

**Statistical report  
No 10: 2025**

**2024 Energy Report**



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## **1.0 Introduction**

“Detailed, complete, timely and reliable statistics are essential to monitor the energy situation at a country level as well as at an international level. Energy statistics on supply, trade, stocks, transformation and demand are indeed the basis for any sound energy policy decision”. IEA (2004), Energy Statistics Manual, OECD Publishing, Paris, <https://doi.org/10.1787/9789264033986-en>.

Lesotho has been depending on ‘Muela hydropower generation with 72MW installed capacity as well as imports from Eskom and Electricidade Mozambique. Due to low access to electricity, the government of Lesotho established an entity called Lesotho Electricity Generation Company (Legco) with a mandate to elevate generation and meet local electricity requirements. One of Legco projects is Ramarothole power station which generates electricity by solar photovoltaic and sells it to LEC. There are also mini grids from private companies.

The country imports all its fossil fuels, imports some wood and wood products also produces charcoal.

### **1.1 Scope and Coverage**

The report includes data on installed capacity, production, consumption, imports and exports of energy commodities such as electricity, fossil fuels and bioenergy.

## **2.0 Results**

The results are for the year 2024 presented in tables and graphs.

### **3.0 Electricity**

Electricity is a form of energy resulting from the existence of charged particles (such as electrons or protons), either statically as an accumulation of charge or dynamically as a current. <https://www.dictionary.com/browse/electricity>

#### **3.1 Generated Electricity**

Electricity is generated by converting a different form of energy into electrical energy. <https://www.bbc.co.uk/bitesize/articles/zgpj8hv#zdrsf82>

##### **3.1.1 Installed Capacity**

Installed Capacity is the maximum amount of electricity that a generating station (also known as a power plant) can produce under specific conditions designated by the manufacturer. Installed capacity is typically calculated in megawatts (MW). [https://uk.practicallaw.thomsonreuters.com/7-517-7373?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://uk.practicallaw.thomsonreuters.com/7-517-7373?transitionType=Default&contextData=(sc.Default)&firstPage=true).

Power stations in Lesotho include two hydro-power stations (‘Muela and Mantsonyane: both undergoing maintenance), a hybrid diesel-hydro power station in Semonkong, solar mini-grid at Moshoeshoe I international airport, Ramarothole solar power station, solar mini-grids of

One Power at Ha-Makebe, Tlhanyaku, Matsoaing and Mashai. Included also is the capacity of solar installed in Health centres as well as solar lights.

‘Muela is the main producer of electricity with a capacity of 72MW (three 24MW generators), followed by Ramarothole with a capacity of 30MW Solar mini-grids capacity in Tlhanyaku, Mashai and Matsoaing is 0.03MW and that of Ha-Makebe is 0.04MW. All these mini grids installed LPG back-up generators of 0.04MW and 0.02MW respectively.

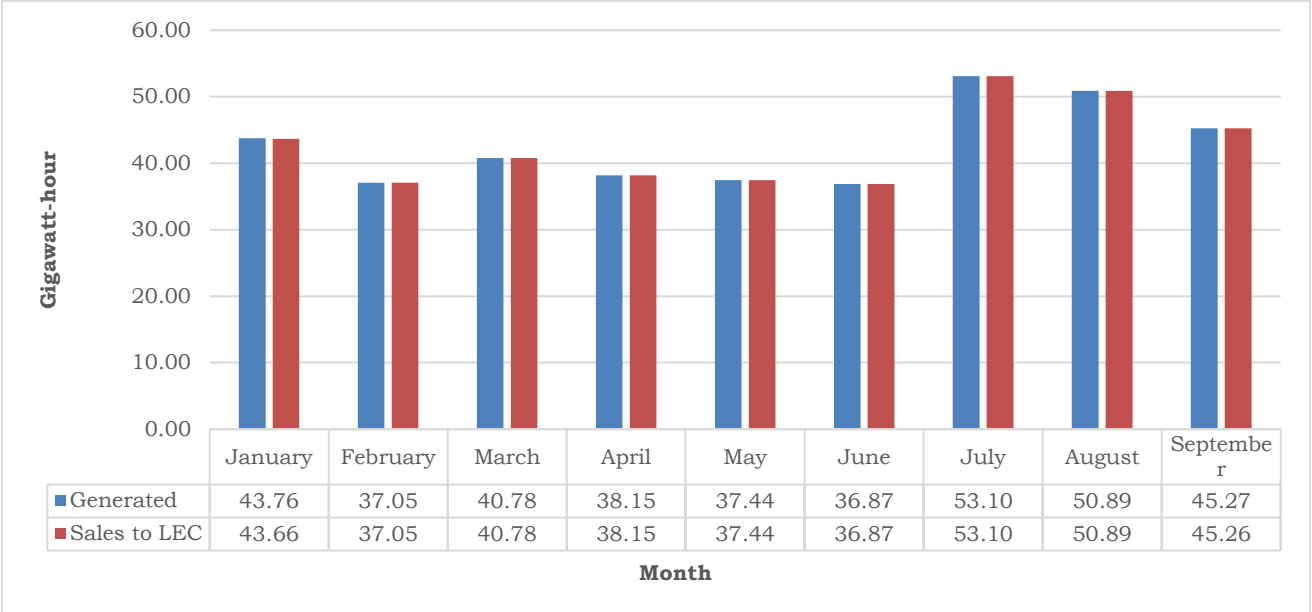
**Refer to Annex 1**

### 3.1.2 ‘Muela Generation

Lesotho’s main source of electricity is from the Muela hydropower plant. Hydroelectric power is produced with moving water. At hydropower plants, water flows through a pipe, or penstock, then pushes against and turns blades in a turbine that spins to power a generator to produce electricity.  
<https://www.eia.gov/energyexplained/hydropower/#:~:text=Hydroelectric%20power%20is%20produced%20with%20moving%20water&text=At%20hydropower%20plants%20water%20flows,a%20generator%20to%20produce%20electricity>.

Electricity generated by ‘Muela power station and sales to LEC in Gigawatt-hours (GWh) by month in 2024 is portrayed in figure 1. Electricity generation stopped in September 2024 due to planned maintenance by LHDA. Electricity generation was highest in July (53.10GWh) and lowest in June (36.87GWh). All electricity generated by LHDA was sold to LEC except in January and September.

