybokus (Pers. Comm, 2009)

8.3.3 Results

The emissions from the wastewater sub-sector varied from 61.7% to 46.9% of the total GHG emissions for the waste sector for the period 2000 – 2006.

Emissions varied, according to the level of activities in the sub-sectors, with a reduction of 14 % from 722 Gg CO_2-eq in 2000 to 625 Gg CO_2 –eq in 2006. Methane was the main gas emitted and represented more than 95% of the total of this sector.

Table 8.17 - GHG Emissions (Gg CO_2–eq) from Wastewater Handling (2000-2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
WASTE TOTAL	1,170	1,281	1,226	1,261	1,265	1,266	1,333	2.3
WASTEWATER HANDLING	722.1	753.6	641.3	654.0	681.5	640.4	624.8	-2.1
% of Waste Total	*61.7*	*58.8*	*52.3*	*51.9*	*53.9*	*50.6*	*46.9*	
Industrial Wastewater	564.90	598.50	483.42	498.54	531.09	482.58	468.93	-2.6
Domestic & Commercial Wastewater	155.06	152.71	155.52	152.92	147.93	155.31	153.11	-0.2
Others (Hotel Sector)	2.184	2.394	2.331	2.520	2.520	2.520	2.730	3.9

During the period 2000 to 2006, the sugar and poultry industries, combined together, represented the major source of emissions within this sector. It dropped from 78% to 75% over the 7 years period. The sharp drop of 15% from 2001 to 2002 was due to a marked decrease in sugar production resulting from the passage of a severe cyclone. Thereafter, the GHG emissions varied according to the level of sugar production, itself function of the climate. Emissions from the Domestic and Commercial sector remained stable over the period 2000-2006 at about 23% since population increase was offset by the number of households being connected to the sewer network.

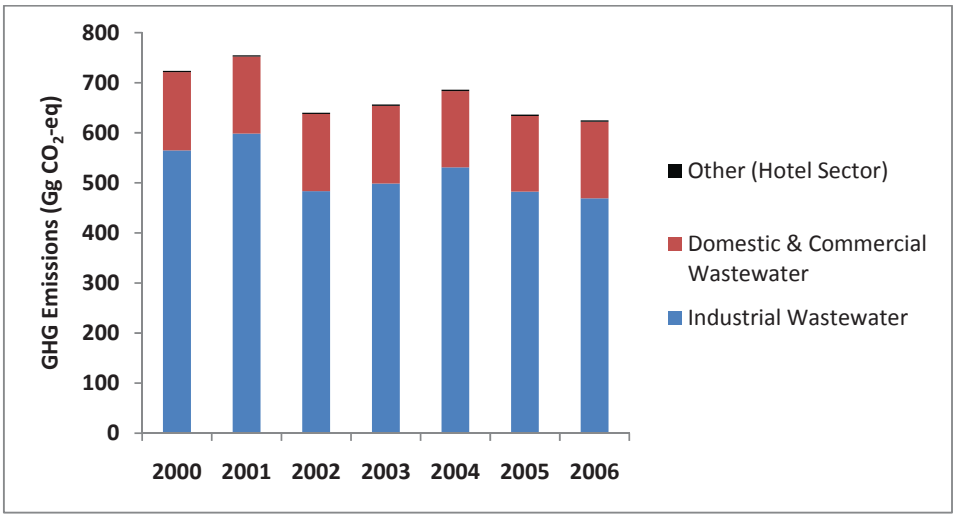


Figure 8.4 - GHG Emissions ($GgCO_2$–eq) from Wastewater Handling (2000-2006)

Almost all emissions were CH_4. The emissions decreased from 32.98 Gg in the year 2000 to 28.57 in 2006 on account of a higher proportion of the population being sewered, the shift to tertiary treatment and reduced industrial activities. N_2O emissions regressed slightly over the same period.

Table 8.18 - Emissions by gas (Gg) from Wastewater Handling (2000-2006)

SOURCE CATEGORY	GHG	2000	2001	2002	2003	2004	2005	2006
WASTEWATER HANDLING	CH_4	32.98	34.61	29.15	29.93	31.48	29.26	28.57
	N_2O	0.10	0.09	0.09	0.08	0.07	0.08	0.08
Industrial Wastewater	CH_4	26.90	28.50	23.02	23.74	25.29	22.98	22.33
Domestic & Commercial Wastewater	CH_4	5.98	6.00	6.02	6.07	6.07	6.16	6.11
	N_2O	0.10	0.09	0.09	0.08	0.07	0.08	0.08
Others (Hotel Sector)	CH_4	0.10	0.11	0.11	0.12	0.12	0.12	0.13

8.3.4 Time-series Consistency and Uncertainty

The time series is considered consistent as the source and quality of AD did not change throughout the inventory period while the same EFs were used.

Based on the quality of data records available locally, the uncertainty associated with wastewater was adopted as 8% since there is good record-keeping and archiving. A slightly higher value for human waste

(N_2O) emissions has been used because of less rigorous records on septic tanks. Uncertainty associated with EFs was aligned on the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000). The resulting combined uncertainty is given in Table 8.19.

Table 8.19 – AD and EF uncertainty in the Wastewater Handling sub-category

IPCC Source Category	Gas	UNCERTAINTY		
		Activity data	Emission factor	Combined
WASTEWATER HANDLING	CH_4	8.0	5.0	9.43
WASTEWATER HANDLING	N_2O	10.0	5.0	11.18

8.3.5 QA/QC and Verification

During the preparation of the inventory, quality control was mainly focused on completeness and consistency of AD, appropriateness of EFs and computation of emission estimates.

Computed sewered population was cross-checked with data available in the feasibility study of the project. Figures obtained for the year 2000 differed by less than 1%. Using a similar approach, the volume of wastewater obtained for the inventory period using the two methods differed by less than 10%.

The amount of methane generated in 2006 by the St Martin WWTP has been computed at 793 metric tonnes using the method given in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997). The tonnage of methane currently recovered was of the order of 686 metric tonnes.

8.3.6 Recalculations

No recalculations were made since it was the first time that emissions from this source were calculated.

8.3.7 Planned Improvements

Lack and unavailability of data pertaining to sewered/unsewered population, BOD/COD and exactness of wastewater produced are planned to be improved.

8.4 WASTE INCINERATION

8.4.1 Source Category Description

Open burning of wastes is well regulated in Mauritius and only an insignificant proportion of households disposed of their wastes in ash pits. Moreover, out of the wastes disposed of by households, the major constituent was of biogenic origin. Therefore, emissions from open burning of wastes were not estimated. CO_2 emissions from incineration of clinical wastes have been compiled and included in the inventory for the period 2000-2006.

8.4.2 Methodological Issues

Activity Data

Data for quantity of incinerated waste for the period 2000-2006 were obtained from the Ministry of Local Government and Outer Islands. These were crosschecked with estimates made using population data as reference.

Table 8.20 – Waste (t) Incinerated (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006
Clinical waste	641.09	627.36	635.10	589.55	594.66	593.78	622.98

Tier Level

The Tier 1 approach from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997) has been used to calculate the emissions, also known as the default methodology.

Emission factor

CO_2 emissions from incineration of clinical waste have been calculated using the EFs proposed in the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (IPCC, 1997).

Table 8.21 – EFs adopted for Waste Incineration

	UNIT	Value	SOURCE - REMARKS
Carbon content	**Fraction**	0.6	Table 5.6, IPCC 2000
Carbon fraction	**Fraction**	0.4	Table 5.6, IPCC 2000
Combustion Efficiency	**Fraction**	0.95	Table 5.6, IPCC 2000

8.4.3 Results

Only CO_2 was estimated for Waste Incineration. The annual emissions of CO_2 (Table 8.22) for the period 2000-2006 remained fairly constant at around 0.5 Gg CO_2-eq. This represented a contribution of about 0.04% to the total emissions in the Waste sector.

Table 8.22 - GHG Emissions (Gg CO_2-eq) from Waste Incineration (2000 – 2006)

	2000	2001	2002	2003	2004	2005	2006	Annual Change (%)
WASTE TOTAL	**1170**	**1281**	**1226**	**1261**	**1265**	**1266**	**1333**	**2.3**
WASTE INCINERATION	0.54	0.52	0.53	0.49	0.49	0.49	0.52	-0.5
%	0.05	0.04	0.04	0.04	0.04	0.04	0.04	

8.4.4 Time-series Consistency and Uncertainty

Based on the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (IPCC, 2000) and the quality of locally-available data, the uncertainty associated with AD and EF was assumed to be 10% and 30% respectively and gave a combined uncertainty of 31.62%

8.4.5 QA/QC and Verification

QA/QC related to checking and validating the AD and the computation exercise.

8.4.6 Recalculations

Recalculations were not performed as emissions from this sub-category were not compiled in previous inventories

8.4.7 Planned Improvements

Improvements in the sub-sector Waste Incineration are related primarily to collection of accurate AD.

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ANNEX 1 – UNCERTAINTY ASSESSMENT

Table A1.1 – Uncertainty in GHG emissions for the year 2000

IPCC Source Category	Gas	Year 2000 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**1CO_2**	**1020.5868**	*1.0*	*3.0*	3.16	0.82
1.A.2 Manufacturing Industries and Construction	**1CO_2**	**349.2725**	*10.0*	*3.0*	10.44	0.93
1.A.3.a Transport - Civil Aviation	**1CO_2**	**13.8107**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**1CO_2**	**680.0782**	*5.0*	*3.0*	5.83	1.01
1.A.3.d Transport - Navigation	**1CO_2**	**26.8808**	*10.0*	*3.0*	10.44	0.07
1.A.4 Other sector Commercial	**1CO_2**	**12.2585**	*10.0*	*5.0*	11.18	0.04
1.A.4 Other sector Residential	**1CO_2**	**141.9548**	*10.0*	*5.0*	11.18	0.41
1.A.4 Other sector Agriculture/Fishing/Forestry	**1CO_2**	**41.8675**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**1CO_2**	**2.5680**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**1CO_2**	**-280.3100**	*30.0*	*40.0*	50.00	-3.58
5.B Cropland	**1CO_2**	**-9.3700**	*5.0*	*40.0*	40.31	-0.10
5.D Wetlands	**1CO_2**	**107.4800**	*5.0*	*40.0*	40.31	1.11
5.E Settlements	**1CO_2**	**45.1900**	*10.0*	*40.0*	41.23	0.48
5.F Other Land	**1CO_2**	**54.9900**	*10.0*	*40.0*	41.23	0.58
6.C Waste Incineration	**1CO_2**	**0.5359**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.5439**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.8413**	*10.0*	*50.0*	50.99	0.04
1.A.3.d Transport - Civil Aviation	**CH_4**	**4.2525**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.0378**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.0021**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH_4**	**0.0798**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH_4**	**1.9950**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture/Fishing/Forestry	**CH_4**	**0.0588**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**65.2764**	*10.0*	*20.0*	22.36	0.37
4.B Manure Management	**CH_4**	**9.9771**	*10.0*	*20.0*	22.36	0.06
4.F Field Burning of Agricultural Residues	**CH_4**	**8.5239**	*20.0*	*20.0*	28.28	0.06
5.A Forest Land	**CH_4**	**0.1617**	*5.0*	*50.0*	50.25	0.002
6.A Solid Waste Disposal on Land	**CH_4**	**447.3168**	*10.0*	*20.0*	22.36	2.56
6.B Wastewater Handling	**CH_4**	**692.6640**	*8.0*	*5.0*	9.43	1.67
2(I).F HFCs emissions	**HFCs**	**76.7811**	*1.0*	*30.0*	30.02	0.59
1.A.1 Energy Industries	**N_2O**	**2.5420**	*1.0*	*50.0*	50.01	0.03
1.A.2 Manufacturing Industries and Construction	**N_2O**	**6.0140**	*10.0*	*50.0*	50.99	0.08
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.1240**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**7.4090**	*5.0*	*30.0*	30.41	0.06
1.A.3.d Transport - Navigation	**N_2O**	**0.0620**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.0310**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.7130**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture/Fishing/Forestry	**N_2O**	**1.0850**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**104.1910**	*1.0*	*5.0*	5.10	0.14
4.B Manure Management	**N_2O**	**8.5250**	*10.0*	*50.0*	50.99	0.11
4.D Agricultural Soils	**N_2O**	**139.1900**	*20.0*	*50.0*	53.85	1.91
4.F Field Burning of Agricultural Residues	**N_2O**	**3.4720**	*20.0*	*50.0*	53.85	0.05
5.A Forest Land	**N_2O**	**0.0310**	*5.0*	*50.0*	50.25	0.0004
6.B Wastewater Handling	**N_2O**	**29.4810**	*10.0*	*5.0*	11.18	0.08
2(I).F. PFCs emissions	**PFCs**	**93.2160**	*1.0*	*30.0*	30.02	0.71
TOTAL		**3914.3919**				**5.60**

Table A1.2 – Uncertainty in GHG emissions for the year 2001

IPCC Source Category	Gas	Year 2001 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**$1CO_2$**	**1162.69700**	*1.0*	*3.0*	3.16	0.92
1.A.2 Manufacturing Industries and Construction	**$1CO_2$**	**376.15980**	*10.0*	*3.0*	10.44	0.98
1.A.3.a Transport - Civil Aviation	**$1CO_2$**	**15.38630**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**$1CO_2$**	**694.94580**	*5.0*	*3.0*	5.83	1.01
1.A.3.d Transport - Navigation	**$1CO_2$**	**26.30030**	*10.0*	*3.0*	10.44	0.07
1.A.4 Other sector Commercial	**$1CO_2$**	**13.14460**	*10.0*	*5.0*	11.18	0.04
1.A.4 Other sector Residential	**$1CO_2$**	**141.98620**	*10.0*	*5.0*	11.18	0.40
1.A.4 Other sector Agriculture	**$1CO_2$**	**43.29840**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**$1CO_2$**	**2.51480**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**$1CO_2$**	**-284.31000**	*30.0*	*40.0*	50.00	-3.54
5.B Cropland	**$1CO_2$**	**-7.29000**	*5.0*	*40.0*	40.31	-0.07
5.D Wetlands	**$1CO_2$**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**$1CO_2$**	**45.13000**	*10.0*	*40.0*	41.23	0.46
5.F Other Land	**$1CO_2$**	**28.56000**	*10.0*	*40.0*	41.23	0.29
6.C Waste Incineration	**$1CO_2$**	**0.52420**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.56910**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.84130**	*10.0*	*50.0*	50.99	0.04
1.A.3.a Transport - Civil Aviation	**CH_4**	**4.22730**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03780**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.08610**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**1.98660**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.06090**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**67.24410**	*10.0*	*20.0*	22.36	0.37
4.B Manure Management	**CH_4**	**9.59700**	*10.0*	*20.0*	22.36	0.05
4.F Field Burning of Agricultural Residues	**CH4**	**9.27780**	*20.0*	*20.0*	28.28	0.07
5.A Forest Land	**CH_4**	**0.22890**	*5.0*	*50.0*	50.25	0.003
6.A Solid Waste Disposal on Land	**CH_4**	**527.27850**	*10.0*	*20.0*	22.36	2.94
6.B Wastewater Handling	**CH_4**	**726.82050**	*8.0*	*5.0*	9.43	1.71
2(I).F HFCs emissions	**HFCs**	**127.96850**	*1.0*	*30.0*	30.02	0.96
1.A.1 Energy Industries	**N_2O**	**3.10000**	*1.0*	*50.0*	50.01	0.04
1.A.2 Manufacturing Industries and Construction	**N_2O**	**6.04500**	*10.0*	*50.0*	50.99	0.08
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.12097**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**7.62600**	*5.0*	*30.0*	30.41	0.06
1.A.3.d Transport - Navigation	**N_2O**	**0.06831**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.03100**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.71300**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.20900**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**72.19900**	*1.0*	*5.0*	5.10	0.09
4.B Manure Management	**N_2O**	**8.86600**	*10.0*	*50.0*	50.99	0.11
4.D Agricultural Soils	**N_2O**	**144.36700**	*20.0*	*50.0*	53.85	1.94
4.F Field Burning of Agricultural Residues	**N_2O**	**3.78200**	*20.0*	*50.0*	53.85	0.05
5.A Forest Land	**N_2O**	**0.06200**	*5.0*	*50.0*	50.25	0.0008
6.B Wastewater Handling	**N_2O**	**26.78400**	*10.0*	*5.0*	11.18	0.07
2(I).F. PFCs emissions	**PFCs**	**2.18475**	*1.0*	*30.0*	30.02	0.02
TOTAL		**4014.4319**				**5.68**

Table A1.3 – Uncertainty in GHG emissions for the year 2002

IPCC Source Category	Gas	Year 2002 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**1CO_2**	**1159.30080**	*1.0*	*3.0*	3.16	0.92
1.A.2 Manufacturing Industries and Construction	**1CO_2**	**376.51190**	*10.0*	*3.0*	10.44	0.99
1.A.3.a Transport - Civil Aviation	**1CO_2**	**16.50430**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**1CO_2**	**715.71020**	*5.0*	*3.0*	5.83	1.05
1.A.3.d Transport - Navigation	**1CO_2**	**25.61540**	*10.0*	*3.0*	10.44	0.07
1.A.4 Other sector Commercial	**1CO_2**	**13.46660**	*10.0*	*5.0*	11.18	0.04
1.A.4 Other sector Residential	**1CO_2**	**142.04120**	*10.0*	*5.0*	11.18	0.40
1.A.4 Other sector Agriculture	**1CO_2**	**42.54430**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**1CO_2**	**2.30480**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**1CO_2**	**-253.44000**	*30.0*	*40.0*	50.00	-3.20
5.B Cropland	**1CO_2**	**-9.50000**	*5.0*	*40.0*	40.31	-0.10
5.D Wetlands	**1CO_2**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**1CO_2**	**45.06000**	*10.0*	*40.0*	41.23	0.47
5.F Other Land	**1CO_2**	**34.04000**	*10.0*	*40.0*	41.23	0.35
6.C Waste Incineration	**1CO_2**	**0.53090**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.63420**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.42970**	*10.0*	*50.0*	50.99	0.03
1.A.3.a Transport - Civil Aviation	**CH_4**	**3.71910**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03570**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.08820**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**1.95510**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.06090**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**59.72610**	*10.0*	*20.0*	22.36	0.34
4.B Manure Management	**CH_4**	**9.50670**	*10.0*	*20.0*	22.36	0.05
4.F Field Burning of Agricultural Residues	**CH4**	**6.60240**	*20.0*	*20.0*	28.28	0.05
5.A Forest Land	**CH_4**	**0.22890**	*5.0*	*50.0*	50.25	0.003
6.A Solid Waste Disposal on Land	**CH_4**	**583.81890**	*10.0*	*20.0*	22.36	3.29
6.B Wastewater Handling	**CH_4**	**612.22350**	*8.0*	*5.0*	9.43	1.46
2(I).F HFCs emissions	**HFCs**	**86.08790**	*1.0*	*30.0*	30.02	0.65
1.A.1 Energy Industries	**N_2O**	**4.61900**	*1.0*	*50.0*	50.01	0.06
1.A.2 Manufacturing Industries and Construction	**N_2O**	**5.23900**	*10.0*	*50.0*	50.99	0.07
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.15500**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**8.02900**	*5.0*	*30.0*	30.41	0.06
1.A.3.d Transport - Navigation	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.03100**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.71300**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.20900**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**94.64300**	*1.0*	*5.0*	5.10	0.12
4.B Manure Management	**N_2O**	**9.11400**	*10.0*	*50.0*	50.99	0.12
4.D Agricultural Soils	**N_2O**	**130.94400**	*20.0*	*50.0*	53.85	1.78
4.F Field Burning of Agricultural Residues	**N_2O**	**2.69700**	*20.0*	*50.0*	53.85	0.04
5.A Forest Land	**N_2O**	**0.06200**	*5.0*	*50.0*	50.25	0.0008
6.B Wastewater Handling	**N_2O**	**29.04700**	*10.0*	*5.0*	11.18	0.08
2(I).F. PFCs emissions	**PFCs**	**0.97100**	*1.0*	*30.0*	30.02	0.01
TOTAL		**3965.3448**				**5.51**

