



# Economic and Social Indicators

**Issue No 1736**

**Environment Statistics**

**Year 2022**

**Released online : 31 July 2023**

<https://statsmauritius.govmu.org>

Price: Rs 40.00

Statistics Mauritius  
Ministry of Finance, Economic Planning and Development  
Port Louis

Note: Readers are invited to make the distinction between official data which are published in the Economic and Social indicators and the analysis presented for the benefit of general readers. Differences of opinion may arise regarding the analytical part but these do not in any way, undermine the quality of the data. The Editors welcome constructive critical comments.

# Environment Statistics - 2022

## 1. Introduction

This issue of Economic and Social Indicators presents statistics on Environment for year 2022 based on data gathered from various institutions.

The main environment indicators for the years 2021 and 2022 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. Forestry and Agriculture

### 2.1 Forestry

Preservation of forests is vital for the protection of the ecosystem. Total forest area decreased by 4 hectares from 47,006 hectares in 2021 to 47,002 hectares in 2022. Some 22,002 hectares (46.8%) of the total forest area in 2022 was state-owned and the remaining 25,000 hectares (53.2%) was privately-owned (Table 2).

Out of the 22,002 hectares of state-owned forest area, 11,771 hectares (53.5%) were planted areas, while the Black River Gorges National Park and the nature reserves accounted for 6,574 (29.9%) and 799 (3.6%) hectares respectively. “Pas Geometriques” covered about 588 hectares (2.7%), other nature parks, 908 hectares (4.1%), Ramsar sites, 46 hectares (0.2%) and other forest lands, 1,316 hectares (6.0%).

The 25,000 hectares of privately-owned forest lands consisted of 18,447 (73.8%) hectares of plantation, forest lands, scrub and grazing lands, and 6,553 (26.2%) hectares of mountain, rivers and nature reserves.

### 2.2 Agriculture

The area harvested of sugar cane decreased from 41,897 hectares in 2021 to 39,199 hectares in 2022. The production of sugar cane went down by 15.5% from 2,669,667 tonnes in 2021 to 2,256,806 tonnes in 2022 (Table 3). The average yield has decreased by 9.7% from 63.72 tonnes per hectares in 2021 to 57.57 in 2022.

The production of sugar went down by 9.0% from 255,818 tonnes in 2021 to 232,707 tonnes in 2022. Compared to 9.59% in 2021, the average extraction rate was 10.32% in 2022, representing an increase of 7.6%.

The area under food crops harvested decreased by 2.9% from 8,004 hectares in 2021 to 7,770 hectares in 2022. Production of food crops increased by 6.7% from 108,012 tonnes in 2021 to 115,211 tonnes in 2022.

The area harvested under tea plantation in 2022 was 659 hectares as compared to 669 hectares in 2021. The production of green tea leaves went up from 5,034 tonnes in 2021 to 6,351 tonnes in 2022, representing an increase of 26.2%.

### 2.3 Import of fertilisers and pesticides

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.

From 2021 to 2022, import of fertilisers decreased by 25.2% from 35,381 tonnes to 26,459 tonnes. Import of pesticides increased by 31.8% from 2,453 tonnes to 3,234 tonnes (Table 4).

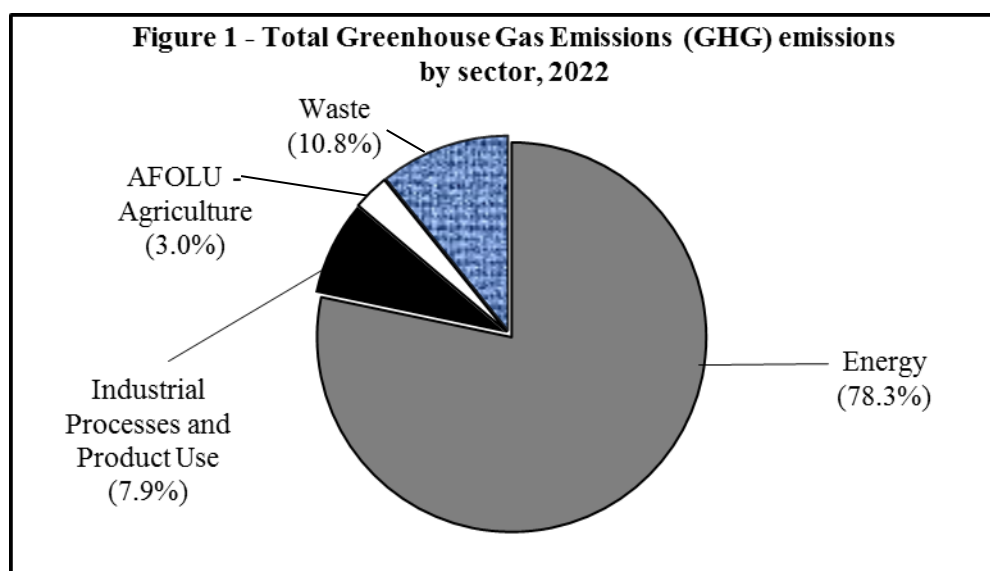
### 3. Greenhouse Gas (GHG) Emissions

GHG are gases occurring naturally and also resulting from human-induced activities (anthropogenic emissions from production and consumption). They contribute directly or indirectly to global warming. Some main GHG are Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>) and Nitrous Oxide (N<sub>2</sub>O).

#### 3.1 Total GHG emissions by sector

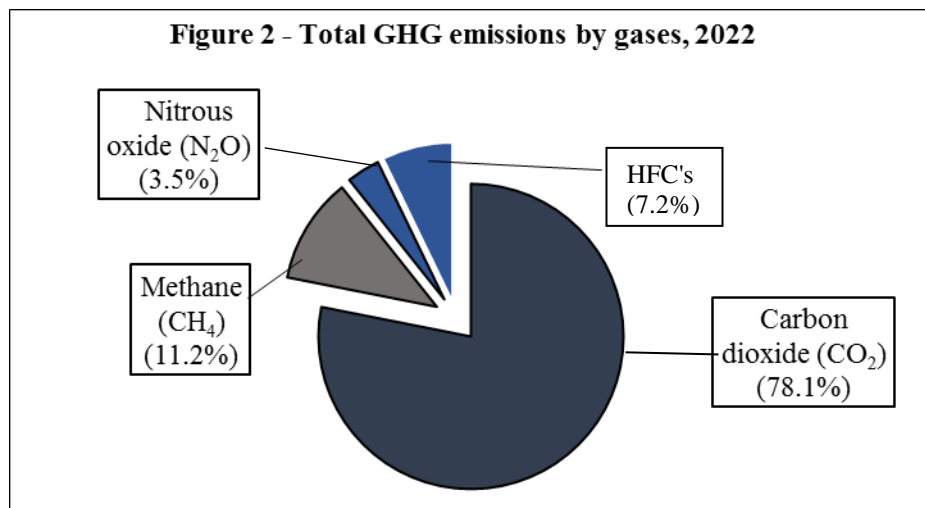
The total GHG emissions (excluding Forestry and Other Land Use) in 2022 were 5,642.2 Gg carbon dioxide equivalent (CO<sub>2</sub>-eq) compared to 5,471.8 Gg CO<sub>2</sub>-eq in 2021, representing an increase of 3.1 %. In 2022, there was a general rise in emissions from all four sectors, namely; energy, industrial processes and product use, agriculture forestry and other land use and waste (Table 6). The contribution of GHG to total global GHG emission stood at 0.01% (Source: United Nations Environment Programme (UNEP), Emissions Gap Report 2021).