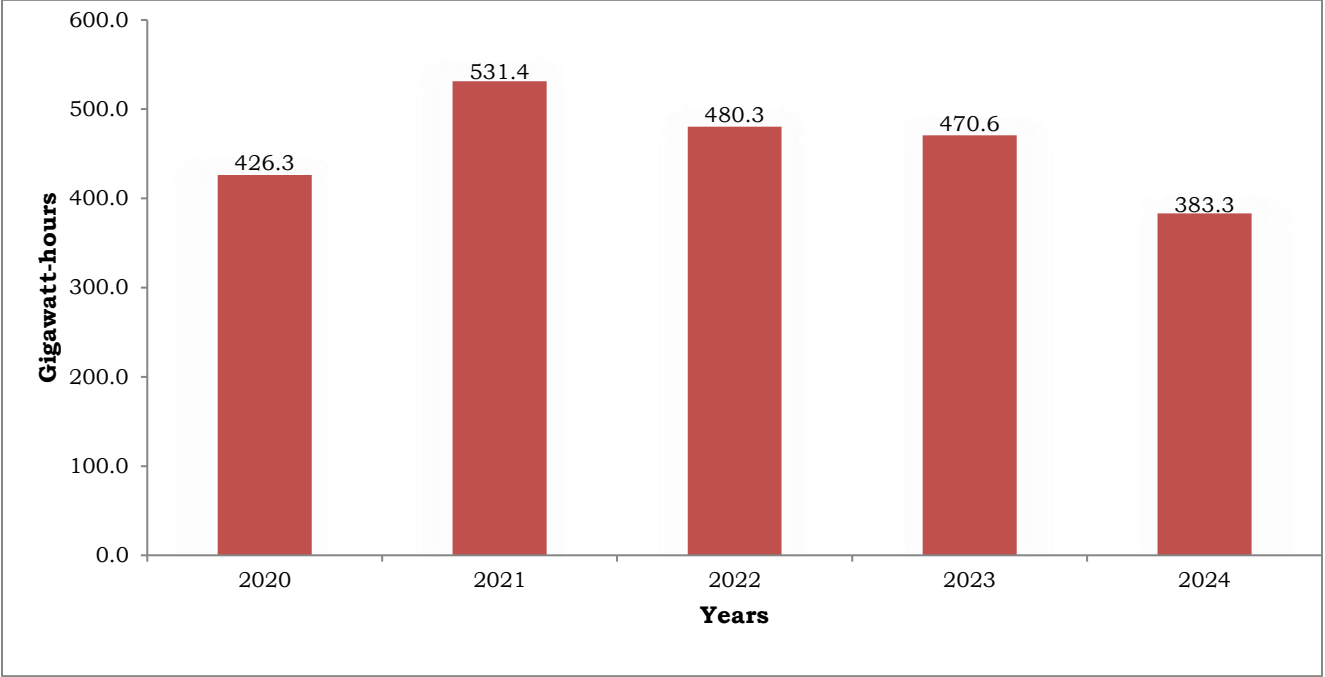
**Figure 1: Electricity Generated by ‘Muela Power Station and Sales to LEC in Gigawatt-hours (GWh) by Month - 2024**



**Source: Lesotho Highlands Development Authority**

Figure 2 depicts electricity generated in Gigawatt-hours (GWh) for the years 2020 to 2024. Currently an 18.6 percent decline was experienced from 2023 (470.6GWh) to 2024 (383.3GWh). Electricity generated was highest in 2021 and lowest in 2024 with 531.4GWh and 383.3GWh respectively. Electricity production increased by 24.7 percent from 426.3GWh in 2020 to 531.4GWh in 2021. Production decreased in 2022 (480.3GWh) until 2024 (383.3GWh).

**Figure 2 : Electricity Generated by ‘Muela in Gigawatt-hours (GWh) - 2020 to 2024**



Source: Lesotho Highlands Development Authority

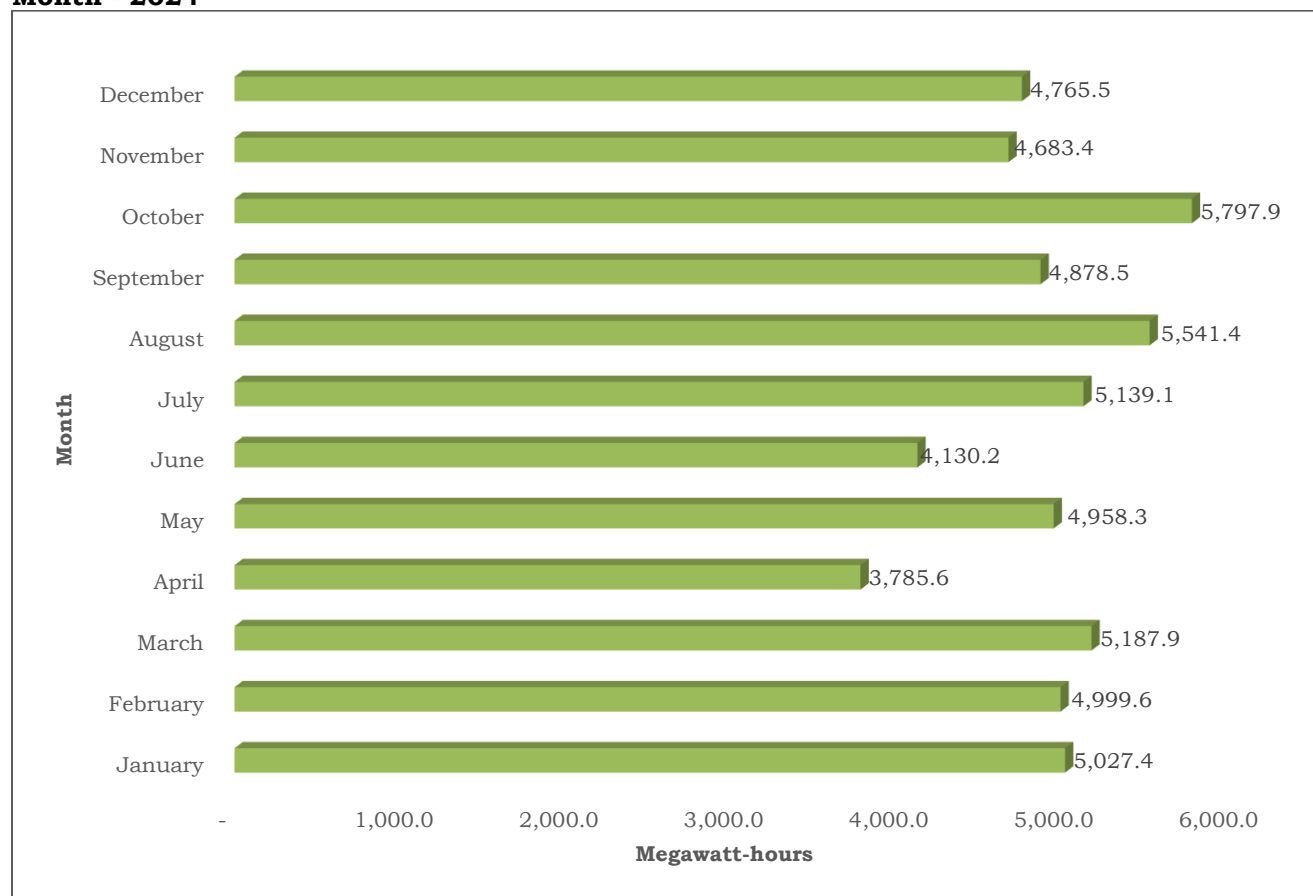
**3.1.3 Ramarothole Generation**

Located in the scenic region of Mafeteng, the Ramarothole Solar Power Station represents a significant stride towards renewable energy in Lesotho. This solar photovoltaic power plant harnesses the abundant sunlight of the area to generate clean energy, contributing to the nation’s goal of sustainability. <https://evendo.com/locations/lesotho/mafeteng/landmark/ramarothole-solar-power-station>

Electricity generated from Ramarothole power station is fed into the main grid and purchased by Lesotho Electricity Company (LEC).

Figure 3 illustrates electricity generated by Ramarothole Power Station in Megawatt-hours (MWh) in 2024. Most of the electricity was produced in October at 5,797.9MWh, followed by 5,541.4MWh in August. The least production of 3,785.6MWh was observed in April.

