Environment Statistics - 2014

1. Introduction

This issue of Economic and Social Indicators presents statistics on Environment for year 2014 based on data gathered from various institutions.

The main environment indicators for the years 2005 and 2014 are given in Table 1 while technical notes are given at Annex. Figures presented in the tables may not add up to totals due to rounding.

2. Land use, Forestry and Agriculture

2.1 Land use

Land use refers to the main activity taking place on an area of land, for example, farming, forestry or housing. Based on latest available data (Table 2) in 2005, sugar cane plantations occupied 39% (72,000 hectares) of the total land area of the Island of Mauritius, forest, scrubs and grazing lands 25% (47,200 hectares), and built-up areas another 25% (46,500 hectares).

During the period 1995 to 2005, the land occupied by sugarcane, tea plantations and forestry decreased while that of built-up areas, other agricultural activities, infrastructure and inland water resource systems went up.

2.2 Forest area is decreasing

Preservation of forests is vital for the protection of the ecosystem. Total forest area decreased by 5 hectares from 47,108 hectares in 2013 to 47,103 hectares in 2014. Some 22,103 hectares (47%) of the total forest area in 2014 was state-owned and the remaining 25,000 hectares (53%) was privately-owned (Table 3).

Out of the 22,103 hectares of state-owned forest area, 11,830 hectares (53.5%) were planted areas while the Black River Gorges National Park and the nature reserves accounted for 6,574 (29.7%) and 799 (3.6%) hectares respectively. “Pas Geometriques” covered about 625 hectares (2.8%), other nature parks, 906 hectares (4.1%) and other forest lands, 1,369 hectares (6.2%).

The 25,000 hectares of privately-owned forest lands consisted of 18,447 (74%) hectares of plantation, forest, scrub and grazing lands, and 6,553 (26%) hectares of mountain, rivers and nature reserves.

2.3 Area harvested under sugar cane cultivation goes down

From 2013 to 2014, the area under sugar cane cultivation harvested decreased by 5.2% from 53,464 hectares to 50,687 hectares.

The area under tea cultivation in 2014 was 672 hectares, same as in 2013. There was no production of tobacco leaves in 2014 compared to only 1 tonne in 2013 (Table 4).

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2.4 Import of fertilisers and pesticides rises

Intensive use of chemical based fertilisers and other agro-chemicals may contribute to the pollution of the environment through the leaching of nitrate to ground water.

Between 2013 and 2014,

- import of fertilisers increased by 16.0% (from 45,924 to 53,276 tonnes) and
- import of pesticides went up by 0.7 % (from 2,185 to 2,201 tonnes) – (Table 5)

3. Energy and Greenhouse gas (GHG)

Though vital for economic development and households, the production and consumption of energy release greenhouse gases. Carbon dioxide is the main component of the greenhouse gases.

3.1 Total primary energy requirement increases

Total primary energy requirement (defined as the sum of imported and locally available fuels less re-exports and bunkering after adjusting for stock changes) was 1,492 thousand tonnes of oil equivalent (ktoe) in 2014, some 2.5% more than in 2013 (Table 6).

Some 14% (212 ktoe) was met from locally renewable energy sources (hydro, wind, landfill gas, bagasse, fuel wood and photovoltaic) while 86% (1,279 ktoe) were from imported fossil fuels (petroleum products and coal).

Energy supply from local renewable sources declined by 3.2% from 219 ktoe in 2013 to 212 ktoe in 2014 while energy supply from imported fossil fuels went up by 3.5% from 1,235 to 1,279 ktoe.

Energy supply from petroleum products increased by 3.1% from 795 ktoe in 2013 to 819 ktoe in 2014. Supply of coal increased by 4.3% from 441 ktoe in 2013 to 460 ktoe in 2014 (Table 6).

3.2 Net carbon dioxide emission increases

The national inventory of greenhouse gas (GHG) emissions by source category is given in Table 7. The table shows that:

- carbon dioxide remains the main contributor of greenhouse gas emissions and stood at 3,969.6 thousand tonnes, contributing 0.0096% to global emissions;
- removal of carbon dioxide (CO_2) was around 294 thousand tonnes in 2014; and
- net carbon dioxide emissions, after accounting for the removal of CO_2 by forests, went up by 3.8% from 3,543 thousand tonnes in 2013 to 3,676 thousand tonnes in 2014; the increase was due to rise in emission from the energy sector, mainly energy industries (electricity generation).

3.3 Carbon dioxide (CO_2) emission from the energy sector (fuel combustion activities)

In 2014, CO_2 emission from the energy sector stood at 3,968.8 thousand tonnes, up by 3.5% from 3,835.4 thousand tonnes in 2013. Within the energy sector, the sub-sector that contributed most of the total CO_2 emission was the energy industries (electricity generation) which accounted for 61.7% (2,449.1 thousand tonnes) of the total CO_2 emissions. Next came the transport sector which made up 25.1% (996.5 thousand tonnes) of the total emissions and the manufacturing industries making up another 8.4% (332.7 thousand tonnes) - (Table 8).

3.3.1 Energy industries (electricity generation)

Carbon dioxide emission from the generation of electricity (energy industries) stood at 2,449.1 thousand tonnes in 2014 compared to 2,363.8 thousand tonnes in 2013, representing an increase of 3.6%. This is mainly attributed to increase in petroleum products and coal used to produce electricity.