Table A1.4 – Uncertainty in GHG emissions for the year 2003

IPCC Source Category	Gas	Year 2003 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**$1CO_2$**	**1285.06620**	*1.0*	*3.0*	3.16	0.98
1.A.2 Manufacturing Industries and Construction	**$1CO_2$**	**376.60960**	*10.0*	*3.0*	10.44	0.95
1.A.3.a Transport - Civil Aviation	**$1CO_2$**	**15.94190**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**$1CO_2$**	**738.59730**	*5.0*	*3.0*	5.83	1.04
1.A.3.d Transport - Navigation	**$1CO_2$**	**27.08760**	*10.0*	*3.0*	10.44	0.07
1.A.4 Other sector Commercial	**$1CO_2$**	**16.98170**	*10.0*	*5.0*	11.18	0.05
1.A.4 Other sector Residential	**$1CO_2$**	**146.11980**	*10.0*	*5.0*	11.18	0.40
1.A.4 Other sector Agriculture	**$1CO_2$**	**52.24540**	*10.0*	*3.0*	10.44	0.13
2(I).A.2 Lime Production	**$1CO_2$**	**2.18930**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**$1CO_2$**	**-287.66000**	*30.0*	*40.0*	50.00	-3.48
5.B Cropland	**$1CO_2$**	**-9.26000**	*5.0*	*40.0*	40.31	-0.09
5.D Wetlands	**$1CO_2$**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**$1CO_2$**	**45.02000**	*10.0*	*40.0*	41.23	0.45
5.F Other Land	**$1CO_2$**	**52.16000**	*10.0*	*40.0*	41.23	0.52
6.C Waste Incineration	**$1CO_2$**	**0.49320**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.71610**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.74470**	*10.0*	*50.0*	50.99	0.03
1.A.3.a Transport - Civil Aviation	**CH_4**	**3.60780**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03990**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.10080**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**1.98660**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.07350**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**59.30610**	*10.0*	*20.0*	22.36	0.32
4.B Manure Management	**CH_4**	**9.25890**	*10.0*	*20.0*	22.36	0.05
4.F Field Burning of Agricultural Residues	**CH4**	**5.87160**	*20.0*	*20.0*	28.28	0.04
5.A Forest Land	**CH_4**	**0.21210**	*5.0*	*50.0*	50.25	0.003
6.A Solid Waste Disposal on Land	**CH_4**	**606.37920**	*10.0*	*20.0*	22.36	3.28
6.B Wastewater Handling	**CH_4**	**628.50060**	*8.0*	*5.0*	9.43	1.44
2(I).F HFCs emissions	**HFCs**	**48.86070**	*1.0*	*30.0*	30.02	0.36
1.A.1 Energy Industries	**N_2O**	**4.96000**	*1.0*	*50.0*	50.01	0.06
1.A.2 Manufacturing Industries and Construction	**N_2O**	**5.85900**	*10.0*	*50.0*	50.99	0.07
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.15500**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**11.06700**	*5.0*	*30.0*	30.41	0.08
1.A.3.d Transport - Navigation	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.71300**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.30200**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**101.30800**	*1.0*	*5.0*	5.10	0.13
4.B Manure Management	**N_2O**	**8.71100**	*10.0*	*50.0*	50.99	0.11
4.D Agricultural Soils	**N_2O**	**137.98100**	*20.0*	*50.0*	53.85	1.80
4.F Field Burning of Agricultural Residues	**N_2O**	**2.38700**	*20.0*	*50.0*	53.85	0.03
5.A Forest Land	**N_2O**	**0.06200**	*5.0*	*50.0*	50.25	0.0008
6.B Wastewater Handling	**N_2O**	**25.48200**	*10.0*	*5.0*	11.18	0.07
2(I).F. PFCs emissions	**PFCs**	**0.48550**	*1.0*	*30.0*	30.02	0.00
TOTAL		**4129.8492**				**5.67**

Table A1.5 – Uncertainty in GHG emissions for the year 2004

IPCC Source Category	Gas	Year 2004 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**$1CO_2$**	**1287.97260**	*1.0*	*3.0*	3.16	0.99
1.A.2 Manufacturing Industries and Construction	**$1CO_2$**	**353.89480**	*10.0*	*3.0*	10.44	0.90
1.A.3.a Transport - Civil Aviation	**$1CO_2$**	**14.18280**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**$1CO_2$**	**758.34050**	*5.0*	*3.0*	5.83	1.07
1.A.3.d Transport - Navigation	**$1CO_2$**	**25.18510**	*10.0*	*3.0*	10.44	0.06
1.A.4 Other sector Commercial	**$1CO_2$**	**18.82190**	*10.0*	*5.0*	11.18	0.05
1.A.4 Other sector Residential	**$1CO_2$**	**154.37250**	*10.0*	*5.0*	11.18	0.42
1.A.4 Other sector Agriculture	**$1CO_2$**	**44.47260**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**$1CO_2$**	**1.78730**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**$1CO_2$**	**-267.69000**	*10.0*	*40.0*	41.23	-2.68
5.B Cropland	**$1CO_2$**	**-8.17000**	*5.0*	*40.0*	40.31	-0.08
5.D Wetlands	**$1CO_2$**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**$1CO_2$**	**45.02000**	*10.0*	*40.0*	41.23	0.45
5.F Other Land	**$1CO_2$**	**33.16000**	*10.0*	*40.0*	41.23	0.33
6.C Waste Incineration	**$1CO_2$**	**0.49320**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.75810**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.77200**	*10.0*	*50.0*	50.99	0.03
1.A.3.d Transport - Civil Aviation	**CH_4**	**3.39360**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03570**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.10920**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**2.02860**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.06090**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**55.95660**	*10.0*	*20.0*	22.36	0.30
4.B Manure Management	**CH_4**	**9.99180**	*10.0*	*20.0*	22.36	0.05
4.F Field Burning of Agricultural Residues	**CH4**	**4.68930**	*20.0*	*20.0*	28.28	0.03
5.A Forest Land	**CH_4**	**0.23940**	*5.0*	*50.0*	50.25	0.003
6.A Solid Waste Disposal on Land	**CH_4**	**582.96000**	*10.0*	*20.0*	22.36	3.16
6.B Wastewater Handling	**CH_4**	**661.08000**	*8.0*	*5.0*	9.43	1.51
2(I).F HFCs emissions	**HFCs**	**44.20730**	*1.0*	*30.0*	30.02	0.32
1.A.1 Energy Industries	**N_2O**	**4.77400**	*1.0*	*50.0*	50.01	0.06
1.A.2 Manufacturing Industries and Construction	**N_2O**	**5.89000**	*10.0*	*50.0*	50.99	0.07
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.12400**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**12.71000**	*5.0*	*30.0*	30.41	0.09
1.A.3.d Transport - Navigation	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.74400**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.36400**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**97.71200**	*1.0*	*5.0*	5.10	0.12
4.B Manure Management	**N_2O**	**7.56400**	*10.0*	*50.0*	50.99	0.09
4.D Agricultural Soils	**N_2O**	**137.29900**	*20.0*	*50.0*	53.85	1.79
4.F Field Burning of Agricultural Residues	**N_2O**	**1.92200**	*20.0*	*50.0*	53.85	0.03
5.A Forest Land	**N_2O**	**0.06200**	*5.0*	*50.0*	50.25	0.0008
6.B Wastewater Handling	**N_2O**	**20.46000**	*10.0*	*5.0*	11.18	0.06
2(I).F. PFCs emissions	**PFCs**	**0.97100**	*1.0*	*30.0*	30.02	0.01
TOTAL		**4121.8479**				**5.14**

Table A1.6 – Uncertainty in GHG emissions for the year 2005

IPCC Source Category	Gas	Year 2005 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**1CO_2**	**1424.27180**	*1.0*	*3.0*	3.16	1.08
1.A.2 Manufacturing Industries and Construction	**1CO_2**	**343.81480**	*10.0*	*3.0*	10.44	0.86
1.A.3.a Transport - Civil Aviation	**1CO_2**	**13.66960**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**1CO_2**	**784.66540**	*5.0*	*3.0*	5.83	1.10
1.A.3.d Transport - Navigation	**1CO_2**	**27.75460**	*10.0*	*3.0*	10.44	0.07
1.A.4 Other sector Commercial	**1CO_2**	**20.63260**	*10.0*	*5.0*	11.18	0.06
1.A.4 Other sector Residential	**1CO_2**	**158.71440**	*10.0*	*5.0*	11.18	0.43
1.A.4 Other sector Agriculture	**1CO_2**	**44.39680**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**1CO_2**	**1.83680**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**1CO_2**	**-269.95000**	*10.0*	*40.0*	41.23	-2.67
5.B Cropland	**1CO_2**	**-9.10000**	*5.0*	*40.0*	40.31	-0.09
5.D Wetlands	**1CO_2**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**1CO_2**	**45.01000**	*10.0*	*40.0*	41.23	0.45
5.F Other Land	**1CO_2**	**57.35000**	*10.0*	*40.0*	41.23	0.57
6.C Waste Incineration	**1CO_2**	**0.49320**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.66360**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.56620**	*10.0*	*50.0*	50.99	0.03
1.A.3.a Transport - Civil Aviation	**CH_4**	**3.63510**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03990**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.11760**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**2.10000**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.06090**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**58.84620**	*10.0*	*20.0*	22.36	0.32
4.B Manure Management	**CH_4**	**10.94100**	*10.0*	*20.0*	22.36	0.06
4.F Field Burning of Agricultural Residues	**CH4**	**3.95220**	*20.0*	*20.0*	28.28	0.03
5.A Forest Land	**CH_4**	**0.05670**	*5.0*	*50.0*	50.25	0.001
6.A Solid Waste Disposal on Land	**CH_4**	**625.07550**	*10.0*	*20.0*	22.36	3.36
6.B Wastewater Handling	**CH_4**	**614.46000**	*8.0*	*5.0*	9.43	1.39
2(I).F HFCs emissions	**HFCs**	**6.98010**	*1.0*	*30.0*	30.02	0.05
1.A.1 Energy Industries	**N_2O**	**5.17700**	*1.0*	*50.0*	50.01	0.06
1.A.2 Manufacturing Industries and Construction	**N_2O**	**5.76600**	*10.0*	*50.0*	50.99	0.07
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.12400**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**14.69400**	*5.0*	*30.0*	30.41	0.11
1.A.3.d Transport - Navigation	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.00000**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.77500**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.30200**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**0.00000**	*1.0*	*5.0*	5.10	0.00
4.B Manure Management	**N_2O**	**8.30800**	*10.0*	*50.0*	50.99	0.10
4.D Agricultural Soils	**N_2O**	**128.21600**	*20.0*	*50.0*	53.85	1.66
4.F Field Burning of Agricultural Residues	**N_2O**	**1.61200**	*20.0*	*50.0*	53.85	0.02
5.A Forest Land	**N_2O**	**0.00000**	*5.0*	*50.0*	50.25	0.0000
6.B Wastewater Handling	**N_2O**	**25.94700**	*10.0*	*5.0*	11.18	0.07
2(I).F. PFCs emissions	**PFCs**	**0.48550**	*1.0*	*30.0*	30.02	0.00
TOTAL		**4165.5256**				**5.20**

Table A1.7 – Uncertainty in GHG emissions for the year 2006

IPCC Source Category	Gas	Year 2006 (Gg CO_2-eq)	UNCERTAINTY			Combined Uncertainty as % of total emissions
			AD	EF	Combined	
1.A.1 Energy Industries	**$1CO_2$**	**1662.72410**	*1.0*	*3.0*	3.16	1.15
1.A.2 Manufacturing Industries and Construction	**$1CO_2$**	**401.64030**	*10.0*	*3.0*	10.44	0.92
1.A.3.a Transport - Civil Aviation	**$1CO_2$**	**13.62640**	*5.0*	*3.0*	5.83	0.02
1.A.3.b Transport - Road Transportation	**$1CO_2$**	**799.50640**	*5.0*	*3.0*	5.83	1.02
1.A.3.d Transport - Navigation	**$1CO_2$**	**24.98440**	*10.0*	*3.0*	10.44	0.06
1.A.4 Other sector Commercial	**$1CO_2$**	**29.34940**	*10.0*	*5.0*	11.18	0.07
1.A.4 Other sector Residential	**$1CO_2$**	**136.97810**	*10.0*	*5.0*	11.18	0.33
1.A.4 Other sector Agriculture	**$1CO_2$**	**46.15570**	*10.0*	*3.0*	10.44	0.11
2(I).A.2 Lime Production	**$1CO_2$**	**1.89750**	*2.0*	*15.0*	15.13	0.01
5.A Forest Land	**$1CO_2$**	**-269.37000**	*10.0*	*40.0*	41.23	-2.43
5.B Cropland	**$1CO_2$**	**-7.84000**	*5.0*	*40.0*	40.31	-0.07
5.D Wetlands	**$1CO_2$**	**0.00000**	*5.0*	*40.0*	40.31	0.00
5.E Settlements	**$1CO_2$**	**45.00000**	*10.0*	*40.0*	41.23	0.41
5.F Other Land	**$1CO_2$**	**46.14000**	*10.0*	*40.0*	41.23	0.42
6.C Waste Incineration	**$1CO_2$**	**0.51830**	*10.0*	*30.0*	31.62	0.00
1.A.1 Energy Industries	**CH_4**	**0.83160**	*1.0*	*50.0*	50.01	0.01
1.A.2 Manufacturing Industries and Construction	**CH_4**	**2.54310**	*10.0*	*50.0*	50.99	0.03
1.A.3.a Transport - Civil Aviation	**CH_4**	**3.54270**	*5.0*	*6.0*	7.81	0.01
1.A.3.b Transport - Road Transportation	**CH_4**	**0.03570**	*5.0*	*6.0*	7.81	0.00
1.A.3.d Transport - Navigation	**CH_4**	**0.00210**	*10.0*	*6.0*	11.66	0.00
1.A.4 Other sector Commercial	**CH4**	**0.14910**	*10.0*	*10.0*	14.14	0.00
1.A.4 Other sector Residential	**CH4**	**2.12310**	*10.0*	*10.0*	14.14	0.01
1.A.4 Other sector Agriculture	**CH_4**	**0.06300**	*10.0*	*6.0*	11.66	0.00
4.A Enteric Fermentation	**CH_4**	**60.03900**	*10.0*	*20.0*	22.36	0.29
4.B Manure Management	**CH_4**	**9.99810**	*10.0*	*20.0*	22.36	0.05
4.F Field Burning of Agricultural Residues	**CH4**	**3.75270**	*20.0*	*20.0*	28.28	0.02
5.A Forest Land	**CH_4**	**0.08820**	*5.0*	*50.0*	50.25	0.001
6.A Solid Waste Disposal on Land	**CH_4**	**707.66430**	*10.0*	*20.0*	22.36	3.46
6.B Wastewater Handling	**CH_4**	**599.97000**	*8.0*	*5.0*	9.43	1.24
2(I).F HFCs emissions	**HFCs**	**62.82090**	*1.0*	*30.0*	30.02	0.41
1.A.1 Energy Industries	**N_2O**	**6.85100**	*1.0*	*50.0*	50.01	0.07
1.A.2 Manufacturing Industries and Construction	**N_2O**	**5.36300**	*10.0*	*50.0*	50.99	0.06
1.A.3.a Transport - Civil Aviation	**N_2O**	**0.12400**	*5.0*	*30.0*	30.41	0.00
1.A.3.b Transport - Road Transportation	**N_2O**	**14.75600**	*5.0*	*30.0*	30.41	0.10
1.A.3.d Transport - Navigation	**N_2O**	**0.06200**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Commercial	**N_2O**	**0.09300**	*10.0*	*30.0*	31.62	0.00
1.A.4 Other sector Residential	**N_2O**	**0.74400**	*10.0*	*50.0*	50.99	0.01
1.A.4 Other sector Agriculture	**N_2O**	**1.33300**	*10.0*	*30.0*	31.62	0.01
2(I).B.2 Nitric Acid Production	**N_2O**	**0.00000**	*1.0*	*5.0*	5.10	0.00
4.B Manure Management	**N_2O**	**7.99800**	*10.0*	*50.0*	50.99	0.09
4.D Agricultural Soils	**N_2O**	**122.72900**	*20.0*	*50.0*	53.85	1.45
4.F Field Burning of Agricultural Residues	**N_2O**	**1.51900**	*20.0*	*50.0*	53.85	0.02
5.A Forest Land	**N_2O**	**0.03100**	*5.0*	*50.0*	50.25	0.0003
6.B Wastewater Handling	**N_2O**	**24.80000**	*10.0*	*5.0*	11.18	0.06
2(I).F. PFCs emissions	**PFCs**	**0.24275**	*1.0*	*30.0*	30.02	0.00
TOTAL		**4571.5800**				**5.05**

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2000	2000
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
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Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2286.7098**	**0.4672**	**0.0580**	**12.7033**	**53.7044**	**13.4623**	**8.7557**
A Fuel Combustion Activities (Sectoral Approach)	**2286.7098**	**0.4672**	**0.0580**	**12.7033**	**53.7044**	**13.4623**	**8.7557**
1 Energy Industries	**1020.5868**	**0.0259**	**0.0082**	**3.3233**	**0.2376**	**0.0694**	**4.7135**
a Public Electricity and Heat Production	1020.5868	0.0259	0.0082	3.3233	0.2376	0.0694	4.7135
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**349.2725**	**0.1353**	**0.0194**	**1.7813**	**4.1640**	**0.2365**	**2.0362**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing	125.6167	0.1296	0.0172	0.7551	4.1191	0.2213	1.4912
Sugar	4.5809	0.1190	0.0159	0.4088	3.9622	0.1984	0.2923
Tea	6.1877	0.0006	0.0001	0.0188	0.0159	0.0012	0.0093
Bakery, Food and other miscellaneous industries	114.8481	0.0100	0.0012	0.3275	0.1410	0.0217	1.1896
f Other	223.6558	0.0057	0.0022	1.0262	0.0449	0.0152	0.5450
Manufacture of Textiles	214.5690	0.0055	0.0021	0.9999	0.0437	0.0146	0.5307
Construction	9.0868	0.0002	0.0001	0.0263	0.0012	0.0006	0.0143