The energy sector remains the largest contributing sector and accounted for 78.3 % (4,419.7 Gg CO<sub>2</sub>-eq) of the total emissions, followed by the waste sector with 10.8 % (609.2 Gg CO<sub>2</sub>-eq), the industrial processes and product use sector with 7.9 % (442.7 Gg CO<sub>2</sub>-eq) and the agriculture sector, 3.0% (170.6 Gg CO<sub>2</sub>-eq) - (Figure 1).



#### 3.2 Total GHG emissions by type gases

In 2022, carbon dioxide (CO<sub>2</sub>) was the main GHG representing 78.1 % (4,406.4 Gg) of total GHG emissions. Methane (CH<sub>4</sub>) contributed 11.2 % (632.1 Gg CO<sub>2</sub>-eq), hydrofluorocarbons (HFCs) 7.2% (405.3 Gg CO<sub>2</sub>-eq), and nitrous oxide (N<sub>2</sub>O) 3.5 % (198.5 Gg CO<sub>2</sub>-eq) -(Figure 2).



### 3.3 Net GHG emissions

In 2022, GHG emissions have increased mainly due to a higher fuel consumption in manufacturing and construction, transport, residential and commercial activities from the Energy sector. Moreover, a slight decrease was observed in GHG removals due to an increase in forest fires and a decrease in crop land. The overall net GHG emissions, after accounting for the removal of Carbon Dioxide by Forestry and Other Land Use sector, stood at around 5,308.0 Gg CO<sub>2</sub>.eq in 2022, up by 3.3% from 5,136.2 Gg CO<sub>2</sub>.eq in 2021 (Table 6).

### 3.4 Energy and Greenhouse gas (GHG)

#### 3.4.1 Energy sector

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

#### 3.4.2 Primary energy requirement

Total primary energy requirement (total primary energy requirement = local production + imports of primary energy - re-exports of primary energy – international bunkers – stock changes) was 1,485.0 thousand tonnes of oil equivalent (ktoe) in 2022, 8.6% higher than in 2021 (1,367.1 ktoe) - (Table 5).

In 2022, some 10.0% (149 ktoe) was met from locally renewable energy sources (hydro, wind, landfill gas, photovoltaic, bagasse, fuelwood, and charcoal), while 89.9% (1,336 ktoe) were from imported fossil fuels (petroleum products and coal).

In 2022, there was a decrease of 11.5 % in energy supply from local renewable sources. Energy sources from bagasse decreased by 15.1% from 139 ktoe in 2021 to 118 ktoe in 2022, landfill gas decreased by 6.3% from 1.6 ktoe to 1.5 ktoe , hydro increased by 19.6% from 9.2 ktoe to 11.0 ktoe, , photovoltaic increased by 2.3% from 13.0 to 13.3 ktoe while wind and fuelwood remained at 1.3 ktoe and 4.2 ktoe respectively, same level as in 2021.

From 2021 to 2022, energy supply from imported fossil fuels increased by 11.4% from 1,199 to 1,336 ktoe. Energy supply from petroleum products increased by 31.5% from 742 ktoe in 2021 to 976 ktoe in 2022. Supply from coal decreased by 21.4% from 457 ktoe to 359 ktoe (Table 5).

### *3.4.3 Electricity generation*

Total electricity generated increased by 4.2% from 2,992 GWh in 2021 to 3,119 GWh in 2022. In 2022, around 31.5% of electricity was generated from coal, 49.2% from diesel and fuel oil, and 19.2% from renewable sources. Electricity generated from coal decreased by 21.6% from 1,255 GWh in 2021 to 984 GWh in 2022; that from diesel and fuel oil together increased by 40.3% from 1,094 GWh in 2021 to 1,535 GWh in 2022 (Table 8).

Electricity generated from renewable sources decreased from 642 GWh to 598 GWh, down by 6.9%. Landfill gas decreased by 10.5% from 19 GWh to 17 GWh, hydro increased by 19.6% from 107 GWh to 128 GWh and photovoltaic increased by 2.6% from 151 GWh to 155 GWh. Electricity generated from bagasse decreased by 19.1% from 350 GWh to 283 GWh whereas that generated by wind stood approximately at 16 GWh with a slight increase of 0.6% (Table 8).

### *3.4.4 Fuel input for electricity generation*

Fuel input for electricity generation from petroleum products, coal and bagasse as shown in Table 9 indicates that:

- In 2022, coal (45.9%) was the major fuel used to produce electricity followed by fuel oil (39.3%) and bagasse (14.6%);
- Between 2021 and 2022, fuel input decreased by 3.2% from 773 ktoe to 748 ktoe;
- Input of fuel oil increased by 38.0%, from 213 ktoe in 2021 to 294 ktoe in 2022 and that of coal decreased by 20.4%, from 431 ktoe in 2021 to 343 ktoe in 2022;
- Some 110 ktoe of bagasse was used to produce electricity in 2022 compared to 128 ktoe in 2021, down by 14.1%.

### *3.4.5 Energy sector emissions*

In 2022, GHG emission from the energy sector stood at 4,420 Gg CO<sub>2</sub>-eq, up by 1.9% from 4,337 Gg CO<sub>2</sub>-eq in 2021. Within the energy sector, the sub-sector that contributed most of the GHG emission was the electricity generating industries which accounted for 52.3 % (2,311 Gg CO<sub>2</sub>-eq) of the total emissions. Next came the transport sector which made up 33.6% (1,482 Gg CO<sub>2</sub>-eq) of the total emissions, the manufacturing industries and construction making up another 7.8% (347 Gg CO<sub>2</sub>-eq) and the other sectors accounting for the remaining 6.3% (280 Gg CO<sub>2</sub>-eq) - (Table 7).