In 2014, around 43% of electricity was generated from coal, 37% from diesel and fuel oil and 20% from renewable sources. Electricity generated from coal increased by 3.8% from 1,213.6 GWh in 2013 to 1,259.5 GWh in 2014; that from petroleum products increased by 0.3% from 1,077.8 GWh in 2013 to 1,081.3 GWh in 2014 (Table 9).

Electricity generated from renewable sources increased by 0.3% from 594.0 GWh in 2013 to 596.2 GWh in 2014. Photovoltaic increased around 9 folds from 2.7 GWh to 24.6 and landfill gas remained at around 20 GWh. On the other hand, hydro went down by 4.2 % from 94.8 GWh to 90.8, wind by 11.1 % from 3.6 GWh to 3.2 and bagasse by 3.6% from 472.8 GWh to 456.2 (Table 9).

Table 10 shows the fuel input (petroleum products, coal and bagasse) for electricity generation and indicates that:

- In 2014, coal (53.8%) was the major fuel used to produce electricity followed by fuel oil (25.9%) and bagasse (20.1%);

- Input of coal increased by 4.1% (from 423.6 ktoe in 2013 to 441.0 ktoe in 2014), and that of fuel oil by 2.4% (from 207.5 ktoe in 2013 to 212.5 ktoe in 2014); and

- Some 164.9 ktoe of bagasse was used to produce electricity in 2014 compared to 169.0 ktoe in 2013, down by 2.4%. To note that in 2014, sugar cane harvest was extended to the first week of February 2015 and production of sugar cane stood at 4,044,421 tonnes compared to 3,815,782 tonnes in 2013.

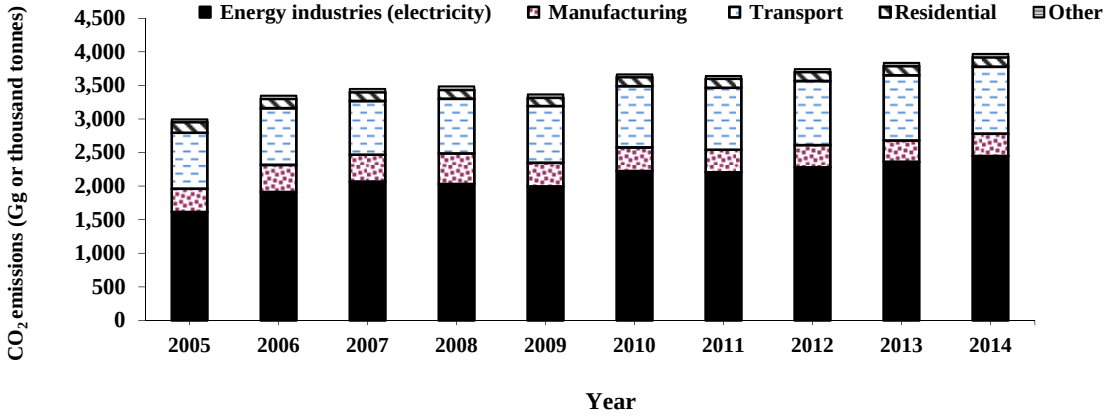
3.3.2 Transport industries

In 2014, carbon dioxide emission from the transport sector stood at 996.5 thousand tonnes compared to 969.5 in 2013, up by 2.8% due to higher fuel consumption. It is to be noted that the number of registered motor vehicles went up by 4.9% from 443,495 in 2013 to 465,052 in 2014 (Table 12). Consequently the energy consumed by land transport increased from 310.1 ktoe to 319.1 ktoe (+2.9%) - (Table11).

3.3.3 Manufacturing industries

The manufacturing sector registered an increase of 4.9% in CO_2 emissions in 2014 (from 317.2 to 332.7 thousand tonnes). The amount of fossil fuels consumed by the sector went up by 4.6% from 96.2 ktoe in 2013 to 100.6 ktoe in 2014.

Figure 1 - Carbon dioxide emissions from energy sector (fuel combustion activities), Republic of Mauritius, 2005 - 2014



4. Temperature

Table 13 indicates that both mean maximum and mean minimum temperatures were above the long term mean (1981-2010). February was the warmest month and August, the coolest month.

The highest maximum temperature recorded was 36.6 ˚C, recorded on 20 March 2014 at Port Louis. The lowest minimum temperature was 10.2 ˚C which was recorded on 11 August 2014 at Bois Chéri.

5. Water

Water being a basic support element for human life and ecosystems, is of vital environmental and biological importance.

5.1 Rainfall

During the year 2014, the mean amount of rainfall recorded around the Island of Mauritius was 2,094 millimetres (mm), representing a decrease of 1.5% compared to 2,126 mm in 2013 and an increase of 4.5% compared to the long term mean (1981-2010) of 2,003 mm.

The wettest month in 2014 was January with a mean of 419 mm, which represents a surplus of 59.3% relative to the long term mean (1981-2010) of 263 mm. September was the driest month with a mean of 54 mm of rainfall registering a deficit of 43.8% compared to the long term mean (1981-2010) of 96 mm (Table 14).