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**720.7697**	**0.2044**	**0.0245**	**6.6522**	**48.6383**	**12.8889**	**1.6072**
a Civil Aviation	13.8107	0.0001	0.0004	0.0585	0.0195	0.0098	0.0044
b Road Transportation	680.0782	0.2025	0.0239	6.0428	48.2515	12.8056	0.8272
c Railways							
d Navigation	26.8808	0.0018	0.0002	0.5509	0.3673	0.0735	0.7756
e Other (please specify)			.				
Pipeline Transport							
4 Other Sectors	**196.0808**	**0.1016**	**0.0059**	**0.9465**	**0.6645**	**0.2675**	**0.3988**
a Commercial/Institutional	12.2585	0.0038	0.0001	0.0205	0.0669	0.0019	0.0060
b Residential	141.9548	0.0950	0.0023	0.2458	0.0983	0.1555	0.3326
c Agriculture/Forestry/Fishing	41.8675	0.0028	0.0035	0.6802	0.4993	0.1101	0.0602
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**1302.9893**	**0.0506**	**0.0230**	**16.4872**	**10.1193**	**2.2855**	**0.0000**
Aviation	617.3697	0.0044	0.0174	2.6165	0.8722	0.4361	0.0000
Marine	685.6196	0.0462	0.0055	13.8707	9.2471	1.8494	0.0000
CO_2 Emissions from Biomass	**1023.0677**						

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**2.5680**	**0.0000**	**0.3361**	**0.4481**	**0.0000**	**8.7855**	**0.0000**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**2.5680**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.1430**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	2.5680												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						6.1430							
7 Other (please specify)													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.3361**	**0.4481**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production			0.3361	0.4481									
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6425**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6425							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluorid	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC
Total Agriculture	**3.9894**	**0.4877**	**0.4043**	**8.5247**	**0.0000**
A Enteric Fermentation	**3.1084**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cattle	1.2093				
2 Buffalo	0.0000				
3 Sheep	0.0344				
4 Goats	0.1178				
5 Camels and Llamas	0.0000				
6 Horses	0.0102				
7 Mules and Asses	0.0000				
8 Swine	0.0217				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.7150				
B Manure Management	**0.4751**	**0.0275**	**0.0000**	**0.0000**	**0.0000**
1 Cattle	0.0555				
2 Buffalo	0.0000				
3 Sheep	0.0007				
4 Goats	0.0028				
5 Camels and Llamas	0.0000				
6 Horses	0.0009				
7 Mules and Asses	0.0000				
8 Swine	0.3012				
9 Poultry	0.0723				
10 Other (please specify) Deer	0.0417				

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0273			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Irrigated					
2 Rainfed					
3 Deep Water					
4 Other (please specify)					
D Agricultural Soils	**0.0000**	**0.4490**	**0.0000**	**0.0000**	**0.0000**
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
F Field Burning of Agricultural Residues (1)	**0.4059**	**0.0112**	**0.4043**	**8.5247**	**0.0000**
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.4059	0.0112	0.4043	8.5247	
5 Other (please specify)					
G Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **233.9600**	(1) **-315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stock	(1) **0.0000**	(1) **-315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**178.9700**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
E Other (Cropland converted to Other Land)	**54.9900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**233.9600**	**-315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**
A. Forest Land	**0.0000**	**-280.3100**	**0.0077**	**0.0001**	**0.0008**	**0.1214**
1. Forest Land Remaining Forest Land		-280.3100	0.0077	0.0001	0.0008	0.1214
2. Land Converted to Forest Land						
B. Cropland	**0.0000**	**-9.3700**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland	0.0000	-9.3700				
2. Land Converted to Cropland						
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland						
2. Land Converted to Grassland						
D. Wetlands	**107.4800**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands						
2. Land Converted to Wetlands	107.4800					
E. Settlements	**71.4900**	**-26.3000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.3000				
2. Land Converted to Settlements	71.4900					
F. Other Land	**54.9900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land						
2. Land Converted to Other Land	54.9900					
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categories						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2000

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.5359**	**54.2848**	**0.0951**			
A Solid Waste Disposal on Land	**0.0000**	**21.3008**	**0.0000**			
1 Managed Waste Disposal on Land		21.3008				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**32.9840**	**0.0951**			
1 Industrial Wastewater		26.9000	0.0000			
2 Domestic and Commercial Wastewater		5.9800	0.0951			
3 Other (Hotel Sector)		0.1040	0.0000			
C Waste Incineration	**0.5359**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2523.7737**	**-315.9800**	**58.7491**	**0.9770**	**13.5565**	**62.3505**	**22.2478**	**8.7557**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2286.7098**	**0.0000**	**0.4672**	**0.0580**	**12.703300**	**53.7044**	**13.4623**	**8.7557**						
A Fuel Combustion (Sectoral Approach)	2286.7098		0.4672	0.0580	12.7033	53.7044	13.4623	8.7557						
1 Energy Industries	1020.5868		0.0259	0.0082	3.3233	0.2376	0.0694	4.7135						
2 Manufacturing Industries and Construction	349.2725		0.1353	0.0194	1.7813	4.1640	0.2365	2.0362						
3 Transport	720.7697		0.2044	0.0245	6.6522	48.6383	12.8889	1.6072						
4 Other Sectors	196.0808		0.1016	0.0059	0.9465	0.6645	0.2675	0.3988						
B Fugitive Emissions from Fuels														
1 Solid Fuels														
2 Oil and Natural Gas														
2 Industrial Processes	**2.5680**	**0.0000**	**0.0000**	**0.3361**	**0.4481**	**0.0000**	**8.7855**	**0.0000**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	2.5680						6.1430							
B Chemical Industry				0.3361	0.4481									
C Metal Production														
D Other Production							2.6425							
E Production of Halocarbons and Sulphur Hexafluoride														
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0330		0.0384			
G Other (please specify)														

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

Country	The Republic of Mauritius
Inventory Year	2000

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.9894**	**0.4877**	**0.4043**	**8.5247**								
A Enteric Fermentation			3.1084											
B Manure Management			0.4751	0.0275										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4490										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.4059	0.0112	0.4043	8.5247								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 233.9600**	**(1) -315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -315.9800	0.0077	0.0001	0.0008	0.1214	0.0000	0.0000						
B Forest and Grassland Conversion	178.9700													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	54.9900	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
6 Waste	**0.5359**		**54.2848**	**0.0951**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			21.3008											
B Wastewater Handling			32.9840	0.0951										
C Waste Incineration	0.5359													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**1302.9893**		**0.0506**	**0.0230**	**16.4872**	**10.1193**	**2.2855**	**0.0000**						
Aviation	617.3697		0.0044	0.0174	2.6165	0.8722	0.4361	0.0000						
Marine	685.6196		0.0462	0.0055	13.8707	9.2471	1.8494	0.0000						
CO_2 Emissions from Biomass	**1023.0677**													

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES

(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)															
GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**2523.7737**	**-315.9800**	**58.7491**	**0.9770**	**13.5565**	**62.3505**	**22.2478**	**8.7557**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach(1)	**2468.0526**													
	Sectoral Approach(1)	**2286.7098**		**0.4672**	**0.0580**	**12.7033**	**53.7044**	**13.4623**	**8.7557**						
A Fuel Combustion		2286.7098		0.4672	0.0580	12.7033	53.7044	13.4623							
B Fugitive Emissions from Fuels															
2 Industrial Processes		**2.5680**		**0.0000**	**0.3361**	**0.4481**	**0.0000**	**8.7855**	**0.0000**	**0.0330**	**0.0000**	**0.0384**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**										
4 Agriculture				**3.9894**	**0.4877**	**0.4043**	**8.5247**	**0.0000**	**0.0000**						
5 Land-Use Change & Forestry		**(2) 233.9600**	**(2) -315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**	**0.0000**	**0.0000**						
6 Waste		**0.5359**		**54.2848**	**0.0951**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1302.9893**		**0.0506**	**0.0230**	**16.4872**	**10.1193**	**2.2855**	**0.0000**						
Aviation		617.3697		0.0044	0.0174	2.6165	0.8722	0.4361	0.0000						
Marine		685.6196		0.0462	0.0055	13.8707	9.2471	1.8494	0.0000						
CO_2 Emissions from Biomass		**1023.0677**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the resu
of both the Reference Approach and the Sectoral Approach in national totals

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions

or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,207.7937**		**58.7491**		**0.9770**		**13.5565**		**62.3505**		**22.2478**		**8.7557**		**0.0330**		**0.0384**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	2,286.7098		0.4672		0.0580		12.7033		53.7044		13.4623		8.7557		0.0000		0.0000		0.0000				
1 Energy Industries	1020.5868	H	0.0259	H	0.0082	H	3.3233	H	0.2376	H	0.0694	H	4.7135	H									
2 Manufacturing Industries and Construction	349.2725	H	0.1353	H	0.0194	H	1.7813	H	4.1640	H	0.2365	H	2.0362	H									
3 Transport	720.7697	H	0.2044	H	0.0245	H	6.6522	H	48.6383	H	12.8889	H	1.6072	H									
4 Other Sectors	196.0808	H	0.1016	H	0.0059	H	0.9465	H	0.6645	H	0.2675	H	0.3988	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**2.5680**		**0.0000**		**0.3361**		**0.4481**		**0.0000**		**8.7855**		**0.0000**		**0.0330**		**0.0384**		**0.0000**				
A Mineral Products	2.5680	H									6.1430	H											
B Chemical Industry					0.3361	H	0.4481	H															
C Metal Production																							
D Other Production											2.6425	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Note: H = High, M = Medium and L = Low

+

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE																						
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0330	H	0.0384	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.9894**		**0.4877**		**0.4043**		**8.5247**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			3.1084	H																			
B Manure Management			0.4751	H	0.0275	H																	
C Rice Cultivation																							
D Agricultural Soils					0.449	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.4059	H	0.0112	H	0.4043	H	8.5247	H													
G Other (please specify)			0		0																		
5 Land-Use Change & Forestry	-82.02		0.0077		0.0001		0.0008		0.1214		0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-315.98	M	0.0077	H	0.0001	H	0.0008	H	0.1214	H	0.000												
B Forest and Grassland Conversion	178.97	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2000

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	54.99	H																					
6 Waste	**0.5359**		**54.2848**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			21.3008	M																			
B Wastewater Handling			32.9840	H	0.0951	H																	
C Waste Incineration	0.5359	H	0.0000																				
D Other (please specify)			0.0000																				
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**1,302.9893**		**0.0506**		**0.0230**		**16.4872**		**10.1193**		**2.2855**		**0.0000**		**0**		**0**		**0**				
Aviation	617.3697	H	0.0044	H	0.0174	H	2.6165	H	0.8722	H	0.4361	H	0.0000	H									
Marine	685.6196	H	0.0462	H	0.0055	H	13.8707	H	9.2471	H	1.8494	H	0.0000	H									
CO_2 Emissions from Biomass	1,023.0677	H																					

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2000

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	**CO_2 emissions (Gg)**	**CO_2 removals (Gg)**	**CH_4 (Gg)**	**N_2O (Gg)**	**NO_x (Gg)**	**CO (Gg)**	**NMVOCs (Gg)**	**SO_x (Gg)**
Total national emissions and removals	**2523.7737**	**-315.9800**	**58.7491**	**0.9770**	**13.5565**	**62.3505**	**22.2478**	**8.7557**
1. Energy	**2286.7098**	**0.0000**	**0.4672**	**0.0580**	**12.7033**	**53.7044**	**13.4623**	**8.7557**
A. Fuel combustion (sectoral	2286.7098		0.4672	0.0580	12.7033	53.7044	13.4623	8.7557
1. Energy Industries	1020.5868		0.0259	0.0082	3.3233	0.2376	0.0694	4.7135
2. Manufacturing industries and construction	349.2725		0.1353	0.0194	1.7813	4.1640	0.2365	2.0362
3. Transport	720.7697		0.2044	0.0245	6.6522	48.6383	12.8889	1.6072
4. Other sectors	196.0808		0.1016	0.0059	0.9465	0.6645	0.2675	0.3988
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**2.5680**	**0.0000**	**0.0000**	**0.3361**	**0.4481**	**0.0000**	**8.7855**	**0.0000**
A. Mineral products	2.5680				0.0000	0.0000	6.1430	0.0000
B. Chemical industry	0.0000		0.0000	0.3361	0.4481	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6425	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.9894**	**0.4877**	**0.4043**	**8.5247**	**0.0000**	**0.0000**
A. Enteric fermentation			3.1084					
B. Manure management			0.4751	0.0275			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4490			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.4059	0.0112	0.4043	8.5247	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**233.9600**	**-315.9800**	**0.0077**	**0.0001**	**0.0008**	**0.1214**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-315.9800	0.0077	0.0001	0.0008	0.1214		
B. Forest and grassland conversion	178.9700	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	54.9900	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.5359**		**54.2848**	**0.0951**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			21.3008		0.0000		0.0000	
B. Waste-water handling			32.9840	0.0951	0.0000	0.0000	0.0000	
C. Waste incineration	0.5400				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**1302.9893**		**0.0506**	**0.0230**	**16.4872**	**10.1193**	**2.2855**	**0.0000**
Aviation	617.3697		0.0044	0.0174	2.6165	0.8722	0.4361	0.0000
Marine	685.6196		0.0462	0.0055	13.8707	9.2471	1.8494	0.0000
CO_2 emissions from biomass	**1023.0677**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2000

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.0157**	**0.0018**	**0.0053**	**0.0053**	**0.0048**	**0.0384**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.0157**	**0.0018**	**0.0053**	**0.0053**	**0.0048**	**0.0384**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.0157	0.0018	0.0053	0.0053	0.0048	0.0384	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2001	2001
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
	Vacoas	Le Reduit
	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
Fax	+230 686 1033	+230 208 7064
E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2473.9184**	**0.4672**	**0.0610**	**12.7124**	**53.9454**	**13.6991**	**9.5494**
A Fuel Combustion Activities (Sectoral Approach)	**2473.9184**	**0.4672**	**0.0610**	**12.7124**	**53.9454**	**13.6991**	**9.5494**
1 Energy Industries	**1162.6970**	**0.0271**	**0.0100**	**3.5422**	**0.2521**	**0.0755**	**5.3421**
a Public Electricity and Heat Production	1162.6970	0.0271	0.0100	3.5422	0.2521	0.0755	5.3421
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**376.1598**	**0.1353**	**0.0195**	**1.4564**	**4.1467**	**0.2373**	**2.2714**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing	123.8428	0.1288	0.0171	0.7496	4.0978	0.2202	1.6601
Sugar	4.7837	0.1183	0.0158	0.4072	3.9411	0.1974	0.2911
Tea	4.6889	0.0006	0.0001	0.0146	0.0157	0.0011	0.0074
Bakery, Food and other misc. industries	114.3702	0.0099	0.0012	0.3278	0.1410	0.0217	1.3616
f Other	252.3170	0.0065	0.0024	0.7068	0.0489	0.0171	0.6113
Manufacture of Textiles	242.7536	0.0062	0.0023	0.6807	0.0476	0.0164	0.5962
Construction	9.5634	0.0003	0.0001	0.0261	0.0013	0.0007	0.0151

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**736.6324**	**0.2032**	**0.0252**	**6.7426**	**48.8656**	**13.1162**	**1.5383**
a Civil Aviation	15.3863	0.0001	0.0004	0.0652	0.0217	0.0109	0.0049
b Road Transportation	694.9458	0.2013	0.0246	6.1392	48.4851	13.0335	0.7562
c Railways							
d Navigation	26.3003	0.0018	0.0002	0.5382	0.3588	0.0718	0.7772
e Other (please specify)							
Pipeline Transport							
4 Other Sectors	**198.4292**	**0.1016**	**0.0063**	**0.9712**	**0.6810**	**0.2701**	**0.3976**
a Commercial/Institutional	13.1446	0.0041	0.0001	0.0220	0.0735	0.0020	0.0066
b Residential	141.9862	0.0946	0.0023	0.2458	0.0983	0.1546	0.3305
c Agriculture/Forestry/Fishing	43.2984	0.0029	0.0039	0.7034	0.5092	0.1135	0.0605
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**872.9723**	**0.0445**	**0.0119**	**13.8521**	**8.8961**	**1.8808**	**0.0000**
Aviation	239.7212	0.0017	0.0068	1.0160	0.3387	0.1693	0.0000
Marine	633.2511	0.0428	0.0051	12.8361	8.5574	1.7115	0.0000
CO_2 Emissions from Biomass	**1108.6613**						

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**2.5148**	**0.0000**	**0.2329**	**0.3105**	**0.0000**	**8.5438**	**0.0000**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**2.5148**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.8573**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	2.5148												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						5.8573							
7 Other													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.2329**	**0.3105**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production			0.2329	0.3105									
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6865**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6865							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC
Total Agriculture	**4.1009**	**0.5065**	**0.4400**	**9.2783**	**0.0000**
A Enteric Fermentation	**3.2021**				
1 Cattle	1.2648				
2 Buffalo	0.0000				
3 Sheep	0.0437				
4 Goats	0.1317				
5 Camels and Llamas	0.0000				
6 Horses	0.0106				
7 Mules and Asses	0.0000				
8 Swine	0.0191				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.7320				
B Manure Management	**0.4570**	**0.0286**	**0.0000**	**0.0000**	**0.0000**
1 Cattle	0.0580				
2 Buffalo	0.0000				
3 Sheep	0.0009				
4 Goats	0.0032				
5 Camels and Llamas	0.0000				
6 Horses	0.0010				
7 Mules and Asses	0.0000				
8 Swine	0.2766				
9 Poultry	0.0752				
10 Other (please specify) Deer	0.0421				

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0284			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Irrigated					
2 Rainfed					
3 Deep Water					
4 Other (please specify)					
D Agricultural Soils	**0.0000**	**0.4657**	**0.0000**	**0.0000**	**0.0000**
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
F Field Burning of Agricultural Residues (1)	**0.4418**	**0.0122**	**0.4400**	**9.2783**	**0.0000**
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.4418	0.0122	0.4400	9.2783	0.0000
5 Other (please specify)					
G Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **100.0500**	(1) **-317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1) **0.0000**	(1) **-317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**						
E Other (Cropland converted to Other Land)	**28.5600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**100.0500**	**-317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**
A. Forest Land	**0.0000**	**-284.3100**	**0.0109**	**0.0002**	**0.0011**	**0.1722**
1. Forest Land Remaining Forest Land		-284.3100	0.0109	0.0002	0.0011	0.1722
2. Land Converted to Forest Land						
B. Cropland	**0.0000**	**-7.2900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-7.2900				
2. Land Converted to Cropland						
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland						
2. Land Converted to Grassland						
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands						
2. Land Converted to Wetlands	0.0000					
E. Settlements	**71.4900**	**-26.3600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.3600				
2. Land Converted to Settlements	71.4900					
F. Other Land	**28.5600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land						
2. Land Converted to Other Land	28.5600					
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categorie						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2001

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.5242**	**59.7190**	**0.0864**			
A Solid Waste Disposal on Land	**0.0000**	**25.1085**	**0.0000**			
1 Managed Waste Disposal on Land		25.1085				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**34.6105**	**0.0864**			
1 Industrial Wastewater		28.5000				
2 Domestic and Commercial Wastewater		5.9965	0.0864			
3 Other (Hotel Sector)		0.1140				
C Waste Incineration	**0.5242**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2577.0074**	**-317.9600**	**64.2980**	**0.8870**	**13.4640**	**63.3959**	**22.2429**	**9.5494**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2473.9184**	**0.0000**	**0.4672**	**0.0610**	**12.7124**	**53.9454**	**13.6991**	**9.5494**						
A Fuel Combustion (Sectoral Approach)	2473.9184		0.4672	0.0610	12.7124	53.9454	13.6991	9.5494						
1 Energy Industries	1162.6970		0.0271	0.0100	3.5422	0.2521	0.0755	5.3421						
2 Manufacturing Industries and Construction	376.1598		0.1353	0.0195	1.4564	4.1467	0.2373	2.2714						
3 Transport	736.6324		0.2032	0.0252	6.7426	48.8656	13.1162	1.5383						
4 Other Sectors	198.4292		0.1016	0.0063	0.9712	0.6810	0.2701	0.3976						
B Fugitive Emissions from Fuels														
1 Solid Fuels														
2 Oil and Natural Gas														
2 Industrial Processes	**2.5148**	**0.0000**	**0.0000**	**0.2329**	**0.3105**	**0.0000**	**8.5438**	**0.0000**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	2.5148						5.8573							
B Chemical Industry				0.2329	0.3105									
C Metal Production														
D Other Production							2.6865							
E Production of Halocarbons and Sulphur Hexafluoride														
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0550		0.0009			
G Other (please specify)														