### 3.4.5.1 Energy industries (electricity generation)

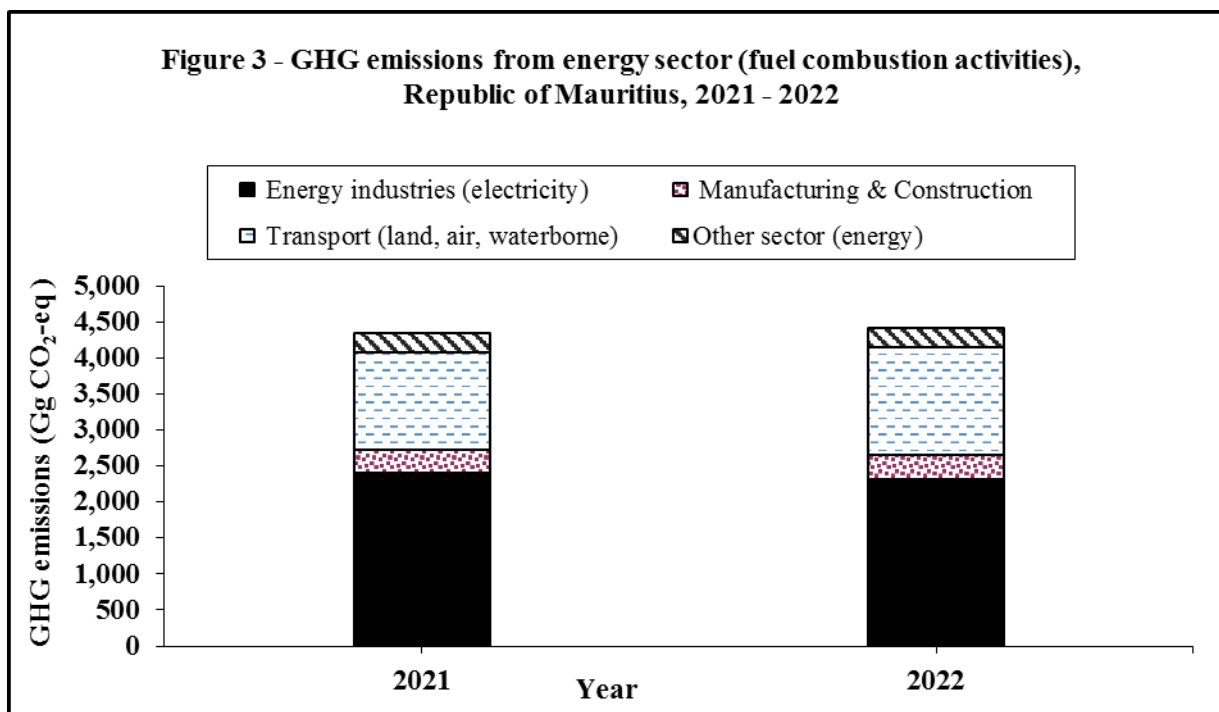
GHG emission from the generation of electricity (energy industries) stood at 2,311 Gg CO<sub>2</sub>-eq in 2022 compared to 2,396 Gg CO<sub>2</sub>-eq in 2021, representing a decrease of 3.6% (Table 7). This is mainly attributed to a 20.4% decrease (from 431 ktoe to 343 ktoe) in the amount of coal used to produce electricity (Table 9).

### 3.4.5.2 Transport industries

In 2022, GHG emission from transport industries was estimated at 1,482 Gg CO<sub>2</sub>-eq compared to 1,353 in 2021, up by 9.5% (Table 7). The number of registered motor vehicles went up by 4.0% from 622,988 in 2021 to 648,176 in 2022 (Table 11), the energy consumed by transport sector increased by 34.9% from 378 ktoe to 510 ktoe - (Table10).

### 3.4.5.3 Manufacturing industries and construction

Manufacturing industries and construction registered an increase of 6.8% in GHG emissions in 2022, from 325 to 347 Gg CO<sub>2</sub>-eq (Table 7). The amount of coal consumed by the sector decreased from 25.7 ktoe to 16.5 ktoe and consumption of fuel oil, diesel and LPG increased from 66.6 ktoe to 83.8 ktoe (Table10).



## 4. Temperature

Table 12 indicates that, in 2022, the monthly mean temperature, the monthly maximum mean temperature and the monthly minimum mean temperature were mostly below their respective long term (1991-2020). March was the warmest month of the year with an average maximum of 30.3 °C and August the coolest month with an average minimum of 16.6 °C.

The highest maximum temperature recorded was 35.7 °C, recorded on 22 January 2022 at Rivière Noire.

The lowest minimum temperature was 9.1 °C, which was recorded on 20 July 2022 at Bois Cheri.

## **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 2022, the mean amount of rainfall recorded around the Island of Mauritius was 2,201 millimetres (mm), representing an increase of 8.7% compared to 2,025 mm in 2021.

The wettest month in 2022 was April with a mean of 442 mm, which represented a surplus of 215% relative to the long term (1991-2020) mean of 206 mm. October and November were the driest month with a mean of 33 mm of rainfall, registering a deficit of 45% and 39% respectively, compared to the long term (1991-2020) mean of 73 mm and 85 mm respectively (Table 13).

### *5.2 Water Balance*

In 2022, the Island of Mauritius received 4,105 million cubic metres (Mm<sup>3</sup>) of water from precipitation (rainfall), 8.7% higher when compared to 3,776 Mm<sup>3</sup> in 2021. Nearly 10 % (411 Mm<sup>3</sup>) of the water went as ground water recharge, while evapotranspiration and surface runoff accounted for 30% (1,232 Mm<sup>3</sup>) and 60% (2,463 Mm<sup>3</sup>) respectively (Table 14).

### *5.3 Water utilisation*

Total water utilisation was estimated at 1,064 Mm<sup>3</sup> in 2022. Around 85% (906 Mm<sup>3</sup>) of the total water utilisation was met from surface water and 15% (157 Mm<sup>3</sup>) from ground water.

The agricultural sector accounted for 29% (303 Mm<sup>3</sup>) of the water utilised, domestic, industrial and tourism sector 31% (330 Mm<sup>3</sup>), and hydropower 40% (431 Mm<sup>3</sup>) - (Table 15).

Compared to 2021, water utilisation increased by 9.9%, from 968 to 1,064 Mm<sup>3</sup> with changes as follows:

