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DIGEST OF ENERGY AND WATER STATISTICS - 2005

FOREWORD

This is the eighth publication of the Central Statistics Office on energy and water statistics. It presents detailed data on energy for the years 1996 to 2005, while those on water cover the period 2001 to 2005. All data refer to the Republic of Mauritius, unless otherwise specified. These may be subject to revision in subsequent issues of the digest.

It is hoped that the statistics contained in this publication will prove useful to a wide range of users including planners, policy makers and research workers.

This digest has been prepared with the collaboration of the Ministry of Public Utilities, the Central Electricity Board, the Central Water Authority and several other public and private organisations. The co-operation and assistance of all these organisations are gratefully acknowledged.

This publication, together with other publications of the Central Statistics Office, is available on our website <http://statsmauritius.gov.mu>.

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Symbols & abbreviations

	Nil
...	Not available
000	Thousand
m ³	Cubic metres
max	Maximum
min	Minimum
mm	Millimetres
Mm ³	Million cubic metres
mn	Million
toe	Tonne of oil equivalent
ktoe	Thousand tonnes of oil equivalent
c.i.f	Cost, insurance and freight
LPG	Liquefied Petroleum Gas
DPK	Dual Purpose Kerosene
MW	Megawatt (1,000 kW)
kWh	Kilowatt hour
GWh	Gigawatt hour (million kWh)
CEB	Central Electricity Board
IPP	Independent Power Producers
GDP	Gross Domestic Product
Rod.	Island of Rodrigues



Glossary

Energy sector

Bagasse	A cellulosic residue left after sugar is extracted from sugar cane. It is mostly used as a fuel within the sugar milling factories.
Bunkers	Refer to the amount of fuels delivered to ocean-going ships or aircraft of all flags engaged in international traffic. Deliveries to ships engaged in transport in inland and coastal waters, or to aircraft engaged in domestic flights, are not included.
Calorific values	The energy content of a fuel is equivalent to the heat released on complete combustion of the fuel.
Capacity	The maximum power available from a power station at a point in time: <ul style="list-style-type: none"> - <i>Installed capacity</i>: The nameplate capacity of the generator set. - <i>Plant capacity</i>: The net capacity measured at the terminals of the stations, i.e, after deduction of the power absorbed by the auxiliary installations and the losses in the station transformers. - - <i>Effective capacity</i>: It is the plant capacity less any amount of derated capacity from the install capacity.
Charcoal	Comprises the solid residue obtained by the destructive distillation of wood in the absence of air.
Coal	Fossil fuel that has a high degree of coalification, with a gross calorific value over 24MJ/kg (5700 Kcal/kg) on an ash-free but moist basis.
Conversion factors	Factors used to convert quantities from original physical units into a common accounting unit for the purpose of aggregating diverse energy sources. The 'tonne of oil equivalent' (toe) has been adopted as the accounting unit.
Diesel Oil	Consists primarily of medium oil distilling between 180 ⁰ C and 380 ⁰ C.
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.
Energy Balance	Shows in a consistent accounting framework, the production, transformation and final consumption of all forms of energy for a given geographical area and a given period of time, with quantities expressed in terms of a single accounting unit for purposes of comparison and aggregation. The energy balance thus presents an overview of the energy produced and consumed in a system, matching input and output for a specific time period, usually a year.

