# **ENERGY AND WATER STATISTICS – 2010**

## Introduction

This issue of the Economic and Social Indicators on Energy and Water Statistics contains data for the years 2009 and 2010. These statistics have been compiled in close collaboration with the Central Electricity Board, the Central Water Authority, the petroleum companies, the Independent Power Producers and the Meteorological Services. All data refer to the Republic of Mauritius, unless stated otherwise.

## 2. Energy

## 2.1 Energy balance

The energy balance (Tables 1 & 2) shows the supply and final uses of energy and the different types of fuel. Total primary energy requirement, also known as Total Primary Energy Supply (TPES), is obtained as the sum of indigenous production (fuelwood, hydro, wind and bagasse) and imports (fossil fuel) less re-exports and bunkering, after stock adjustments. Final energy consumption is the total amount of energy required by end users as a final product. End-users are mainly categorized into five sectors, namely manufacturing, transport, commercial and distributive trade, households and agriculture.

In order to compare the energy content of the different fuels, a common accounting unit, namely tonne of oil equivalent (toe) is used. The conversion factors are given on page 7.

## 2.2 Total primary energy requirement

The total primary energy requirement of the country increased by 5.8 %, from 1,347 ktoe in 2009 to 1,425 ktoe in 2010 (Table 3). Of this, imported fuels (petroleum products and coal) accounted for 83.0% (1,183 ktoe) while locally available sources which are all renewables, supplied the remaining 17.0% (242 ktoe).

Petroleum products which amounted to 769 ktoe comprised mainly fuel oil (30.2%), diesel (27.9%), gasolene (16.6%), and aviation fuel (16.0%) in 2010.

In the same year, coal was 414 ktoe, representing an increase of 12.2% over the 369 ktoe estimated in 2009.

The local production (242 ktoe) comprised renewables including bagasse (93.0%), hydro/wind electricity (3.7%), and fuelwood (3.3%).

The total primary energy requirement index, with 1990 as base year (1990 = 100), increased by 5.8%, from 184.3 in 2009 to 194.9 in 2010 and the per capita primary energy requirement went up by 4.7% from 1.06 toe to 1.11 toe (Table 16).

'Energy intensity' defined as total primary energy requirement (toe) per Rs 100,000 of GDP (in 1990 rupees) provides a measure of the efficiency with which energy is being used in production. As shown in Table 16, 'Energy intensity', which stood at 1.43 in 2009, rose slightly to 1.45 in 2010.

#### 2.2.1 Local production

Total energy production from local renewable sources went up by 2.5% from 236 ktoe in 2009 to 242 ktoe in 2010. This was mainly driven by an increase in the electricity produced from bagasse which reached 225 ktoe compared to 218 ktoe in 2009. On the other hand, production of hydroelectricity dropped from 10.7 ktoe in 2009 to 8.9 ktoe in 2010 (Table 3).

#### 2.2.2 Imports of energy sources

Data on total imports of energy sources show that some 1,498 ktoe of petroleum products and coal were imported in 2010 compared with 1,365 ktoe in 2009, representing an increase of 9.7%. Petroleum products imports went up from 1,019 ktoe to 1089 ktoe (+6.9 %) and coal from 347 ktoe to 410 ktoe (+18.2%).

The import bill of petroleum products and coal increased by 36.8% from Rs 17,999 million in 2009 to Rs 24,620 million in 2010. (Table 4 and Figures 2 to 4)

#### 2.2.3 Re-exports and bunkering

Of the 1,498 ktoe of imported energy sources in 2010, about 352 ktoe (23%) were supplied to foreign marine vessels and aircraft, up by of 6.7% over 2009 figures. These re-exports consisted of: 120 ktoe of aviation fuel (34.0%), 119 ktoe of fuel oil (33.7%), and 114 ktoe of diesel oil (32.3%), (Table 5). The following changes were noted as compared over the previous year: Aviation fuel +2.6%, Fuel Oil +14.6%, Diesel +3.6%.

## 2.3 Electricity generation

Some 2,689 GWh (231 ktoe) of electricity was generated in 2010 as compared to 2,577 GWh (222 ktoe) in 2009, representing an increase of 4.3 %. The Independent Power Producers (IPPs) supplied 59.1% of the total electricity generated while the Central Electricity Board (CEB) provided the remaining 40.9%. Thermal energy represented 96.2% and hydro/wind 3.8%. The peak power demand in 2010 reached 404.1 MW (+4.0%) in the Island of Mauritius as compared with 388.6 MW in 2009 (Tables 6, 7 and 8).

## 2.3.1 Fuel input for electricity generation

The different types of fuel used for electricity generation are shown in Table 9. Fuel input rose by 6.7%, from 729 ktoe in 2009 to 778 ktoe in 2010. The major components of the fuel input were coal (51.2 %), fuel oil (24.3%) and bagasse (23.5%).

#### 2.3.2 Electricity sales and consumption

Electricity sales increased by 5.1% from 2,069 GWh (178 ktoe) in 2009 to 2,174 GWh (187 ktoe) in 2010. The average sales price of electricity went up slightly by 0.4% from Rs 5.20 per kWh to Rs 5.22 per kWh, during the same period (Table 10).

The per capita consumption of electricity sold per annum went up by 4.6% from 1,623 kWh in 2009 to reach 1,697 kWh in 2010 (Table 16).

#### 2.4 Final energy consumption

Final energy consumption increased by 4.8% from 809 ktoe in 2009 to 848 ktoe in 2010. "Transport" and "Manufacturing" were the two largest energy-consuming sectors accounting for 49.3% and 27.7% of energy consumed respectively. They were followed by "Household" (13.8%), "Commercial and Distributive Trade" (8.3%) and "Agriculture" (0.5%). Details on the different types of fuel consumed by each sector and the respective amounts are given in Table 11.

## 2.4.1 Manufacturing

Energy used for manufacturing processes rose by 4.5% from 224 ktoe in 2009 to 234 ktoe in 2010. The contribution of electricity was 80 ktoe (34.2%); diesel oil, 47 ktoe (20%); fuel oil, 43 ktoe (18.4%); and bagasse, 43 ktoe (18.4%).

## 2.4.2 Transport

In 2010, some 418 ktoe of energy were used for transportation, representing an increase of 6.9% over the previous year's figure of 391 ktoe. Consumption of gasolene increased from 121 ktoe to 128 ktoe (+5.8%) and that of diesel oil from 155 ktoe to 162 ktoe (+4.5%). Consumption of aviation fuel increased from 111 ktoe in 2009 to 123 ktoe in 2010 (+10.8%) and the use of LPG in the transport sector remained at 5 ktoe.

## 2.4.3 Commercial and Distributive Trade

Total energy consumption by "Commercial and Distributive Trade" sector dropped by 2.8%, from 72 ktoe in 2009 to 70 ktoe in 2010.

LPG consumption in the commercial and distributive trade sector decreased from 11 ktoe to 6 ktoe (-45.5%). Nevertheless this sector witnessed an increase in electricity consumption from 61 ktoe to 64 ktoe (+4.9%).