**Figure 3: Electricity Generated by Ramarothole Power Station in Megawatt-hours (MWh) by Month - 2024**



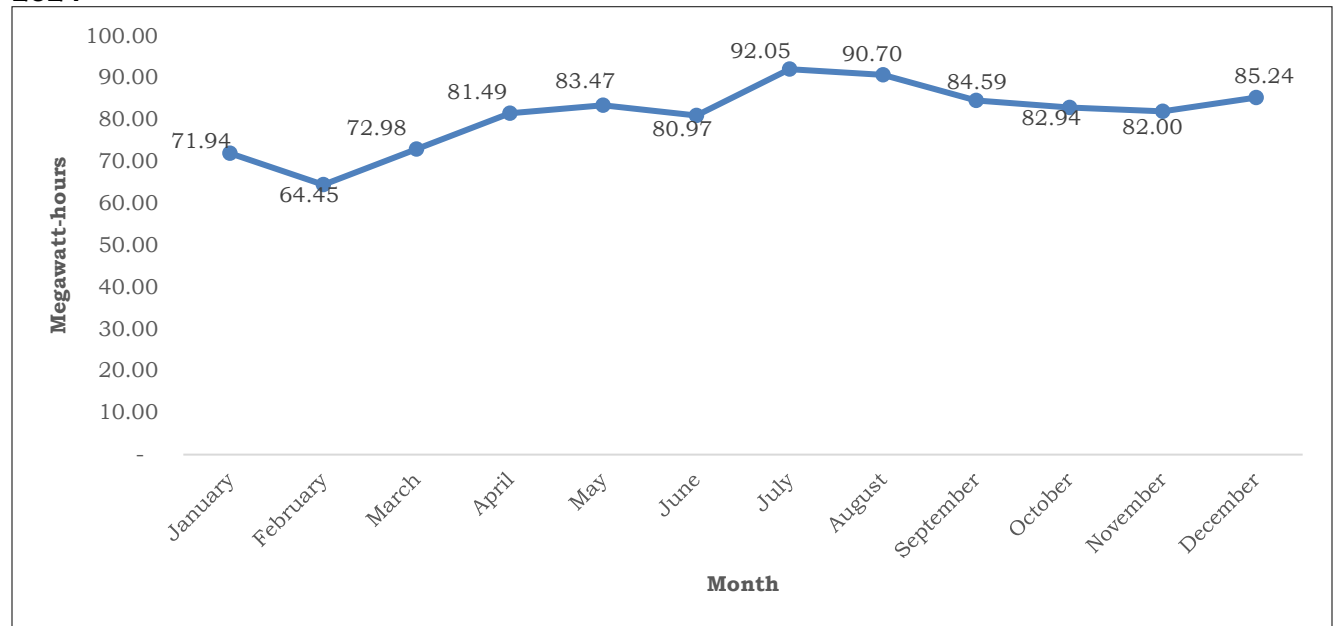
Source: Lesotho Electricity Generation Company

### 3.1.4a Semonkong Generation

The role of the mini hydro power plants is to reduce the dependence on diesel generators in the remote areas and to supply rural areas with electricity in isolated networks from the National Grid. Generation of electricity falls outside the scope of the LEC business; hence it is done at a very small scale in Semonkong and Mantšonyane. <https://lec.co.ls/generation/>

Figure 4 displays electricity generated by Semonkong power station in Megawatt-hours (MWh) by months in 2024. The highest electricity generation was in July (92.05MWh) followed by August with 90.70MWh. The lowest generation was noticed in February (64.45MWh).

**Figure 4 : Electricity Generated by Semonkong Power Station in Megawatt-hours by Month - 2024**



Source: Lesotho Electricity Company

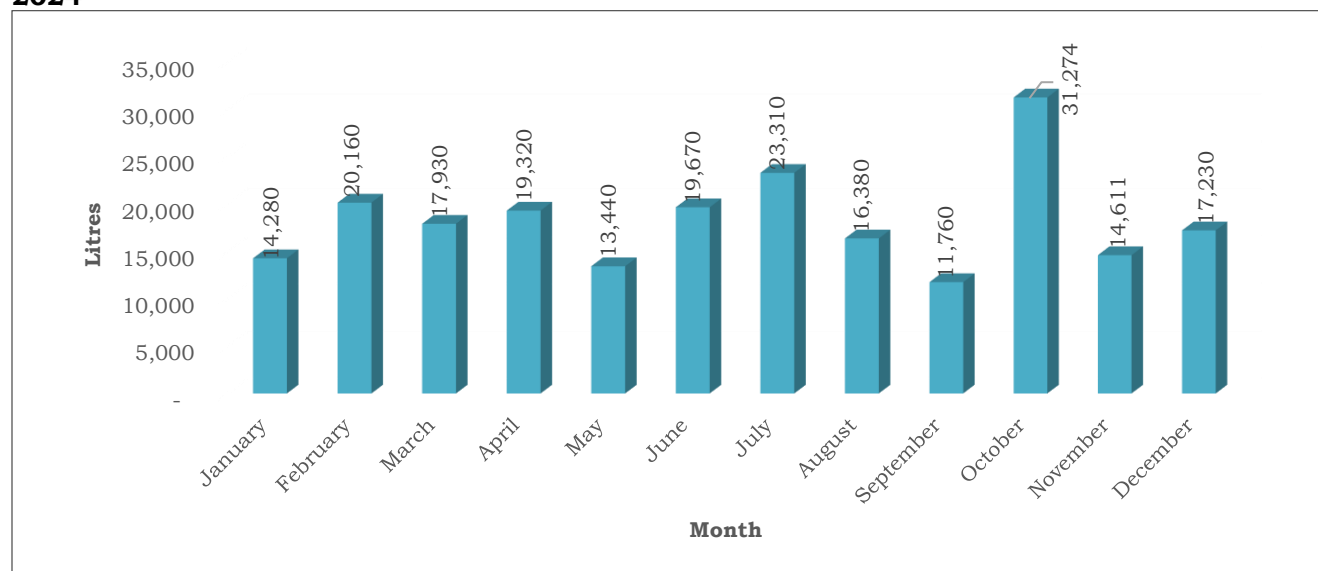
### 3.1.4b Diesel Used for Electricity Generation Semonkong

A diesel generator utilizes a diesel engine and electric generator to generate electrical energy. Liquid fuel or natural gas is usually used as the primary fuel of the diesel generator. Diesel generators convert fuel energy (diesel or biodiesel) into mechanical energy by means of an internal combustion engine and then into electric energy by means of an electric generator. <https://www.sciencedirect.com/topics/engineering/diesel-generator>

Semonkong hybrid power station generates electricity using diesel as the primary fuel to provide access to electricity in Semonkong town.

Figure 5 depicts the quantity of diesel in Litres (L) used for electricity generation in Semonkong by month for the year 2024. The largest quantity of diesel was used in October (31,274L), followed by July (23,310L), and February with 20,160L. The lowest quantity of diesel used for generation was in September with 11,760L. Diesel used for electricity generation increased by 25.8 percent from 2023 (174,444L) to 2024 (219,365L).

**Figure 5 : Quantity of Diesel (Litres) Used for Electricity Generation in Semonkong by Month - 2024**



Source: Lesotho Electricity Company

### 3.2 Electricity Sales to LEC

To date, LEC buys electricity from 'Muela Hydro-power station (LHDA), Eskom and EDM through a 132kV and 88kV networks. In Qacha's Nek, LEC purchases electricity from Eskom through a 22kV line from Matatiele in the RSA. Qacha's Nek is the only district that is not connected to the main national grid.