5.*2 Water Balance*

In 2014, the Island of Mauritius received 3,905 million cubic metres (Mm^3) of water from precipitation (rainfall), 1.5% lower when compared to 3,965 Mm^3 in 2013. Only 10 % (390 Mm^3) of the water went as ground water recharge, while evapotranspiration and surface runoff accounted for 30% (1,172 Mm^3) and 60% (2,343 Mm^3) respectively (Table 15).

5.3 Water utilisation

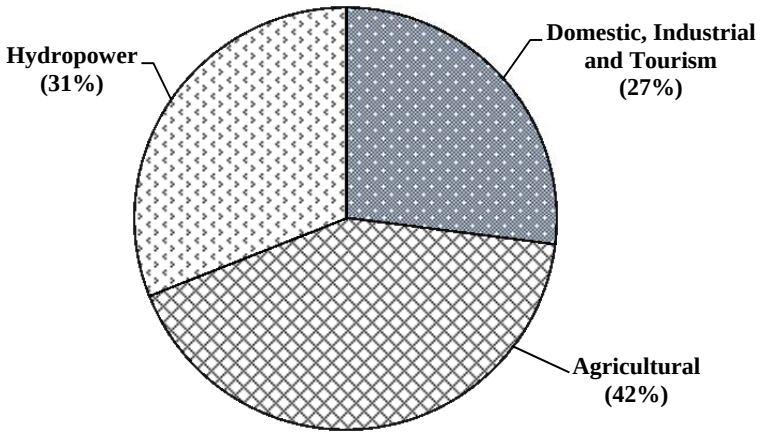
Total water utilisation was estimated at 895 Mm^3 in 2014. Around 85% (764 Mm^3) of the total water utilisation was met from surface water and the remaining 15% (131 Mm^3) from ground water.

The agricultural sector accounted for 42% (373 Mm^3) of the water utilised, hydropower 31% (275 Mm^3), and domestic, industrial and tourism sector 27% (247 Mm^3) - (Table 16).

Compared to 2013, water utilisation increased by 0.8%, from 888 to 895 Mm^3 with changes as follows:

- domestic, industrial and tourism (+6.0%);
- hydropower (-1.8%); and
- agricultural (-0.5%).

Figure 2 - Water utilisation, 2014



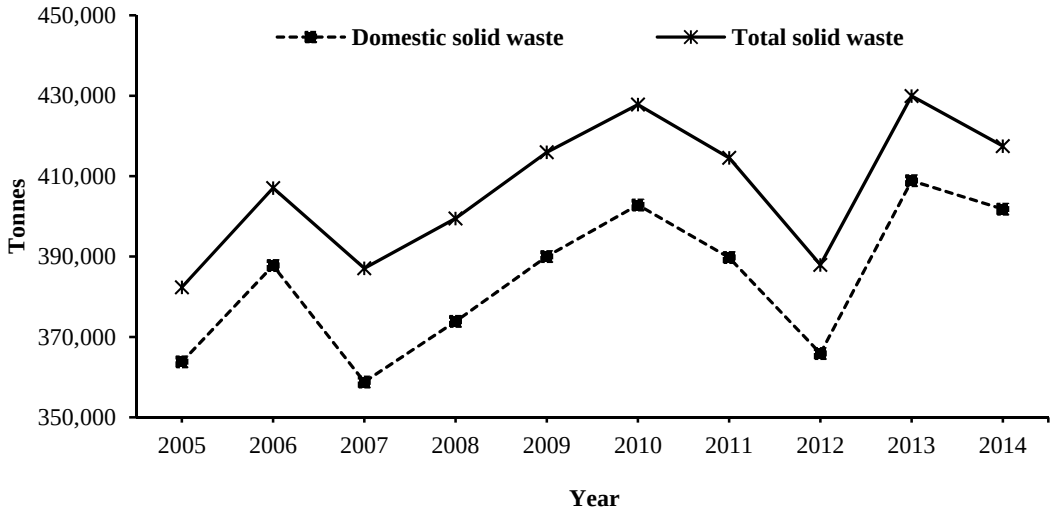
6. Waste

6.1 Waste disposal at Mare Chicose Landfill decreases

The total amount of solid waste landfilled at Mare Chicose decreased to 417,478 tonnes in 2014 from 429,935 tonnes in 2013, down by 2.9 % (Table 17).

Domestic waste constituted 96% of the total solid waste landfilled in 2014. The trend of the amount of solid waste landfilled is as shown in figure 3.

Figure 3 - Total solid waste landfilled at Mare Chicose, 2005 - 2014



7. Complaints

Effective environmental management needs appropriate coordination and monitoring of environmental problems. The Ministry of Environment, Sustainable Development, Disaster and Beach Management addresses complaints received from the general public according to a complaints handling protocol.

7.1 The number of complaints received goes down

Table 18 lists the number of complaints by category received by the Pollution Prevention and Control Division of the Ministry of Environment, Sustainable Development, Disaster and Beach Management for 2013 and 2014**.** The number of complaints received decreased by 3.3% from 687 in 2013 to 664 in 2014. The complaints were mainly due to: air pollution (21%), waste water (15%), solid waste (14%), odour (12%) and noise (12%).