## 2.4.4 Household

Energy consumed by households (excluding transport) increased by 3.5%, from 113 ktoe in 2009 to 117 ktoe in 2010. The two main sources of energy for households were electricity and LPG, representing 52% and 41% respectively of total energy consumed by households. Consumption of electricity rose by 4.4% and that of LPG by 1.9%.

## 2.4.5 Agriculture

Energy consumption in "Agriculture" went up from 4.1 ktoe in 2009 to 4.4 ktoe in 2010 (+7.3%). Electricity and diesel were the only two sources of energy used in this sector. In 2010, about 2.1 ktoe of electricity were used mainly for irrigation while 2.4 ktoe of diesel oil were used for mechanical operations in fields.

## 3 Water

## 3.1 Rainfall

Table 12 shows the amount of rainfall recorded around the Islands of Mauritius and Rodrigues. During the year 2010, the mean amount of rainfall recorded around the Island of Mauritius was 1,806 mm, a 24.7% decrease compared with the 2,397 mm registered in 2009. February was the wettest month with 374 mm while December was the driest with only15 mm of rainfall.

For the Island of Rodrigues, the mean rainfall registered in 2010 was 1,142 millimetres compared with 948 mm in 2009. The month of April recorded the highest amount of rainfall with 214 mm while September was driest with only 16 mm.

## **3.2** Water storage level

In 2010, the minimum and maximum percentage water storage level of the different reservoirs was as follows:

Reservoir	% Minimum (month(s))	% Maximum (month(s))
Mare aux Vacoas	41 (Dec)	98 (Feb)
La Nicoliere	53 (Dec)	100 (Jan-Feb), (Jul-Aug)
Piton du Milieu	37 (Dec)	100 (Jan-Mar)
La Ferme	43 (Dec)	100 (Jan-Apr)
Mare Longue	29 (Dec)	100 (Feb-Apr)
Midlands Dam	41 (Dec)	100 (Jan-Jun),(Aug-Sep)

Table 13 shows the mean water level in 2010, for all reservoirs combined together (excluding Midlands Dam), which varied from 49% to 97%. It is to be noted that the mean water level is computed as the average level during a month while the normal level is the long term mean averaged over the period 1990 to 1999.

## **3.3** Water production

In 2010 the total volume of potable water treated by the different treatment plants amounted to 223 million cubic metres (Mm<sup>3</sup>), up by 1.4% compared with 220 Mm<sup>3</sup> recorded in 2009. During the same year, average water production from surface and borehole water represented 48.8% and 51.2% respectively (Table 14).

## **3.4** Water sales and revenue collectible

Total volume of water sold increased from 110.3  $\text{Mm}^3$  in 2009 to 115.0  $\text{Mm}^3$  in 2010 (4.3%). In 2010, potable water made up 87.2% of the volume sold and the remaining 12.8% consisted of non-treated water. Water for domestic consumption was 76.5  $\text{Mm}^3$ , accounting for nearly 66.5% of the total volume of water sold.

The amount of revenue collectible from the sale of water for the year 2010 was Rs 1035.8 million, that is a rise of 3.7% over the amount of Rs 998.8 million collected in 2009 (Table 15).

**Central Statistics Office** Ministry of Finance and Economic Development Port Louis June 2010

## **Contact person:**

Mr. A. Sookun (Statistician) Mrs. N. Meenowa (Senior Statistical Officer)

Tel. No. (230) 213 3077

Fax: (230) 211 4150

Email: cso\_energy @mail.gov.mu

# **Concepts and Terminology**

The energy data have been compiled according to the recommendations of the United Nations Manual, Series F No. 29 on Energy Statistics.

## - Energy

Energy means the capacity for doing work or for producing heat. Producing heat is a common manifestation of "doing work" as are producing light and motive force.

#### - Primary energy

Primary energy designates energy from sources that involve only extraction or capture, with or without separation from contiguous material, cleaning or grading, before the energy embodied in that source can be converted into heat or mechanical work. Primary energy is not derived from any other form of energy. By convention, sources of energy that occur naturally such as coal, natural gas, fuel wood are termed primary energy.

## - Secondary energy

Secondary energy designates energy from all sources of energy that results from transformation of primary sources.

#### - Fuels

The term fuel is used to describe those energy sources, whether primary or secondary, that must be subjected to combustion or fission in order to release for use the energy stored up inside them.

#### - Re-export of bunkers and aviation fuel

Bunkers relate to fuels sold to ships irrespective of their flags of ownership or registration. Reexports include aviation fuel delivered to foreign aircraft. Aviation fuel delivered to aircraft owned by the national airline is included as final consumption in the transport sector.

#### - Primary energy requirement

It is the sum of imported fuels and locally available fuels less re-exports of bunkers and aviation fuel to foreign aircraft after adjusting for stock changes.

## - Primary energy input to hydro electricity.

The primary energy input to hydro electricity is defined as the energy value of the electricity generated from hydro.

# **Energy conversion factors**

The following energy conversion factors have been used to express the energy content for the different fuels in terms of a common accounting unit, tonnes of oil equivalent (toe).

	<b>Tonne</b>	toe
Gasolene	1	1.08
Diesel Oil	1	1.01
Dual Purpose Kerosene (DPK)	1	1.04
Fuel oil	1	0.96
Liquefied Petroleum Gas (LPG)	1	1.08
Coal	1	0.62
Bagasse	1	0.16
Fuel Wood	1	0.38
Charcoal	1	0.74
	GWh	too
TT 1 (TT) 1		toe
Hydro/Wind	1	86
Electricity	1	86

1 toe = 41.84 gigajoule (net calorific value)

# **ABBREVIATIONS**

The following technical abbreviations have been used throughout the report.

- toe Tonne of oil equivalent
- ktoe Thousand tonnes of oil equivalent
- LPG Liquefied Petroleum Gas
- MW Megawatt (1,000 kW)
- kWh Kilowatt hour
- GWh Gigawatt hour
- Mm<sup>3</sup> Millimetres

# ACRONYMS

CEB	Central Electricity Board
IPP	Independent Power Producers
GDP	Gross Domestic Product