Energy unit	Express fuel and energy in energy content. The International System of Units (SI unit) of energy is the Joule. Historically the 'tonne of coal equivalent' was used, but with ascendance of oil, this has been largely replaced by the 'tonne of oil equivalent' (toe), defined as 41.868 gigajoules.
Final Energy Consumption	Energy consumption by final user- i.e. energy which is not being used for transformation into other forms of energy. The consumption by sector is presented as follows: <p style="margin-left: 40px;">Agriculture: Energy used for irrigation and by other agricultural equipments;</p> <p style="margin-left: 40px;">Commercial and distributive trade: Energy consumed by the business and commercial sector;</p> <p style="margin-left: 40px;">Household: Consumption of energy by households;</p> <p style="margin-left: 40px;">Manufacturing: Consumption in industry and construction; and</p> <p style="margin-left: 40px;">Transport: Includes consumption by land vehicles, ships and local aircrafts.</p>
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 the energy stored up inside them.
Fuel wood	The term 'fuel wood' embraces all forms of woody material.
Fuel Oils	The heavy oils from the refining process and used essentially as fuel in power stations.
Gasolene	Comprises a mixture of relatively volatile hydrocarbons with or without small quantities of activities, which have been blended to form a fuel suitable for use in spark-ignition internal combustion engines.
Gross Domestic Product (GDP)	It represents 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.
Gigawatt hour (GWh)	Unit of electrical energy, equal to 0.0036 terajoules (TJ).
Hydro	Energy derived from the potential and kinetic energy content of water.
Imports	Refer to amount of fuels obtained from other countries.
Indigenous production	Comprises hydro electricity, fuel wood, bagasse and electricity from wind generation.
IPP (Independent Power Producers)	Undertakings which, in addition to their main activities, themselves produce (individually or in combination) electric energy intended, in whole or in part, to meet their own needs and for sale to the CEB.
Jet fuel Kerosene-type	Refers to medium oils meeting the required properties for use in jet engines and aircraft-turbine engines.

Kerosene (excl. Jet fuel type)	A medium oil distilling between 150 ⁰ C and 300 ⁰ C and which is used in sectors other than aircraft transport.
Kilowatt hour (kWh)	It is a precise measure of heat and work. 1kWh=3.6 x 10 ⁶ joules
Liquefied petroleum Gas (LPG)	Gas usually propane or butane, derived from oil and put under pressure so that it is in liquid form. Often used to power cooking stoves or heaters and to fuel some types of vehicle.
Losses (Distribution loss)	Comprise losses in transmission and distribution of electric energy and losses in transformers, which are <i>not</i> considered as integral parts of the power stations.
Megawatt (MW)	A unit of electrical power, equal to 10 ⁶ watts, i.e 1000kW
Own use (Station use and loss)	Included are consumption by station auxiliaries and losses in transformers, which are considered as integral parts of the power stations.
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 forms of energy. By convention, sources of energy that occur naturally such as coal, natural gas, fuelwood are termed primary energy.
Primary energy requirement	It is the sum of imported fuels and locally available fuels less re-exports to bunkers after adjusting for stock changes.
Production	Comprises gross production, i.e., the amount of electric energy produced, including that consumed by station auxiliaries and any losses in transformers that are considered integral parts of the power station.
Secondary energy	Secondary energy designates energy from all sources of energy that results from transformation of primary sources. e.g charcoal from fuelwood.
Statistical differences	This is the difference between calculated and observed inland consumption.
Solar	Energy derived from solar radiation directly by photovoltaic effect, or indirectly by thermal transformation.
Stock change/Statistical error	This is the difference between calculated and observed inland consumption.
Thermal plants	Comprises of conventional thermal plants of all types, whether or not equipped for the combined generation of heat and electric energy. They include steam-operated generating plants and plants using internal combustion engines or gas turbines.

Thermal sources of electricity	These include coal, oil and bagasse.
Transformation	Those fuels used directly in producing other fuels.
Watt (W)	The conventional unit to measure a rate of flow of energy. One watt amounts to 1 Joule per second.
Wind energy	Energy derived from the action of the wind.

Water

Water Balance	The water balance is based on long term records of annual average rainfall and indicates how freshwater resources are distributed.
Evapotranspiration	Combined loss of water by evaporation from the soil or surface.
Surface runoff	The flow of surface water, from rainfall, which flows directly to streams, rivers, lakes and the sea.
Groundwater recharge	Process by which water is added from outside to fresh water found beneath the earth surface.

* * * * *

Energy conversion factors

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

Energy source	Tonne	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
Fuelwood	1	0.38
Charcoal	1	0.74
	GWh	toe
Hydro/Wind	1	86
Electricity	1	86

* 1 toe = 41.84 gigajoule (net calorific value)

* * * * *

ENERGY AND WATER STATISTICS, 2005 – An overview

Introduction

This issue of the Digest of Energy and Water Statistics, 2005 contains energy statistics covering the years 1996 to 2005, and water statistics for the years 2001 to 2005. These statistics have been compiled in close collaboration with the Ministry of Public Utilities, Central Electricity Board, 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.