8. Environmental Impact Assessment (EIA) Licences and Preliminary Environmental Report (PER) Approvals

8.1 EIA Licences and PER Approvals

In 2014, some 34 EIA licences were granted of which 8 were for housing, 7 for land parcelling (morcellement), 6 for coastal hotels and related works and another 6 were for development in port area (Table 19).

During the same period, 22 PER approvals were issued of which 7 were for poultry rearing and 4 for industrial development (Table 20).

Statistics Mauritius

Ministry of Finance and Economic Development

Port Louis

July 2015.

Contact Persons

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Table 1 - Main environment indicators, 2005 and 2014

Indicator	Units	2005	2014
Republic of Mauritius			
1. Land Protected Areas	ha	14,579	14,879
2. Total Carbon dioxide emission	000 tonnes	2,996	3,970
3. Per capita carbon dioxide emission	tonnes	2.4	3.1
4. Total electricity generated	GWh	2,272	2,937
5. Electricity generated from renewable sources	%	25.0	20.3
6. Total primary energy requirement	ktoe	1,293	1,492
7. Primary energy requirement from renewable sources	%	20.3	14.2
8. Per capita primary energy requirement	toe	1.05	1.18
9. Per capita final energy consumption	toe	0.69	0.71
10. Energy intensity	toe per Rs.100,000 GDP at 2000 prices	0.90	0.72
Island of Mauritius			
11. Forest area	ha	47,185	47,103
12. Total forest area as a % of total land area	%	25.3	25.3
13. Total fish production (fresh-weight equivalent)	tonnes	9,253	11,537
14. Mean catch per fisherman day	kg	4.1	5.2
15. Irrigated land	ha	20,658	…
16. Marine Protected Areas	ha	7,216	7,216
17. Threatened endemic plant species	%	…	88
18. Threatened endemic animal species	%	…	89
19. Mean annual rainfall	millimetres	2,376	2,094
20. Mean of maximum annual temperature	Degrees Celcius	27.2	28.2
21. Mean of minimum annual temperature	Degrees Celcius	19.9	20.6
22. Annual fresh water abstraction	Mm^3	691	620
23. Daily per capita domestic water consumption	litres	167.0	167.0
24. Daily per capita solid waste disposed at landfill	Kg	0.88	0.94

… : Not available

Table 2 - Land use, Island of Mauritius, 1995 and 2005

Land Use Distribution	1995		2005 [1]		Change	
	Hectares	%	Hectares	%	Hectares	%
Sugar cane plantations	76,840	41.2	72,000	38.6	-4,840	-6.3
Tea plantations	3,660	2.0	674	0.4	-2,986	-81.6
Forests, shrubs and grazing lands	57,000	30.6	47,200	25.3	-9,800	-17.2
Other agricultural activities	6,000	3.2	8,000	4.3	2,000	33.3
Infrastructure	4,000	2.1	4,500	2.4	500	12.5
Inland water resource systems	2,600	1.4	2,900	1.6	300	11.5
Built-up areas	36,400	19.5	46,500	24.9	10,100	27.7
Abandoned cane field	…	…	4,726	2.5	4,726	…
Total	**186,500**	**100.0**	**186,500**	**100.0**	**0**	**0**

Source: SIFB - Sugar cane plantation, Tea Board - Tea Plantation, Climate change Activities Report, May 2006 - Other

[1] Estimate

Table 3 - Forest area by category, Island of Mauritius, 2013 - 2014

Hectares

Category of Forest	2013		2014	
	Hectares	%	Hectares	%
State - owned lands	**22,108**	**46.9**	**22,103**	**46.9**
Plantations	11,867	25.2	11,830	25.1
Nature reserves	799	1.7	799	1.7
On mainland	*200*	*0.4*	*200*	*0.4*
Islets	*599*	*1.3*	*599*	*1.3*
Black River Gorges National Park	6,574	14.0	6,574	14.0
Bras D'Eau National Park [1]	497	1.1	497	1.1
Islet National Parks [2]	134	0.3	134	0.3
Vallee d'Osterlog Endemic Garden [3]	275	0.6	275	0.6
Other Forest Lands	1,332	2.8	1,369	2.9
Pas Geometriques	630	1.3	625	1.3
Plantations	*221*	*0.5*	*216*	*0.5*
Leased for grazing and tree planting	*230*	*0.5*	*230*	*0.5*
Others (mostly rocky)	*179*	*0.4*	*179*	*0.4*
Private - owned lands [4]	**25,000**	**53.1**	**25,000**	**53.1**
Reserves	6,553	13.9	6,553	13.9
Mountain reserves	*3,800*	*8.1*	*3,800*	*8.1*
River reserves	*2,740*	*5.8*	*2,740*	*5.8*
Nature Reserves	*13*	*0.0*	*13*	*0.0*
Other [5]	18,447	39.2	18,447	39.2
Total	**47,108**	**100.0**	**47,103**	**100.0**

Source : Forestry Service, Ministry of Agro Industry and Food Security

[1] Bras D'Eau National Park was proclaimed in 2011 .

[2] Islet National Parks were proclaimed in 2004.

[3] Vallee D'Osterlog Endemic Garden was proclaimed in 2007

[4] Current figures for privately-owned lands are crude estimates based on expert knowledge from Forestry Service.

[5] Includes plantations, forest lands, scrub and grazing lands.