Source		Fossil fuels								Renewables						
		Petroleum products							- Kenewables						Electricity	Total
Flow	Coal	Gasolene	Diesel	Aviation Fuel	Kerosene	Fuel Oil	LPG	Total Petroleum products	Fuelwood C	harcoal	Hydro	Wind	Bagasse	Total Renewables		Total
Local production	-	-	-	-	-	-	-	-	7,718	-	8,663	216	225,019	241,616	-	241,616
Imports	409,584	130,607	313,467	244,245	7,019	327,806	65,385	1,088,529	-	-	-	-	-	-	-	1,498,113
Re-exports and bunkering	-	-	(114,323)	(119,562)	-	(118,505)	-	(352,390)	-	-	-	-	-	-	-	(352,390
Stock change / Statistical error	4,473	(2,922)	14,426	(1,388)	1,030	22,914	(1,350)	32,709	-	-	-	-	-	-	-	37,183
Total Primary Energy Requirement	414,058	127,684	213,570	123,295	8,048	232,215	64,035	768,849	7,718	-	8,663	216	225,019	241,616	-	1,424,523
Public electricity generation plant	-	-	(2,017)	-	(6,248)	(189,007)	-	(197,272)	-	-	(8,663)	(216)	-	(8,879)	94,495	(111,655
Autoproducer plants	(398,690)	-	-	-	-	-	-	-	-	-	-	-	(182,461)	(182,461)	136,734	(444,418
Other transformation	-	-	-	-	-	-	-	-	(869)	423	-	-	-	(446)	) -	(446)
Own use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3,475)	(3,475
Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(16,669)	(16,669)
Total Final Consumption	15,367	127,684	211,554	123,295	1,800	43,209	64,035	571,577	6,849	423	-	-	42,558	49,830	211,085	847,859
Manufacturing sector	15,367	-	47,008	-	-	43,209	5,532	95,749	542	-	-	-	42,558	43,100	80,354	234,570
Transport sector	-	127,684	162,197	123,295	-	-	5,012	418,188	-	-	-	-	-	-	-	418,188
Commercial and distributive trade sector	-	-	-	-	-	-	5,532	5,532	-	335	-	-	-	335	64,324	70,191
Household	-	-	-	-	1,800	-	47,584	49,384	6,307	88	-	-	-	6,395	61,122	116,901
Agriculture	-	-	2,348	-	-	-	-	2,348	-	-	-	-	-	-	2,050	4,398
Other	-	-	-	-	-	-	376	376	-	-	_	-	-	-	3,234	3,610

Note: figures in brackets represent negative quantities

Source				Fossil	fuels						Renew	ables				
				Petro	oleum prod	ucts					Kenew	abics			Electricity	Total
Flow	Coal	Gasolene	Diesel	Aviation Fuel	Kerosene	Fuel Oil	LPG	Total Petroleum products	Fuelwood Ch	arcoal	Hydro	Wind	Bagasse	Total Renewables		
Local production	-	-	-	-	-	-	-	-	7,703	-	10,527	129	217,976	236,334	-	236,334
Imports	347,138	112,790	290,895	212,888	4,310	329,989	67,566	1,018,438	-	-	-	-	-	-	-	1,365,576
Re-exports and bunkering	-	-	(109,657)	(117,217)	-	(103,412)	-	(330,286)	-	-	-	-	-	-	-	(330,286)
Stock change / Statistical error	22,204	7,811	25,444	14,825	2,346	1,354	1,288	53,068	-	-	-	-	-	-	-	75,272
Total Primary Energy Requirement	369,342	120,600	206,683	110,496	6,656	227,931	68,854	741,220	7,703	-	10,527	129	217,976	236,334	-	1,346,897
Public electricity generation plant	-	-	(2,789)	-	(5,121)	(182,980)	-	(190,890)	-	-	(10,527)	(129)	-	(10,656)	92,635	(108,911)
Autoproducer plants	(355,967)	-	-	-	-	-	-	-	-	-	-	-	(181,694)	(181,694)	129,025	(408,637)
Other transformation	-	-	-	-	-	-	-	-	(845)	412	-	-	-	(434)	-	(434)
Own use	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(3,354)	(3,354)
Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(16,988)	(16,988)
Total Final Consumption	13,375	120,600	203,894	110,496	1,535	44,951	68,854	550,330	6,857	412	-	-	36,281	43,550	201,317	808,572
Manufacturing sector	13,375	-	46,341	-	-	44,951	5,408	96,699	542	-	-	-	36,281	36,823	77,163	224,060
Transport sector	-	120,600	155,244	110,496	-	-	4,954	391,294	-	-	-	-	-	-	-	391,294
Commercial and distributive trade sector	-	-	-	-	-	-	11,421	11,421	-	324	-	-	-	324	60,561	72,306
Household	-	-	-	-	1,535	-	46,696	48,231	6,315	88	-	-	-	6,403	58,491	113,125
Agriculture	-	-	2,309	-	-	-	-	2,309	-	-	-	-	-	-	1,761	4,069
Other	-	-	-	-	-	-	376	376	-	-	-	-	-	-	3,342	3,718

 Table 2 - Energy balance, 2009

Note: figures in brackets represent negative quantities

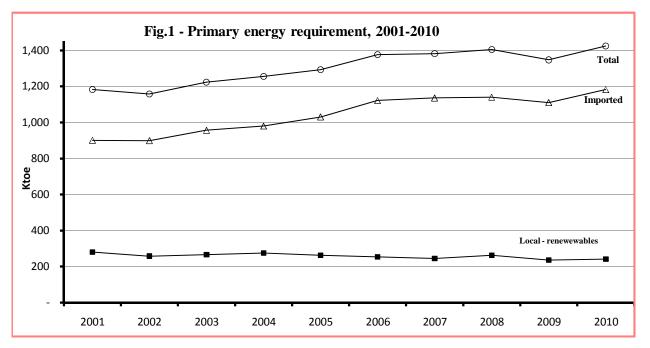
9

Tonne of oil equivalent (toe)

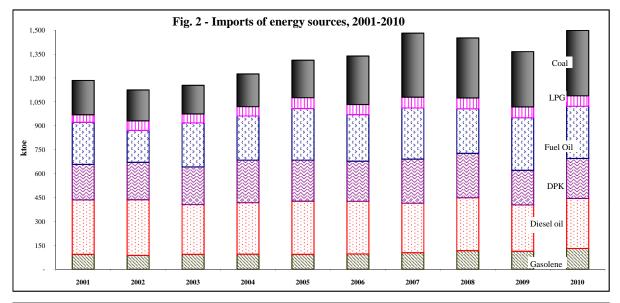
		2009			2010	
Energy source	Tonne (except Hydro-Wind in GWh)	Ktoe	%	Tonne (except Hydro-Wind in GWh)	Ktoe	%
Imported						
Petroleum products						
Gasolene	111,667	120.6	9.0	118,226	127.7	9.0
Diesel Oil	204,636	206.7	15.3	211,456	213.6	15.0
Dual Purpose Kerosene	112,646	117.2	8.7	126,293	131.3	9.2
Kerosene	6,400	6.7	0.5	7,739	8.0	0.6
Aviation Fuel	106,246	110.5	8.2	118,553	123.3	8.7
Fuel Oil	237,428	227.9	16.9	241,891	232.2	16.3
LPG	63,754	68.9	5.1	59,292	64.0	4.5
Sub total (petroleum products)		741.2	55.0		768.8	54.0
Coal	595,713	369.3	27.4	667,835	414.1	29.1
Sub total (Imported)		1,110.6	82.5		1,182.9	83.0
Local						
Renewables						
Hydro and Wind <b>GWh</b>	123,911	10.7	0.8	103,240	8.9	0.6
Bagasse *	1,362,347	218.0	16.2	1,406,371	225.0	15.8
Fuelwood *	20,270	7.7	0.6	20,311	7.7	0.5
Sub total (renewables)		236.3	17.5		241.6	17.0
Total		1,346.9	100.0		1,424.5	100.0