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

2. Energy

2.1 The energy balance

The energy balance (Tables 1.1 & 1.2) shows the supply and final uses of electricity and the different types of fuel. Total primary energy requirement is obtained as the sum of the indigenous production (hydro, fuelwood and bagasse) and imports 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 categorised into five sectors, namely manufacturing, transport, commercial and distributive trade, residential and agriculture.

In order to compare the energy content of the different fuels, a common accounting unit, namely the 'tonne of oil equivalent' (toe) is used. The conversion factors used, are given on page 12.

2.2 Main energy indicators

The total primary energy requirement index, expressed with 1990 as reference year (1990 = 100), increased by 5.2 points or 3.0% from 171.8 in 2004 to 177.0 in 2005. During the same period per capita primary energy requirement increased by 2% from 1.02 toe to 1.04 toe (Table 1.3).

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. A higher ratio indicates a less efficient use of energy. As shown in Table 1.3, energy intensity, which stood at 1.59 in 2004 rose to 1.62 in 2005.

The annual consumption of electricity per capita went up by 3.4% from 1,382 kWh in 2004 to 1,429 kWh in 2005 (Table 1.3).

2.3 Total primary energy requirement

The total primary energy requirement of the country in the year 2005 amounted to some 1,293 ktoe, of which 1,030 ktoe (79.7%) were met from imported fuels while the remaining 263 ktoe (20.3%) were from indigenous sources. Imports consisted of 805 ktoe of petroleum products and 226 ktoe of coal while the indigenous production was mainly derived from bagasse (93.3%), hydro electricity (3.8%) and fuelwood (2.9%) (Table 2.1).

2.3.1 Local production

Total energy production from local sources decreased by 4.8% from 276 ktoe in 2004 to 263 ktoe in 2005. Production of hydroelectricity went down from 10.6 ktoe to 9.9 ktoe while that of bagasse decreased from 258 ktoe to 245 ktoe.

2.3.2 Imports of energy sources

Imports of energy sources are shown in Table 2.2. Some 1,304 ktoe of petroleum products and coal were imported in 2005 compared to 1,226 ktoe in 2004, representing an increase of 6.4%. Imports of petroleum products increased from 1,020 ktoe to 1,069 ktoe (+4.8%) and coal from 206 ktoe to 235 ktoe (+14.1%). Due to the rise in the prices of petroleum products (40% - 52%) and coal (29%) during the year 2005, the import bill was 54% higher in that year, i.e Rs 14,922 million against Rs 9,685 million in 2004. The price per tonne of fuel oil rose from Rs 5,615 to Rs 8,315, while that of the other petroleum products shifted from the range of Rs10,000-Rs12,000 to be in that of Rs14,000-Rs17,000.

2.3.3 Re-exports and bunkering

Of the 1,304 ktoe of imported energy sources, 290 ktoe (22.2%) were supplied to foreign vessels and aircraft in 2005. Re-exports consisted of 137 ktoe of diesel oil, 101 ktoe of aviation fuel and 53 ktoe of fuel oil (Table 2.6).

2.4 Electricity

2.4.1 Electricity generation

In 2005, some 2,272 GWh (195 ktoe) of electricity was generated, as compared to 2,165 GWh (186 ktoe) in 2004, representing an increase of 4.9%. The Central Electricity Board (CEB) generated 53.2% and Independent Power Producers, 46.8%. Thermal energy represented 94.9% and hydro and wind, the remaining 5.1%. The peak demand in 2005 reached 353.1 MW (Tables 3.1-3.6).

2.4.2 Fuel input for electricity generation

Table 3.7 shows the different types of fuel used for electricity generation. Fuel input increased from 572 ktoe in 2004 to 609 ktoe in 2005, representing an increase of 6.5%. The major components of the fuel input were coal (34.7%), fuel oil (34.2%) and bagasse, (27.7%)

2.4.3 Electricity sales

Electricity sales increased from 1,704 GWh in 2004 to 1,777 GWh in 2005, showing an increase of 4.2%. The average sales price of electricity increased from Rs 3.14 per kWh in 2004 to Rs 3.23 per kWh in 2005. (Table 4.7)

2.5 Final energy consumption

Final energy consumption increased by 1.0% from 838 ktoe in 2004 to 846 ktoe in 2005. "Transport" and "Manufacturing" were the two largest energy-consuming sectors accounting for 49.5% and 29.4% respectively. They were followed by "Households" (13.6%), "Commercial and Distributive Trade" (6.6%) and "Agriculture" (0.6%) (Table 4.2). The details on the different types and amount of fuel consumed by each sector are given in Tables 4.3 and 4.4.