<https://lec.co.ls/history/#::~text=To%20date%2C%20LEC%20buys%20electricity,from%20Matatiele%20in%20the%20RSA>

LEC also purchases electricity from Ramarothole power station.

Electricity purchased by LEC in MWh from 'Muela, Eskom, Electricidade De Moçambique (EDM) and Ramarothole for the year 2024 is presented in table 1. It is studied that the highest electricity purchases were from Eskom (535,279MWh) and the least from EDM with 45,745MWh. Elevated purchases from Eskom were in October (74,113MWh) and low in January (25,344MWh). Purchases from 'Muela were high in July with 53,099MWh. There were no purchases in October, November and December from 'Muela due to ongoing power plant maintenance. LEC purchased the highest quantity of electricity from Ramarothole in August and the lowest in April with 5,237MWh and 3,617MWh respectively. In general, electricity was mostly purchased in July with 101,247MWh and least purchased in November with 71,995MWh.

**Table 1 : Electricity Purchased by LEC in MWh from Eskom, 'Muela EDM and Ramarothole by Month - 2024**

| <b>Month</b> | <b>Eskom</b>   | <b>Muela</b>   | <b>EDM</b>    | <b>Ramarothole</b> | <b>Total</b>     |
|--------------|----------------|----------------|---------------|--------------------|------------------|
| January      | 25,344         | 43,663         | 3,720         | 4,504              | 77,231           |
| February     | 27,157         | 37,046         | 3,480         | 4,901              | 72,584           |
| March        | 27,099         | 40,777         | 4,805         | 5,050              | 77,731           |
| April        | 38,400         | 38,152         | 4,650         | 3,617              | 84,819           |
| May          | 43,482         | 37,439         | 4,720         | 4,756              | 90,397           |
| June         | 47,256         | 36,869         | 5,970         | 3,895              | 93,989           |
| July         | 40,390         | 53,099         | 3,100         | 4,658              | 101,247          |
| August       | 39,889         | 50,887         | 3,100         | 5,237              | 99,113           |
| September    | 35,195         | 45,261         | 3,000         | 4,544              | 88,000           |
| October      | 74,113         |                | 3,100         | 5,053              | 82,066           |
| November     | 67,692         |                | 3,000         | 4,302              | 71,995           |
| December     | 69,261         |                | 3,100         | 4,364              | 76,725           |
| <b>Total</b> | <b>535,279</b> | <b>383,194</b> | <b>45,745</b> | <b>54,879</b>      | <b>1,015,897</b> |

**Source: Lesotho Electricity Company**

### **3.3 Electricity Imports and Exports**

Lesotho imports electricity from Eskom and EDM to meet its high electricity demand. It also exports excess electricity produced to Eskom when electricity demand is low.

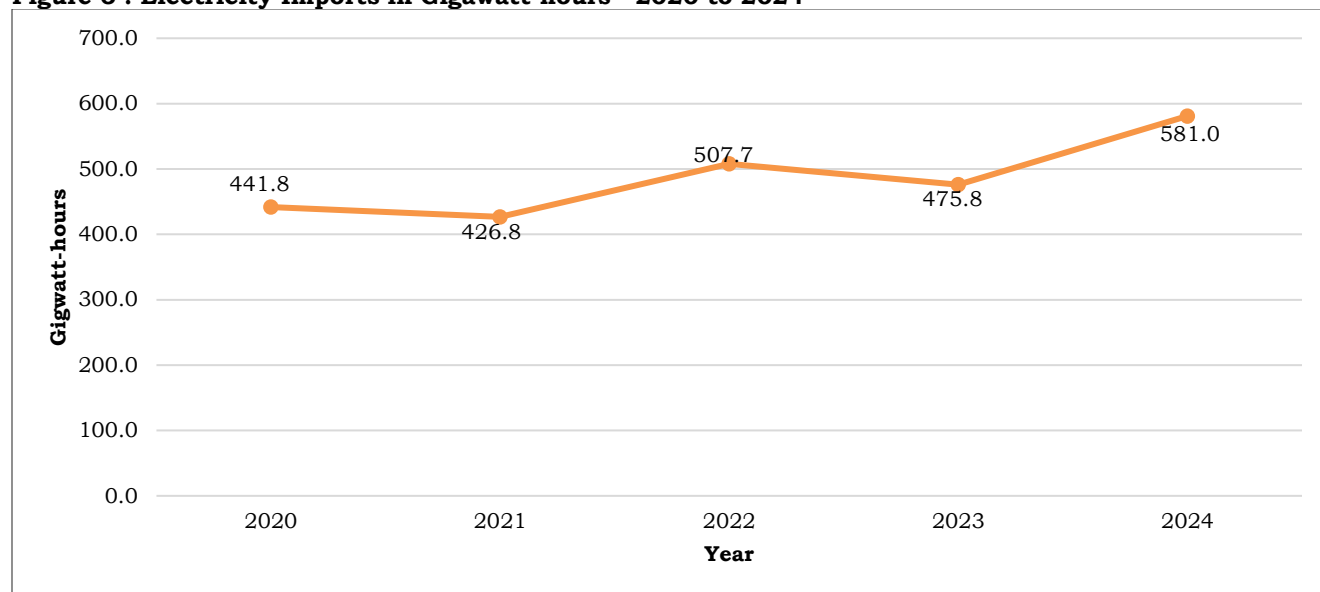
Table 2 shows electricity imports and exports by month in Megawatt-hours (MWh) for the year 2024. It revealed that the electricity was mostly imported in October amounting to 77,212.82MWh. The least imports were recognized in January with 29,064.31MWh. Exports were highest in January (101.67MWh) and lowest in August at 0.46MWh. There were no exports recorded in February, April, May, June, October, November and December.

**Table 2 : Electricity Imports and Exports by Month in Megawatt-hours - 2024**

| Month        | MWh               |               |
|--------------|-------------------|---------------|
|              | Imports           | Exports       |
| January      | 29,064.31         | 101.67        |
| February     | 30,637.27         | 0.00          |
| March        | 31,903.84         | 1.12          |
| April        | 43,050.02         | 0.00          |
| May          | 48,201.80         | 0.00          |
| June         | 53,225.73         | 0.00          |
| July         | 43,490.34         | 1.44          |
| August       | 42,989.12         | 0.46          |
| September    | 38,195.32         | 10.40         |
| October      | 77,212.82         | 0.00          |
| November     | 70,692.42         | 0.00          |
| December     | 72,360.98         | 0.00          |
| <b>Total</b> | <b>581,023.97</b> | <b>115.09</b> |

Source: Lesotho Highlands Development Authority, Lesotho Electricity Company

A trend in electricity imports in Gigawatt-hours (GWh) from 2020 to 2024 is displayed in figure 6. It is noticed that there have been fluctuations in imported electricity over the years. Electricity imports were highest in 2024 (581.0GWh) and lowest in 2021 with 426.8GWh. Imports increased by 22.1 percent from 2023 (475.8GWh) to 581.0GWh in 2024. Imports decreased by 3.4 percent from 2020 to 2021 (441.8GWh to 426.8GWh). From 2022 to 2023, imports declined by 6.3 percent

**Figure 6 : Electricity Imports in Gigawatt-hours - 2020 to 2024**

Source: Lesotho Electricity Company

### 3.4 Electricity Distribution

Electric power distribution is the final stage in the delivery of electricity. Electricity is carried from the transmission system to individual consumers.