 Table 3 - Total primary energy requirement, 2009-2010

\* estimates



		20	09		2010				
Energy source	Tonne (000)	Ktoe	%	C.I.F value (Rs million)	Tonne (000)	Ktoe	%	C.I.F value (Rs million)	
Gasolene	104.4	112.8	8.3	2,022.4	120.9	130.6	8.7	3,084.4	
Diesel Oil	288.0	290.9	21.3	4,852.9	310.4	313.5	20.9	6,945.1	
Dual Purpose Kerosene	208.8	217.2	15.9	3,656.4	241.6	251.3	16.8	5,619.5	
Kerosene	4.1	4.3	0.3	77.1	6.8	7.0	0.5	154.5	
Aviation Fuel	204.7	212.9	15.6	3,579.3	234.9	244.2	16.3	5,465.0	
Fuel Oil	343.7	330.0	24.2	4,353.2	341.5	327.8	21.9	5,112.8	
LPG	62.6	67.6	4.9	1,322.2	60.5	65.4	4.4	1,568.1	
Sub total (petroleum products)		1,018.5	74.6	16,207.1		1,088.5	72.7	22,329.9	
Coal	559.9	347.1	25.4	1,792.0	660.6	409.6	27.3	2,290.1	
Total imports of energy sources		1,365.6	100.0	17,999.1		1,498.1	100.0	24,620.0	



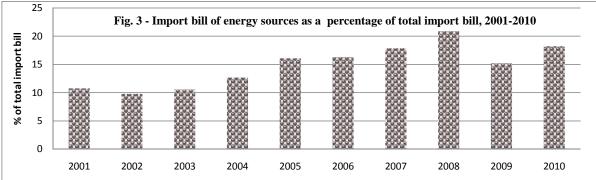
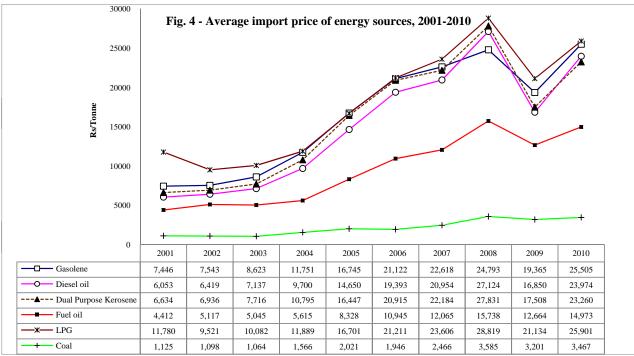
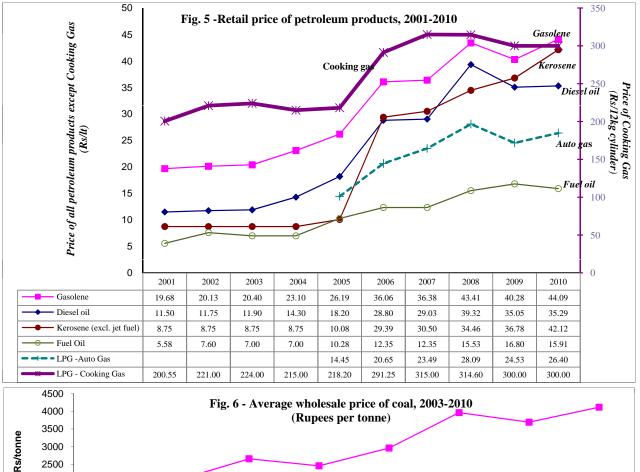


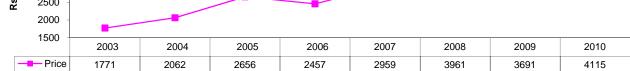
Table 5	<ul> <li>Re-exports of ener</li> </ul>	gy sources to foreign	aircraft and bunkers,	2009-2010

		2009		2010			
Energy Re-exported	Tonne	Ktoe	%	Tonne	Ktoe	%	
Aviation fuel to foreign aircraft	113	117.2	35.5	115	119.6	33.9	
Diesel oil	109	109.7	33.2	113	114.3	32.4	
Fuel oil	108	103.4	31.3	123	118.5	33.6	
Total		330.3	100.0		352.4	100.0	

Table 4 - Imports of energy sources, 2009-2010







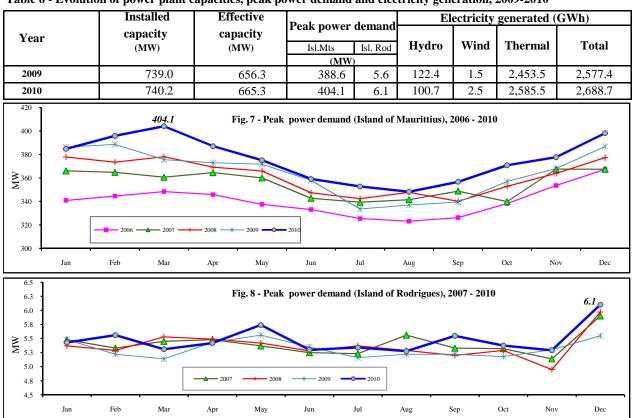


Table 6 - Evolution of power plant capacities, peak power demand and electricity generation, 2009-2010

13

 Table 7 - Electricity production by source of energy, 2009-2010

Source of energy	200	20	10		
Source of energy	GWh	%	GWh	%	
Primary energy	123.9	4.8	103.2	3.8	
Hydro (renewable energy)	122.4	4.7	100.7	3.7	
Wind (renewable energy)	1.5	0.1	2.5	0.1	
Secondary energy	2,453.5	95.2	2,585.4	96.2	
Gas turbine (kerosene)	15.3	0.6	18.9	0.7	
Diesel & Fuel oil	938.0	36.4	976.6	36.3	
Coal	1,015.3	39.4	1,039.5	38.7	
Bagasse (renewable energy)	485.0	18.8	550.4	20.5	
Total	2,577.4	100.0	2,688.7	100.0	
of which : renewable energy (hydro, wind & bagasse)	608.9	23.6	653.6	24.3	

Dormon runo dun con	200	9	20	010
Power producer	GWh	%	GWh	%
CEB	1,077.1	41.8	1,098.7	40.9
Island of Mauritius	1,045.4	40.6	1,066.7	39.7
Hydro	122.4	4.7	100.7	3.7
Thermal	923.0	35.8	966.0	35.9
Island of Rodrigues	31.7	1.2	32.1	1.2
Wind	1.5	0.1	2.5	0.1
Thermal	30.2	1.2	29.6	1.1
IPP (thermal)	1,500.3	58.2	1,589.9	59.1
of which: exported to CEB	1,228.6	47.7	1,309.4	48.7
Total	2,577.4	100.0	2,688.7	100.0
Island of Mauritius				
CEB	1,045.4	46.0	1,066.7	44.9
IPP export to CEB	1,228.6	54.0	1,309.4	55.1
Total units generated for sales	2,274.1	100.0	2,376.0	100.0