Table 4 - Agricultural crops - Area harvested and production, Island of Mauritius, 2013 - 2014

Crops	2013 [1]		2014 [2]	
	Area harvested (hectares)	Production (tonnes)	Area harvested (hectares)	Production (tonnes)
Sugarcane	53,464	3,815,782	50,687	4,044,421
Tea (green leaves)	672 [3]	7,981	672 [3]	7,607
Tobacco	2	1	-	-

[1] Revised [2] Provisional [3] Area under cultivation - : No production

Table 5 - Imports of fertilisers and pesticides, Island of Mauritius, 2013 - 2014

Year	Fertilisers		Pesticides	
	Quantity (tonnes)	Value CIF (Rs mn)	Quantity (tonnes)	Value CIF (Rs mn)
2013	45,924	596.4	2,185	370.0
2014	53,276	682.4	2,201	407.0

CIF: Cost, Insurance, Freight

Table 6 - Total primary energy requirement, Republic of Mauritius, 2013 - 2014

ktoe (000 Tonne of oil equivalent)

Energy source	2013		2014	
	ktoe	%	ktoe	%
Imported (Fossil fuels)	**1,235.4**	**84.9**	**1,279.3**	**85.8**
Coal	***440.64***	***30.3***	***460.3***	***30.9***
Petroleum products	***794.7***	***54.6***	***819.0***	***54.9***
Gasolene	142.7	9.8	151.7	10.2
Diesel Oil	207.0	14.2	208.0	13.9
Dual Purpose Kerosene	121.6	8.4	127.7	8.6
Kerosene	*0.9*	*0.1*	*0.9*	*0.1*
Aviation Fuel	*120.7*	*8.3*	*126.8*	*8.5*
Fuel Oil	248.5	17.1	254.8	17.1
LPG	74.9	5.1	76.7	5.1
Local (Renewables)	**219.4**	**15.0**	**212.3**	**14.2**
Hydro	8.2	0.6	7.8	0.5
Wind	0.31	0.02	0.27	0.02
Landfill Gas	1.72	0.12	1.83	0.12
Photovoltaic	0.23	0.02	2.12	0.14
Bagasse [1]	201.7	13.9	193.4	13.0
Fuelwood [1]	7.3	0.5	6.9	0.5
Total	**1,454.8**	**100.0**	**1,491.7**	**100.0**

[1] Estimates

Table 7 - National inventory of greenhouse gas emissions by source categories, Republic of Mauritius, 2013 - 2014

Gg or thousand tonnes

Source	Carbon dioxide (CO_2)				Methane (CH_4)		Nitrous oxide (N_2O)		Oxides of nitrogen (NO_x)		Carbon monoxide (CO)		NMVOC [1]		Sulphur dioxide (SO_2)	
	Emissions		Removals													
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
1. Energy	3,835.44	3,968.81	-	-	0.61	0.60	0.08	0.08	19.15	19.67	70.32	72.05	11.07	11.61	34.31	35.05
Fuel combustion activities																
(a) Energy industries (electricity)	*2,363.79*	*2,449.07*	-	-	*0.28*	*0.28*	*0.06*	*0.06*	*7.82*	*8.06*	*8.64*	*8.29*	*0.53*	*0.53*	*28.79*	*29.36*
(b) Manufacturing industries	*317.17*	*332.71*	-	-	*0.07*	*0.06*	*0.01*	*0.01*	*1.04*	*1.07*	*6.42*	*5.63*	*0.11*	*0.10*	*3.18*	*3.31*
(c) Transport	*969.53*	*996.54*	-	-	*0.15*	*0.16*	*0.01*	*0.01*	*9.85*	*10.10*	*53.70*	*56.71*	*10.25*	*10.80*	*2.25*	*2.29*
(d) Other sectors	*184.95*	*190.49*	-	-	*0.11*	*0.10*	*0.00*	*0.00*	*0.44*	*0.45*	*1.56*	*1.42*	*0.18*	*0.17*	*0.09*	*0.09*
2.Industrial processes	1.31	0.81	-	-	-	-	-	-	-	-	-	-	12.60 [2]	8.83	-	-
3.Solvent and other product use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.Agriculture	-	-	-	-	1.00	1.10	*1.00*	*1.00*	-	-	-	-	-	-	-	-
5.Land use change and forestry [3]	-	-	293.9	294.0	-	-	-	-	-	-	-	-	-	-	-	-
6.Waste [4]	-	-	-	-	38.33	37.18	-	-	-	-	-	-	-	-	-	-
Total	**3,836.75**	**3,969.62**	**293.90**	**294.00**	**39.94**	**38.88**	**1.08**	**1.08**	**19.15**	**19.67**	**70.32**	**72.05**	**23.67**	**20.43**	**34.31**	**35.05**

Emissions	2013	2014
Net Carbon Dioxide emissions (Gg or thousand tonnes)	3,542.85	3,675.62
Total GHG [5] emissions (Gg or thousand tonnes CO_2-eq)	5,010.29	5,120.90

[1] Non - methane volatile organic compound [2] Revised [3] Excludes the amount of CO_2 sequestrated by trees and vegetations found along rivers and canal reserves and trees along roads
[4] Exclude waste water [5] Refers to carbon dioxide, methane and nitrous oxide