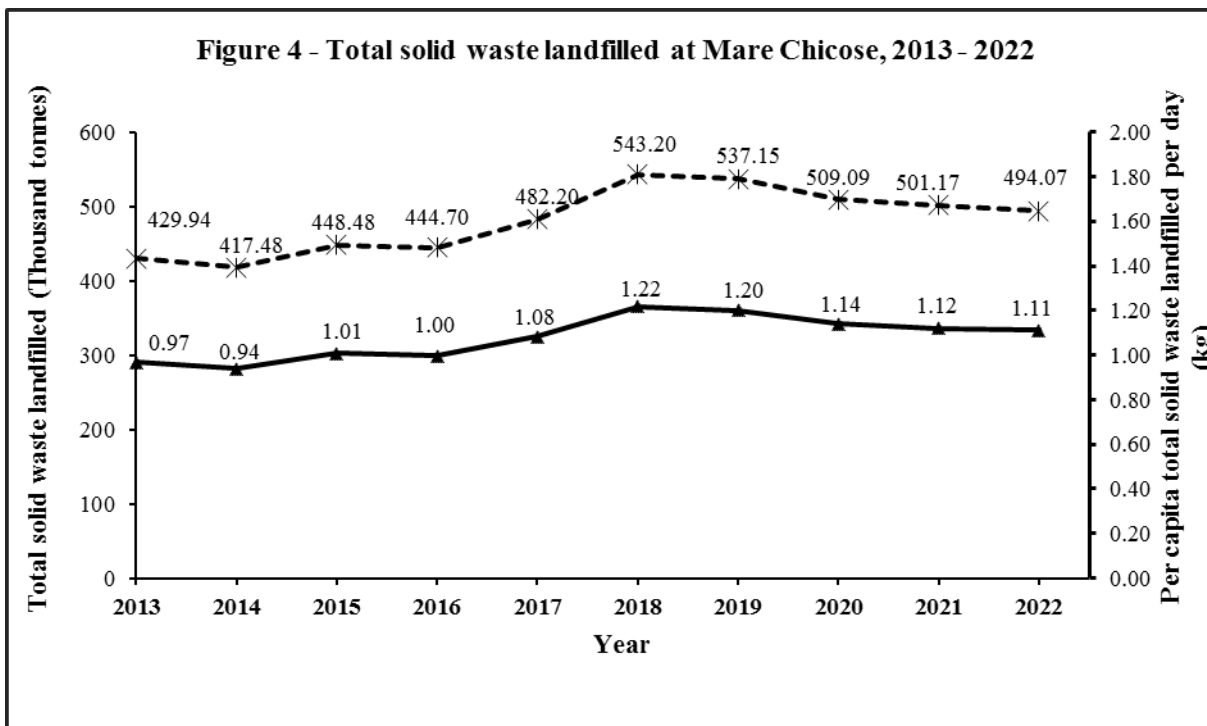
- agriculture (+0.7%);
- domestic, industrial and tourism (+8.6%); and
- hydropower (+18.4%).

## **6. Waste**

### *6.1 Waste disposal at Mare Chicose Landfill*

The total amount of solid waste landfilled at Mare Chicose decreased by 1.4% from 501,167 tonnes in 2021 to 494,073 tonnes in 2022 (Table 16). The trend of the total amount of solid waste landfilled and the per capita solid waste landfilled are as shown in Figure 4. The per capita total solid waste landfilled increased by 14.4% from 0.97 kg/day in 2013 to 1.11 kg/day in 2021.





## 7. Complaints

Effective environmental management needs appropriate coordination and monitoring of environmental problems. The Ministry of Environment, Solid Waste Management and Climate Change addresses complaints received from the general public according to a complaints handling protocol.

Complaints attended by the Pollution Prevention and Control Division of the Ministry of Environment, Solid Waste Management and Climate Change (including those received from the Citizen Support Portal) are categorised at Table 17. The number of complaints attended increased by 9.9% from 689 in 2021 to 757 in 2022. The main categories of complaints were as follows: other complaints (32.9%), noise pollution (18.4%), bareland (11.5%), air pollution (11.2%), odour (7.9%), waste water (7.0%), flooding/obstruction of rivers and drains (5.9%) and solid waste (5.2%).

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

### 8.1 EIA Licences and PER Approvals

In 2022, some 34 EIA licences were granted, which comprised 12 for “other projects, 5 for land parcelling (morcellement), 5 for coastal hotels and related works, 4 for “housing/integrated resort scheme/property development scheme/smart city”, 3 for photovoltaic farms, 2 for stone crushing plants, 2 for development in port area and 1 for industrial development (Table 18).

During the same period, 10 PER approvals were issued, which comprised 6 for industrial development, 2 for “other projects”, 1 for livestock rearing and 1 for Housing/Integrated Resort Scheme/Property Development Scheme/Smart City (Table 19).

**Statistics Mauritius**

**Ministry of Finance, Economic Planning and Development**

**Port Louis**

**31 July 2023**

**Contact Persons:**

Ms. D. Mewa Hurdowar  
Statistician/Senior Statistician

Mr. L.K. Dindoyal  
Statistical Officer/Senior Statistical Officer

Ministry of Environment, Solid Waste  
Management and Climate Change

Ken Lee Tower

Port Louis

Tel. (230) 210-6186

Website : <http://statsmauritius.govmu.org>

Email [cso\\_envi@govmu.org](mailto:cso_envi@govmu.org)

**Table 1 - Main environment indicators, 2021 and 2022**

Indicator	Unit	2021 <sup>1</sup>	2022 <sup>2</sup>
<b>Republic of Mauritius</b>			
1. Terrestrial protected areas	hectares	14,915	14,915
2. Marine protected areas	hectares	13,953	13,953
3. Total Greenhouse gas (GHG) emission	Gg CO <sub>2</sub> -eq	5,471.8	5,642.2
4. Total carbon dioxide emission	000 tons	4,324.8	4,406.4
5. Per capita carbon dioxide emission	tons	3.42	3.49
6. Total electricity generated	GWh	2,992.1	3,119.2
7. Electricity generated from renewable sources	%	21.5	19.2
8. Total primary energy requirement	ktoe	1,367.1	1,484.9
9. Primary energy requirement from renewable sources	%	12.3	10.1
10. Per capita primary energy requirement	toe	1.08	1.18
11. Per capita final energy consumption	toe	0.64	0.76
12. Energy intensity	toe per Rs.100,000 GDP at 2018 prices	0.30	0.30
<b>Island of Mauritius</b>			
13. Forest area	ha	47,006	47,002
14. Total forest area as a % of total land area	%	25.2	25.2
15. Total fish production (fresh-weight equivalent)	tons	28,696	33,254
16. Irrigated land	ha	15,333	14,295
17. Mean annual rainfall	millimetres	2,025	2,201
18. Mean of maximum annual temperature	degrees Celcius	27.7	27.4
19. Mean of minimum annual temperature	degrees Celcius	20.2	19.5
20. Mean annual temperature	degrees Celcius	23.9	23.5
21. Annual fresh water abstraction	Mm <sup>3</sup>	604	632
22. Daily per capita domestic water consumption	litres	184.0	190.0
23. Daily per capita total solid waste disposed at landfill	Kg	1.1	1.1