Source: Central Electricity Board and Annual Sugar Industry Energy Survey

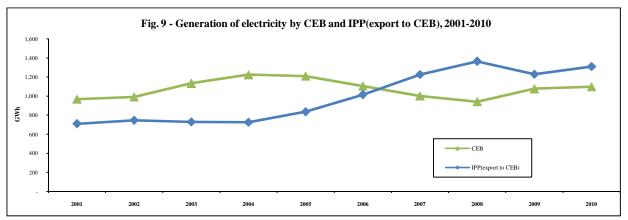


 Table 9 - Fuel input for electricity production, 2009-2010

Fuel		2009		2010					
ruei	Tonne	Ktoe	%	Tonne	Ktoe	%			
Fuel oil	190,604	183.0	25.1	196,882	189.0	24.3			
Diesel oil	2,761	2.8	0.4	1,997	2.0	0.3			
Kerosene	4,924	5.1	0.7	6,008	6.3	0.8			
Coal	574,141	356.0	48.9	643,049	398.7	51.2			
Bagasse	1,135,588	181.7	24.9	1,140,383	182.5	23.4			
Total		728.6	100.0		778.4	100.0			

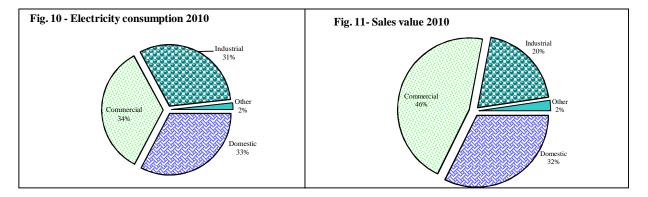
Source: Central Electricity Board and Annual Sugar Industry Energy Survey

Table 10 - Sales of electricity by type of tariff, 2009-2010

		2009		2010						
Type of tariff	No. of	Sales	Average sales	No. of	Sales	Average sales				
	consumers	(MWh)	price <sup>1</sup> per KWh (Rupees)	consumers	(MWh)	price <sup>1</sup> per KWh (Rupees)				
Domestic	358,359	680,122	5.12	364,474	710,721	5.16				
Commercial	36,151	704,201	6.91	36,956	747,958	6.92				
Industrial	7,143	646,050	3.29	7,008	677,616	3.29				
of which: irrigation	502	20,471	2.58	517	23,837	2.65				
Other	403	38,837	7.16	429	37,611	7.17				
Total	402,056	2,069,210	5.20	408,867	2,173,906	5.22				

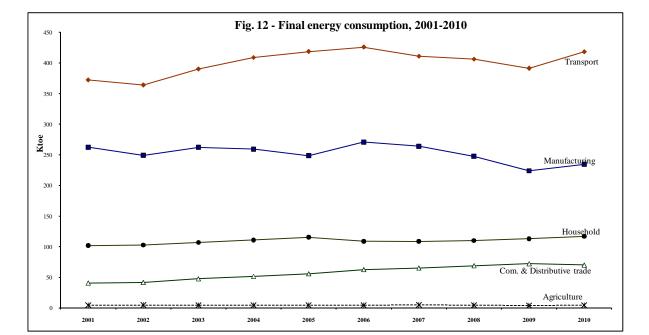
<sup>1</sup> Excluding VAT & meter rent

Source: Central Electricity Board (CEB)



			2009			2010					
	Sector	Tonne (except Electricity in GWh)	Ktoe	%	Tonne (except Electricity in GWh)	Ktoe	%				
1.	Manufacturing		224.1	27.7		234.5	27.7				
	1.1 excluding bagasse		187.8	23.2		192.0	22.6				
	Fuel oil	46,824	45.0	5.6	45,009	43.2	5.1				
	Diesel oil	45,882	46.3	5.7	46,543	47.0	5.5				
	LPG	5,007	5.4	0.7	5,122	5.5	0.6				
	Coal	21,572	13.4	1.7	24,786	15.4	1.8				
	Fuel wood <sup>1</sup>	1,426	0.5	0.1	1,426	0.5	0.1				
	Electricity ( <i>GWh</i> )	897.2	77.2	9.5	934.3	80.4	9.5				
	1.2 bagasse	226,759	36.3	4.5	265,988	42.6	5.0				
2.	Transport		391.3	48.4		418.2	49.3				
	Gasolene	111,667	120.6	14.9	118,226	127.7	15.1				
	LPG	4,587	5.0	0.6	4,641	5.0	0.6				
	Diesel oil	153,707	155.2	19.2	160,591	162.2	19.1				
	Aviation Fuel	106,246	110.5	13.7	118,553	123.3	14.5				
4.	Commercial and Distributive Trade		72.3	8.9		70.2	8.3				
	LPG	10,575	11.4	1.4	5,122	5.5	0.7				
	Charcoal <sup>1</sup>	437	0.3	0.0	453	0.3	0.0				
	Electricity (GWh)	704.2	60.6	7.5	748.0	64.3	7.6				
3.	Household		113.1	14.0		116.9	13.8				
	Kerosene	1,476	1.5	0.2	1,731	1.8	0.2				
	LPG	43,237	46.7	5.8	44,059	47.6	5.6				
	Fuelwood <sup>1</sup>	16,619	6.3	0.8	16,597	6.3	0.7				
	Charcoal <sup>1</sup>	119	0.1	0.0	119	0.1	0.0				
	Electricity (GWh)	680.1	58.5	7.2	710.7	61.1	7.2				
5.	Agriculture		4.1	0.5		4.4	0.5				
	Diesel oil <sup>1</sup>	2,286	2.3	0.3	2,325	2.4	0.3				
	Electricity (GWh)	20.5	1.8	0.2	23.8	2.1	0.2				
6.	Other (n.e.s)		3.7	0.5		3.6	0.4				
	TOTAL		808.6	100.0		847.8	100.0				