Table 8 - Carbon dioxide emissions from energy sector (fuel combustion activities), Republic of Mauritius, 2013 - 2014

Gg or thousand tonnes

Energy Sector	2013		2014	
	Quantity	%	Quantity	%
Energy industries (electricity)	2,363.8	61.6	2,449.1	61.7
Manufacturing industries	317.2	8.3	332.7	8.4
Transport	969.5	25.3	996.5	25.1
Residential	137.6	3.6	141.0	3.6
Other [1]	47.4	1.2	49.5	1.2
Total	**3,835.4**	**100.0**	**3,968.8**	**100.0**

[1] includes Commercial/Institutional and Agriculture

Table 9 - Electricity generation by source of energy, Republic of Mauritius, 2013 - 2014

Source of energy	2013		2014	
	GWh	%	GWh	%
Primary energy	**121.2**	**4.2**	**140.0**	**4.8**
Hydro (renewable energy)	94.8	3.3	90.8	3.1
Wind (renewable energy)	3.6	0.1	3.2	0.1
Landfill gas (renewable energy)	20.0	0.7	21.3	0.7
Photovoltaic (renewable energy)	2.7	0.1	24.6	0.8
Secondary energy	**2,764.1**	**95.8**	**2,797.0**	**95.2**
Gas turbine (kerosene)	1.7	0.1	2.0	0.1
Diesel and Fuel oil	1,076.1	37.3	1,079.3	36.7
Coal	1,213.6	42.1	1,259.5	42.9
Bagasse (renewable energy)	472.8	16.4	456.2	15.5
Total	**2,885.3**	**100.0**	**2,936.9**	**100.0**
of which **:** renewable energy	**594.0**	**20.6**	**596.2**	**20.3**

Table 10 - Fuel input for electricity production, Republic of Mauritius, 2013 - 2014

ktoe (000 Tonne of oil equivalent)

Fuel	2013		2014	
	Quantity (ktoe)	%	Quantity (ktoe)	%
Petroleum products	**209.5**	**26.1**	**214.4**	**26.1**
Fuel oil	*207.5*	*25.9*	*212.5*	*25.9*
Diesel oil	*1.3*	*0.2*	*1.2*	*0.2*
Kerosene	*0.7*	*0.1*	*0.7*	*0.1*
Coal	**423.6**	**52.8**	**441.0**	**53.8**
Total petroleum products and coal	***633.1***	***78.9***	***655.4***	***79.9***
Local renewables	**169.0**	**21.1**	**164.9**	**20.1**
Bagasse	*169.0*	*21.1*	*164.9*	*20.1*
Total	**802.1**	**100.0**	**820.3**	**100.0**

Source: Central Electricity Board and Sugar Industry Energy Survey

Table 11 - Final energy consumption by sector and type of fuel, 2013 - 2014

Sector	2013			2014		
	Tonne (except Electricity in GWh)	ktoe	%	Tonne (except Electricity in GWh)	ktoe	%
1. Manufacturing		**212.3**	**24.4**		**210.7**	**23.6**
1.1 excluding bagasse		**179.5**	**20.6**		**182.3**	**20.4**
Fuel oil	39,182	37.6	4.3	40,476	38.9	4.4
Diesel oil	35,443	35.8	4.1	36,096	36.5	4.1
LPG	5,353	5.8	0.7	5,427	5.9	0.7
Coal	27,507	17.1	2.0	31,250	19.4	2.2
Fuel wood [2]	1,385	0.5	0.1	1,343	0.5	0.1
Electricity (*GWh*)	962.6	82.8	9.5	944.5	81.2	9.1
1.2 bagasse	**204,565**	**32.7**	**3.8**	**177,973**	**28.5**	**3.2**
2. Transport [1]		**438.8**	**50.4**		**454.1**	**50.9**
Land		***310.1***	***35.6***		***319.1***	***35.8***
Gasolene	*128,928*	*139.2*	16.0	*137,244*	*148.2*	16.6
LPG	*4,068*	*4.4*	0.5	*3,744*	*4.0*	0.5
Diesel oil	*164,802*	*166.5*	19.1	*165,140*	*166.8*	18.7
Air						
Aviation Fuel	***116,093***	***120.7***	**13.9**	***121,968***	***126.8***	**14.2**
Sea		***8.0***	***0.9***		***8.2***	***0.9***
Gasolene	*3,170*	*3.4*	0.4	*3,260*	*3.5*	0.4
Diesel oil	*1,142*	*1.2*	0.1	*1,210*	*1.2*	0.1
Fuel oil	*3,525*	*3.4*	0.4	*3,641*	*3.5*	0.4
3. Commercial and Distributive Trade		**88.1**	**10.1**		**92.5**	**10.4**
LPG	13,285	14.3	1.6	14,028	15.2	1.7
Charcoal [2]	483	0.4	0.0	497	0.4	0.0
Electricity (*GWh*)	853.2	73.4	8.4	895.6	77.0	8.6
4. Household		**123.4**	**14.2**		**126.5**	**14.2**
Kerosene	202	0.2	0.0	153	0.2	0.0
LPG	46,360	50.1	5.8	47,570	51.4	5.8
Fuelwood [2]	15,466	5.9	0.7	14,529	5.5	0.6
Charcoal [2]	111	0.1	0.0	103	0.1	0.0
Electricity (*GWh*)	781.0	67.1	7.7	806.5	69.3	7.8
5. Agriculture		**4.5**	**0.5**		**4.6**	**0.5**
Diesel oil [2]	2,320	2.3	0.3	2,283	2.3	0.3
Electricity (*GWh*)	25.4	2.2	0.3	26.7	2.3	0.3
6. Other (n.e.s)		**3.5**	**0.4**		**3.4**	**0.4**
TOTAL		**870.6**	**100.0**		**891.9**	**100.0**