[https://en.wikipedia.org/wiki/Electric\\_power\\_distribution](https://en.wikipedia.org/wiki/Electric_power_distribution)

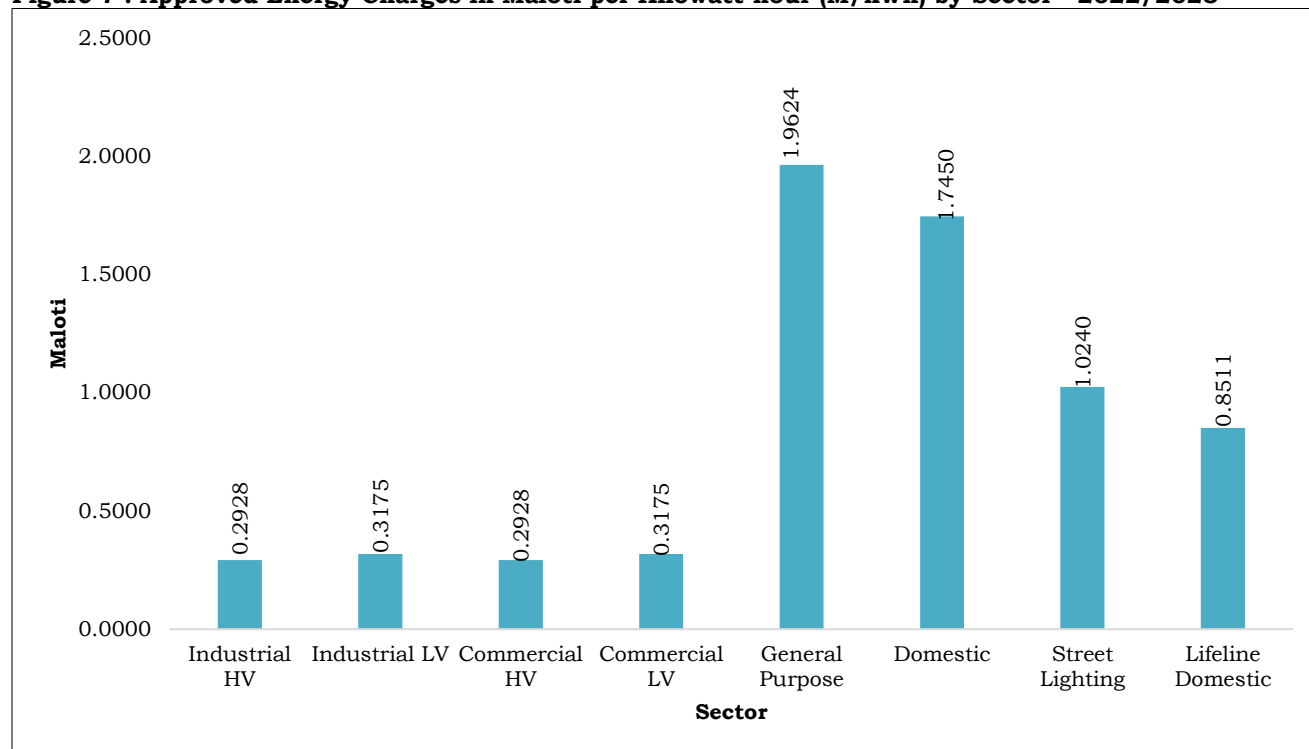
In Lesotho, electricity is distributed through electricity network cables from Muela, Ramarothole, Moshoeshoe 1, Makebe, Tlhanyaku, Matsoaing, Mantsonyane, Semonkong and Mashai to different consumers stationed all over the country.

#### 3.4.1 Electricity Tariff

Electricity tariff is the amount of money that is charged a consumer per unit of electricity used.

Figure 7 outlines approved energy charges in Maloti per kilowatt-hour (M/kWh) in 2022/2023. The rate is high for General Purpose consumers (M1.9624), followed by Domestic consumers with M1.7450. Electricity tariff increased by 7.54 percent and 7.48 percent for General Purpose Consumers and Domestic Consumers from 2021/2022 to 2022/2023 respectively. The electricity tariffs are M0.2928 for Industrial and Commercial High Voltage consumers and M0.3175 for Industrial and Commercial Low Voltage consumers.

**Figure 7 : Approved Energy Charges in Maloti per Kilowatt-hour (M/kWh) by Sector - 2022/2023**



Source: Lesotho Electricity Company

### 3.4.2 Electricity Consumed and Number of LEC Consumers

Electricity consumed refers to the amount of electricity used by a consumer for a certain time. The amount consumed in a year depends on the tariff used, number and type of consumers as well as how many units of electricity they used. In Lesotho, electricity consumers are classified into different sectors and each sector has its own charge.

Table 3 demonstrates electricity consumption in Megawatt-hours and average number of consumers in 2024. Prepaid Domestic consumers were the most consuming with a consumption of 273,162.90MWh followed by Industrial high Voltage (181,656.31MWh). It is further observed that the least consuming were Domestic Consumers with 299.85MWh.

**Table 3 : Electricity Consumption in Megawatt-hours and Average Number of Consumers by Sector - 2024**

| Sector                   | Consumption (MWh) | Average Number of Consumers |
|--------------------------|-------------------|-----------------------------|
| Domestic Consumers       | 299.85            | 4                           |
| General Purpose          | 1,672.06          | 22                          |
| Commercial HV            | 74,179.62         | 39                          |
| Commercial LV            | 69,516.57         | 223                         |
| Industrial HV            | 181,656.31        | 37                          |
| Industrial LV            | 60,038.42         | 172                         |
| Pre-Paid Domestic        | 273,162.90        | 294,150                     |
| Pre-Paid General Purpose | 103,827.62        | 17,687                      |
| Streetlights             | 1,887.08          | 133                         |
| Staff                    | 5,065.75          | 545                         |
| Lifeline                 | 99,648.64         |                             |
| <b>Total</b>             | <b>870,954.82</b> |                             |