<sup>1</sup>Revised

<sup>2</sup>Provisional

**Table 2 - Forest area by category, Island of Mauritius, 2021 - 2022**

Category of Forest	Hectares			
	2021		2022	
	Hectares	%	Hectares	%
<b>State - owned lands</b>	<b>22,006</b>	<b>46.8</b>	<b>22,002</b>	<b>46.8</b>
Plantations	11,774	25.1	11,771	25.0
Nature reserves	799	1.7	799	1.7
<i>Mainland</i>	200	0.4	200	0.4
<i>Islets</i>	599	1.3	599	1.3
Black River Gorges National Park	6,574	14.0	6,574	14.0
Bras D'Eau National Park <sup>1</sup>	497	1.1	497	1.1
Special Reserves <sup>2</sup>	136	0.3	136	0.3
Vallee d'Osterlog Endemic Garden	275	0.6	275	0.6
Ramsar sites	46	0.1	46	0.1
<i>Rivulet Terre Rouge Estuary Bird Sanctuary</i>	26	0.1	26	0.1
<i>Pointe D'Esny Wetland</i>	20	0.0	20	0.0
Other Forest Lands	1,316	2.8	1,316	2.8
Pas Geometriques	589	1.3	588	1.3
<i>Plantations</i>	197	0.4	196	0.4
<i>Leased for grazing and tree planting</i>	230	0.5	230	0.5
<i>Others (mostly rocky)</i>	162	0.3	162	0.3
<b>Private - owned lands <sup>3</sup></b>	<b>25,000</b>	<b>53.2</b>	<b>25,000</b>	<b>53.2</b>
Reserves	6,553	13.9	6,553	13.9
<i>Mountain reserves</i>	3,800	8.1	3,800	8.1
<i>River reserves</i>	2,740	5.8	2,740	5.8
<i>Private Reserves</i>	13	0.0	13	0.0
Other <sup>4</sup>	18,447	39.2	18,447	39.2
<b>Total</b>	<b>47,006</b>	<b>100.0</b>	<b>47,002</b>	<b>100.0</b>

<sup>1</sup> Bras D'Eau National Park was proclaimed in 2011. From 2002 to 2010, it was known as Bras D'Eau & Poste La Fayette Reserves

<sup>2</sup> "Islet National Parks" renamed as "Special Reserves" as per Native Terrestrial Biodiversity & National Parks Act of 2015

<sup>3</sup> Current figures for privately-owned lands are crude estimates based on expert knowledge from Forestry Service

<sup>4</sup> Includes plantations, forest lands, scrub and grazing lands

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

**Table 3 - Agricultural crops - Area harvested and production, Island of Mauritius, 2021 - 2022**

Crops	2021 <sup>1</sup>		2022 <sup>2</sup>	
	Area harvested (hectares)	Production (tonnes)	Area harvested (hectares)	Production (tonnes)
Sugar cane	41,897	2,669,667	39,199	2,256,806
Tea (green leaves)	669 <sup>3</sup>	5,034	659 <sup>3</sup>	6,351
Food crops	8,004	108,012	7,770	115,211
Sugar	Napp	255,818	Napp	232,707

<sup>1</sup> Revised<sup>2</sup> Provisional<sup>3</sup> Area under cultivation**Table 4 - Imports and value (c.i.f)<sup>1</sup> of fertilisers and pesticides, 2021 - 2022**

Year	Fertilisers		Pesticides	
	Quantity (tonnes)	Value c.i.f (Rs mn)	Quantity (tonnes)	Value c.i.f (Rs mn)
2021	35,381 <sup>2</sup>	950.0	2,453 <sup>2</sup>	649.2
2022	26,459	1,000.3	3,234	888.3

<sup>1</sup> Cost, Insurance, Freight<sup>2</sup> Revised**Table 5 - Total primary energy requirement, Republic of Mauritius, 2021- 2022**

ktoe (000 Tonne of oil equivalent)

Energy source	2021		2022	
	ktoe	%	ktoe	%
<b>Imported (Fossil Fuels)</b>	<b>1,198.5</b>	<b>87.7</b>	<b>1,335.5</b>	<b>89.9</b>
<i>Coal</i>	<i>456.7</i>	<i>33.4</i>	<i>359.3</i>	<i>24.2</i>
<i>Petroleum products</i>	<i>741.8</i>	<i>54.3</i>	<i>976.2</i>	<i>65.7</i>
Gasolene	180.5	13.2	206.5	13.9
Diesel Oil	191.9	14.0	214.3	14.4
Dual Purpose Kerosene	33.2	2.4	126.4	8.5
<i>Kerosene</i>	<i>0.7</i>	<i>0.0</i>	<i>0.8</i>	<i>0.1</i>
<i>Aviation Fuel</i>	<i>32.5</i>	<i>2.4</i>	<i>125.6</i>	<i>8.5</i>
Fuel Oil	247.9	18.1	332.6	22.4
LPG	88.3	6.5	96.4	6.5
<b>Imported (Renewables)</b>				
Fuel wood and charcoal	0.1	0.0	0.2	0.0
<b>Local (Renewables)</b>	<b>168.5</b>	<b>12.3</b>	<b>149.2</b>	<b>10.0</b>
Hydro	9.2	0.7	11.0	0.7
Wind	1.3	0.1	1.3	0.1
Landfill Gas	1.6	0.1	1.5	0.1
Photovoltaic	13.0	1.0	13.3	0.9
Bagasse <sup>1</sup>	139.2	10.2	117.9	7.9
Fuelwood <sup>1</sup>	4.2	0.3	4.2	0.3
Charcoal	0.1	0.0	0.0	0.0
<b>Total</b>	<b>1,367.1</b>	<b>100.0</b>	<b>1,485.0</b>	<b>100.0</b>

<sup>1</sup> Estimates

Source: Central Electricity Board and Annual Sugar Industry Energy Survey

**Table 6 - National inventory of greenhouse gas emissions <sup>1</sup> by sector, Republic of Mauritius, 2021<sup>2</sup> - 2022<sup>2</sup>**

Sector	Gg or Thousand Tonnes						Gg CO <sub>2</sub> - eq		Greenhouse gas emissions (GHG) <sup>2</sup> (Gg CO <sub>2</sub> - eq) excluding Forestry and Other Land Use (FOLU)		% of total GHG emissions	
	Carbon dioxide (CO <sub>2</sub> )		Methane (CH <sub>4</sub> )		Nitrous oxide (N <sub>2</sub> O)		Hydrofluorocarbons (HFCs)		2021	2022	2021	2022
	2021	2022	2021	2022	2021	2022	2021	2022				
1. Energy	4,284.82	4,368.22	0.64	0.64	0.12	0.12	0.00	0.00	4,336.62	4,419.74	79.3	78.3
2. Industrial Processes and Product Use (IPPU)	39.24	37.44	...	...	...	...	348.92	405.27	388.16	442.71	7.1	7.9
3. Agriculture Forestry and Other Land Use (AFOLU) - Agriculture	...	...	1.37	1.63	0.39	0.44	...	...	148.18	170.55	2.7	3.0
4. Waste	0.74	0.74	27.33	27.82	0.08	0.08	...	...	598.83	609.18	10.9	10.8
<b>Total</b>	<b>4,324.80</b>	<b>4,406.39</b>	<b>29.34</b>	<b>30.10</b>	<b>0.59</b>	<b>0.64</b>	<b>348.92</b>	<b>405.27</b>	<b>5,471.78</b>	<b>5,642.18</b>	<b>100.0</b>	<b>100.0</b>