# Table 11 - Final energy consumption by sector and type of fuel, 2009-2010



## Table 12 - Mean rainfall 2009-2010

																-	-							Millimet	res	
	Long	200	)9	20	010	Long	200	9	201	10	Long	20	09	201	0	Long	20	09	201	0	Long	20	09	20	10	
Period	Term Mean (1971- 2000)	Mean	% of Long Term Mean	Mean	% of Long Term Mean	Term Mean (1971- 2000)	Mean	% of Long Term Mean	Mean	% of Long Term Mean	Term Mean (1971- 2000)	Mean	% of Long Term Mean	Mean	% of Long Term Mean	Term Mean (1971- 2000)	Mean	% of Long Term Mean	% Mean	6 of Long Term Mean	Term Mean (1971- 2000)	Mean	% of Long Term Mean	Mean	% of Long Term Mean	
													Island	of Mauritiu	IS											
			North	l				South					East	t		West						Center				
Year	1,341	1,696	126	1,061	79	2,557	2,838	111	2,400	94	2,065	3141	152	2757	133	918	1,236	135	610	69	2,790	2,991	107	2,154	77	
Jan	186	192	104	216	116	290	274	94	422	146	260	196	75	524	202	167	229	137	115	69	354	384	108	314	89	
Feb	245	239	97	146	60	366	310	85	461	126	336	366	109	624	186	219	122	56	221	101	464	355	76	435	94	
Mar	161	251	156	186	116	325	368	113	389	120	243	544	224	417	172	112	153	136	124	111	337	441	131	238	71	
Apr	165	136	82	75	45	280	347	124	248	89	245	315	129	173	71	97	110	114	36	37	293	250	85	144	49	
May	107	79	74	79	74	212	257	121	139	66	180	256	142	206	114	56	49	88	19	34	210	241	115	155	74	
Jun	72	58	81	39	54	157	166	106	75	48	123	114	93	73	59	33	23	68	6	18	163	108	67	97	60	
Jul	73	78	107	82	112	180	221	123	208	116	116	203	175	210	181	25	24	96	29	116	181	218	120	256	141	
Aug	68	95	140	105	154	180	149	83	175	97	114	214	188	229	201	26	25	96	29	112	192	164	85	234	122	
Sep	44	51	116	29	66	112	86	77	80	71	79	120	152	77	97	20	16	79	12	60	126	89	70	97	77	
Oct	41	148	360	20	49	96	270	281	80	83	74	326	440	45	61	18	199	1,106	1	6	102	298	292	70	69	
Nov	47	133	282	72	153	110	181	165	105	95	86	234	272	160	186	31	178	574	11	35	105	202	192	95	90	
Dec	132	236	179	12	9	249	208	84	18	7	209	253	121	19	9	114	108	95	7	6	263	241	92	19	7	
		Island	of Ma	uritius	s		Island	of Roc	lrigues		3500	1			Fig. 13	3 - Mean	annual	rainfal	, 2009 &	2010		■ Mean(1971-20				
Year	2,006	2,397	119	1,806	90	1,105	948	86	1,142	103	3000				1616						8		■ M ■ 20		-2000)	
Jan	261	259	99	318	122	150	69	46	208	139	2500			8							8		20	10		
Feb	336	281	84	374	111	185	130	70	169	91							88				<u> </u>		2			
Mar	242	352	145	271	112	131	103	79	69	53	<b>E</b> <sup>2000</sup>	-				8	88					- <b>66</b>				
Apr	221	233	103	138	61	117	82	70	214	183	= 1500		828	202			88									
May	159	178	112	120	75	78	122	156	144	185	1500	28				8	88		8Y.8Y							
Jun	115	96	84	60	52	78	87	112	46	59	1000	-		a 🛛			88	1.2.2.1								
Jul	120	152	126	160	133	81	106	131	76	94							88									
Aug	122	130	107	156	128	59	75	127	67	114	500			8												
Sep	81	73	90	60	74	44	65	149	16	36	0			8 j 🔮		1 🕺										
Oct	70	247	353	45	64	41	32	79	46	112			North		South		East		West	Cer	ntre	Whole I	sland			
Nov	80	184	230	89	111	70	32	46	50	71				,		I	Island	of Mauritius			I			Island of Ro	drigues	
Dec	199	212	107	15	8	71	45	64	37	52		I					isidilu	o. maariila	,				I	John of Ru	angues	

Source: Mauritius Meteorological Services

16

17

 Table 13 - Percentage water level by month and reservoir - 2009, 2010

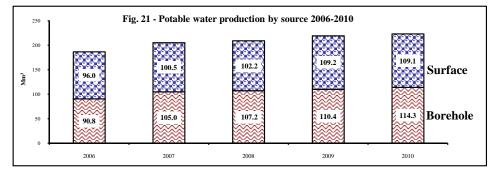
Iuon		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
		Jan	reb	Wiai					Aug	Зер	ou	1409	Det	-
Normal	Mare aux Vacoas           Normal*         60         65         80         83         81         79         80         78         72         63													Fig.14 - Mare aux Vacoas (25.89 Mm <sup>3</sup> ), 2009-2010
		60	65	80	83	83	81	79	80	78	72	63	58	
2009	Mean	67	69	76	82	88	89	85	90	84	75	78	72	25
	Min	64	65	70	78	84	86	83	88	79	70	76	66	
	Max	69	71	81	86	93	92	88	91	89	79	80	76	15 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -
2010	Mean	72	88	96	94	86	78	75	79	80	72	60	48	$\frac{1}{2}$ 10 - $\frac{1}{2}$ Mormal $\frac{1}{2}$ Mean'09
	Min	69	76	95	91	83	74	74	78	75	67	55	41	5 - Mean'09 → Mean'10
	Max	77	98	97	96	91	83	77	82	83	76	67	55	Jan Feb Mar Anr May Jun Jul Aug Sen Oct Nov Dec
		r		r	1	a Nico				r				6 Fig.15 - La Nicoliere (5.26 Mm <sup>3</sup> ), 2009-2010
Normal	*	63	75	91	92	95	94	93	94	89	69	46	39	X X X X X
2009	Mean	98	100	100	100	100	97	74	99	94	73	98	70	
	Min	89	99	100	100	98	92	64	89	77	64	89	59	
	Max	100	100	100	100	100	100	91	100	100	96	100	93	The second secon
2010	Mean	91	97	94	90	86	77	84	82	81	70	78	70	S
-010	Min	70	86	87	84	78	68	73	68	68	67	70	53	Mean'10
														0 +
	Max	100	100	99	93	93	90	100	100	97	73	87	85	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
		r		r		on du		rn		<b></b> .		, <b></b> ,		Fig.16 - Piton du Milieu (2.99 Mm <sup>3</sup> ), 2009-2010
Normal	*	64	72	88	89	91	86	83	83	81	73	60	57	
2009	Mean	94	100	99	99	98	94	85	97	93	79	90	88	
	Min	76	99	99	99	97	89	81	90	85	73	85	81	
	Max	100	100	100	100	100	98	89	99	98	85	94	93	
2010	Mean	95	100	99	96	90	82	74	85		82	62	45	2
2010														₩ 1 • Mean'10
	Min	89	98	99	93	87	75	72	78	90	72	54	37	0 4
	Max	100	100	100	99	94	88	77	97	99	90	71	54	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
					<u>ا</u> ا	La Fe	rme				,			Fig.17 - La Ferme (11.52 Mm <sup>3</sup> ), 2009-2010
Normal	*	23	30	64	75	77	69	58	49	37	25	13	10	
2009	Mean	94	100	100	100	100	99	93	95	96	86	99	99	
	Min	81	100	100	100	100	98	89	90	93	81	90	94	(unity) · · · · · · · · · · · · · · · · · · ·
	Max	100	100	100	100	100	100	97	99	99	92	100	100	
2010														
2010	Mean	100	100	100	96	87	75	67	72	83	75	62	50	Mean 09
	Min	98	100	99	93	81	69	66	68	81	68	57	43	0 Mean'10
	Max	100	100	100	100	92	81	69	81	84	81	68	56	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
					Ma	are Lo	ongue							Fig.18 - Mare Longue (6.28 Mm <sup>3</sup> ), 2009-2010
Normal	*	32	48	73	75	77	73	65	63	58	46	28	20	
2009	Mean	78	84	91	97	98	94	86	89	83	74	86	85	
	Min	77	77	86		96	89	84	88		69	82	74	
	Max	79	88	97	100	99	99	89	91	87	81	89	92	
2010	Mean	83	97	100	95	73	55	55	76	86	71	53	36	-X Mean'09
	Min	79	91	99	86	64	51	50	66	77	63	45	29	0 Mean'10
	Max	90	100	100	100	85	63	65	86	91	76	62	44	
	1	I	1	1	1	5	8	8	1	1				Fig.19 - All reservoirs(exc. Midlands Dam) (51.9 Mm <sup>3</sup> ),
		A	ll res	ervoi	rs ( e	xclud	ing N	fidlaı	nds D	am)				2009-2010
NI		r				r				r	50	10	41	50
Norm	al	49	56	77	82	83	79	75	73	68	58	46	41	
2000	М.	70	00	07	A1			01		00		07	00	40
2009	Mean	79	83	87	91	94	93	86	92	88	77	87	80	
3010	M.	[		[		[								20 Mean'10
2010	Mean	83	94	97	94	85	75	71	78	82	73	62	49	
						dland								Fig.20 - Midlands Dam (25.5 Mm <sup>3</sup> ), 2009-2010
2009	Mean	91	100	100	100	100	100	100	100	100	94	95	98	-
	Min	81	99			100		 99		100	89	92	95	
		-		100	100		100		100					<u> </u>
	Max	98	100	100	100	100	100	100	100	100	100	97	100	15
2010	Mean	100	100	100	100	100	98	91	96	99	88	67	49	in the interior
	Min	100	100	100	100	100	95	88	91	96	78	57	41	5 - Mean'10
* **	Max	100	100	100	100	100	100	94	100	100	96	78	57	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
# Norma	al is the lo	na tama	moonf	or 1000	1000									