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

Country	The Republic of Mauritius
Inventory Year	2001

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**4.1009**	**0.5065**	**0.4400**	**9.2783**								
A Enteric Fermentation			3.2021											
B Manure Management			0.4570	0.0286										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4657										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.4418	0.0122	0.4400	9.2783								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 100.0500**	**(1) -317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -317.9600	0.0109	0.0002	0.0011	0.1722								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	28.5600	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.5242**		**59.7190**	**0.0864**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			25.1085											
B Wastewater Handling			34.6105	0.0864										
C Waste Incineration	0.5242													
D Other (please specify)														
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**872.9723**		**0.0445**	**0.0119**	**13.8521**	**8.8961**	**1.8808**	**0.0000**						
Aviation	239.7212		0.0017	0.0068	1.0160	0.3387	0.1693	0.0000						
Marine	633.2511		0.0428	0.0051	12.8361	8.5574	1.7115	0.0000						
CO_2 Emissions from Biomass	**1108.6613**													

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2577.0074**	**-317.9600**	**64.2980**	**0.8870**	**13.4640**	**63.3959**	**22.2429**	**9.5494**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
1 Energy Reference Approach(1)														
1 Energy Sectoral Approach(1)	**2473.9184**		**0.4672**	**0.0610**	**12.7124**	**53.9454**	**13.6991**	**9.5494**						
A Fuel Combustion	2473.9184		0.4672	0.0610	12.7124	53.9454	13.6991							
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**2.5148**		**0.0000**	**0.2329**	**0.3105**	**0.0000**	**8.5438**	**0.0000**	**0.0550**	**0.0000**	**0.0009**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**4.1009**	**0.5065**	**0.4400**	**9.2783**	**0.0000**							
5 Land-Use Change & Forestry	(2) **100.0500**	(2) **-317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**	**0.0000**	**0.0000**						
6 Waste	**0.5242**		**59.7190**	**0.0864**										
7 Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:														
International Bunkers	**872.9723**		**0.0445**	**0.0119**	**13.8521**	**8.8961**	**1.8808**	**0.0000**						
Aviation	239.7212		0.0017	0.0068	1.0160	0.3387	0.1693	0.0000						
Marine	633.2511		0.0428	0.0051	12.8361	8.5574	1.7115	0.0000						
CO_2 Emissions from Biomass	**1108.6613**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the resu of both the Reference Approach and the Sectoral Approach in national totals

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions

or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,259.0474**		**64.2980**		**0.8870**		**13.4640**		**63.3959**		**22.2429**		**9.5494**		**0.0550**		**0.0009**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	2,473.9184	**H**	0.4672	**H**	0.0610	**H**	12.7124	**H**	53.9454	**H**	13.6991	**H**	9.5494	**H**	0.0000		0.0000		0.0000				
1 Energy Industries	1162.6970		0.0271	H	0.0100	H	3.5422	H	0.2521	H	0.0755	H	5.3421	H									
2 Manufacturing Industries and Construction	376.1598	H	0.1353	H	0.0195	H	1.4564	H	4.1467	H	0.2373	H	2.2714	H									
3 Transport	736.6324	H	0.2032	H	0.0252	H	6.7426	H	48.8656	H	13.1162	H	1.5383	H									
4 Other Sectors	198.4292	H	0.1016	H	0.0063	H	0.9712	H	0.6810	H	0.2701	H	0.3976	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**2.5148**		**0.0000**		**0.2329**		**0.3105**		**0.0000**		**8.5438**		**0.0000**		**0.0550**		**0.0009**		**0.0000**				
A Mineral Products	2.5148	H									5.8573	H											
B Chemical Industry					0.2329	H	0.3105	H															
C Metal Production																							
D Other Production											2.6865	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0550	H	0.0009	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**4.1009**		**0.5065**		**0.44**		**9.2783**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			3.2021	H																			
B Manure Management			0.4570	H	0.0286	H																	
C Rice Cultivation			0.0000	H																			
D Agricultural Soils					0.4657	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.4418	H	0.0122	H	0.4400	H	9.2783	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-217.91	H	0.0109	H	0.0002	H	0.0011	H	0.1722	H	0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-317.96	M																					
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2001

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	28.56	H																					
6 Waste	**0.5242**		**59.7190**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			25.1085	M																			
B Wastewater Handling			34.6105	H	0.0864	H																	
C Waste Incineration	0.5242	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**872.9723**		**0.0445**		**0.0119**		**13.8521**		**8.8961**		**1.8808**		**0.0000**		**0**		**0**		**0**				
Aviation	239.7212	H	0.0017	H	0.0068	H	1.0160	H	0.3387	H	0.1693	H	0.0000	H									
Marine	633.2511	H	0.0428	H	0.0051	H	12.8361	H	8.5574	H	1.7115	H	0.0000	H									
CO_2 Emissions from Biomass	1,108.6613	H																					

H

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2001

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	**CO_2 emissions (Gg)**	**CO_2 removals (Gg)**	**CH_4 (Gg)**	**N_2O (Gg)**	**NO_x (Gg)**	**CO (Gg)**	**NMVOCs (Gg)**	**SO_x (Gg)**
Total national emissions and removals	**2577.0074**	**-317.9600**	**64.2980**	**0.8870**	**13.4640**	**63.3959**	**22.2429**	**9.5494**
1. Energy	**2473.9184**	**0.0000**	**0.4672**	**0.0610**	**12.7124**	**53.9454**	**13.6991**	**9.5494**
A. Fuel combustion (sectoral	2473.9184		0.4672	0.0610	12.7124	53.9454	13.6991	9.5494
1. Energy Industries	1162.6970		0.0271	0.0100	3.5422	0.2521	0.0755	5.3421
2. Manufacturing industries and construction	376.1598		0.1353	0.0195	1.4564	4.1467	0.2373	2.2714
3. Transport	736.6324		0.2032	0.0252	6.7426	48.8656	13.1162	1.5383
4. Other sectors	198.4292		0.1016	0.0063	0.9712	0.6810	0.2701	0.3976
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**2.5148**	**0.0000**	**0.0000**	**0.2329**	**0.3105**	**0.0000**	**8.5438**	**0.0000**
A. Mineral products	2.5148				0.0000	0.0000	5.8573	0.0000
B. Chemical industry	0.0000		0.0000	0.2329	0.3105	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6865	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**4.1009**	**0.5065**	**0.4400**	**9.2783**	**0.0000**	**0.0000**
A. Enteric fermentation			3.2021					
B. Manure management			0.4570	0.0286			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4657			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.4418	0.0122	0.4400	9.2783	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**100.0500**	**-317.9600**	**0.0109**	**0.0002**	**0.0011**	**0.1722**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-317.9600	0.0109	0.0002	0.0011	0.1722		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	28.5600	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.5242**		**59.7190**	**0.0864**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			25.1085		0.0000		0.0000	
B. Waste-water handling			34.6105	0.0864	0.0000	0.0000	0.0000	
C. Waste incineration	0.5200				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**872.9723**		**0.0445**	**0.0119**	**13.8521**	**8.8961**	**1.8808**	**0.0000**
Aviation	239.7212		0.0017	0.0068	1.0160	0.3387	0.1693	0.0000
Marine	633.2511		0.0428	0.0051	12.8361	8.5574	1.7115	0.0000
CO_2 emissions from biomass	**1108.6613**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2001

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.0082**	**0.0018**	**0.001**	**0.0363**	**0.0077**	**0.0009**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.0082**	**0.0018**	**0.001**	**0.0363**	**0.0077**	**0.0009**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.0082	0.0018	0.001	0.0363	0.0077	0.0009	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2002	2002
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
	Vacoas	Le Reduit
	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
Fax	+230 686 1033	+230 208 7064
E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2491.6947**	**0.4250**	**0.0647**	**13.0309**	**51.7102**	**13.2358**	**9.1978**
A Fuel Combustion Activities (Sectoral Approach)	**2491.6947**	**0.4250**	**0.0647**	**13.0309**	**51.7102**	**13.2358**	**9.1978**
1 Energy Industries	**1159.3008**	**0.0302**	**0.0149**	**3.7424**	**0.2622**	**0.0750**	**5.4493**
a Public Electricity and Heat Production	1159.3008	0.0302	0.0149	3.7424	0.2622	0.0750	5.4493
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**376.5119**	**0.1157**	**0.0169**	**1.3917**	**3.4942**	**0.2043**	**1.6912**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing	120.6506	0.1091	0.0145	0.6758	3.4448	0.1870	1.0715
Sugar	4.1819	0.0989	0.0132	0.3407	3.2922	0.1649	0.2434
Tea	3.3945	0.0005	0.0001	0.0111	0.0155	0.0010	0.0057
Bakery, Food and other misc. industries	113.0742	0.0097	0.0012	0.3240	0.1371	0.0211	0.8224
f Other	255.8613	0.0066	0.0024	0.7159	0.0494	0.0173	0.6197
Manufacture of Textiles	245.6942	0.0063	0.0023	0.6882	0.0480	0.0166	0.6037
Construction	10.1671	0.0003	0.0001	0.0277	0.0014	0.0007	0.0160

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**757.8299**	**0.1789**	**0.0266**	**6.9314**	**47.2818**	**12.6902**	**1.6656**
a Civil Aviation	16.5043	0.0001	0.0005	0.0699	0.0233	0.0117	0.0052
b Road Transportation	715.7102	0.1771	0.0259	6.3383	46.9097	12.6087	0.8811
c Railways							
d Navigation	25.6154	0.0017	0.0002	0.5232	0.3488	0.0698	0.7793
e Other (please specify)	0.0000						
Pipeline Transport	0.0000						
4 Other Sectors	**198.0521**	**0.1002**	**0.0063**	**0.9654**	**0.6720**	**0.2663**	**0.3917**
a Commercial/Institutional	13.4666	0.0042	0.0001	0.0226	0.0757	0.0021	0.0068
b Residential	142.0412	0.0931	0.0023	0.2460	0.0912	0.1517	0.3226
c Agriculture/Forestry/Fishing	42.5443	0.0029	0.0039	0.6968	0.5051	0.1125	0.0623
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**816.2531**	**0.0375**	**0.0125**	**11.8741**	**7.5022**	**1.6246**	**0.0000**
Aviation	292.9491	0.0021	0.0083	1.2416	0.4139	0.2069	0.0000
Marine	523.3040	0.0354	0.0043	10.6325	7.0883	1.4177	0.0000
CO_2 Emissions from Biomass	**1024.4512**						

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**2.3048**	**0.0000**	**0.3053**	**0.4071**	**0.0000**	**10.0618**	**0.0000**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**2.3048**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**7.3805**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	2.3048												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						7.3805							
7 Other (please specify)													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.3053**	**0.4071**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production			0.3053	0.4071									
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6813**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6813							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC
Total Agriculture	**3.6112**	**0.4605**	**0.3131**	**6.6018**	**0.0000**
A Enteric Fermentation	**2.8441**				
1 Cattle	0.8667				
2 Buffalo	0.0000				
3 Sheep	0.0321				
4 Goats	0.1690				
5 Camels and Llamas	0.0000				
6 Horses	0.0110				
7 Mules and Asses	0.0000				
8 Swine	0.0197				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.7456				
B Manure Management	**0.4527**	**0.0294**	**0.0000**	**0.0000**	**0.0000**
1 Cattle	0.0394				
2 Buffalo	0.0000				
3 Sheep	0.0007				
4 Goats	0.0041				
5 Camels and Llamas	0.0000				
6 Horses	0.0000				
7 Mules and Asses	0.0000				
8 Swine	0.2839				
9 Poultry	0.0809				
10 Other (please specify) Deer	0.0425				

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0292			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**				
1 Irrigated	0.0000				
2 Rainfed	0.0000				
3 Deep Water	0.0000				
4 Other (please specify)					
D Agricultural Soils		**0.4224**			
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	
F Field Burning of Agricultural Residues (1)	**0.3144**	**0.0087**	**0.3131**	**6.6018**	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.3144	0.0087	0.3131	6.6018	
5 Other (please specify)					
G Other (please specify)					

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **105.5300**	(1) **-289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1)	(1) **-289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
E Other (Cropland converted to Other Land)	**34.0400**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**105.5300**	**-289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**
A. Forest Land	**0.0000**	**-253.4400**	**0.0109**	**0.0002**	**0.0011**	**0.1723**
1. Forest Land Remaining Forest Land		-253.4400	0.0109	0.0002	0.0011	0.1723
2. Land Converted to Forest Land						
B. Cropland	**0.0000**	**-9.5000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-9.5000	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Cropland			0.0000	0.0000	0.0000	0.0000
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland		0.0000	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Grassland			0.0000	0.0000	0.0000	0.0000
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands		0.0000	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Wetlands	0.0000		0.0000	0.0000	0.0000	0.0000
E. Settlements	**71.4900**	**-26.4300**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.4300	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Settlements	71.4900		0.0000	0.0000	0.0000	0.0000
F. Other Land	**34.0400**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Other Land	34.0400		0.0000	0.0000	0.0000	0.0000
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categorie						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2002

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.5309**	**56.9544**	**0.0937**			
A Solid Waste Disposal on Land	**0.0000**	**27.8009**	**0.0000**			
1 Managed Waste Disposal on Land		27.8009				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**29.1535**	**0.0937**			
1 Industrial Wastewater		23.0200	0.0000			
2 Domestic and Commercial Wastewater		6.0225	0.0937			
3 Other (Hotel Sector)		0.1110	0.0000			
C Waste Incineration	**0.5309**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2600.0604**	**-289.3700**	**61.0015**	**0.9244**	**13.7522**	**58.4843**	**23.2976**	**9.1978**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2491.6947**	**0.0000**	**0.4250**	**0.0647**	**13.0309**	**51.7102**	**13.2358**	**9.1978**						
A Fuel Combustion (Sectoral Approach)	2491.6947		0.4250	0.0647	13.0309	51.7102	13.2358	9.1978						
1 Energy Industries	1159.3008		0.0302	0.0149	3.7424	0.2622	0.0750	5.4493						
2 Manufacturing Industries and Construction	376.5119		0.1157	0.0169	1.3917	3.4942	0.2043	1.6912						
3 Transport	757.8299		0.1789	0.0266	6.9314	47.2818	12.6902	1.6656						
4 Other Sectors	198.0521		0.1002	0.0063	0.9654	0.6720	0.2663	0.3917						
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
1 Solid Fuels			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Oil and Natural Gas			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**2.3048**	**0.0000**	**0.0000**	**0.3053**	**0.4071**	**0.0000**	**10.0618**	**0.0000**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	2.3048					0.0000	7.3805	0.0000						
B Chemical Industry	0.0000		0.0000	0.3053	0.4071	0.0000	0.0000	0.0000						
C Metal Production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D Other Production	0.0000				0.0000	0.0000	2.6813	0.0000						
E Production of Halocarbons and Sulphur Hexafluoride														
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0370		0.0004			
G Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000		0.0000

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

Country	The Republic of Mauritius
Inventory Year	2002

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.6112**	**0.4605**	**0.3131**	**6.6018**								
A Enteric Fermentation			2.8441											
B Manure Management			0.4527	0.0294										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4224										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.3144	0.0087	0.3131	6.6018								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry (2)	**(1) 105.5300**	**(1) -289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -289.3700	0.0109	0.0002	0.0011	0.1723								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	34.0400	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.5309**		**56.9544**	**0.0937**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			27.8009											
B Wastewater Handling			29.1535	0.0937										
C Waste Incineration	0.5309													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**816.2531**		**0.0375**	**0.0125**	**11.8741**	**7.5022**	**1.6246**	**0.0000**						
Aviation	292.9491		0.0021	0.0083	1.2416	0.4139	0.2069	0.0000						
Marine	523.3040		0.0354	0.0043	10.6325	7.0883	1.4177	0.0000						
CO_2 Emissions from Biomass	**1024.4512**													

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**2600.0604**	**-289.3700**	**61.0015**	**0.9244**	**13.7522**	**58.4843**	**23.2976**	**9.1978**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach(1)	**3419.6373**													
	Sectoral Approach(1)	**2491.6947**		**0.4250**	**0.0647**	**13.0309**	**51.7102**	**13.2358**	**9.1978**						
A Fuel Combustion		2491.6947		0.4250	0.0647	13.0309	51.7102	13.2358	9.1978						
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**2.3048**		**0.0000**	**0.3053**	**0.4071**	**0.0000**	**10.0618**	**0.0000**	**0.0370**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.6112**	**0.4605**	**0.3131**	**6.6018**								
5 Land-Use Change & Forestry		**(2) 105.5300**	**(2) -289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**	**0.0000**	**0.0000**						
6 Waste		**0.5309**		**56.9544**	**0.0937**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**816.2531**		**0.0375**	**0.0125**	**11.8741**	**7.5022**	**1.6246**	**0.0000**						
Aviation		292.9491		0.0021	0.0083	1.2416	0.4139	0.2069	0.0000						
Marine		523.3040		0.0354	0.0043	10.6325	7.0883	1.4177	0.0000						
CO_2 Emissions from Biomass		**1024.4512**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the resul of both the Reference Approach and the Sectoral Approach in national totals

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2002

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TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																						
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,310.6904**		**61.0015**		**0.9244**		**13.7522**		**58.4843**		**23.2976**		**9.1978**		**0.0370**		**0.0004**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	2,491.6947		0.4250		0.0647		13.0309		51.7102		13.2358		9.1978		0.0000		0.0000		0.0000				
1 Energy Industries	1159.3008	H	0.0302	H	0.0149	H	3.7424	H	0.2622	H	0.0750	H	5.4493	H									
2 Manufacturing Industries and Construction	376.5119	H	0.1157	H	0.0169	H	1.3917	H	3.4942	H	0.2043	H	1.6912	H									
3 Transport	757.8299	H	0.1789	H	0.0266	H	6.9314	H	47.2818	H	12.6902	H	1.6656	H									
4 Other Sectors	198.0521	H	0.1002	H	0.0063	H	0.9654	H	0.6720	H	0.2663	H	0.3917	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**2.3048**		**0.0000**		**0.3053**		**0.4071**		**0.0000**		**10.0618**		**0.0000**		**0.0370**		**0.0004**		**0.0000**				
A Mineral Products	2.3048	H									7.3805	H											
B Chemical Industry					0.3053	H	0.4071	H															
C Metal Production																							
D Other Production											2.6813	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0370	H	0.0004	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.6112**		**0.4605**		**0.3131**		**6.6018**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			2.8441	H																			
B Manure Management			0.4527	H	0.0294	H																	
C Rice Cultivation			0.0000	H																			
D Agricultural Soils					0.4224	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.3144	H	0.0087	H	0.3131	H	6.6018	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-183.84		0.0109		0.0002		0.0011		0.1723		0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-289.37	M	0.0109	H	0.0002	H	0.0011	H	0.1723	H													
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2002