Source: Lesotho Electricity Company

### 3.4.3 Economic Sectors Consumption

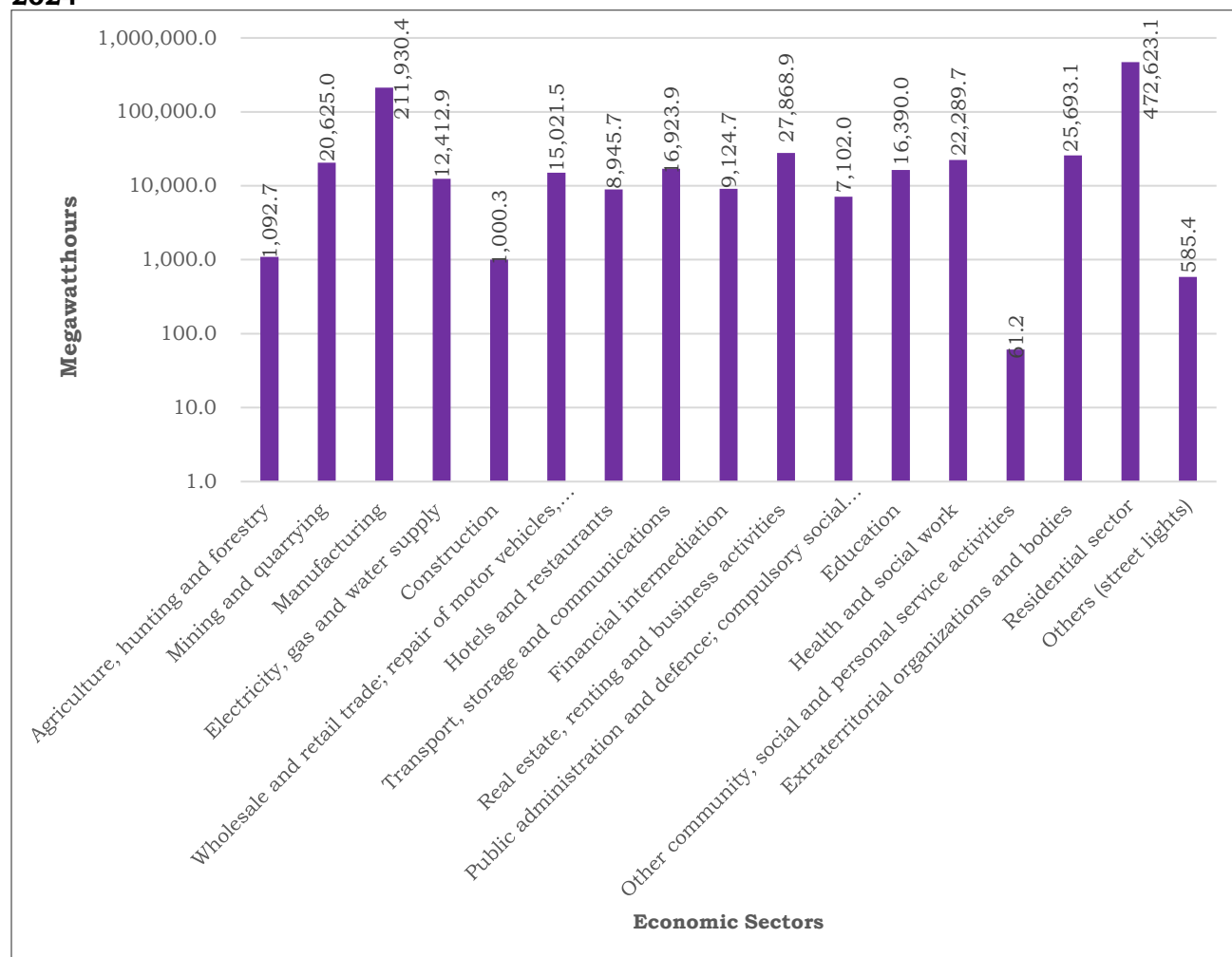
A sector is an area of the economy in which businesses share the same or related business activity, product, or service. Sectors represent a large group of companies with similar business activities, such as the extraction of natural resources and agriculture.

<https://www.investopedia.com/terms/s/sector.asp>

This section comprises consumption of electricity by different sectors of the economy.

Figure 8 demonstrates the quantity of electricity consumed by economic sectors in Megawatt-hours for the year 2024. The Residential sector was the most consuming with 472,623.1MWh, followed by the Manufacturing sector with 211,930.4MWh. The least consuming sector was “Other community, social and personal service activities” with 61.2MWh.

**Figure 8 : Quantity of Electricity Consumed by Economic Sectors in Megawatt-hours (MWh) - 2024**



Source: Lesotho Electricity Company

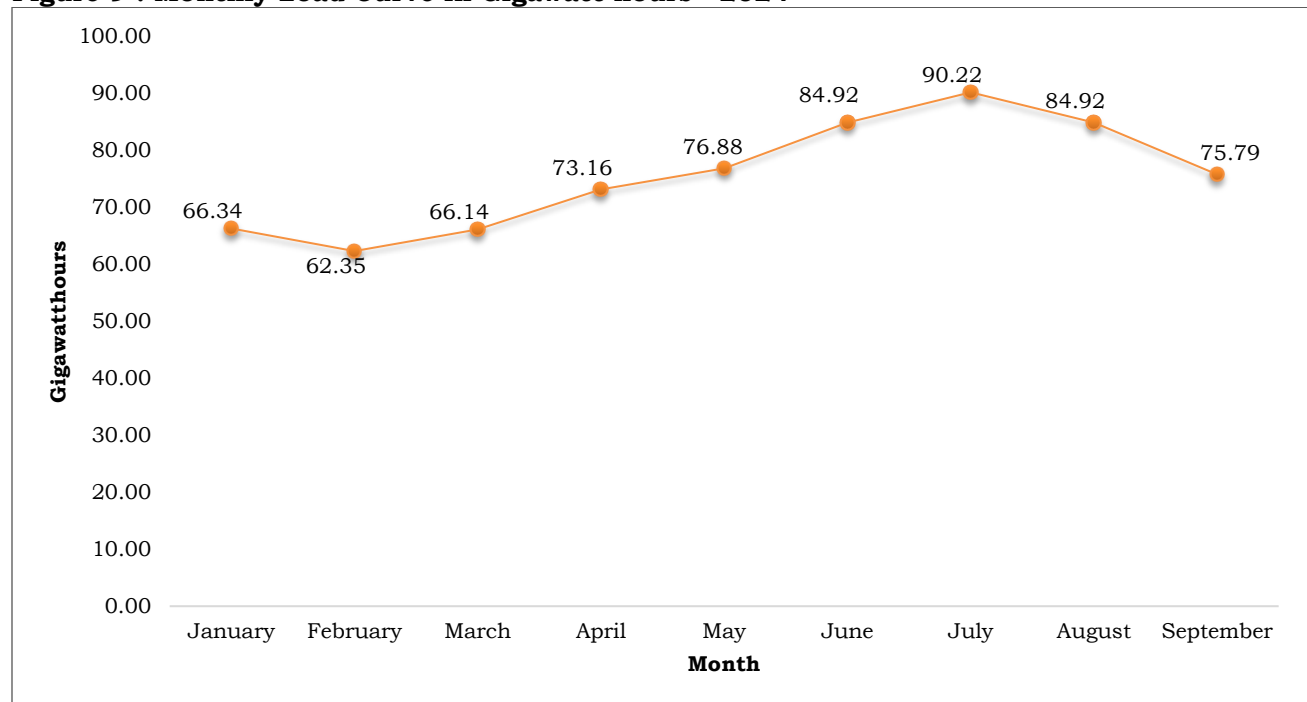
### 3.5 Lesotho Load

An electrical load or electric load is any component of a circuit that consumes electrical energy and converts the generated energy into another form – most commonly light or heat.

<https://www.gridx.ai/knowledge/electrical-load#:~:text=An%20electrical%20load%20or%20electric,most%20commonly%20light%20or%20heat.>

Figure 9 outlines the monthly load curve in gigawatt-hours for the year 2024. It is studied from the figure that the highest load was experienced in July with 90.22GWh followed by June and August with 84.92GWh each. The load was lowest in February (62.35GWh).