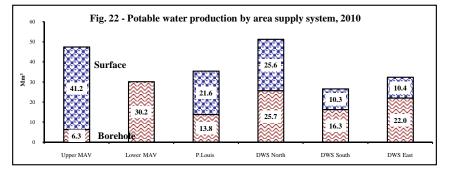
\* Normal is the long term mean for 1990-1999 Source: Water Resources Unit

	Mare Aux Vacoas (Upper)			Mare Aux Vacoas (Lower)			Port -Louis			District	t water su North	ipply -	District	t water si South	upply -	District water supply - East				Tot	tion		
Month	Surface	Borehole	Total	Surface	(Lower) Borehole	Total	Surface	Borehole	Total	Surface	Borehole	Total	Surface	Borehole	Total	Surface	Borehole	Total	Surface	Borehole	Total		
	Burnee	Dorenoie	Total	Burlace	Dorenoie	Total	Surface	Dorenoie	Total		cubic metro		Burrace	Dorenoie	Total	Surface	Dorenoic	Total	Burrace	Borenoie	Total	Surface	Borehole
2009	42.6	6.3	48.9	-	30.5	30.5	21.7	12.6	34.3	25.0	25.7	50.7	9.7	16.0	25.7	10.1	19.3	29.4	109.2	110.4	219.6	49.7%	50.3%
Jan	3.8	0.6	4.4	-	2.7	2.7	1.7	1.1	2.8	2.1	2.1	4.2	0.8	1.4	2.2	0.8	1.5	2.3	9.2	9.4	18.6	49.5%	50.5%
Feb	3.4	0.5	3.9	-	2.3	2.3	1.7	1.0	2.7	1.9	1.9	3.8	0.8	1.2	2.0	0.8	1.4	2.2	8.6	8.3	16.9	50.9%	49.1%
Mar	3.8	0.6	4.4	-	2.6	2.6	1.8	1.1	2.9	2.1	2.2	4.3	0.8	1.4	2.2	0.8	1.6	2.4	9.3	9.5	18.8	49.5%	50.5%
Apr	3.7	0.5	4.2	-	2.5	2.5	1.9	1.1	3.0	2.1	2.2	4.3	0.8	1.3	2.1	0.8	1.5	2.3	9.3	9.1	18.4	50.5%	49.5%
May	3.5	0.6	4.1	-	2.6	2.6	1.9	1.0	2.9	2.2	2.3	4.5	0.9	1.4	2.3	0.8	1.6	2.4	9.4	9.5	18.9	49.7%	50.3%
Jun	3.4	0.5	3.9	-	2.6	2.6	1.7	0.9	2.6	2.1	2.2	4.3	0.8	1.3	2.1	0.8	1.6	2.4	8.8	9.1	17.9	49.2%	50.8%
Jul	3.6	0.5	4.1	-	2.5	2.5	1.8	1.0	2.8	2.1	2.2	4.3	0.8	1.4	2.2	0.8	1.6	2.4	9.1	9.2	18.3	49.7%	50.3%
Aug	3.6	0.5	4.1	-	2.6	2.6	1.9	1.0	2.9	2.1	2.3	4.4	0.8	1.4	2.2	0.9	1.7	2.6	9.3	9.5	18.8	49.5%	50.5%
Sep	3.5	0.5	4.0	-	2.5	2.5	1.8	0.9	2.7	2.0	2.1	4.1	0.8	1.2	2.0	0.9	1.7	2.6	9.0	8.9	17.9	50.3%	49.7%
Oct	3.4	0.5	3.9	-	2.5	2.5	1.9	1.0	2.9	2.1	2.1	4.2	0.8	1.3	2.1	0.9	1.7	2.6	9.1	9.1	18.2	50.0%	50.0%
Nov	3.3	0.5	3.8	-	2.5	2.5	1.8	1.3	3.1	2.0	2.0	4.0	0.8	1.3	2.1	0.9	1.7	2.6	8.8	9.3	18.1	48.6%	51.4%
Dec	3.6	0.5	4.1	-	2.6	2.6	1.8	1.2	3.0	2.2	2.1	4.3	0.8	1.4	2.2	0.9	1.7	2.6	9.3	9.5	18.8	49.5%	50.5%
2010	41.2	6.3	47.5	-	30.2	30.2	21.6	13.8	35.4	25.6	25.7	51.3	10.3	16.3	26.6	10.4	22.0	32.4	109.1	114.3	223.4	48.8%	51.2%
Jan	3.6	0.5	4.1	-	2.7	2.7	1.8	1.2	3.0	2.2	2.1	4.3	0.8	1.4	2.2	0.9	1.9	2.8	9.3	9.8	19.1	48.7%	51.3%
Feb	3.2	0.5	3.7	-	2.0	2.0	1.5	1.1	2.6	2.0	1.9	3.9	0.7	1.2	1.9	0.8	1.7	2.5	8.2	8.4	16.6	49.4%	50.6%
Mar	3.7	0.6	4.3	-	2.6	2.6	1.8	1.2	3.0	2.1	2.2	4.3	0.9	1.4	2.3	0.9	1.9	2.8	9.4	9.9	19.3	48.7%	51.3%
Apr	3.6	0.5	4.1	-	2.5	2.5	1.9	1.2	3.1	2.0	2.2	4.2	0.9	1.3	2.2	0.8	1.8	2.6	9.2	9.5	18.7	49.2%	50.8%
May	3.2	0.5	3.7	-	2.6	2.6	1.8	1.6	3.4	1.9	2.3	4.2	0.9	1.4	2.3	0.9	1.9	2.8	8.7	10.3	19.0	45.8%	54.2%
Jun	3.7	0.6	4.3	-	2.6	2.6	1.8	1.1	2.9	2.0	2.2	4.2	0.9	1.3	2.2	0.8	1.8	2.6	9.2	9.6	18.8	48.9%	51.1%
Jul	3.3	0.6	3.9	-	2.5	2.5	1.9	1.1	3.0	2.0	2.2	4.2	0.9	1.4	2.3	0.9	1.9	2.8	9.0	9.7	18.7	48.1%	51.9%
Aug	3.3	0.5	3.8	-	2.6	2.6	1.9	1.1	3.0	2.3	2.3	4.6	0.9	1.4	2.3	0.9	1.9	2.8	9.3	9.8	19.1	48.7%	51.3%
Sep	3.3	0.5	3.8	-	2.5	2.5	1.8	1.0	2.8	2.2	2.1	4.3	0.9	1.4	2.3	0.9	1.8	2.7	9.1	9.3	18.4	49.5%	50.5%
Oct	3.5	0.5	4.0	-	2.5	2.5	1.9	1.1	3.0	2.3	2.1	4.4	0.9	1.4	2.3	0.9	1.9	2.8	9.5	9.5	19.0	50.0%	50.0%
Nov	3.3	0.5	3.8	-	2.5	2.5	1.8	1.1	2.9	2.3	2.0	4.3	0.9	1.3	2.2	0.9	1.7	2.6	9.2	9.1	18.3	50.3%	49.7%
Dec	3.5	0.5	4.0	-	2.6	2.6	1.7	1.0	2.7	2.3	2.1	4.4	0.7	1.4	2.1	0.8	1.8	2.6	9.0	9.4	18.4	48.9%	51.1%