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	34.04	H																					
6 Waste	**0.5309**		**56.9544**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			27.8009	M																			
B Wastewater Handling			29.1535	H	0.0937	H																	
C Waste Incineration	0.5309	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**816.2531**		**0.0375**		**0.0125**		**11.8741**		**7.5022**		**1.6246**		**0.0000**		**0**		**0**		**0**				
Aviation	292.9491	H	0.0021	H	0.0083	H	1.2416	H	0.4139	H	0.2069	H	0.0000	H									
Marine	523.3040	H	0.0354	H	0.0043	H	10.6325	H	7.0883	H	1.4177	H	0.0000	H									
CO_2 Emissions from Biomass	1,024.4512	H																					

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2002

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	**CO_2 emissions (Gg)**	**CO_2 removals (Gg)**	**CH_4 (Gg)**	**N_2O (Gg)**	**NO_x (Gg)**	**CO (Gg)**	**NMVOCs (Gg)**	**SO_x (Gg)**
Total national emissions and removals	**2600.0604**	**-289.3700**	**61.0015**	**0.9244**	**13.7522**	**58.4843**	**23.2976**	**9.1978**
1. Energy	**2491.6947**	**0.0000**	**0.4250**	**0.0647**	**13.0309**	**51.7102**	**13.2358**	**9.1978**
A. Fuel combustion (sectoral	2491.6947		0.4250	0.0647	13.0309	51.7102	13.2358	9.1978
1. Energy Industries	1159.3008		0.0302	0.0149	3.7424	0.2622	0.0750	5.4493
2. Manufacturing industries and construction	376.5119		0.1157	0.0169	1.3917	3.4942	0.2043	1.6912
3. Transport	757.8299		0.1789	0.0266	6.9314	47.2818	12.6902	1.6656
4. Other sectors	198.0521		0.1002	0.0063	0.9654	0.6720	0.2663	0.3917
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**2.3048**	**0.0000**	**0.0000**	**0.3053**	**0.4071**	**0.0000**	**10.0618**	**0.0000**
A. Mineral products	2.3048				0.0000	0.0000	7.3805	0.0000
B. Chemical industry	0.0000		0.0000	0.3053	0.4071	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6813	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.6112**	**0.4605**	**0.3131**	**6.6018**	**0.0000**	**0.0000**
A. Enteric fermentation			2.8441					
B. Manure management			0.4527	0.0294			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4224			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.3144	0.0087	0.3131	6.6018	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**105.5300**	**-289.3700**	**0.0109**	**0.0002**	**0.0011**	**0.1723**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-289.3700	0.0109	0.0002	0.0011	0.1723		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	34.0400	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.5309**		**56.9544**	**0.0937**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			27.8009		0.0000		0.0000	
B. Waste-water handling			29.1535	0.0937	0.0000	0.0000	0.0000	
C. Waste incineration	0.5300				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**816.2531**		**0.0375**	**0.0125**	**11.8741**	**7.5022**	**1.6246**	**0.0000**
Aviation	292.9491		0.0021	0.0083	1.2416	0.4139	0.2069	0.0000
Marine	523.3040		0.0354	0.0043	10.6325	7.0883	1.4177	0.0000
CO_2 emissions from biomass	**1024.4512**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2002

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.0224**	**0.0047**	**0.0004**	**0.0072**	**0.0023**	**0.0004**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.0224**	**0.0047**	**0.0004**	**0.0072**	**0.0023**	**0.0004**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.0224	0.0047	0.0004	0.0072	0.0023	0.0004	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2003	2003
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
	Vacoas	Le Reduit
	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
Fax	+230 686 1033	+230 208 7064
E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2658.6495**	**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**
A Fuel Combustion Activities (Sectoral Approach)	**2658.6495**	**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**
1 Energy Industries	**1285.0662**	**0.0341**	**0.0160**	**4.0483**	**0.2846**	**0.0822**	**6.0008**
a Public Electricity and Heat Production	1285.0662	0.0341	0.0160	4.0483	0.2846	0.0822	6.0008
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**376.6096**	**0.1307**	**0.0189**	**1.4491**	**4.0012**	**0.2295**	**4.3638**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing, etc	125.8003	0.1243	0.0165	0.7418	3.9520	0.2125	3.7380
Sugar	5.1576	0.1141	0.0152	0.3942	3.8002	0.1903	0.2815
Tea	2.8793	0.0005	0.0001	0.0094	0.0154	0.0009	0.0054
Bakery, Food and other misc. industries	117.7634	0.0097	0.0012	0.3382	0.1364	0.0213	3.4511
f Other	250.8093	0.0064	0.0024	0.7073	0.0492	0.0170	0.6258
Manufacture of Textiles	239.5937	0.0061	0.0023	0.6767	0.0477	0.0162	0.6081
Construction	11.2156	0.0003	0.0001	0.0306	0.0015	0.0008	0.0177

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**781.6268**	**0.1738**	**0.0364**	**6.9388**	**43.7193**	**12.4768**	**1.6979**
a Civil Aviation	15.9419	0.0001	0.0005	0.0676	0.0225	0.0113	0.0051
b Road Transportation	738.5973	0.1718	0.0357	6.3158	43.3266	12.3915	0.9126
c Railways							
d Navigation	27.0876	0.0019	0.0002	0.5554	0.3702	0.0740	0.7802
e Other (please specify)							
Pipeline Transport							
4 Other Sectors	**215.3469**	**0.1029**	**0.0067**	**1.1350**	**0.8007**	**0.2946**	**0.4078**
a Commercial/Institutional	16.9817	0.0048	0.0002	0.0282	0.0789	0.0024	0.0070
b Residential	146.1198	0.0946	0.0023	0.2529	0.0908	0.1538	0.3264
c Agriculture/Forestry/Fishing	52.2454	0.0035	0.0042	0.8539	0.6310	0.1384	0.0744
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**1087.5880**	**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**
Aviation	670.2473	0.0047	0.0189	2.8406	0.9469	0.4734	0.0000
Marine	417.3407	0.0281	0.0034	8.4440	5.6293	1.1259	0.0000
CO_2 Emissions from Biomass	**1017.5487**						

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**2.1893**	**0.0000**	**0.3268**	**0.4357**	**0.0000**	**8.5043**	**0.0000**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**2.1893**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.8688**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	2.1893												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						5.8688							
7 Other (please specify)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.3268**	**0.4357**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production			0.3268	0.4357									
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6355**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6355							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC
Total Agriculture	**3.5446**	**0.4809**	**0.2784**	**5.8711**	**0.0000**
A Enteric Fermentation	**2.8241**				
1 Cattle	0.8130				
2 Buffalo	0.0000				
3 Sheep	0.0337				
4 Goats	0.1752				
5 Camels and Llamas	0.0000				
6 Horses	0.0115				
7 Mules and Asses	0.0000				
8 Swine	0.0193				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.7714				
B Manure Management	**0.4409**	**0.0281**	**0.0000**	**0.0000**	**0.0000**
1 Cattle	0.0370				
2 Buffalo	0.0000				
3 Sheep	0.0007				
4 Goats	0.0043				
5 Camels and Llamas	0.0000				
6 Horses	0.0010				
7 Mules and Asses	0.0000				
8 Swine	0.2727				
9 Poultry	0.0821				
10 Other (please specify) Deer	0.0431				

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0279			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**				
1 Irrigated	0.0000				
2 Rainfed	0.0000				
3 Deep Water	0.0000				
4 Other (please specify)					
D Agricultural Soils		**0.4451**			
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	
F Field Burning of Agricultural Residues (1)	**0.2796**	**0.0077**	**0.2784**	**5.8711**	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.2796	0.0077	0.2784	5.8711	
5 Other (please specify)					
G Other (please specify)					

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **123.6500**	(1) **-323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1) **0.0000**	(1) **-323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**						
E Other (Cropland converted to Other Land)	**52.1600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_X	CO
Total Land Use, Land-Use Change and Forestry	**123.6500**	**-323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**
A. Forest Land	**0.0000**	**-287.6600**	**0.0101**	**0.0002**	**0.0010**	**0.1591**
1. Forest Land Remaining Forest Land		-287.6600	0.0101	0.0002	0.0010	0.1591
2. Land Converted to Forest Land						
B. Cropland	**0.0000**	**-9.2600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-9.2600				
2. Land Converted to Cropland						
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland						
2. Land Converted to Grassland						
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands						
2. Land Converted to Wetlands						
E. Settlements	**71.4900**	**-26.4700**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.4700				
2. Land Converted to Settlements	71.4900					
F. Other Land	**52.1600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land						
2. Land Converted to Other Land	52.1600					
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categories						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2003

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.4932**	**58.8038**	**0.0822**			
A Solid Waste Disposal on Land	**0.0000**	**28.8752**	**0.0000**			
1 Managed Waste Disposal on Land		28.8752				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**29.9286**	**0.0822**			
1 Industrial Wastewater		23.7400	0.0000			
2 Domestic and Commercial Wastewater		6.0686	0.0822			
3 Other (Hotel Sector)		0.1200	0.0000			
C Waste Incineration	**0.4932**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2784.9820**	**-323.3900**	**62.8000**	**0.9681**	**14.2863**	**54.8360**	**21.5874**	**12.4703**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2658.6495**	**0.0000**	**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**						
A Fuel Combustion (Sectoral Approach)	2658.6495		0.4415	0.0780	13.5712	48.8058	13.0831	12.4703						
1 Energy Industries	1285.0662		0.0341	0.0160	4.0483	0.2846	0.0822	6.0008						
2 Manufacturing Industries and Construction	376.6096		0.1307	0.0189	1.4491	4.0012	0.2295	4.3638						
3 Transport	781.6268		0.1738	0.0364	6.9388	43.7193	12.4768	1.6979						
4 Other Sectors	215.3469		0.1029	0.0067	1.1350	0.8007	0.2946	0.4078						
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
1 Solid Fuels			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Oil and Natural Gas			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**2.1893**	**0.0000**	**0.0000**	**0.3268**	**0.4357**	**0.0000**	**8.5043**	**0.0000**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	2.1893					0.0000	5.8688	0.0000						
B Chemical Industry			0.0000	0.3268	0.4357	0.0000	0.0000	0.0000						
C Metal Production			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D Other Production					0.0000	0.0000	2.6355	0.0000						
E Production of Halocarbons and Sulphur Hexafluoride									0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0210		0.0002			
G Other (please specify)														

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

Country	The Republic of Mauritius
Inventory Year	2003

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.5446**	**0.4809**	**0.2784**	**5.8711**								
A Enteric Fermentation			2.8241											
B Manure Management			0.4409	0.0281										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4451										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.2796	0.0077	0.2784	5.8711								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 123.6500**	**(1) -323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -323.3900	0.0101	0.0002	0.0010	0.1591								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	52.1600	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.4932**		**58.8038**	**0.0822**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			28.8752											
B Wastewater Handling			29.9286	0.0822										
C Waste Incineration	0.4932													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**1087.5880**		**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**						
Aviation	670.2473		0.0047	0.0189	2.8406	0.9469	0.4734	0.0000						
Marine	417.3407		0.0281	0.0034	8.4440	5.6293	1.1259	0.0000						
CO_2 Emissions from Biomass	**1017.5487**													

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**2784.9820**	**-323.3900**	**62.8000**	**0.9681**	**14.2863**	**54.8360**	**21.5874**	**12.4703**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach(1)	**3419.6373**													
	Sectoral Approach(1)	**2658.6495**		**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**						
A Fuel Combustion		2658.6495		0.4415	0.0780	13.5712	48.8058	13.0831							
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**2.1893**		**0.0000**	**0.3268**	**0.4357**	**0.0000**	**8.5043**	**0.0000**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.5446**	**0.4809**	**0.2784**	**5.8711**								
5 Land-Use Change & Forestry		**(2) 123.6500**	**(2) -323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**	**0.0000**	**0.0000**						
6 Waste		**0.4932**		**58.8038**	**0.0822**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1087.5880**		**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**						
Aviation		670.2473		0.0047	0.0189	2.8406	0.9469	0.4734	0.0000						
Marine		417.3407		0.0281	0.0034	8.4440	5.6293	1.1259	0.0000						
CO_2 Emissions from Biomass		**1017.5487**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the resul
of both the Reference Approach and the Sectoral Approach in national totals

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions

or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,461.5920**		**62.8000**		**0.9681**		**14.2863**		**54.8360**		**21.5874**		**12.4703**		**0.0210**		**0.0002**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	2,658.6495	**H**	0.4415	**H**	0.0780	**H**	13.5712	**H**	48.8058	**H**	13.0831	**H**	12.4703	**H**	0.0000		0.0000		0.0000				
1 Energy Industries	1285.0662	H	0.0341	H	0.0160	H	4.0483	H	0.2846	H	0.0822	H	6.0008	H									
2 Manufacturing Industries and Construction	376.6096	H	0.1307	H	0.0189	H	1.4491	H	4.0012	H	0.2295	H	4.3638	H									
3 Transport	781.6268	H	0.1738	H	0.0364	H	6.9388	H	43.7193	H	12.4768	H	1.6979	H									
4 Other Sectors	215.3469	H	0.1029	H	0.0067	H	1.135	H	0.8007	H	0.2946	H	0.4078	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**2.1893**		**0.0000**		**0.3268**		**0.4357**		**0.0000**		**8.5043**		**0.0000**		**0.0210**		**0.0002**		**0.0000**				
A Mineral Products	2.1893	H									5.8688	H											
B Chemical Industry					0.3268	H	0.4357	H															
C Metal Production																							
D Other Production											2.6355	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0210	H	0.0002	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.5446**		**0.4809**		**0.2784**		**5.8711**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			2.8241	H																			
B Manure Management			0.4409	H	0.0281	H																	
C Rice Cultivation																							
D Agricultural Soils					0.4451	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.2796	H	0.0077	H	0.2784	H	5.8711	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-199.74	H	0.0101	H	0.0002	H	0.0010	H	0.1591	H	0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-323.39	M	0.0101	H	0.0002	H	0.0010	H	0.1591	H													
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Country The Republic of Mauritius
Inventory Year 2003

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	52.16	H																					
6 Waste	**0.4932**		**58.8038**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			28.8752	M																			
B Wastewater Handling			29.9286	H	0.0822	H																	
C Waste Incineration	0.4932	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**1,087.5880**		**0.0328**		**0.0223**		**11.2846**		**6.5762**		**1.5993**		**0.0000**		**0**		**0**		**0**				
Aviation	670.2473	H	0.0047	H	0.0189	H	2.8406	H	0.9469	H	0.4734	H	0.0000										
Marine	417.3407	H	0.0281	H	0.0034	H	8.4440	H	5.6293	H	1.1259	H	0.0000										
CO_2 Emissions from Biomass	1,017.5487	H																					

Country	The Republic of Mauritius
Inventory Year	2003

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	CO_2 emissions (Gg)	CO_2 removals (Gg)	CH_4 (Gg)	N_2O (Gg)	NO_x (Gg)	CO (Gg)	NMVOCs (Gg)	SO_x (Gg)
Total national emissions and removals	**2784.9820**	**-323.3900**	**62.8000**	**0.9681**	**14.2863**	**54.8360**	**21.5874**	**12.4703**
1. Energy	**2658.6495**	**0.0000**	**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**
A. Fuel combustion (sectoral	2658.6495		0.4415	0.0780	13.5712	48.8058	13.0831	12.4703
1. Energy Industries	1285.0662		0.0341	0.0160	4.0483	0.2846	0.0822	6.0008
2. Manufacturing industries and construction	376.6096		0.1307	0.0189	1.4491	4.0012	0.2295	4.3638
3. Transport	781.6268		0.1738	0.0364	6.9388	43.7193	12.4768	1.6979
4. Other sectors	215.3469		0.1029	0.0067	1.1350	0.8007	0.2946	0.4078
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**2.1893**	**0.0000**	**0.0000**	**0.3268**	**0.4357**	**0.0000**	**8.5043**	**0.0000**
A. Mineral products	2.1893				0.0000	0.0000	5.8688	0.0000
B. Chemical industry	0.0000		0.0000	0.3268	0.4357	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6355	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.5446**	**0.4809**	**0.2784**	**5.8711**	**0.0000**	**0.0000**
A. Enteric fermentation			2.8241					
B. Manure management			0.4409	0.0281			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4451			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.2796	0.0077	0.2784	5.8711	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**123.6500**	**-323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-323.3900	0.0101	0.0002	0.0010	0.1591		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	52.1600	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.4932**		**58.8038**	**0.0822**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			28.8752		0.0000		0.0000	
B. Waste-water handling			29.9286	0.0822	0.0000	0.0000	0.0000	
C. Waste incineration	0.4900				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**1087.5880**		**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**
Aviation	670.2473		0.0047	0.0189	2.8406	0.9469	0.4734	0.0000
Marine	417.3407		0.0281	0.0034	8.4440	5.6293	1.1259	0.0000
CO_2 emissions from biomass	**1017.5487**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2003

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emission and removals	**0.0068**	**0.0033**	**0.0003**	**0.0053**	**0.0052**	**0.0002**	**0.0000**
1. Energy							
A. Fuel combustion (Sectoral)							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emission from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.0068**	**0.0033**	**0.0003**	**0.0053**	**0.0052**	**0.0002**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.0068	0.0033	0.0003	0.0053	0.0052	0.0002	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural residues							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody Biomass stocks							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1 : Estimates provided are potential emissions

Note 2 : Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC-413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O**	**NO_X**	**CO**	**NMVOC**	**SO_2**	**HFC_S**		**PFC_s**		**SF_6**	
									P	**A**	**P**	**A**	**P**	**A**
Memo Items														
International Bunkers	**1087.5880**		**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**						
Aviation	670.2473		0.0047	0.0189	2.8406	0.9469	0.4734	0.0000						
Marine	417.3407		0.0281	0.0034	8.4440	5.6293	1.1259	0.0000						
CO_2 Emissions from Biomass	**1017.5487**													

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES																
GREENHOUSE GAS SOURCE AND SINK CATEGORIES		**CO_2 Emissions**	**CO_2 Removals**	**CH_4**	**N_2O**	**NO_X**	**CO**	**NMVOC**	**SO_2**	**$HFCs$**		**$PFCs$**		**SF_6**	
										P	**A**	**P**	**A**	**P**	**A**
Total National Emissions and Removals		**2784.9820**	**-323.3900**	**62.8000**	**0.9681**	**14.2863**	**54.8360**	**21.5874**	**12.4703**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach[1]	**3419.6373**													
	Sectoral Approach[1]	**2658.6495**		**0.4415**	**0.0780**	**13.5712**	**48.8058**	**13.0831**	**12.4703**						
A Fuel Combustion		2658.6495		0.4415	0.0780	13.5712	48.8058	13.0831							
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**2.1893**		**0.0000**	**0.3268**	**0.4357**	**0.0000**	**8.5043**	**0.0000**	**0.0210**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.5446**	**0.4809**	**0.2784**	**5.8711**								
5 Land Use Change & Forestry		**(2) 123.6500**	**(2) -323.3900**	**0.0101**	**0.0002**	**0.0010**	**0.1591**	**0.0000**	**0.0000**						
6 Waste		**0.4932**		**58.8038**	**0.0822**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1087.5880**		**0.0328**	**0.0223**	**11.2846**	**6.5762**	**1.5993**	**0.0000**						
Aviation		670.2473		0.0047	0.0189	2.8406	0.9469	0.4734	0.0000						
Marine		417.3407		0.0281	0.0034	8.4440	5.6293	1.1259	0.0000						
CO_2 Emissions from Biomass		**1017.5487**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explained any differences in the Sectoral Approach. Do not include the results of both the Reference Approach and the Sectoral Approach in national totals.