Emissions	Gg CO <sub>2</sub> -eq	
	2021	2022
1. Total GHG emissions excluding removals by Forestry and Other Land Use (FOLU)	5,471.78	5,642.18
2. GHG removals <sup>3</sup> - (FOLU)	335.56	334.14
3. GHG emissions including FOLU (= 1 - 2)	5,136.22	5,308.04

<sup>1</sup> Based on 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines of the United Nations Framework Convention on Climate Change (UNFCCC)

<sup>2</sup> Refers to carbon dioxide, methane, nitrous oxide and hydrofluorocarbons

<sup>3</sup> Excludes the amount of CO<sub>2</sub> sequestered by trees and vegetations found along rivers, canal reserves and trees along roads

... : Not occurring, not applicable, not estimated

**Table 7 - Greenhouse gas emissions from energy sector (fuel combustion activities), Republic of Mauritius, 2021 - 2022**

Gg CO<sub>2</sub>- eq

Energy Sector	2021		2022	
	Quantity	%	Quantity	%
Energy industries (electricity generation)	2,396.04	55.3	2,310.90	52.3
Manufacturing industries and construction	325.40	7.5	346.61	7.8
Transport	1,352.92	31.2	1,482.45	33.6
Other Sectors <sup>1</sup>	262.27	6.0	279.79	6.3
<b>Total</b>	<b>4,336.62</b>	<b>100.0</b>	<b>4,419.74</b>	<b>100.0</b>

<sup>1</sup> Includes Residential, Commercial, Institutional and Agriculture

**Table 8 - Electricity generation by source of energy, Republic of Mauritius, 2021 - 2022**

Source of energy	2021		2022	
	GWh	%	GWh	%
<b>Primary energy</b>	<b>292.6</b>	<b>9.8</b>	<b>315.5</b>	<b>10.1</b>
Hydro (renewable energy)	106.9	3.6	128.3	4.1
Wind (renewable energy)	15.4	0.5	15.5	0.5
Landfill gas (renewable energy)	19.0	0.6	17.2	0.6
Photovoltaic (renewable energy)	151.3	5.1	154.5	5.0
<b>Secondary energy</b>	<b>2,699.5</b>	<b>90.2</b>	<b>2,803.7</b>	<b>89.9</b>
Gas turbine (kerosene)	1.8	0.1	2.2	0.1
Diesel and Fuel oil	1,093.6	36.5	1,534.7	49.2
Coal	1,254.5	41.9	983.9	31.5
Bagasse (renewable energy)	349.7	11.7	283.0	9.1
<b>Total</b>	<b>2,992.1</b>	<b>100.0</b>	<b>3,119.2</b>	<b>100.0</b>
<i>of which</i> : renewable energy	<b>642.3</b>	<b>21.5</b>	<b>598.4</b>	<b>19.2</b>

**Table 9 - Fuel input for electricity production, Republic of Mauritius, 2021 - 2022**

ktoe (000 Tonne of oil equivalent)

Fuel	2021		2022	
	Quantity (ktoe)	%	Quantity (ktoe)	%
<b>Petroleum products</b>	<b>214.8</b>	<b>27.8</b>	<b>295.2</b>	<b>39.5</b>
<i>Fuel oil</i>	213.2	27.6	293.6	39.3
<i>Diesel oil</i>	0.9	0.1	0.8	0.1
<i>Kerosene</i>	0.7	0.1	0.8	0.1
<b>Coal</b>	<b>431.0</b>	<b>55.7</b>	<b>342.8</b>	<b>45.9</b>
<b>Total petroleum products and coal</b>	<b>645.8</b>	<b>83.5</b>	<b>638.0</b>	<b>85.4</b>
<b>Local renewables</b>	<b>127.6</b>	<b>16.5</b>	<b>109.5</b>	<b>14.6</b>
<i>Bagasse</i>	127.6	16.5	109.5	14.6
<b>Total</b>	<b>773.4</b>	<b>100.0</b>	<b>747.5</b>	<b>100.0</b>

Source: Central Electricity Board and Annual Sugar Industry Energy Survey

**Table 10 - Final energy consumption by sector and type of fuel, 2021 - 2022**

Sector	2021			2022		
	Tonne (except Electricity in GWh)	ktoe	%	Tonne (except Electricity in GWh)	ktoe	%
<b>1. Manufacturing</b>		<b>181.7</b>	<b>22.5</b>		<b>184.2</b>	<b>19.2</b>
<b>1.1 excluding bagasse</b>		<b>170.2</b>	<b>21.1</b>		<b>175.8</b>	<b>18.3</b>
<i>Fuel oil</i>	32,610	31.3	3.9	36,731	35.3	3.7
<i>Diesel oil</i>	29,815	30.1	3.7	40,817	41.2	4.3
<i>LPG</i>	4,815	5.2	0.6	6,743	7.3	0.8
<i>Coal</i>	41,372	25.7	3.2	26,588	16.5	1.7
<i>Fuel wood</i> <sup>1</sup>	1,000	0.4	0.0	1,536	0.6	0.1
<i>Electricity (GWh)</i>	902	77.6	9.6	872	75.0	7.8
<b>1.2 bagasse</b>	<b>71,906</b>	<b>11.5</b>	<b>1.4</b>	<b>52,332</b>	<b>8.4</b>	<b>0.9</b>
<b>2. Transport</b> <sup>2</sup>		<b>378.3</b>	<b>47.1</b>		<b>510.3</b>	<b>53.2</b>
<b>Land</b>		<b>336.5</b>	<b>41.9</b>		<b>373.9</b>	<b>39.0</b>
<i>Gasolene</i>	163,104	176.2	21.9	186,589	201.5	21.0
<i>LPG</i>	2,620	2.8	0.3	2,899	3.1	0.3
<i>Diesel oil</i>	155,961	157.5	19.6	166,850	168.5	17.6
<b>Air</b>						
<i>Aviation Fuel</i>	31,282	32.5	4.0	120,727	125.6	13.1
<b>Sea</b>		<b>9.3</b>	<b>1.2</b>		<b>10.8</b>	<b>1.1</b>
<i>Gasolene</i>	4,011	4.3	0.5	4,588	5.0	0.5
<i>Diesel oil</i>	1,505	1.5	0.2	2,093	2.1	0.2
<i>Fuel oil</i>	3,584	3.4	0.4	3,903	3.7	0.4
<b>3. Commercial and Distributive Trade</b>		<b>88.6</b>	<b>11.0</b>		<b>104.6</b>	<b>10.9</b>
<i>LPG</i>	16,738	18.1	2.2	20,063	21.7	2.3
<i>Charcoal</i> <sup>1</sup>	419	0.3	0.0	510	0.4	0.0
<i>Electricity (GWh)</i>	816	70.2	8.7	960	82.5	8.6
<b>4. Household</b>		<b>149.8</b>	<b>18.6</b>		<b>151.7</b>	<b>15.8</b>
<i>LPG</i>	57,277	61.9	7.7	58,768	63.5	6.6
<i>Fuelwood</i> <sup>1</sup>	8,904	3.4	0.4	8,568	3.3	0.3
<i>Charcoal</i> <sup>1</sup>	59	0.0	0.0	49	49.0	0.0
<i>Electricity (GWh)</i>	983	84.5	10.5	988	84.9	8.9
<b>5. Agriculture</b>		<b>3.4</b>	<b>0.4</b>		<b>3.2</b>	<b>0.3</b>
<i>Diesel oil</i> <sup>1</sup>	1,854	1.9	0.2	1,612	1.6	0.2
<i>Electricity (GWh)</i>	18	1.5	0.2	19	1.6	0.2
<b>6. Other (n.e.s)</b>		<b>3.0</b>	<b>0.4</b>		<b>4.3</b>	<b>0.5</b>
<b>Total</b>		<b>804.9</b>	<b>100.0</b>		<b>958.3</b>	<b>100.0</b>