[1] Includes transport for all sectors [2] Estimates

Table 12 - Stock of registered motor vehicles, Island of Mauritius, 2013 - 2014

Type of vehicle	2013	2014
Cars and Dual Purpose Vehicle	210,431	223,457
Auto / Motocycles	180,785	187,851
Heavy Motor Car and Bus	4,213	4,277
Van and Lorry	40,685	41,133
Other vehicles[1]	7,381	8,334
Total	**443,495**	**465,052**

[1] Includes tractor and dumper, prime mover, trailer, road roller and other

Table 13 - Mean maximum and mean minimum temperature (climatological), Island of Mauritius, 2014

Degree Celcius

Month	Maximum temperature			Minimum temperature		
	Long Term Mean (1981-2010)	Monthly Mean	Difference from Long Term Mean	Long Term Mean (1981-2010)	Monthly Mean	Difference from Long Term Mean
January	29.8	30.0	0.2	22.3	23.3	1.0
February	29.8	30.4	0.6	22.6	23.2	0.6
March	29.4	30.1	0.7	22.1	22.6	0.5
April	28.6	29.0	0.4	21.2	21.5	0.3
May	27.0	27.5	0.6	19.4	19.5	0.1
June	25.2	26.1	0.9	17.6	18.7	1.1
July	24.3	25.3	1.0	16.9	18.6	1.7
August	24.4	25.4	1.0	16.9	17.7	0.8
September	25.3	26.3	1.0	17.2	17.6	0.4
October	26.2	28.3	2.1	18.3	20.1	1.8
November	28.1	29.5	1.5	19.6	21.4	1.8
December	29.3	30.1	0.8	21.2	22.6	1.4
Annual mean temperature	**27.3**	**28.2**	**0.9**	**19.6**	**20.6**	**1.0**

Source: Mauritius Meteorological Services

Table 14 - Mean rainfall, Island of Mauritius, 2013 - 2014

Millimetres

Month	Long Term Mean (1981-2010)	2013		2014	
		Monthly Mean	% of Long Term Mean	Monthly Mean	% of Long Term Mean
January	263	258	98.1	419	159.3
February	348	486	139.7	184	52.9
March	263	355	135.0	270	102.7
April	212	214	100.9	247	116.5
May	148	54	36.5	127	85.8
June	107	75	70.1	61	57.0
July	125	65	52.0	126	100.8
August	106	110	103.8	116	109.4
September	96	37	38.5	54	56.3
October	77	138	179.2	64	83.1
November	78	233	298.7	89	114.1
December	180	101	56.1	336	186.7
Total for the year	**2,003**	**2,126**	**106.1**	**2,094**	**104.5**

Source: Mauritius Meteorological Services

Table 15 - Water balance, Island of Mauritius, 2013 - 2014

Mm^3

	2013 [1]	2014
Rainfall	**3,965**	**3,905**
Surface runoff	*2,379*	*2,343*
Evapotranspiration	*1,189*	*1,172*
Net recharge to groundwater	*397*	*390*

Source: Water Resources Unit,Ministry of Energy and Public Utilities. [1] Revised

Table 16 - Water Utilisation, Island of Mauritius, 2013 - 2014

Mm^3

Utilisation	2013				2014			
	Surface water		Ground water	Total	Surface water		Ground water	Total
	River-run offtakes	Reservoirs			River-run offtakes	Reservoirs		
Domestic, Industrial and Tourism	34 [1]	78	108	220	35 [1]	80	119	234
Industrial	5	2 *	6	13	5	2 *	6	13
Agricultural	312	56 [2]	7	375	308	59 [2]	6	373
Hydropower	146 [4]	134 [3]	-	280	150 [4]	125 [3]	-	275
Overall utilisation	**497**	**270**	**121**	**888**	**498**	**266**	**131**	**895**
Total water mobilisation	**465**	**224**	**121**	**810**	**469**	**213**	**131**	**813**

Source: Water Resources Unit, Ministry of Energy and Public Utilities.