2.5.1 Manufacturing

Energy used for manufacturing process decreased by 3.9% from 259 ktoe in 2004 to 249 ktoe in 2005. The consumption of coal and petroleum products, except LPG, went down. Even consumption of bagasse was reduced from 83 ktoe to 76 ktoe in 2005. However, the consumption of electricity went up slightly, from 66.1 ktoe to 66.9 ktoe.

2.5.2 Transport

In 2005, some 419 ktoe of energy were used for transportation, representing an increase of 2.4% over preceding year. Gasolene consumption increased from 98 ktoe to 100 ktoe (+2.0%) and that of diesel oil from 166 ktoe to 168 ktoe (+1.2%). Consumption of aviation fuel for local aircraft rose by 0.7%, from 142 ktoe to 143 ktoe. The use of LPG in the transport sector increased from 2.9 ktoe in 2004 to 7.3 ktoe in 2005, showing almost a threefold increase.

2.5.3 Households

Energy consumed by households increased by 3.6% to 116 ktoe in 2005. The two main sources of energy for households were electricity and LPG, representing 52.3% and 46.7% of total energy consumption by households. Electricity consumption increased by 5.7% whilst that of LPG by 0.9%.

2.5.4 Commercial and Distributive Trade

Total energy consumption by the “Commercial and Distributive Trade” sector went up by 8.1% in 2004 to reach 56 ktoe. Electricity was the main source of energy and its consumption increased from 44 ktoe to 48 ktoe in 2005 (+7.7%).

2.5.5 Agriculture

Consumption of energy in the agricultural sector went up from 4.4 ktoe in 2004 to 4.7 ktoe in 2005 (+6.8%), mainly as a result of an increase of 0.2 ktoe in electricity consumption for irrigation.

3 Water

3.1 Water balance

The estimated water balance for the Island of Mauritius is shown in Table 6.1. The water balance indicates how fresh water resources are distributed. In 2005, the Island of Mauritius registered 4,423 million cubic metres (Mm³) of rainfall. Some 1,327 Mm³ of water was lost through evapotranspiration, while surface run-off and ground water recharge were 2,654 Mm³ and 442 Mm³ respectively.

3.2 Rainfall

During the year 2005 the mean amount of rainfall recorded around the island of Mauritius was 2,372 millimetres, representing a 4.5% increase compared to 2,270 millimetres recorded in 2004. The mean rainfall was highest during the month of March with 727 mm and the driest month, November, registered only 48 mm of rainfall. (Table 6.3)

In Rodrigues, the mean rainfall registered was 1,275 millimetres at Pointe Canon and 1,126 millimetres at Plaine Corail (Table 6.4).

3.3 Water storage level

In 2005, the minimum and maximum percentage water storage level of the different reservoirs were as follows:

- Mare aux Vacoas (50% and 100%)
- La Nicoliere (37% and 100%)
- Piton du Milieu (56% and 100%)
- La Ferme (21% and 100%)
- Mare Longue (0% and 100%)
- Midlands Dam (59% and 100%)

During the same period, the mean water level for all the reservoirs combined together (excluding Midlands Dam) varied from 44% to 97% (Table 6.5). It is to be noted that the mean water level is computed as the average level during a month.

3.4 Water production

The total water production by the different water plants amounted to 195 million cubic metres (Mm³) in 2005, and this represents a 5.4% increase compared to the 185 Mm³ recorded in 2004. In 2005, average water production from surface and ground water represented 48.2% and 51.8% respectively (Table 6.6).