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2003

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	**CO_2**		**CH_4**		**N_2O**		**NO_X**		**CO**		**NMVOC**		**SO_2**		**HFC_s**		**PFC_s**		**SF_6**		**Documentation**	**Disaggregation**	**Footnotes**
	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity	Estimate	Quantity			
Total National Emissions and Removals																							
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach																							
1 Energy Industries																							
2 Manufacturing Industries and Construction																							
3 Transport																							
4 Other Sectors																							
5 Other (please specify)																							
B Fugitive Emission from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes																							
A Mineral Products																							
B Chemical Industry																							
C Metal Production																							
D Other Production																							
E Production of Halocarbons and Sulphur Hexafluoride																							

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2004	2004
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
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	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
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E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2657.2428**	**0.4362**	**0.0830**	**13.3070**	**46.7414**	**12.1711**	**9.7153**
A Fuel Combustion Activities (Sectoral Approach)	**2657.2428**	**0.4362**	**0.0830**	**13.3070**	**46.7414**	**12.1711**	**9.7153**
1 Energy Industries	**1287.9726**	**0.0361**	**0.0154**	**3.9902**	**0.2823**	**0.0828**	**5.8396**
a Public Electricity and Heat Production	1287.9726	0.0361	0.0154	3.9902	0.2823	0.0828	5.8396
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**353.8948**	**0.1320**	**0.0190**	**1.3866**	**4.0572**	**0.2309**	**1.7540**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing, etc	124.2124	0.1261	0.0168	0.7407	4.0115	0.2153	1.1937
Sugar	4.2628	0.1159	0.0155	0.3978	3.8612	0.1933	0.2845
Tea	2.0584	0.0005	0.0001	0.0070	0.0153	0.0009	0.0048
Bakery, Food and other misc. industries	117.8912	0.0097	0.0012	0.3359	0.1350	0.0211	0.9044
f Other	229.6824	0.0059	0.0022	0.6459	0.0457	0.0156	0.5603
Manufacture of Textiles	218.3851	0.0056	0.0021	0.6151	0.0442	0.0148	0.5372
Construction	11.2973	0.0003	0.0001	0.0308	0.0015	0.0008	0.0231

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**797.7084**	**0.1634**	**0.0416**	**6.9047**	**41.7082**	**11.5817**	**1.7206**
a Civil Aviation	14.1828	0.0001	0.0004	0.0601	0.0200	0.0100	0.0045
b Road Transportation	758.3405	0.1616	0.0410	6.3308	41.3457	11.5032	0.9371
c Railways							
d Navigation	25.1851	0.0017	0.0002	0.5138	0.3425	0.0685	0.7790
e Other (please specify)							
Pipeline Transport							
4 Other Sectors	**217.6670**	**0.1047**	**0.0070**	**1.0255**	**0.6937**	**0.2757**	**0.4011**
a Commercial/Institutional	18.8219	0.0052	0.0002	0.0312	0.0816	0.0026	0.0072
b Residential	154.3725	0.0966	0.0024	0.2661	0.0916	0.1559	0.3299
c Agriculture/Forestry/Fishing	44.4726	0.0029	0.0044	0.7282	0.5205	0.1172	0.0640
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**1169.0221**	**0.0358**	**0.0238**	**12.2689**	**7.1743**	**1.7354**	**0.0000**
Aviation	711.3897	0.0050	0.0201	3.0150	1.0050	0.5025	0.0000
Marine	457.6324	0.0308	0.0037	9.2539	6.1693	1.2329	0.0000
CO_2 Emissions from Biomass	**1054.0674**						

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**1.7873**	**0.0000**	**0.3152**	**0.4203**	**0.0000**	**7.8049**	**0.0000**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**1.7873**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**5.1680**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	1.7873												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						5.1680							
7 Other (please specify)													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.3152**	**0.4203**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production			0.3152	0.4203									
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6369**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6369							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC
Total Agriculture	**3.3637**	**0.4735**	**0.2224**	**4.6886**	**0.0000**
A Enteric Fermentation	**2.6646**				
1 Cattle	0.6383				
2 Buffalo	0.0000				
3 Sheep	0.0410				
4 Goats	0.1650				
5 Camels and Llamas	0.0000				
6 Horses	0.0118				
7 Mules and Asses	0.0000				
8 Swine	0.0224				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.7861				
B Manure Management	**0.4758**	**0.0244**			
1 Cattle	0.0291				
2 Buffalo	0.0000				
3 Sheep	0.0009				
4 Goats	0.0040				
5 Camels and Llamas	0.0000				
6 Horses	0.0011				
7 Mules and Asses	0.0000				
8 Swine	0.3123				
9 Poultry	0.0849				
10 Other (please specify) Deer	0.0435				

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0242			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**				
1 Irrigated					
2 Rainfed					
3 Deep Water					
4 Other (please specify)					
D Agricultural Soils		**0.4429**			
E Prescribed Burning of Savannas					
F Field Burning of Agricultural Residues (1)	**0.2233**	**0.0062**	**0.2224**	**4.6886**	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.2233	0.0062	0.2224	4.6886	
5 Other (please specify)					
G Other (please specify)					

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 5 SECTORAL REPORT FOR LAND-USE CHANGE AND FORESTRY
(Sheet 1 of 1)

RAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Emissions CO_2	Removals CO_2	CH_4	N_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **104.6500**	(1) **-302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1) **0.0000**	(1) **-302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
1 Tropical Forests	71.4900							
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**						
E Other (Cropland converted to Other Land)	**33.1600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**104.6500**	**-302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**
A. Forest Land	**0.0000**	**-267.6900**	**0.0114**	**0.0002**	**0.0011**	**0.1800**
1. Forest Land Remaining Forest Land		-267.6900	0.0114	0.0002	0.0011	0.1800
2. Land Converted to Forest Land			0.0000	0.0000	0.0000	0.0000
B. Cropland	**0.0000**	**-8.1700**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-8.1700	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Cropland			0.0000	0.0000	0.0000	0.0000
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Grassland			0.0000	0.0000	0.0000	0.0000
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Wetlands	0.0000		0.0000	0.0000	0.0000	0.0000
E. Settlements	**71.4900**	**-26.4700**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.4700	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Settlements	71.4900		0.0000	0.0000	0.0000	0.0000
F. Other Land	**33.1600**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land	**33.1600**		0.0000	0.0000	0.0000	0.0000
2. Land Converted to Other Land			0.0000	0.0000	0.0000	0.0000
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categorie						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2004

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.4932**	**59.2400**	**0.0660**			
A Solid Waste Disposal on Land	**0.0000**	**27.7600**	**0.0000**			
1 Managed Waste Disposal on Land		27.7600				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**31.4800**	**0.0660**			
1 Industrial Wastewater		25.2900	0.0000			
2 Domestic and Commercial Wastewater		6.0700	0.0660			
3 Other (Hotel Sector)		0.1200	0.0000			
C Waste Incineration	**0.4932**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2764.1733**	**-302.3300**	**63.0513**	**0.9379**	**13.9508**	**51.6100**	**19.9760**	**9.7153**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2657.2428**	**0.0000**	**0.4362**	**0.0830**	**13.3070**	**46.7414**	**12.1711**	**9.7153**						
A Fuel Combustion (Sectoral Approach)	2657.2428		0.4362	0.0830	13.3070	46.7414	12.1711	9.7153						
1 Energy Industries	1287.9726		0.0361	0.0154	3.9902	0.2823	0.0828	5.8396						
2 Manufacturing Industries and Construction	353.8948		0.1320	0.0190	1.3866	4.0572	0.2309	1.7540						
3 Transport	797.7084		0.1634	0.0416	6.9047	41.7082	11.5817	1.7206						
4 Other Sectors	217.6670		0.1047	0.0070	1.0255	0.6937	0.2757	0.4011						
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
1 Solid Fuels			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Oil and Natural Gas			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**1.7873**	**0.0000**	**0.0000**	**0.3152**	**0.4203**	**0.0000**	**7.8049**	**0.0000**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	1.7873					0.0000	5.1680	0.0000						
B Chemical Industry	0.0000		0.0000	0.3152	0.4203	0.0000	0.0000	0.0000						
C Metal Production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D Other Production	0.0000				0.0000	0.0000	2.6369	0.0000						
E Production of Halocarbons and Sulphur Hexafluoride									0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0190		0.0004			
G Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000		0.0000

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

Country	The Republic of Mauritius
Inventory Year	2004

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.3637**	**0.4735**	**0.2224**	**4.6886**								
A Enteric Fermentation			2.6646											
B Manure Management			0.4758	0.0244										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4429										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.2233	0.0062	0.2224	4.6886								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 104.6500**	**(1) -302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -302.3300	0.0114	0.0002	0.0011	0.1800								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	33.1600	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.4932**		**59.2400**	**0.0660**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			27.7600											
B Wastewater Handling			31.4800	0.0660										
C Waste Incineration	0.4932													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**1169.0221**		**0.0358**	**0.0238**	**12.2689**	**7.1743**	**1.7354**	**0.0000**						
Aviation	711.3897		0.0050	0.0201	3.0150	1.0050	0.5025	0.0000						
Marine	457.6324		0.0308	0.0037	9.2539	6.1693	1.2329	0.0000						
CO_2 Emissions from Biomass	**1054.0674**													

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**2764.1733**	**-302.3300**	**63.0513**	**0.9379**	**13.9508**	**51.6100**	**19.9760**	**9.7153**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach(1)	**3419.6373**													
	Sectoral Approach(1)	**2657.2428**		**0.4362**	**0.0830**	**13.3070**	**46.7414**	**12.1711**	**9.7153**						
A Fuel Combustion		2657.2428		0.4362	0.0830	13.3070	46.7414	12.1711							
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**1.7873**		**0.0000**	**0.3152**	**0.4203**	**0.0000**	**7.8049**	**0.0000**	**0.0190**	**0.0000**	**0.0004**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.3637**	**0.4735**	**0.2224**	**4.6886**								
5 Land-Use Change & Forestry		**(2) 104.6500**	**(2) -302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**	**0.0000**	**0.0000**						
6 Waste		**0.4932**		**59.2400**	**0.0660**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1169.0221**		**0.0358**	**0.0238**	**12.2689**	**7.1743**	**1.7354**	**0.0000**						
Aviation		711.3897		0.0050	0.0201	3.0150	1.0050	0.5025	0.0000						
Marine		457.6324		0.0308	0.0037	9.2539	6.1693	1.2329	0.0000						
CO_2 Emissions from Biomass		**1054.0674**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the resul
of both the Reference Approach and the Sectoral Approach in national totals

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions

or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,461.8433**		**63.0513**		**0.9379**		**13.9508**		**51.6100**		**19.9760**		**9.7153**		**0.0190**		**0.0004**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																H		H					
Sectoral Approach	2,657.2428		0.4362		0.0830		13.3070		46.7414	**H**	12.1711	**H**	9.7153	**H**	0.0000		0.0000		0.0000				
1 Energy Industries	1287.9726	H	0.0361	H	0.0154	H	3.9902	H	0.2823	H	0.0828	H	5.8396	H									
2 Manufacturing Industries and Construction	353.8948	H	0.1320	H	0.0190	H	1.3866	H	4.0572	H	0.2309	H	1.754	H									
3 Transport	797.7084	H	0.1634	H	0.0416	H	6.9047	H	41.7082	H	11.5817	H	1.7206	H									
4 Other Sectors	217.6670	H	0.1047	H	0.0070	H	1.0255	H	0.6937	H	0.2757	H	0.4011	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**1.7873**		**0.0000**		**0.3152**		**0.4203**		**0.0000**		**7.8049**		**0.0000**		**0.0190**		**0.0004**		**0.0000**				
A Mineral Products	1.7873	H									5.1680	H											
B Chemical Industry					0.3152	H	0.4203	H															
C Metal Production																							
D Other Production											2.6369	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Country	The Republic of Mauritius
Inventory Year	20004

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0190	H	0.0004	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.3637**		**0.4735**		**0.2224**		**4.6886**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			2.6646	H																			
B Manure Management			0.4758	H	0.0244	H																	
C Rice Cultivation																							
D Agricultural Soils					0.4429	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.2233	H	0.0062	H	0.2224	H	4.6886	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-197.68	H	0.0114	H	0.0002	H	0.0011	H	0.1800	H	0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-302.33	M	0.0114	H	0.0002	H	0.0011	H	0.1800	H													
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Country	The Republic of Mauritius
Inventory Year	2004

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	33.16	H																					
6 Waste	**0.4932**		**59.2400**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			27.7600	M																			
B Wastewater Handling			31.4800	H	0.0660	H																	
C Waste Incineration	0.4932	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**1,169.0221**		**0.0358**		**0.0238**		**12.2689**		**7.1743**		**1.7354**		**0.0000**		**0**		**0**		**0**				
Aviation	711.3897	H	0.0050	H	0.0201	H	3.0150	H	1.0050	H	0.5025	H	0.0000	H									
Marine	457.6324	H	0.0308	H	0.0037	H	9.2539	H	6.1693	H	1.2329	H	0.0000	H									
CO_2 Emissions from Biomass	1,054.0674	H																					

Country	The Republic of Mauritius
Inventory Year	2004

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	**CO_2 emissions (Gg)**	**CO_2 removals (Gg)**	**CH_4 (Gg)**	**N_2O (Gg)**	**NO_x (Gg)**	**CO (Gg)**	**NMVOCs (Gg)**	**SO_x (Gg)**
Total national emissions and removals	**2764.1733**	**-302.3300**	**63.0513**	**0.9379**	**13.9508**	**51.6100**	**19.9760**	**9.7153**
1. Energy	**2657.2428**	**0.0000**	**0.4362**	**0.0830**	**13.3070**	**46.7414**	**12.1711**	**9.7153**
A. Fuel combustion (sectoral	2657.2428		0.4362	0.0830	13.3070	46.7414	12.1711	9.7153
1. Energy Industries	1287.9726		0.0361	0.0154	3.9902	0.2823	0.0828	5.8396
2. Manufacturing industries and construction	353.8948		0.1320	0.0190	1.3866	4.0572	0.2309	1.7540
3. Transport	797.7084		0.1634	0.0416	6.9047	41.7082	11.5817	1.7206
4. Other sectors	217.6670		0.1047	0.0070	1.0255	0.6937	0.2757	0.4011
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**1.7873**	**0.0000**	**0.0000**	**0.3152**	**0.4203**	**0.0000**	**7.8049**	**0.0000**
A. Mineral products	1.7873				0.0000	0.0000	5.1680	0.0000
B. Chemical industry	0.0000		0.0000	0.3152	0.4203	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6369	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.3637**	**0.4735**	**0.2224**	**4.6886**	**0.0000**	**0.0000**
A. Enteric fermentation			2.6646					
B. Manure management			0.4758	0.0244			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4429			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.2233	0.0062	0.2224	4.6886	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**104.6500**	**-302.3300**	**0.0114**	**0.0002**	**0.0011**	**0.1800**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-302.3300	0.0114	0.0002	0.0011	0.1800		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	33.1600	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.4932**		**59.2400**	**0.0660**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			27.7600		0.0000		0.0000	
B. Waste-water handling			31.4800	0.0660	0.0000	0.0000	0.0000	
C. Waste incineration	0.4900				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**1169.0221**		**0.0358**	**0.0238**	**12.2689**	**7.1743**	**1.7354**	**0.0000**
Aviation	711.3897		0.0050	0.0201	3.0150	1.0050	0.5025	0.0000
Marine	457.6324		0.0308	0.0037	9.2539	6.1693	1.2329	0.0000
CO_2 emissions from biomass	**1054.0674**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2004

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.0068**	**0.0049**	**0.0012**	**0.0024**	**0.0037**	**0.0004**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.0068**	**0.0049**	**0.0012**	**0.0024**	**0.0037**	**0.0004**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.0068	0.0049	0.0012	0.0024	0.0037	0.0004	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2005	2005
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
	Vacoas	Le Reduit
	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
Fax	+230 686 1033	+230 208 7064
E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**2817.9200**	**0.4374**	**0.0900**	**13.5014**	**45.6601**	**12.5792**	**9.5991**
A Fuel Combustion Activities (Sectoral Approach)	**2817.9200**	**0.4374**	**0.0900**	**13.5014**	**45.6601**	**12.5792**	**9.5991**
1 Energy Industries	**1424.2718**	**0.0316**	**0.0167**	**4.1137**	**0.2872**	**0.0814**	**6.2406**
a Public Electricity and Heat Production	1424.2718	0.0316	0.0167	4.1137	0.2872	0.0814	6.2406
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**343.8148**	**0.1222**	**0.0186**	**1.3268**	**3.7372**	**0.2143**	**1.2036**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing, etc	120.3714	0.1164	0.0156	0.6979	3.6925	0.1991	0.6680
Sugar	4.4346	0.1064	0.0142	0.3666	3.5440	0.1775	0.2620
Tea	1.2309	0.0005	0.0001	0.0047	0.0152	0.0008	0.0035
Bakery, Food and other misc. industries	114.7059	0.0095	0.0013	0.3266	0.1333	0.0208	0.4025
f Other	223.4434	0.0058	0.0030	0.6289	0.0447	0.0152	0.5356
Manufacture of Textiles	212.6544	0.0055	0.0029	0.5995	0.0432	0.0145	0.5133
Construction	10.7890	0.0003	0.0001	0.0294	0.0015	0.0007	0.0223

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**826.0896**	**0.1751**	**0.0480**	**7.1160**	**40.9244**	**12.0005**	**1.7390**
a Civil Aviation	13.6696	0.0001	0.0004	0.0579	0.0193	0.0097	0.0043
b Road Transportation	784.6654	0.1731	0.0474	6.4882	40.5251	11.9148	0.9540
c Railways							
d Navigation	27.7546	0.0019	0.0002	0.5699	0.3800	0.0760	0.7807
e Other (please specify)							
Pipeline Transport							
4 Other Sectors	**223.7438**	**0.1085**	**0.0067**	**0.9449**	**0.7113**	**0.2830**	**0.4159**
a Commercial/Institutional	20.6326	0.0056	0.0000	0.0342	0.0864	0.0028	0.0076
b Residential	158.7144	0.1000	0.0025	0.2733	0.0964	0.1617	0.3432
c Agriculture/Forestry/Fishing	44.3968	0.0029	0.0042	0.6374	0.5285	0.1185	0.0651
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**1244.9825**	**0.0447**	**0.0231**	**14.7902**	**8.9428**	**2.0638**	**0.0000**
Aviation	649.3147	0.0046	0.0183	2.7519	0.9173	0.4587	0.0000
Marine	595.6678	0.0401	0.0048	12.0383	8.0255	1.6051	0.0000
CO_2 Emissions from Biomass	**1026.4537**						

(1) Please do not include in energy totals.