<sup>1</sup> Estimates

<sup>2</sup> Includes transport for all sectors



**Table 11 - Stock of registered motor vehicles, Island of Mauritius, 2021 - 2022**

Type of vehicle	2021	2022
Cars, Dual Purpose Vehicle, Double cab pick up	334,104	350,996
Auto / Motorcycles	229,563	236,566
Heavy Motor Car and Bus	4,531	4,575
Van, lorry and truck	47,363	48,523
Other vehicles <sup>1</sup>	7,427	7,516
<b>Total</b>	<b>622,988</b>	<b>648,176</b>
<i>of which hybrid vehicles</i>	<i>20,252</i>	<i>24,101</i>
<i>electric vehicles</i>	<i>575</i>	<i>960</i>

<sup>1</sup> Includes tractor and dumper, prime mover, trailer, road roller and other

**Table 12 - Mean maximum, mean minimum and mean temperature, Island of Mauritius, 2022**

Temperature	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Degree Celcius
													Annual mean temperature
<b>Maximum temperature</b>													
Long Term Mean (1991-2020)	30.0	30.0	29.6	28.7	27.1	25.3	24.5	24.6	25.5	26.8	28.3	29.6	<b>27.5</b>
Monthly Maximum Mean Temperature	30.0	29.7	30.3	28.8	27.4	25.1	23.9	24.8	25.1	26.5	27.9	28.8	<b>27.4</b>
Difference from Long Term Mean	0.0	-0.3	0.7	0.1	0.3	-0.2	-0.6	0.2	-0.4	-0.3	-0.4	0.8	-0.1
<b>Minimum temperature</b>													
Long Term Mean (1991-2020)	22.6	22.9	22.4	21.5	19.6	18.1	17.3	17.3	17.5	18.7	19.9	21.6	<b>20.0</b>
Monthly Minimum Mean Temperature	22.3	23.0	22.8	22.1	19.6	17.4	16.7	16.6	17.4	17.8	18.4	20.6	<b>19.5</b>
Difference from Long Term Mean	-0.3	0.1	0.4	0.6	0.0	-0.7	-0.6	-0.7	-0.1	-0.9	-1.5	-1.0	-0.5
<b>Mean temperature</b>													
Long Term Mean (1991-2020)	26.3	26.4	26.0	25.1	23.4	21.7	20.9	20.9	21.5	22.7	24.1	25.6	<b>23.7</b>
Monthly Mean temperature	26.2	26.3	26.6	25.4	23.5	21.2	20.3	20.7	21.3	22.1	23.2	24.7	<b>23.5</b>
Difference from Long Term Mean	-0.1	-0.1	0.6	0.3	0.1	-0.5	-0.6	-0.2	-0.2	-0.6	-0.9	-0.9	-0.2

Source: Mauritius Meteorological Services

**Table 13 - Mean rainfall, Island of Mauritius, 2021 - 2022**

Month	Long Term Mean (1991-2020)	2021		2022	
		Monthly Mean	% of Long Term Mean	Monthly Mean	% of Long Term Mean
January	282	170	60	293	104
February	323	152	47	401	124
March	294	192	65	411	140
April	206	495	240	442	215
May	148	102	69	136	92
June	117	180	154	137	117
July	132	184	139	123	93
August	108	190	176	61	56
September	85	72	84	72	85
October	73	109	149	33	45
November	85	12	14	33	39
December	165	167	101	59	36
<b>Total for the year</b>	<b>2,018</b>	<b>2,025</b>	<b>100</b>	<b>2,201</b>	<b>109</b>

Source: Mauritius Meteorological Services

**Table 14 - Water balance, Island of Mauritius, 2021 - 2022**

	Mm <sup>3</sup>	
	2021	2022
<b>Rainfall</b>	<b>3,776</b>	<b>4,105</b>
<i>Surface runoff</i>	<i>2,265</i>	<i>2,463</i>
<i>Evapotranspiration</i>	<i>1,133</i>	<i>1,232</i>
<i>Net recharge to groundwater</i>	<i>378</i>	<i>411</i>

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

**Table 15 - Water Utilisation, Island of Mauritius, 2021 - 2022**

Mm<sup>3</sup>

Utilisation	2021				2022			
	Surface water		Ground water	Total	Surface water		Ground water	Total
	River-run offtakes	Storage (Reservoirs)			River-run offtakes	Storage (Reservoirs)		
Domestic, Industrial and Tourism (CWA network)	48 <sup>1</sup>	104	143	295	62 <sup>1</sup>	113	145	320
Agricultural	228	68 <sup>2</sup>	4	301 <sup>5</sup>	225	72 <sup>2</sup>	5	303 <sup>4</sup>
Hydropower	163 <sup>4</sup>	201 <sup>3</sup>	0	364	174	257 <sup>3</sup>	-	431
Industrial	2	1	6	9	2	1	7	10
<b>Overall utilisation</b>	<b>441</b>	<b>374</b>	<b>153</b>	<b>968<sup>5</sup></b>	<b>463</b>	<b>443</b>	<b>157</b>	<b>1,064</b>
<b>Total water mobilisation</b>	<b>410</b>	<b>298</b>	<b>153</b>	<b>861</b>	<b>441</b>	<b>321</b>	<b>157</b>	<b>894</b>

<sup>1</sup> 12 Mm<sup>3</sup> used also for Reduit hydropower station

<sup>2</sup> 43 Mm<sup>3</sup> used for Tamarind Falls and Magenta hydropower stations and 4 Mm<sup>3</sup> for La Ferme hydropower station;

<sup>3</sup> 26 Mm<sup>3</sup> used at Midlands and La Nicoliere;