3.5 Water sales and revenue collectible

Total volume of water sold increased from 102.4 Mm³ in 2004 to 107.8 Mm³ in 2005 (+5.3%). In 2005, potable water made up 86.9% of the volume sold while the remaining 13.1% consisted of non-treated water. Water for domestic consumption amounted to 73.1 Mm³, accounting for nearly 67.8% of the water sales.

Revenue collectible for the year 2005 amounted to Rs 934.5 million, that is an increase of 4.1% over the amount of Rs 897.5 million for year 2004 (Table 6.7).



Section I

Energy balance & Main indicators

Table 1.1 - Energy balance, 2005

Flow	Source	Tonnes of oil equivalent (toe)											Total		
		Coal	Gasoline	Diesel	Aviation Fuel	Kerosene	Fuel Oil	LPG	Fuelwood	Charcoal	Hydro	Wind		Bagasse	Electricity
Local production		-	-	-	-	-	-	-	7,592	-	9,880	38	245,110	-	262,621
Imports		235,143	93,700	333,221	228,878	29,015	316,718	67,730	-	-	-	-	-	-	1,304,405
Re-exports and bunkering		-	-	(136,792)	(100,745)	-	(52,558)	-	-	-	-	-	-	-	(290,095)
Stock change / Statistical error		(9,564)	6,387	17,801	14,929	(419)	(10,897)	(2,008)	-	-	-	-	-	-	16,230
Total Primary Energy Requirement		225,579	100,087	214,230	143,062	28,596	253,263	65,722	7,592	-	9,880	38	245,110	-	1,293,160
Public electricity generation plant		-	-	(2,148)	-	(18,441)	(208,371)	-	-	-	(9,880)	(38)	-	104,021	(134,856)
Autoproducer plants		(211,219)	-	-	-	-	-	-	-	-	-	-	(168,919)	91,384	(288,753)
Other transformation		-	-	-	-	-	-	-	(775)	377	-	-	-	-	(398)
Own use		-	-	-	-	-	-	-	-	-	-	-	-	(4,035)	(4,035)
Losses		-	-	-	-	-	-	-	-	-	-	-	-	(19,038)	(19,038)
Total Final Consumption		14,360	100,087	212,082	143,062	10,156	44,892	65,722	6,817	377	-	-	76,192	172,332	846,080
Manufacturing sector		14,360	-	41,538	-	-	44,892	4,216	532	-	-	-	76,192	66,856	248,588
Transport sector		-	100,087	168,175	143,062	-	-	7,264	-	-	-	-	-	-	418,588
Commercial and distributive trade sector		-	-	-	-	-	-	7,544	-	281	-	-	-	47,846	55,671
Residential sector		-	-	-	-	10,156	-	46,662	6,285	96	-	-	-	52,252	115,452
Agriculture		-	-	2,368	-	-	-	-	-	-	-	-	-	2,328	4,697
Other		-	-	-	-	-	-	36	-	-	-	-	-	3,049	3,085

Note: figures in brackets represent negative quantities

Table 1.2 - Energy balance¹, 2004

Flow	Source	Tonnes of oil equivalent (toe)											Total		
		Coal	Gasoline	Diesel	Aviation Fuel	Kerosene	Fuel Oil	LPG	Fuelwood	Charcoal	Hydro	Wind		Bagasse	Electricity
Local production		-	-	-	-	-	-	-	7,325	-	10,516	37	257,792	-	275,670
Imports		205,732	94,722	322,929	236,074	31,041	277,265	58,082	-	-	-	-	-	-	1,225,847
Re-exports and bunkering		-	-	(106,250)	(91,920)	-	(38,483)	-	-	-	-	-	-	-	(236,653)
Stock change / Statistical error		(26,336)	2,856	(706)	(1,672)	(4,748)	20,344	1,157	-	-	-	-	-	-	(9,107)
Total Primary Energy Requirement		179,396	97,578	215,973	142,482	26,293	259,127	59,239	7,325	-	10,516	37	257,792	-	1,255,757
Public electricity generation plant		-	-	(4,008)	-	(17,218)	(211,264)	-	-	(10,514)	(37)	-	-	105,374	(137,666)
Autoproducer plants		(164,379)	-	-	-	-	-	-	-	(2)	-	(174,852)	80,835	-	(258,398)
Other transformation		-	-	-	-	-	-	(730)	355	-	-	-	-	-	(374)
Own use		-	-	-	-	-	-	-	-	-	-	-	-	(4,233)	(4,233)
Losses		-	-	-	-	-	-	-	-	-	-	-	-	(16,962)	(16,962)
Total Final Consumption		15,016	97,578	211,966	142,482	9,075	47,863	59,239	6,595	355	-	-	82,941	165,014	838,123
Manufacturing sector		15,016	-	43,806	-	-	47,863	2,976	538	-	-	-	82,941	66,125	259,265
Transport sector		-	97,578	165,761	142,482	-	-	2,906	-	-	-	-	-	-	408,728
Commercial and distributive trade sector		-	-	-	-	-	-	6,882	-	266	-	-	-	44,395	51,544
Residential sector		-	-	-	-	9,075	-	46,284	6,057	89	-	-	-	49,451	110,957
Agriculture		-	-	2,399	-	-	-	-	-	-	-	-	-	2,046	4,445
Other		-	-	-	-	-	-	190	-	-	-	-	-	2,996	3,186