**Figure 9 : Monthly Load Curve in Gigawatt-hours - 2024**



Source: Lesotho Highlands Development Authority

## 4.0 Fossil Fuels

A fossil fuel is a hydrocarbon-containing material such as coal, oil, and natural gas, formed naturally in the Earth's crust from the remains of dead plants and animals that is extracted and burned as a fuel. [https://en.wikipedia.org/wiki/Fossil\\_fuel](https://en.wikipedia.org/wiki/Fossil_fuel)

### 4.1 Petroleum

Petroleum products are materials derived from crude oil (petroleum) as it is processed in oil refineries. [https://en.wikipedia.org/wiki/Petroleum\\_product](https://en.wikipedia.org/wiki/Petroleum_product)

#### 4.1.1 Petroleum Fuel Costs

The mission of Petroleum Fund in Lesotho is to spearhead the supply of adequate and reliable petroleum products at competitive and reasonable prices to consumers in all parts of the country. <https://petroleum.org.ls/about-us/>

Table 4 shows petroleum fuel costs in Maloti per litre for the year 2024. Petrol 93 and Petrol 95 prices were highest in May with M23.25 and M23.70 respectively. On the other hand, Paraffin and Diesel prices were M17.60 and M23.35 from March to May. In addition, the prices of fuels were lowest in October with prices recorded as M19.05 (Diesel), M18.75 (Petrol 95), M18.35 (Petrol 93) and M13.50 for Illuminating Paraffin.

**Table 4 : Petroleum Fuel costs in Maloti per Litre - 2024**

| <b>Month</b>   | <b>Maloti</b>    |                  |               |              |
|----------------|------------------|------------------|---------------|--------------|
|                | <b>Petrol 93</b> | <b>Petrol 95</b> | <b>Diesel</b> | <b>IP</b>    |
| January        | 19.05            | 19.40            | 21.90         | 16.50        |
| February       | 19.80            | 20.25            | 21.55         | 16.50        |
| March          | 22.25            | 22.70            | 23.35         | 17.60        |
| April          | 22.70            | 23.15            | 23.35         | 17.60        |
| May            | 23.25            | 23.70            | 23.35         | 17.60        |
| June           | 22.35            | 22.80            | 22.45         | 16.60        |
| July           | 21.05            | 21.55            | 21.65         | 16.30        |
| August         | 21.00            | 21.40            | 21.35         | 15.90        |
| September      | 19.75            | 20.15            | 20.15         | 14.60        |
| October        | 18.35            | 18.75            | 19.05         | 13.50        |
| November       | 18.65            | 19.20            | 19.50         | 13.90        |
| December       | 18.45            | 18.95            | 19.75         | 14.10        |
| <b>Average</b> | <b>20.55</b>     | <b>21.00</b>     | <b>21.45</b>  | <b>15.89</b> |

**Source: Petroleum Fund**

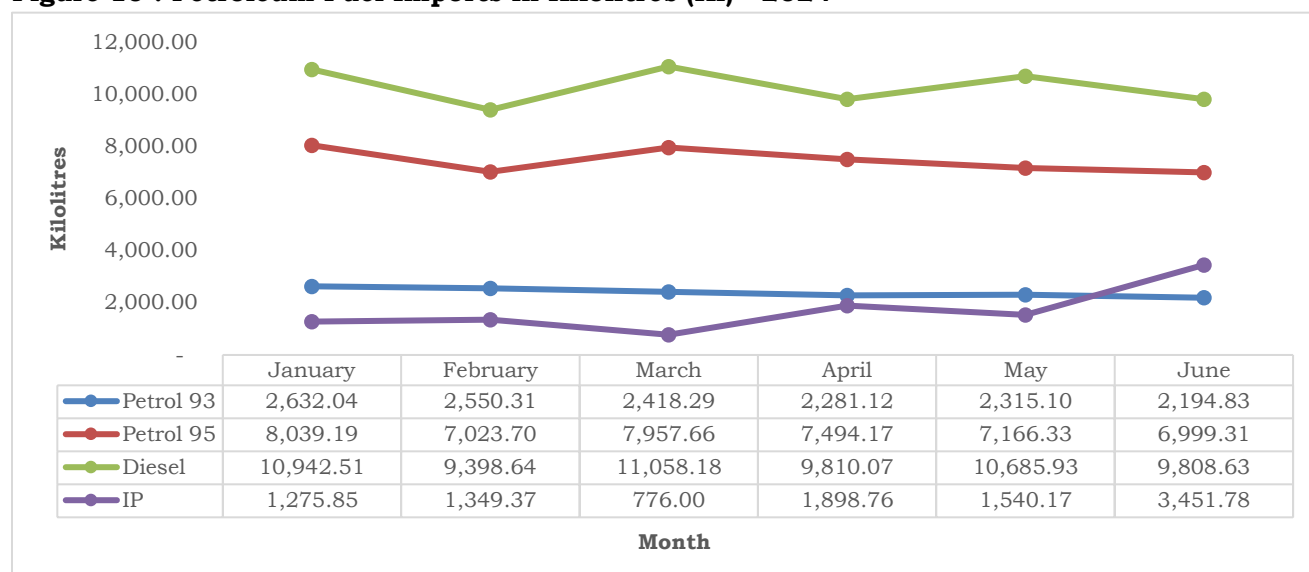
#### **4.1.2 Petroleum Fuel Imports**

All Lesotho's imported oil products come from South Africa, with three multi-national companies operating in Lesotho in that field, as they import and store the products in bulk storage facilities before they redistribute them throughout the country.

[https://energypedia.info/wiki/Lesotho\\_Energy\\_Situation](https://energypedia.info/wiki/Lesotho_Energy_Situation)

Figure 10 shows petroleum fuel imports in kilolitres (Kl) in 2024. Petrol 93 imports were higher in January (2,632.04Kl) and lower in June (2,194.83Kl). Petrol 95 was mostly imported in January (8,039.19Kl) and the least imported in June with 6,999.31Kl. Diesel 50ppm imports were high in March and low in February, adding up to 11,058.18Kl and 9,398.64Kl. It is indicated that Paraffin was imported in larger volumes in June (3,451.78Kl) and smaller volume in March with 776.00Kl.