Table 14 - Average monthly potable water production (Mm<sup>3</sup>), 2009-2010 (Island of Mauritius )

Source: Central Water Authority

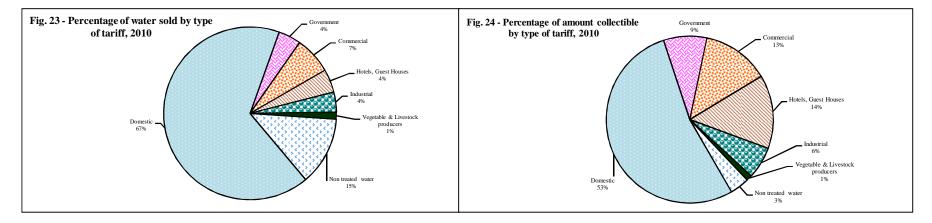




				2009				2010							
Type of tariff	Subscril	oers	Volume s	old (m³)	Amount col	lectible	Average consumption	Subscr	ibers	Volume sold (m <sup>3</sup> )		Amount col	lectible	Average consumption	
	No.	%	Mm <sup>3</sup>	%	Rs million	%	(m <sup>3</sup> )	No.	%	Mm <sup>3</sup>	%	Rs million	%	(m <sup>3</sup> )	
Domestic	292,294	93.0	75.1	68.1	536.5	53.7	257	299,300	93.0	76.5	66.5	550.6	53.2	256	
Government	4,184	1.3	5.0	4.5	88.7	8.9	1,184	4,224	1.3	4.9	4.2	86.8	8.4	1,157	
Acquired / concessionary prises	43	0.0	0.0	0.0	0.1	0.0	337	39	0.0	0.0	0.0	0.1	0.0	370	
Commercial	12,822	4.1	7.5	6.8	127.9	12.8	588	13,308	4.1	8.0	6.9	134.9	13.0	599	
Hotels, Guest Houses	280	0.1	4.7	4.2	135.5	13.6	16,613	297	0.1	5.1	4.4	147.4	14.2	17,026	
Industrial	697	0.2	4.1	3.7	60.9	6.1	5,818	661	0.2	4.3	3.7	64.2	6.2	6,483	
Ship	1	0.0	0.1	0.0	1.5	0.1	52,454	1	0.0	0.0	0.0	1.4	0.1	48,377	
Sub total	310,321	98.8	96.4	87.4	951.1	95.2	77,251	317,830	98.7	98.8	85.9	985.4	95.1	311	
Vegetable & Livestock producers	3,611	1.1	1.5	1.3	11.7	1.2	403	3,774	1.2	1.5	1.3	12.1	1.2	407	
Total potable water	313,932	99.9	97.8	88.7	962.8	96.4	77,654	321,604	99.9	100.3	87.2	997.4	96.3	312	
Total non-treated water (Agriculture/Industry)	294	0.1	12.4	11.3	36.0	3.6	42,240	296	0.1	14.7	12.8	38.3	3.7	49,587	
Grand Total	314,226	100.0	110.3	100.0	998.8	100.0	351	321,900	100.0	115.0	100.0	1035.8	100.0	357	

Table 15 - Water sales by type of tariff of subscriber, 2009-2010 (Island of Mauritius)

Source: Central Water Authority



19

Indicators	Unit	2006	2007	2008	2009	2010
Mid-year population, Republic of Mauritius	thousand	1,253	1,260	1,269	1,275	1,281
GDP in1990 rupees	Rs.Million	81,582	86,375	91,140	93,903	97,925
GDP index (1990 = 100)		205.9	218.0	230.0	237.0	247.1
Total primary energy requirement	ktoe	1,376.8	1,381.8	1,404.4	1,346.9	1,424.5
Imported	ktoe	1,122.1	1,136.0	1,140.9	1,110.6	1,182.9
Local	ktoe	254.6	245.8	263.5	236.3	241.6
Annual increase	%	+6.5	+0.4	+1.6	-4.1	+5.8
Total primary energy requirement index (1990 = 100)		188.4	189.1	192.2	184.3	194.9
Import dependency	%	81.5	82.2	81.24	82.45	83.04
Energy intensity	toe per Rs.100,000 GDP	1.69	1.60	1.54	1.43	1.45
Per capita primary energy requirement	toe	1.10	1.10	1.11	1.06	1.11
Total final energy consumption	ktoe	876.3	857.5	841.2	808.6	847.9
Per capita final energy consumption	toe	0.70	0.68	0.66	0.63	0.66
Total electricity generated	GWh	2,350	2,465	2,557	2,577	2,689
Total electricity sold	GWh	1,880	1,975	2,054	2,069	2,174
Per capita consumption of electricity sold	kWh	1,501	1,567	1,619	1,623	1,697
Mean annual rainfall, Island of Mauritius	Millimetres	1,914	1,954	2,382	2,397	1,806
Mean annual rainfall, Island of Rodrigues <sup>2</sup>	Millimetres	1,189	1,226	1,055	949	1,142
Potable water produced <sup>3</sup>	Mm <sup>3</sup>	187	205	209	220	223
Potable water consumed <sup>3</sup>	Mm <sup>3</sup>	94	95	94	98	100
Potable water consumed per capita per day <sup>3</sup>	litres	212	213	209	217	221

Table 16 - Main Indicators<sup>1</sup>, 2006 - 2010

1 Revised

2 Refers to Pte Canon only

3 Refers to Island of Mauritius only