Revised

Note: figures in brackets represent negative quantities

Table 1.3 - Main energy indicators¹, 1996 - 2005

Details	Unit	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total primary energy requirement	ktoe	910.3	943.7	1,007.7	999.5	1,113.1	1,182.0	1,157.3	1,222.8	1,255.8	1,293.2
<i>Imported</i>	ktoe	634.7	647.3	707.2	778.9	849.0	901.2	898.8	956.3	980.1	1,030.5
<i>Local</i>	ktoe	275.6	296.4	300.5	220.6	264.1	280.9	258.6	266.5	275.7	262.6
Total primary energy requirement index (1990 = 100)		124.6	129.1	137.9	136.8	152.3	161.8	158.4	167.3	171.8	177.0
Annual increase	%	+4.5	+3.7	+6.8	-0.8	+11.4	+6.2	-2.1	+5.7	+2.7	+3.0
Import dependency	%	69.7	68.6	70.2	77.9	76.3	76.2	77.7	78.2	78.0	79.7
GDP in 1990 rupees	Rs. Million	53,250	56,285	59,662	61,332	66,607	70,071	71,542	74,618	78,797	79,821
GDP index (1990 = 100)		134.4	142.0	150.6	154.8	168.1	176.8	180.5	188.3	198.8	201.4
Energy intensity	toe per Rs.100,000 GDP	1.71	1.68	1.69	1.63	1.67	1.69	1.62	1.64	1.59	1.62
Mid-year population	thousand	1,134	1,148	1,160	1,175	1,187	1,200	1,210	1,223	1,233	1,243
Per capita primary energy requirement	toe	0.80	0.82	0.87	0.85	0.94	0.99	0.96	1.00	1.02	1.04
Per capita final energy consumption	toe	0.61	0.63	0.63	0.59	0.63	0.65	0.63	0.67	0.68	0.68
Per capita consumption of electricity sold	kWh	878	947	1,026	1,059	1,158	1,222	1,248	1,330	1,382	1,429