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**1.8368**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.2345**	**0.0000**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**1.8368**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.4986**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	1.8368												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						6.4986							
7 Other (please specify)													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production													
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
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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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.7359**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.7359							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
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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_2O	NO_x	CO	NMVOC
Total Agriculture	**3.5114**	**0.4456**	**0.1874**	**3.9523**	**0.0000**
A Enteric Fermentation	**2.8022**				
1 Cattle	0.7204				
2 Buffalo	0.0000				
3 Sheep	0.0371				
4 Goats	0.1819				
5 Camels and Llamas	0.0000				
6 Horses	0.0122				
7 Mules and Asses	0.0000				
8 Swine	0.0253				
9 Poultry	0.0000				
10 Other (please specify) Deer	1.8253				
B Manure Management	**0.5210**	**0.0268**			
1 Cattle	0.0328				
2 Buffalo	0.0000				
3 Sheep	0.0008				
4 Goats	0.0044				
5 Camels and Llamas	0.0000				
6 Horses	0.0011				
7 Mules and Asses	0.0000				
8 Swine	0.3515				
9 Poultry	0.0860				
10 Other (please specify) Deer	0.0444				

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0266			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**				
1 Irrigated					
2 Rainfed					
3 Deep Water					
4 Other (please specify)					
D Agricultural Soils		**0.4136**			
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	
F Field Burning of Agricultural Residues (1)	**0.1882**	**0.0052**	**0.1874**	**3.9523**	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.1882	0.0052	0.1874	3.9523	
5 Other (please specify)					
G Other (please specify)					

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 5 SECTORAL REPORT FOR LAND-USE CHANGE AND FORESTRY
(Sheet 1 of 1)

)RAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **128.8400**	(1) **-305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1) **0.0000**	(1) **-305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands	**0.0000**	**0.0000**						
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**						
E Other (Cropland converted to Other Land)	**57.3500**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**128.8400**	**-305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**
A. Forest Land	**0.0000**	**-269.9500**	**0.0027**	**0.0000**	**0.0003**	**0.0420**
1. Forest Land Remaining Forest Land		-269.9500	0.0027	0.0000	0.0003	0.0420
2. Land Converted to Forest Land			0.0000	0.0000	0.0000	0.0000
B. Cropland	**0.0000**	**-9.1000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-9.1000	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Cropland			0.0000	0.0000	0.0000	0.0000
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Grassland			0.0000	0.0000	0.0000	0.0000
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Wetlands	0.0000		0.0000	0.0000	0.0000	0.0000
E. Settlements	**71.4900**	**-26.4800**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.4800	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Settlements	71.4900		0.0000	0.0000	0.0000	0.0000
F. Other Land	**57.3500**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Other Land	57.3500		0.0000	0.0000	0.0000	0.0000
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categorie						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2005

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.4932**	**59.0255**	**0.0837**			
A Solid Waste Disposal on Land	**0.0000**	**29.7655**	**0.0000**			
1 Managed Waste Disposal on Land		29.7655				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**29.2600**	**0.0837**			
1 Industrial Wastewater		22.9800	0.0000			
2 Domestic and Commercial Wastewater		6.1600	0.0837			
3 Other (Hotel Sector)		0.1200	0.0000			
C Waste Incineration	**0.4932**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**2949.0900**	**-305.5300**	**62.9770**	**0.6193**	**13.6891**	**49.6544**	**21.8137**	**9.5991**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**2817.9200**	**0.0000**	**0.4374**	**0.0900**	**13.5014**	**45.6601**	**12.5792**	**9.5991**						
A Fuel Combustion (Sectoral Approach)	2817.9200		0.4374	0.0900	13.5014	45.6601	12.5792	9.5991						
1 Energy Industries	1424.2718		0.0316	0.0167	4.1137	0.2872	0.0814	6.2406						
2 Manufacturing Industries and Construction	343.8148		0.1222	0.0186	1.3268	3.7372	0.2143	1.2036						
3 Transport	826.0896		0.1751	0.0480	7.1160	40.9244	12.0005	1.7390						
4 Other Sectors	223.7438		0.1085	0.0067	0.9449	0.7113	0.2830	0.4159						
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
1 Solid Fuels			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Oil and Natural Gas			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**1.8368**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.2345**	**0.0000**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	1.8368					0.0000	6.4986	0.0000						
B Chemical Industry	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
C Metal Production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D Other Production	0.0000				0.0000	0.0000	2.7359	0.0000						
E Production of Halocarbons and Sulphur Hexafluoride									0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0030		0.0002			
G Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000		0.0000

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

Country	The Republic of Mauritius
Inventory Year	2005

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.5114**	**0.4456**	**0.1874**	**3.9523**								
A Enteric Fermentation			2.8022											
B Manure Management			0.5210	0.0268										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.4136										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.1882	0.0052	0.1874	3.9523								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 128.8400**	**(1) -305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -305.5300	0.0027	0.0000	0.0003	0.0420								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	57.3500	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.4932**		**59.0255**	**0.0837**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			29.7655											
B Wastewater Handling			29.2600	0.0837										
C Waste Incineration	0.4932													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**1244.9825**		**0.0447**	**0.0231**	**14.7902**	**8.9428**	**2.0638**	**0.0000**						
Aviation	649.3147		0.0046	0.0183	2.7519	0.9173	0.4587	0.0000						
Marine	595.6678		0.0401	0.0048	12.0383	8.0255	1.6051	0.0000						
CO_2 Emissions from Biomass	**1026.4537**													

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES

(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)															
GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**2949.0900**	**-305.5300**	**62.9770**	**0.6193**	**13.6891**	**49.6544**	**21.8137**	**9.5991**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach[1]	**3419.6373**													
	Sectoral Approach[1]	**2817.9200**		**0.4374**	**0.0900**	**13.5014**	**45.6601**	**12.5792**	**9.5991**						
A Fuel Combustion		2817.9200		0.4374	0.0900	13.5014	45.6601	12.5792							
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**1.8368**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.2345**	**0.0000**	**0.0030**	**0.0000**	**0.0002**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.5114**	**0.4456**	**0.1874**	**3.9523**								
5 Land-Use Change & Forestry		**(2) 128.8400**	**(2) -305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**	**0.0000**	**0.0000**						
6 Waste		**0.4932**		**59.0255**	**0.0837**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1244.9825**		**0.0447**	**0.0231**	**14.7902**	**8.9428**	**2.0638**	**0.0000**						
Aviation		649.3147		0.0046	0.0183	2.7519	0.9173	0.4587	0.0000						
Marine		595.6678		0.0401	0.0048	12.0383	8.0255	1.6051	0.0000						
CO_2 Emissions from Biomass		**1026.4537**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the results of both the Reference Approach and the Sectoral Approach in national totals.

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,643.5600**		**62.9770**		**0.6193**		**13.6891**		**49.6544**		**21.8137**		**9.5991**		**0.0030**		**0.0002**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	2,817.9200		0.4374		0.0900		13.5014		45.6601		12.5792		9.5991		0.0000		0.0000		0.0000				
1 Energy Industries	1424.2718	H	0.0316	H	0.0167	H	4.1137	H	0.2872	H	0.0814	H	6.2406	H									
2 Manufacturing Industries and Construction	343.8148	H	0.1222	H	0.0186	H	1.3268	H	3.7372	H	0.2143	H	1.2036	H									
3 Transport	826.0896	H	0.1751	H	0.0480	H	7.116	H	40.9244	H	12.0005	H	1.739	H									
4 Other Sectors	223.7438	H	0.1085	H	0.0067	H	0.9449	H	0.7113	H	0.2830	H	0.4159	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**1.8368**		**0.0000**		**0.0000**		**0.0000**		**0.0000**		**9.2345**		**0.0000**		**0.0030**		**0.0002**		**0.0000**				
A Mineral Products	1.8368	H									6.4986	H											
B Chemical Industry																							
C Metal Production																							
D Other Production											2.7359	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0030	H	0.0002	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.5114**		**0.4456**		**0.1874**		**3.9523**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			2.8022	H																			
B Manure Management			0.5210	H	0.0268	H																	
C Rice Cultivation																							
D Agricultural Soils					0.4136	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.1882	H	0.0052	H	0.1874	H	3.9523	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-176.69	H	0.0027	H	0.0000	H	0.0003	H	0.0420	H	0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-305.53	M	0.0027	H	0.0000	H	0.0003	H	0.0420	H													
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Country	The Republic of Mauritius
Inventory Year	2005

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	57.35	H																					
6 Waste	**0.4932**		**59.0255**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			29.7655	M																			
B Wastewater Handling			29.2600	H	0.0837	H																	
C Waste Incineration	0.4932	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**1,244.9825**		**0.0447**		**0.0231**		**14.7902**		**8.9428**		**2.0638**		**0.0000**		**0**		**0**		**0**				
Aviation	649.3147	H	0.0046	H	0.0183	H	2.7519	H	0.9173	H	0.4587	H	0.0000	H									
Marine	595.6678	H	0.0401	H	0.0048	H	12.0383	H	8.0255	H	1.6051	H	0.0000	H									
CO_2 Emissions from Biomass	1,026.4537	H																					

Country	The Republic of Mauritius
Inventory Year	2005

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	**CO_2 emissions (Gg)**	**CO_2 removals (Gg)**	**CH_4 (Gg)**	**N_2O (Gg)**	**NO_x (Gg)**	**CO (Gg)**	**NMVOCs (Gg)**	**SO_x (Gg)**
Total national emissions and removals	**2949.0900**	**-305.5300**	**62.9770**	**0.6193**	**13.6891**	**49.6544**	**21.8137**	**9.5991**
1. Energy	**2817.9200**	**0.0000**	**0.4374**	**0.0900**	**13.5014**	**45.6601**	**12.5792**	**9.5991**
A. Fuel combustion (sectoral	2817.9200		0.4374	0.0900	13.5014	45.6601	12.5792	9.5991
1. Energy Industries	1424.2718		0.0316	0.0167	4.1137	0.2872	0.0814	6.2406
2. Manufacturing industries and construction	343.8148		0.1222	0.0186	1.3268	3.7372	0.2143	1.2036
3. Transport	826.0896		0.1751	0.0480	7.1160	40.9244	12.0005	1.7390
4. Other sectors	223.7438		0.1085	0.0067	0.9449	0.7113	0.2830	0.4159
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**1.8368**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**9.2345**	**0.0000**
A. Mineral products	1.8368				0.0000	0.0000	6.4986	0.0000
B. Chemical industry	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.7359	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.5114**	**0.4456**	**0.1874**	**3.9523**	**0.0000**	**0.0000**
A. Enteric fermentation			2.8022					
B. Manure management			0.5210	0.0268			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.4136			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.1882	0.0052	0.1874	3.9523	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**128.8400**	**-305.5300**	**0.0027**	**0.0000**	**0.0003**	**0.0420**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-305.5300	0.0027	0.0000	0.0003	0.0420		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	57.3500	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.4932**		**59.0255**	**0.0837**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			29.7655		0.0000		0.0000	
B. Waste-water handling			29.2600	0.0837	0.0000	0.0000	0.0000	
C. Waste incineration	0.4932				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**1244.9825**		**0.0447**	**0.0231**	**14.7902**	**8.9428**	**2.0638**	**0.0000**
Aviation	649.3147		0.0046	0.0183	2.7519	0.9173	0.4587	0.0000
Marine	595.6678		0.0401	0.0048	12.0383	8.0255	1.6051	0.0000
CO_2 emissions from biomass	**1026.4537**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2005

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.002**	**0**	**0.001**	**0**	**0**	**0.003**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.002**	**0**	**0.001**	**0**	**0**	**0.003**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.002	0	0.001	0	0	0.003	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable

Country	The Republic of Mauritius	The Republic of Mauritius
Inventory Year	2006	2006
Title of Inventory	Greenhouse Gas Emissions/Removals	Greenhouse Gas Emissions/Removals
Contact Name	Yadowsun Boodhoo	Rasack Nayamuth
Title	Director	Technical Coordinator NIR and SNC
Organisation	Mauritius Meteorological Services	MSIRI
Address	St Paul Road	Old Moka Road
	Vacoas	Le Reduit
	Mauritius	Mauritius
Phone	+230 686 1031	+230 433 3835
Fax	+230 686 1033	+230 208 7064
E-Mail	meteo@intnet.mu	r.nayamuth@yahoo.com
Is uncertainty addressed?	Yes	Yes
Related documents filed with UNFCCC	SNC	SNC

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2
Total Energy	**3114.9648**	**0.4424**	**0.0946**	**14.9682**	**45.1318**	**12.4686**	**11.4422**
A Fuel Combustion Activities (Sectoral Approach)	**3114.9648**	**0.4424**	**0.0946**	**14.9682**	**45.1318**	**12.4686**	**11.4422**
1 Energy Industries	**1662.7241**	**0.0396**	**0.0221**	**5.3939**	**0.3791**	**0.1053**	**7.9049**
a Public Electricity and Heat Production	1662.7241	0.0396	0.0221	5.3939	0.3791	0.1053	7.9049
b Petroleum Refining							
c Manufacture of Solid Fuels and Other Energy Industries							
2 Manufacturing Industries and Construction	**401.6403**	**0.1211**	**0.0173**	**1.4738**	**3.6518**	**0.2138**	**1.3471**
a Iron and Steel							
b Non-Ferrous Metals							
c Chemicals							
d Pulp, Paper and Print							
e Food Processing	155.1985	0.1147	0.0154	0.7886	3.6044	0.1971	0.7725
Sugar	5.6838	0.1036	0.0138	0.3605	3.4492	0.1728	0.2571
Tea	1.2925	0.0005	0.0001	0.0049	0.0152	0.0008	0.0036
Bakery, Food and other misc. industries	148.2222	0.0106	0.0015	0.4232	0.1400	0.0235	0.5118
f Other	246.4418	0.0064	0.0019	0.6852	0.0474	0.0167	0.5746
Manufacture of Textiles	235.1309	0.0061	0.0018	0.6543	0.0459	0.0159	0.5568
Construction	11.3109	0.0003	0.0001	0.0309	0.0015	0.0008	0.0178

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2
3 Transport	**838.1172**	**0.1705**	**0.0482**	**7.1473**	**40.3706**	**11.8543**	**1.7581**
a Civil Aviation	13.6264	0.0001	0.0004	0.0578	0.0193	0.0096	0.0043
b Road Transportation	799.5064	0.1687	0.0476	6.5805	40.0119	11.7768	0.9802
c Railways							
d Navigation	24.9844	0.0017	0.0002	0.5090	0.3394	0.0679	0.7736
e Other (please specify)							
Pipeline Transport							
4 Other Sectors	**212.4832**	**0.1112**	**0.0070**	**0.9532**	**0.7303**	**0.2952**	**0.4321**
a Commercial/Institutional	29.3494	0.0071	0.0003	0.0482	0.0919	0.0035	0.0079
b Residential	136.9781	0.1011	0.0024	0.2435	0.0877	0.1685	0.3559
c Agriculture/Forestry/Fishing	46.1557	0.0030	0.0043	0.6615	0.5507	0.1232	0.0683
B Fugitive Emissions from Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Solid Fuels	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Coal Mining							
b Solid Fuel Transformation							
c Other (please specify)							
2 Oil and Natural Gas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
a Oil							
b Natural Gas							
c Venting and Flaring							

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2
Memo Items (1)							
International Bunkers	**1267.5321**	**0.0415**	**0.0250**	**13.9941**	**8.3013**	**1.9687**	**0.0000**
Aviation	727.7741	0.0051	0.0206	3.0844	1.0281	0.5141	0.0000
Marine	539.7580	0.0364	0.0044	10.9097	7.2732	1.4546	0.0000
CO_2 Emissions from Biomass	**990.9360**						

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
Total Industrial Processes	**1.8975**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.7408**	**0.0000**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	**1.8975**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**6.1117**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Cement Production													
2 Lime Production	1.8975												
3 Limestone and Dolomite Use													
4 Soda Ash Production and Use													
5 Asphalt Roofing													
6 Road Paving with Asphalt						6.1117							
7 Other (please specify)													
Glass Production													
Concrete Pumice Stone													
B Chemical Industry	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Ammonia Production													
2 Nitric Acid Production													
3 Adipic Acid Production													
4 Carbide Production													
5 Other													
C Metal Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Iron and Steel Production													
2 Ferroalloys Production													
3 Aluminium Production													
4 SF_6 Used in Aluminium and Magnesium Foundries													
5 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.

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
								P	A	P	A	P	A
D Other Production	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.6291**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 Pulp and Paper													
2 Food and Drink						2.6291							
E Production of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1 By-product Emissions													
2 Fugitive Emissions													
3 Other (please specify)													
F Consumption of Halocarbons and Sulphur Hexafluoride	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
1 Refrigeration and Air Conditioning Equipment													
2 Foam Blowing													
3 Fire Extinguishers													
4 Aerosols													
5 Solvents													
6 Other (please specify)													
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.

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NMVOC
Total Solvent and Other Product Use	**0.0000**	**0.0000**	**0.0000**
A Paint Application			
B Degreasing and Dry Cleaning			
C Chemical Products, Manufacture and Processing			
D Other (please specify)			

Please account for the quantity of carbon released in the form of NMVOC in both the NMVOC and the CO_2 columns.

Note: The Revised 1996 IPCC Guidelines do not provide methodologies for the calculation of emissions of N_2O from solvent and other product use. If you have reported such data, you should provide additional information (activity data and emission factors) used to make these estimates.

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	
Total Agriculture	**3.5138**	**0.4266**	**0.1780**	**3.7532**	**0.0000**	
A Enteric Fermentation	**2.8590**					**2.8590**
1 Cattle	0.7237					
2 Buffalo	0.0000					
3 Sheep	0.0401					
4 Goats	0.2097					
5 Camels and Llamas	0.0000					
6 Horses	0.0118					
7 Mules and Asses	0.0000					
8 Swine	0.0215					
9 Poultry	0.0000					
10 Other (please specify) Deer	1.8522					
B Manure Management	**0.4761**	**0.0258**				
1 Cattle	0.0331					
2 Buffalo	0.0000					
3 Sheep	0.0009					
4 Goats	0.0051					
5 Camels and Llamas	0.0000					
6 Horses	0.0011					
7 Mules and Asses	0.0000					
8 Swine	0.2992					
9 Poultry	0.0916					
10 Other (please specify) Deer	0.0451					

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC
B Manure Management (cont...)					
10 Anaerobic		0.0000			
11 Liquid Systems		0.0002			
12 Solid Storage and Dry Lot		0.0256			
13 Other (please specify)		0.0000			
C Rice Cultivation	**0.0000**				
1 Irrigated					
2 Rainfed					
3 Deep Water					
4 Other (please specify)					
D Agricultural Soils		**0.3959**			
E Prescribed Burning of Savannas	**0.0000**	**0.0000**	**0.0000**	**0.0000**	
F Field Burning of Agricultural Residues (1)	**0.1787**	**0.0049**	**0.1780**	**3.7532**	
1 Cereals					
2 Pulse					
3 Tuber and Root					
4 Sugar Cane	0.1787	0.0049	0.1780	3.7532	
5 Other (please specify)					
G Other (please specify)					

Note: The Revised IPCC 1996 Guidelines do not provide methodologies for the calculation of CH_4 emissions, and CH_4 and N_2O removals from agricultural soils, or CO_2 emissions from savanna burning or agricultural residues burning. If you have reported such data, you should provide additional information (activity data and emissions factors) used to make these estimates.

(1) Sub-items of F should be linked to Worksheet 4-4 sheets 1 and 2.