[1] Used also for Reduit hydropower station * Used by IPP (formerly accounted in agricultural purpose) [2] used also for Tamarind Falls, Magenta and La Ferme hydropower stations [3] used also twice for Tamarind Falls and Magenta hydropower stations [4] used also twice for Le Val and Ferney hydropower stations

Table 17 - Solid waste landfilled at Mare Chicose by source of waste material, Island of Mauritius, 2013 - 2014

Tonnes

Waste material	2013	2014
Domestic	408,858	401,785
Construction	6,141	2,363
Other [1]	14,936	13,330
Total	**429,935**	**417,478**

Source: Ministry of Local Government [1] Includes mainly industrial waste

Table 18 - Number of complaints received at the Pollution Prevention and Control Division, Island of Mauritius, 2013 - 2014

Category	2013	%	2014	%
Noise	150	22	78	12
Solid waste	93	14	91	14
Air pollution	120	17	138	21
Waste water	82	12	101	15
Odour	79	11	82	12
Other [1]	163	24	174	26
Total	**687**	**100**	**664**	**100**

Source: Ministry of Environment, Sustainable Development, Disaster and Beach Management

[1] includes backfilling, erosion, illegal construction, objections to projects, law and order, land conversions, land reclamation, landslides etc

Table 19 - Number of Environmental Impact Assessment (EIA) licences granted by type of project, 2013 - 2014, Island of Mauritius

Project	EIA	
	2013	2014
Land parcelling (morcellement)	7	7
Industrial development	6	4
Coastal hotels and related works	6	6
Housing	-	8
Stone crushing plants	3	-
Development in port area	2	6
Other	3	3
Total	**27**	**34**

Source: Ministry of Environment, Sustainable Development, Disaster and Beach Management

Table 20 - Number of Preliminary Environmental Report (PER) approvals granted by type of project, 2013 - 2014, Island of Mauritius

Project	PER	
	2013	2014
Land parcelling (morcellement)	1	1
Poultry rearing	4	7
Industrial development	4	4
Coastal hotels & related works	-	-
Livestock rearing	-	3
Housing	-	3
Other	4	4
Total	**13**	**22**

Source : Ministry of Environment, Sustainable Development, Disaster and Beach Management

ANNEX

Technical notes

Concepts and definitions

Environment

Environment: the totality of all the external conditions affecting the life, development and survival of an organism.

An *environmental indicator*: A parameter or a value derived from parameters that points to, provides information about and/or describes the state of the environment, and has a significance extending beyond that directly associated with any given parametric value.

Land use, Agriculture and Forestry

Land use: Land use refers to the main activity taking place on an area of land, for example, farming, forestry or housing.

Built-up areas: Built-up areas consist of land under houses, industrial zones, quarries or any other facilities, including their auxiliary spaces, deliberately installed so that human activities may be pursued.

Biodiversity

Threatened species**:** Threatened species is a plant, animal or other living thing which is in danger of becoming extinct.

Greenhouse gas emissions

Greenhouse gases (GHG): GHG are gases occurring naturally and resulting from human activities (production and consumption) that contribute directly or indirectly to global warming. Some main naturally existing GHG are Carbon Dioxide (CO_2), Methane (CH_4) and Nitrous Oxide (N_2O). Other gases such as Carbon Monoxide (CO), Oxides of Nitrogen (NOx), Non Methane volatile organic compounds (NMVOC) and Sulphur Dioxide (SO_2) contribute indirectly to global warming. GHGs act much like a glass greenhouse, trapping heat in the lower levels of the atmosphere and reflecting the heat back to the earth's surface, causing it to heat up.

Carbon dioxide equivalent (CO_2-eq): It is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). The carbon dioxide equivalent of a gas is derived by multiplying the weight of the gas by its associated Global Warming Potential (GWP).

Water

Water balance: The water balance is based on long term records of annual average rainfall and indicates how freshwater resources are distributed.

Precipitation: Rain falling from the atmosphere and deposited on land or water surfaces.

Evapotranspiration: Combined loss of water by evaporation from the soil or surface water and transpiration from plants and animals.

Surface runoff: The flow of surface water from rainfall, which flows directly to streams, rivers and lakes. Runoff may cause soil erosion.

Groundwater recharge: Process by which water is added from outside to fresh water found beneath the earth surface.

Waste

Solid waste: Solid waste includes domestic garbage, industrial and commercial waste, sewage sludge, wastes resulting from agricultural and animal husbandry operations and other connected activities, demolition wastes and mining residues.

Landfill: Final placement of waste in or on the land in a controlled or uncontrolled way according to different sanitary, environmental protection and other safety requirements.

Environmental impact assessment

Environmental impact assessment (EIA): Analytical process that systematically examines the possible environmental consequences of the implementation of projects, programmes and policies.

Preliminary environmental report

Preliminary environmental report (PER): PER is a short form of EIA and this preliminary analysis is undertaken to identify the impacts associated with the proposed development and the means of mitigation.

Economy

Gross Domestic Product (GDP): GDP is the aggregate money value of all goods and services produced within a country out of economic activity during a specified period, usually a year, before provision for the consumption of fixed capital.

Energy intensity: Energy intensity provides a measure of the efficiency with which energy is being used in production or energy used (tonnes of oil equivalent) per Rs 100,000 GDP (at constant prices)

ABBREVIATIONS AND SYMBOLS

Abbreviations

Rs	Rupees
Rs mn	Rupees million
%	Percentage
f.o.b	free on board
c.i.f	Cost, insurance, freight
000	Thousand
Mm^3	Million cubic metres
Gg	Gigagram (thousand tonnes)
Toe	Tonne of oil equivalent
ktoe	Thousand tonnes of oil equivalent
GWh	Gigawatt hour
PER	Preliminary environmental report
EIA	Environmental impact assessment

Symbols

-	Nil or negligible
…	Not available

Conversion factor

1 square kilometre	= 100 hectares