¹ Revised

Section II

Primary energy requirement

Table 2.1 - Primary energy requirement , 1996 - 2005

Energy source	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
	Physical unit (Thousand tonne/GWh)										
Imported											
Gasolene	87.4	87.7	88.6	89.5	92.0	87.7	87.5	89.2	90.4	92.7	
Diesel Oil	136.0	145.5	155.1	165.0	189.4	188.7	196.8	208.8	213.8	212.1	
Dual Purpose Kerosene	156.9	135.6	148.7	148.2	130.8	137.9	122.8	141.8	162.3	165.1	
<i>Kerosene</i>	76.3	56.5	59.1	51.0	22.7	13.2	13.9	18.1	25.3	27.5	
<i>Aviation Fuel</i>	80.6	79.0	89.5	97.1	108.1	124.7	109.0	123.6	137.0	137.6	
Fuel Oil	182.6	202.2	221.5	239.6	224.5	246.0	241.1	260.1	269.9	263.8	
LPG	36.6	39.1	40.4	43.4	46.3	47.1	48.6	51.7	54.9	60.9	
Coal	40.3	45.7	70.7	136.6	253.0	299.2	312.8	316.2	289.3	363.8	
Local											
Hydro/Wind	GWh	105	93	105	30	96	71	86	117.8	122.7	115.3
Bagasse ¹		1,595.1	1,741.0	1,767.0	1,314.4	1,553.3	1,671.5	1,524.4	1,557.0	1,611.2	1,531.9
Fuelwood ¹		30.0	25.8	23.2	20.2	19.3	19.3	19.2	19.3	19.3	20.0
	Energy unit (ktoe)										
Imported											
Gasolene	94.4	94.7	95.7	96.7	99.4	94.8	94.5	96.4	97.6	100.1	
Diesel Oil	137.4	147.0	156.7	166.6	191.3	190.6	198.7	210.9	216.0	214.2	
Dual Purpose Kerosene	163.2	141.0	154.6	154.1	136.0	143.4	127.7	147.4	168.8	171.7	
<i>Kerosene</i>	79.4	58.8	61.5	53.1	23.6	13.8	14.4	18.9	26.3	28.6	
<i>Aviation Fuel</i>	83.8	82.2	93.1	101.0	112.4	129.6	113.3	128.6	142.5	143.1	
Fuel Oil	175.3	194.1	212.7	230.0	215.5	236.1	231.4	249.7	259.1	253.3	
LPG	39.5	42.3	43.7	46.9	50.0	50.8	52.5	55.8	59.2	65.7	
Sub total (Petroleum products)	609.7	619.0	663.3	694.2	692.2	715.7	704.8	760.2	800.7	805.0	
Coal	25.0	28.3	43.9	84.7	156.9	185.5	193.9	196.0	179.4	225.6	
Sub total (Imported)	634.7	647.3	707.2	778.9	849.0	901.2	898.8	956.3	980.1	1,030.5	
Local											
Hydro / Wind	9.0	8.0	9.0	2.6	8.2	6.1	7.4	10.1	10.6	9.9	
Bagasse ¹	255.2	278.6	282.7	210.3	248.5	267.4	243.9	249.1	257.8	245.1	
Fuelwood ¹	11.4	9.8	8.8	7.7	7.3	7.3	7.3	7.3	7.3	7.6	
Sub total (Local)	275.6	296.4	300.5	220.6	264.1	280.9	258.6	266.5	275.7	262.6	
Total	910.3	943.7	1,007.7	999.5	1,113.1	1,182.0	1,157.3	1,222.8	1,255.8	1,293.2	
	Percentage (%)										
Imported											
Gasolene	10.4	10.0	9.5	9.7	8.9	8.0	8.2	7.9	7.8	7.7	
Diesel Oil	15.1	15.6	15.5	16.7	17.2	16.1	17.2	17.3	17.2	16.6	
Dual Purpose Kerosene	17.9	14.9	15.3	15.4	12.2	12.1	11.0	12.1	13.4	13.3	
<i>Kerosene</i>	8.7	6.2	6.1	5.3	2.1	1.2	1.2	1.5	2.1	2.2	
<i>Aviation Fuel</i>	9.2	8.7	9.2	10.1	10.1	11.0	9.8	10.5	11.3	11.1	
Fuel Oil	19.3	20.6	21.1	23.0	19.4	20.0	20.0	20.4	20.6	19.6	
LPG	4.3	4.5	4.3	4.7	4.5	4.3	4.5	4.6	4.7	5.1	
Sub total (Petroleum products)	67.0	65.6	65.8	69.5	62.2	60.5	60.9	62.2	63.8	62.2	
Coal	2.7	3.0	4.4	8.5	14.1	15.7	16.8	16.0	14.3	17.4	
Sub total (Imported)	69.7	68.6	70.2	77.9	76.3	76.2	77.7	78.2	78.0	79.7	
Local											
Hydro/Wind	1.0	0.8	0.9	0.3	0.7	0.5	0.6	0.8	0.8	0.8	
Bagasse ¹	28.0	29.5	28.1	21.0	22.3	22.6	21.1	20.4	20.5	19.0	
Fuelwood ¹	1.3	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	
Sub total (Local)	30.3	31.4	29.8	22.1	23.7	23.8	22.3	21.8	22.0	20.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

¹ estimates