<sup>4</sup> 19 Mm<sup>3</sup> used at Le Val and Ferney hydropower stations;

<sup>1</sup> 22 Mm<sup>3</sup> used also for Reduit hydropower station

<sup>2</sup> 56 Mm<sup>3</sup> used for Tamarind Falls and Magenta hydropower stations and 4 Mm<sup>3</sup> for La Ferme hydropower station;

<sup>3</sup> 62 Mm<sup>3</sup> used at Midlands and La Nicoliere;

<sup>4</sup> Included 0.7 Mm<sup>3</sup> re-use of treated Waste Water

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

**Table 16 - Disposal of solid waste by type at Mare Chicose landfill site, 2021 - 2022**

Tonnes

Waste material	2021	2022
Domestic and Commercial	477,793	473,983
Construction	7,102	5,248
Other <sup>1</sup>	16,272	14,842
<b>Total</b>	<b>501,167</b>	<b>494,073</b>

Source: Ministry of Environment, Solid Waste Management and Climate Change

<sup>1</sup> Includes mainly industrial waste

**Table 17 - Number of complaints<sup>1</sup> attended at the Pollution Prevention and Control (PPC) Division by category, Island of Mauritius, 2021 - 2022**

Category of complaints	2021	%	2022	%
Noise	148	21.5	139	18.4
Solid waste	47	6.8	39	5.2
Air pollution	152	22.1	85	11.2
Waste water	60	8.7	53	7.0
Odour	56	8.1	60	7.9
Bareland	46	6.7	87	11.5
Flooding/Obstruction of rivers and drains <sup>2</sup>	30	4.3	45	5.9
Other <sup>3</sup>	150	21.8	249	32.9
<b>Total</b>	<b>689</b>	<b>100.0</b>	<b>757</b>	<b>100.0</b>

<sup>1</sup> Include number of complaints attended at PPC Division through the Citizen Support Portal.

<sup>2</sup> Complaints regarding "Flooding/obstruction of rivers and drains" were recorded in "Other" prior to 2018.

<sup>3</sup> Includes backfilling, erosion, illegal construction, objections to projects, law and order, land conversion, land reclamations, landslides etc.

Source: Ministry of Environment, Solid Waste Management and Climate Change

**Table 18 - Number of Environmental Impact Assessment (EIA) licences granted by type of project, 2021 - 2022, Island of Mauritius**

Project	Number of EIA licences	
	2021	2022
Land parcelling (morcellement)	8	5
Industrial development	2	1
Coastal hotels and related works	3	5
Housing/Integrated Resort Scheme/Property Development Scheme/Smart City	2	4
Photovoltaic Farms	0	3
Stone crushing plants	0	2
Development in port area	0	2
Construction of road and highway	1	0
Other projects	8	12
<b>Total</b>	<b>24</b>	<b>34</b>

Source: Ministry of Environment, Solid Waste Management and Climate Change

**Table 19 - Number of Preliminary Environmental Report (PER) approvals granted by type of project, 2021 - 2022, Island of Mauritius**

Project	Number of PER approved	
	2021	2022
Land parcelling (morcellement)	0	0
Poultry rearing	4	0
Industrial development	6	6
Livestock rearing	0	1
Housing/Integrated Resort Scheme/Property Development Scheme/Smart City	2	1
Other projects	1	2
<b>Total</b>	<b>13</b>	<b>10</b>

Source: Ministry of Environment, Solid Waste Management and Climate Change

## Technical notes

### Concepts and definitions

#### Environment

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

*Environment Statistics*: Environment statistics are environmental data that have been structured, synthesized and aggregated according to statistical methods, standards and procedures. The scope of environment statistics covers biophysical aspects of the environment and those aspects of the socioeconomic system that directly influence and interact with the environment.

*Environmental indicator*: Environmental indicators are environment statistics that have been selected for their ability to depict important phenomena or dynamics. Environmental indicators are used to synthesize and present complex environment and other statistics in a simple, direct, clear and relevant way.

#### Land use, Agriculture and Forestry

*Pas Géométriques*: Pas Géométriques are a narrow belt, theoretically 81.21 metres (250 French feet) in width, round the coast and are State-owned. There are several cases where the width is less than 81.21 metres or does not exist at all.

*Ramsar Sites*: The Convention on Wetlands also known as the Ramsar Convention defines wetlands as “Areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”. Mauritius became a contracting party to the Ramsar Convention on 30 September 2001.

*Land use*: Land use reflects both the activities undertaken and the institutional arrangements put in place for a given area for the purposes of economic production, or the maintenance and restoration of environmental functions. Consequently, there are areas of land that are “not in use” by human activities.

*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.

#### Energy and Greenhouse gas

*Greenhouse gases (GHG)*: These gases occur naturally and also result from human-induced activities (anthropogenic production and consumption) that contribute directly or indirectly to global warming. Some main GHG are Carbon Dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and Nitrous Oxide (N<sub>2</sub>O). Other gases such as Carbon monoxide (CO), oxides of Nitrogen (NO<sub>x</sub>), non methane volatile organic compounds (NMVOC) and Sulphur dioxide (SO<sub>2</sub>), contribute indirectly to global warming. GHG 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<sub>2</sub>-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).

Global Warming Potential (GWP)

The Global Warming Potential (GWP) was adopted from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (SAR – 100 years’ time horizon) as in the table below.

<b>GHG</b>	<b>GWP</b>
Carbon Dioxide CO <sub>2</sub>	1
Methane CH <sub>4</sub>	21
Nitrous Oxide N <sub>2</sub> O	310
Hydrofluorocarbon 152a	140
Hydrofluorocarbon 32	650
Hydrofluorocarbon 134a	1300
Hydrofluorocarbon 125	2800
Hydrofluorocarbon 227ea	2900
Hydrofluorocarbon 143a	3800
Hydrofluorocarbon 23	11700

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.

Renewable energy: Renewable energy is captured from sources that replenish themselves. It includes solar (photovoltaic and thermal), hydroelectric, geothermal, tidal action, wave action, marine (non-tidal currents, temperature differences and salinity gradients), wind and biomass energy, all of which are naturally replenished, even though their flow may be limited.

Final energy consumption: Energy consumption by final user, i.e energy which is not being used for transformation into other forms of energy.

**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

Rs	Rupees
Rs mn	Rupees million
%	Percentage
000	Thousand
Mm <sup>3</sup>	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
µg/m <sup>3</sup>	Micrograms per cubic metre

## Symbols

0	Nil
NA	Not available
Napp	Not applicable

## Conversion factor

1 square kilometre = 100 hectares



**Statistics Mauritius**  
**LIC Centre,**  
**John Kennedy Street,**  
**Port Louis, MAURITIUS**  
**T: +230 208 1800**  
**F: +230 211 4150**  
**W: <https://statsmauritius.govmu.org>**  
**E: [statsmauritius@govmu.org](mailto:statsmauritius@govmu.org)**