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 5 SECTORAL REPORT FOR LAND-USE CHANGE AND FORESTRY
(Sheet 1 of 1)

RAL REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Gg)

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO2
Total Land-Use Change and Forestry	(1) **117.6300**	(1) **-303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**	**0.0000**	**0.0000**
A Changes in Forest and Other Woody Biomass Stocks	(1) **0.0000**	(1) **-303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
B Forest and Grassland Conversion	**71.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
C Abandonment of Managed Lands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
1 Tropical Forests								
2 Temperate Forests								
3 Boreal Forests								
4 Grasslands/Tundra								
5 Other (please specify)								
D CO2 Emissions and Removals from Soil	(1) **0.0000**	(1) **0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		
E Other (Cropland converted to Other Land)	**46.1400**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for removals are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 5B (OPTIONAL) SECTORAL REPORT FOR LAND USE, LAND-USE CHANGE AND FORESTRY
(Using the categories of the IPCC Good Practice Guidance on Land Use, 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_2O	NO_x	CO
Total Land Use, Land-Use Change and Forestry	**117.6300**	**-303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**
A. Forest Land	**0.0000**	**-269.3700**	**0.0042**	**0.0001**	**0.0004**	**0.0657**
1. Forest Land Remaining Forest Land		-269.3700	0.0042	0.0001	0.0004	0.0657
2. Land Converted to Forest Land			0.0000	0.0000	0.0000	0.0000
B. Cropland	**0.0000**	**-7.8400**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Cropland Remaining Cropland		-7.8400				
2. Land Converted to Cropland						
C. Grassland	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Grassland Remaining Grassland			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Grassland			0.0000	0.0000	0.0000	0.0000
D. Wetlands	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Wetlands Remaing Wetlands			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Wetlands			0.0000	0.0000	0.0000	0.0000
E. Settlements	**71.4900**	**-26.4900**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Settlements Remaining Settlements		-26.4900	0.0000	0.0000	0.0000	0.0000
2. Land Converted to Settlements	71.4900		0.0000	0.0000	0.0000	0.0000
F. Other Land	**46.1400**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
1. Other Land Remaining Other Land			0.0000	0.0000	0.0000	0.0000
2. Land Converted to Other Land	46.1400		0.0000	0.0000	0.0000	0.0000
G. Other (Please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Harvested Woord Products						
Information items						
Forest Land converted to Other Land-Use Categories						
Grassland converted to Other Land-Use Categorie						

Non-CO_2 Emissions in this Summary Table are directly linked to the Summary Table in Module5B (LULUCF). CO_2 emissions and CO_2 removals, however, need to be entered manually here.

Country	The Republic of Mauritius
Inventory Year	2006

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 (1)	CH_4	N_2O	NO_x	CO	NMVOC
Total Waste	**0.5183**	**62.2683**	**0.0800**			
A Solid Waste Disposal on Land	**0.0000**	**33.6983**	**0.0000**			
1 Managed Waste Disposal on Land		33.6983				
2 Unmanaged Waste Disposal Sites						
3 Other (please specify)						
B Wastewater Handling	**0.0000**	**28.5700**	**0.0800**			
1 Industrial Wastewater		22.3300	0.0000			
2 Domestic and Commercial Wastewater		6.1100	0.0800			
3 Other (Hotel Sector)		0.1300	0.0000			
C Waste Incineration	**0.5183**					
D Other (please specify)						

(1) Note that CO_2 from waste disposal and incineration should only be included if it stems from non-biological or inorganic waste sources.

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Total National Emissions and Removals	**3235.0106**	**-303.7000**	**66.2287**	**0.6013**	**15.1466**	**48.9507**	**21.2094**	**11.4422**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
1 Energy	**3114.9648**	**0.0000**	**0.4424**	**0.0946**	**14.9682**	**45.1318**	**12.4686**	**11.4422**						
A Fuel Combustion (Sectoral Approach)	3114.9648		0.4424	0.0946	14.9682	45.1318	12.4686	11.4422						
1 Energy Industries	1662.7241		0.0396	0.0221	5.3939	0.3791	0.1053	7.9049						
2 Manufacturing Industries and Construction	401.6403		0.1211	0.0173	1.4738	3.6518	0.2138	1.3471						
3 Transport	838.1172		0.1705	0.0482	7.1473	40.3706	11.8543	1.7581						
4 Other Sectors	212.4832		0.1112	0.0070	0.9532	0.7303	0.2952	0.4321						
B Fugitive Emissions from Fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
1 Solid Fuels			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Oil and Natural Gas			0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes	**1.8975**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.7408**	**0.0000**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
A Mineral Products	1.8975					0.0000	6.1117	0.0000						
B Chemical Industry	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
C Metal Production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D Other Production	0.0000				0.0000	0.0000	2.6291	0.0000						
E Production of Halocarbons and Sulphur Hexafluoride									0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
F Consumption of Halocarbons and Sulphur Hexafluoride									0.0270		0.0001			
G Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000		0.0000

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

Country	The Republic of Mauritius
Inventory Year	2006

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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
3 Solvent and Other Product Use	**0.0000**			**0.0000**			**0.0000**							
4 Agriculture			**3.5138**	**0.4266**	**0.1780**	**3.7532**								
A Enteric Fermentation			2.8590											
B Manure Management			0.4761	0.0258										
C Rice Cultivation			0.0000											
D Agricultural Soils				0.3959										
E Prescribed Burning of Savannas			0.0000	0.0000	0.0000	0.0000								
F Field Burning of Agricultural Residues			0.1787	0.0049	0.1780	3.7532								
G Other (please specify)			0.0000	0.0000										
5 Land-Use Change & Forestry [2]	**(1) 117.6300**	**(1) -303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**	**0.0000**	**0.0000**						
A Changes in Forest and Other Woody Biomass Stocks	(1) 0.0000	(1) -303.7000	0.0042	0.0001	0.0004	0.0657								
B Forest and Grassland Conversion	71.4900													
C Abandonment of Managed Lands		0.0000												
D CO_2 Emissions and Removals from Soil	(1) 0.0000	(1) 0.0000												
E Other (Cropland converted to Other Land)	46.1400	0.0000	0.0000	0.0000	0.0000	0.0000								
6 Waste	**0.5183**		**62.2683**	**0.0800**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
A Solid Waste Disposal on Land			33.6983											
B Wastewater Handling			28.5700	0.0800										
C Waste Incineration	0.5183													
D Other (please specify)			0.0000	0.0000										
7 Other (please specify)														

(1) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

(2) Note that if you have used the IPCC Good Practice Guidance on Land Use, Land-Use Change and Forestry, you will have to use a mapping back procedure before entering emission/removals here

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 7A SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 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_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
									P	A	P	A	P	A
Memo Items														
International Bunkers	**1267.5321**		**0.0415**	**0.0250**	**13.9941**	**8.3013**	**1.9687**	**0.0000**						
Aviation	727.7741		0.0051	0.0206	3.0844	1.0281	0.5141	0.0000						
Marine	539.7580		0.0364	0.0044	10.9097	7.2732	1.4546	0.0000						
CO_2 Emissions from Biomass	**990.9360**													

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 7B SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 1)

SHORT SUMMARY REPORT FOR NATIONAL GREENHOUSE GAS INVENTORIES (Gg)															
GREENHOUSE GAS SOURCE AND SINK CATEGORIES		CO_2 Emissions	CO_2 Removals	CH_4	N_2O	NO_x	CO	NMVOC	SO_2	HFCs		PFCs		SF_6	
										P	A	P	A	P	A
Total National Emissions and Removals		**3235.0106**	**-303.7000**	**66.2287**	**0.6013**	**15.1466**	**48.9507**	**21.2094**	**11.4422**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
1 Energy	Reference Approach(1)	**3419.6373**													
	Sectoral Approach(1)	**3114.9648**		**0.4424**	**0.0946**	**14.9682**	**45.1318**	**12.4686**	**11.4422**						
A Fuel Combustion		3114.9648		0.4424	0.0946	14.9682	45.1318	12.4686							
B Fugitive Emissions from Fuels		0.0000		0.0000		0.0000	0.0000	0.0000	0.0000						
2 Industrial Processes		**1.8975**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.7408**	**0.0000**	**0.0270**	**0.0000**	**0.0001**	**0.0000**	**0.0000**	**0.0000**
3 Solvent and Other Product Use		**0.0000**			**0.0000**			**0.0000**							
4 Agriculture				**3.5138**	**0.4266**	**0.1780**	**3.7532**								
5 Land-Use Change & Forestry		**(2) 117.6300**	**(2) -303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**	**0.0000**	**0.0000**						
6 Waste		**0.5183**		**62.2683**	**0.0800**										
7 Other (please specify)		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						
Memo Items:															
International Bunkers		**1267.5321**		**0.0415**	**0.0250**	**13.9941**	**8.3013**	**1.9687**	**0.0000**						
Aviation		727.7741		0.0051	0.0206	3.0844	1.0281	0.5141	0.0000						
Marine		539.7580		0.0364	0.0044	10.9097	7.2732	1.4546	0.0000						
CO_2 Emissions from Biomass		**990.9360**													

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

(1) For verification purposes, countries are asked to report the results of their calculations using the Reference Approach and explain any differences with the Sectoral Approach. Do not include the results of both the Reference Approach and the Sectoral Approach in national totals.

(2) The formula does not provide a total estimate of both CO_2 emissions and CO_2 removals. It estimates "net" emissions of CO_2 and places a single number in either the CO_2 emissions or CO_2 removals column, as appropriate. Please note that for the purposes of reporting, the signs for uptake are always (-) and for emissions (+).

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 1 of 3)

EW TABLE

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggrega-tion	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Total National Emissions and Removals	**2,931.3106**		**66.2287**		**0.6013**		**15.1466**		**48.9507**		**21.2094**		**11.4422**		**0.0270**		**0.0001**		**0.0000**				
1 Energy																							
A Fuel Combustion Activities																							
Reference Approach																							
Sectoral Approach	3,114.9648		0.4424		0.0946		14.9682		45.1318		12.4686		11.4422		0.0000		0.0000		0.0000				
1 Energy Industries	1662.7241	H	0.0396	H	0.0221	H	5.3939	H	0.3791	H	0.1053	H	7.9049	H									
2 Manufacturing Industries and Construction	401.6403	H	0.1211	H	0.0173	H	1.4738	H	3.6518	H	0.2138	H	1.3471	H									
3 Transport	838.1172	H	0.1705	H	0.0482	H	7.1473	H	40.3706	H	11.8543	H	1.7581	H									
4 Other Sectors	212.4832	H	0.1112	H	0.0070	H	0.9532	H	0.7303	H	0.2952	H	0.4321	H									
5 Other (please specify)																							
B Fugitive Emissions from Fuels																							
1 Solid Fuels																							
2 Oil and Natural Gas																							
2 Industrial Processes	**1.8975**		**0.0000**		**0.0000**		**0.0000**		**0.0000**		**8.7408**		**0.0000**		**0.0270**		**0.0001**		**0.0000**				
A Mineral Products	1.8975	H									6.1117	H											
B Chemical Industry																							
C Metal Production																							
D Other Production											2.6291	H											
E Production of Halocarbons and Sulphur Hexafluoride																							

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 2 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
Industrial Processes (cont...)																							
F Consumption of Halocarbons and Sulphur Hexafluoride																							
Potential (1)															0.0270	H	0.0001	H					
Actual (2)																							
G Other (please specify)																							
3 Solvent and Other Product Use																							
4 Agriculture	**0**		**3.5138**		**0.42664931**		**0.178**		**3.7532**		**0**		**0**		**0**		**0**		**0**				
A Enteric Fermentation			2.8590	H																			
B Manure Management			0.4761	H	0.02584931	H																	
C Rice Cultivation																							
D Agricultural Soils					0.3959	H																	
E Prescribed Burning of Savannas																							
F Field Burning of Agricultural Residues			0.1787	H	0.0049	H	0.1780	H	3.7532	H													
G Other (please specify)																							
5 Land-Use Change & Forestry	-186.07		0.0042		0.0001		0.0004		0.0657		0		0		0		0		0				
A Changes in Forest and Other Woody Biomass Stocks	-303.7	M	0.0042	H	0.0001	H	0.0004	H	0.0657	H													
B Forest and Grassland Conversion	71.49	H																					

(1) Potential emissions based on Tier 1 Approach.

(2) Actual emissions based on Tier 2 Approach.

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2006

TABLE 8A OVERVIEW TABLE FOR NATIONAL GREENHOUSE GAS INVENTORIES
(Sheet 3 of 3)

OVERVIEW TABLE																							
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	CO_2		CH_4		N_2O		NO_x		CO		NMVOC		SO_2		HFCs		PFCs		SF_6		Documen-tation	Disaggre-gation	Footnotes
	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality	Estimate	Quality			
5 Land-Use Change & Forestry (cont....)																							
C Abandonment of Managed Lands																							
D CO_2 Emissions and Removals from Soil																							
E Other (please specify)	46.14	H																					
6 Waste	**0.5183**		**62.2683**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
A Solid Waste Disposal on Land			33.6983	M																			
B Wastewater Handling			28.5700	H	0.0800	H																	
C Waste Incineration	0.5183	H																					
D Other (please specify)																							
7 Other (please specify)	**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**		**0**				
Memo Items:																							
International Bunkers	**1,267.5321**		**0.0415**		**0.0250**		**13.9941**		**8.3013**		**1.9687**		**0.0000**		**0**		**0**		**0**				
Aviation	727.7741	H	0.0051	H	0.0206	H	3.0844	H	1.0281	H	0.5141	H	0.0000	H									
Marine	539.7580	H	0.0364	H	0.0044	H	10.9097	H	7.2732	H	1.4546	H	0.0000	H									
CO_2 Emissions from Biomass	990.9360	H																					

Note: H = High, M = Medium and L = Low

Country	The Republic of Mauritius
Inventory Year	2006

National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors

Greenhouse gas source and sink categories	CO_2 emissions (Gg)	CO_2 removals (Gg)	CH_4 (Gg)	N_2O (Gg)	NO_x (Gg)	CO (Gg)	NMVOCs (Gg)	SO_x (Gg)
Total national emissions and removals	**3235.0106**	**-303.7000**	**66.2287**	**0.6013**	**15.1466**	**48.9507**	**21.2094**	**11.4422**
1. Energy	**3114.9648**	**0.0000**	**0.4424**	**0.0946**	**14.9682**	**45.1318**	**12.4686**	**11.4422**
A. Fuel combustion (sectoral	3114.9648		0.4424	0.0946	14.9682	45.1318	12.4686	11.4422
1. Energy Industries	1662.7241		0.0396	0.0221	5.3939	0.3791	0.1053	7.9049
2. Manufacturing industries and construction	401.6403		0.1211	0.0173	1.4738	3.6518	0.2138	1.3471
3. Transport	838.1172		0.1705	0.0482	7.1473	40.3706	11.8543	1.7581
4. Other sectors	212.4832		0.1112	0.0070	0.9532	0.7303	0.2952	0.4321
B. Fugitive emissions from fuels	0.0000		0.0000		0.0000	0.0000	0.0000	0.0000
1. Solid fuels			0.0000		0.0000	0.0000	0.0000	0.0000
2. Oil and natural gas			0.0000		0.0000	0.0000	0.0000	0.0000
2. Industrial processes	**1.8975**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**8.7408**	**0.0000**
A. Mineral products	1.8975				0.0000	0.0000	6.1117	0.0000
B. Chemical industry	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C. Metal production	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D. Other production	0.0000		0.0000	0.0000	0.0000	0.0000	2.6291	0.0000
E. Production of halocarbons and sulphur hexafluoride								
F. Consumption of halocarbons and sulphur hexafluoride								
G. Other (please specify)	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3. Solvent and other product use	**0.0000**			**0.0000**			**0.0000**	
4. Agriculture			**3.5138**	**0.4266**	**0.1780**	**3.7532**	**0.0000**	**0.0000**
A. Enteric fermentation			2.8590					
B. Manure management			0.4761	0.0258			0.0000	
C. Rice cultivation			0.0000				0.0000	
D. Agricultural soils				0.3959			0.0000	
E. Prescribed burning of savannahs			0.0000	0.0000	0.0000	0.0000	0.0000	
F. Field burning of agricultural			0.1787	0.0049	0.1780	3.7532	0.0000	
G. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	
5. Land-use change and forestry [1]	**117.6300**	**-303.7000**	**0.0042**	**0.0001**	**0.0004**	**0.0657**	**0.0000**	**0.0000**
A. Changes in forest and other woody biomass stocks	0.0000	-303.7000	0.0042	0.0001	0.0004	0.0657		
B. Forest and grassland conversion	71.4900	0.0000						
C. Abandonment of managed lands		0.0000						
D. CO_2 emissions and removals from	0.0000	0.0000						
E. Other (Cropland converted to Other	46.1400	0.0000	0.0000	0.0000	0.0000	0.0000		
6. Waste	**0.5183**		**62.2683**	**0.0800**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
A. Solid waste disposal on land			33.6983		0.0000		0.0000	
B. Waste-water handling			28.5700	0.0800	0.0000	0.0000	0.0000	
C. Waste incineration	0.5183				0.0000	0.0000	0.0000	0.0000
D. Other (please specify)			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
7. Other (please specify)	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Memo items								
International bunkers	**1267.5321**		**0.0415**	**0.0250**	**13.9941**	**8.3013**	**1.9687**	**0.0000**
Aviation	727.7741		0.0051	0.0206	3.0844	1.0281	0.5141	0.0000
Marine	539.7580		0.0364	0.0044	10.9097	7.2732	1.4546	0.0000
CO_2 emissions from biomass	**990.9360**							

[1] If you have completed the LUCF section of Table 7As, these data will appear here automatically. If, however, you have used the IPCC Good Practice Guidance and Categories therein, apply the mapping back procedure for this sector and insert the corresponding numbers here manually.

Country	The Republic of Mauritius
Inventory Year	2006

National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF_6

Greenhouse gas source and sink categories	HFCs[a,b,1] (Gg)					PFCs[a,b] (Gg)	SF_6[a] (Gg)
	HFC-R134a	HFC-404a	HFC-407c	HFC-R12	Other HFC[2]	PFC[3]	
Total national emissions and removals	**0.014**	**0.008**	**0**	**0**	**0.005**	**0.0001**	**0.0000**
1. Energy							
A. Fuel combustion (sectoral							
1. Energy Industries							
2. Manufacturing industries and construction							
3. Transport							
4. Other sectors							
5. Other (please specify)							
B. Fugitive emissions from fuels							
1. Solid fuels							
2. Oil and natural gas							
2. Industrial processes	**0.014**	**0.008**	**0**	**0**	**0.005**	**0.0001**	**0.0000**
A. Mineral products							
B. Chemical industry							
C. Metal production							
D. Other production							
E. Production of halocarbons and sulphur hexafluoride							
F. Consumption of halocarbons and sulphur hexafluoride	0.014	0.008	0	0	0.005	0.0001	0.0000
G. Other (please specify)							
3. Solvent and other product use							
4. Agriculture							
A. Enteric fermentation							
B. Manure management							
C. Rice cultivation							
D. Agricultural soils							
E. Prescribed burning of savannahs							
F. Field burning of agricultural							
G. Other (please specify)							
5. Land-use change and forestry							
A. Changes in forest and other woody							
B. Forest and grassland conversion							
C. Abandonment of managed lands							
D. CO_2 emissions and removals from							
E. Other (please specify)							
6. Waste							
A. Solid waste disposal on land							
B. Waste-water handling							
C. Waste incineration							
D. Other (please specify)							
7. Other (please specify)							
Memo items							
International bunkers							
Aviation							
Marine							
CO_2 emissions from biomass							

Note 1: Estimates provided are potential emissions

Note 2: Other HFC estimates are for the following gases, namely, HFC-R408a, HFC-507, HFC-502, HFC-R11, HFC-R141b, HFC-R409, HFC-R409a, HFC-R407c, HFC-R410a, HFC- 413a, HFC-R123 and HFC-R600a

Note 3: Details of PFC are unavailable