**Figure 10 : Petroleum Fuel Imports in Kilolitres (Kl) - 2024**



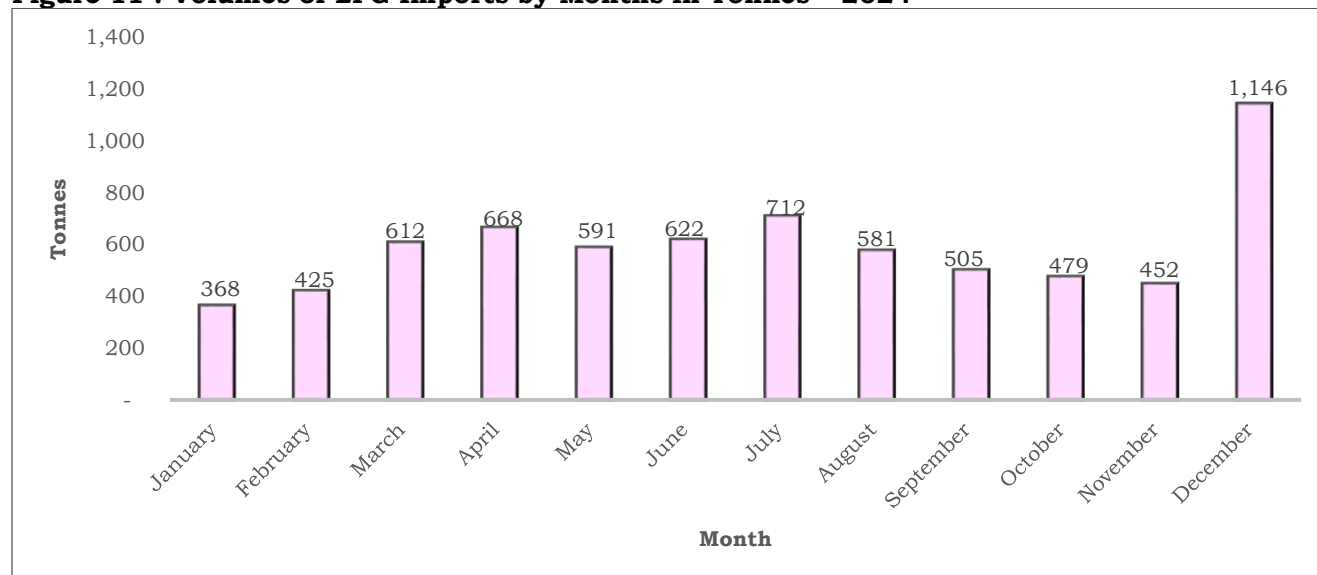
Source: Petroleum Fund

### 4.1.3 Liquefied Petroleum Gas

Liquefied Petroleum Gas (LPG) is a flammable mixture of hydrocarbon gases used as fuel in heating, refrigeration and lighting appliances, cooking equipment, and vehicles. It is a mixture of 48% propane, 50% butane, and 2% pentane. <https://petroleum.org.ls/>

Figure 11 illustrates volumes of LPG imports in tonnes (t) in 2024. LPG was mostly imported in December, followed by July with 1,146t and 712t respectively. The imports were lowest in January with 368t.

**Figure 11 : Volumes of LPG Imports by Months in Tonnes – 2024**



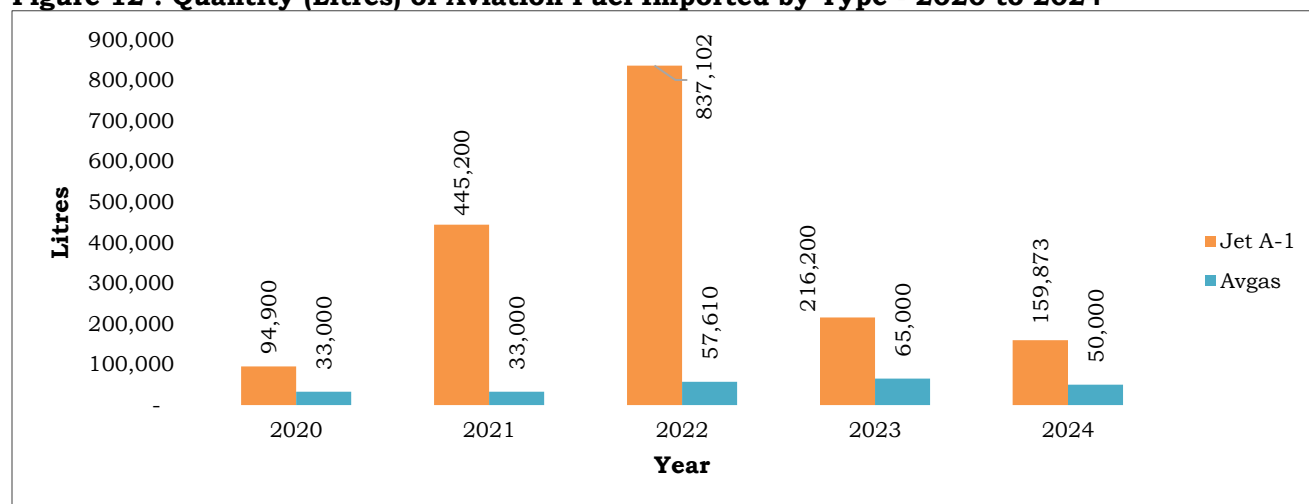
Source: LPG Companies

#### 4.1.4 Aviation Imports

Jet Fuel, also known as aviation turbine fuel (ATF), is primarily used to power gas-turbine engines in aircraft, including commercial jets, military aircraft, and helicopters. All aviation fuel in Lesotho is imported. <https://petroleum.org.ls/faqs/>

Figure 12 depicts quantity of aviation fuel imported by type in Litres (L) for the years 2020 to 2024. The most imported fuel was Jet-A1. In 2024, 159,873L of Jet-A1 and 50,000L of Avgas were imported. About 26.0 percent decrease in Jet-A1 imports was experienced from 2023 to 2024 while Avgas decreased by 15,000L. Jet-A1 imports were highest in 2022 and lowest in 2020 with 837,102L and 94,900L separately.

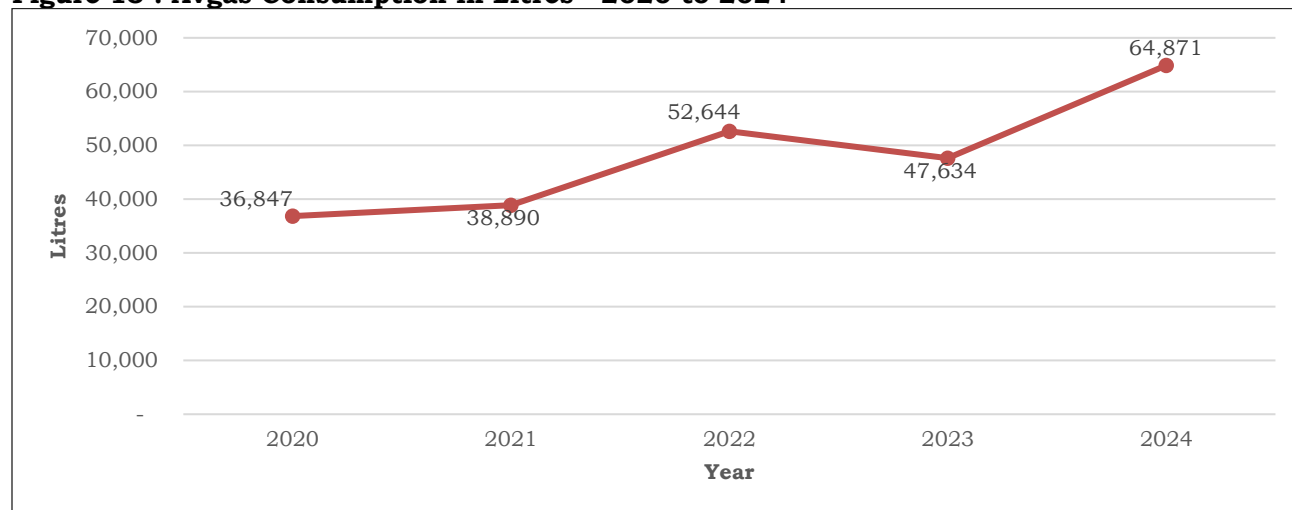
**Figure 12 : Quantity (Litres) of Aviation Fuel Imported by Type - 2020 to 2024**



Source: Aviation Companies

Figure 13 illustrates Avgas consumption in Litres from 2020 to 2024. There has been a steady increase in consumption from 2020 to 2022. A decrease of 9.5 percent from 2022 to 2023 and 33.2 percent increase from 2023 to 2024 were observed in the specified periods. In 2024 avgas consumption was 64,871L.

**Figure 13 : Avgas Consumption in Litres - 2020 to 2024**



Source: Mission Aviation Fellowship

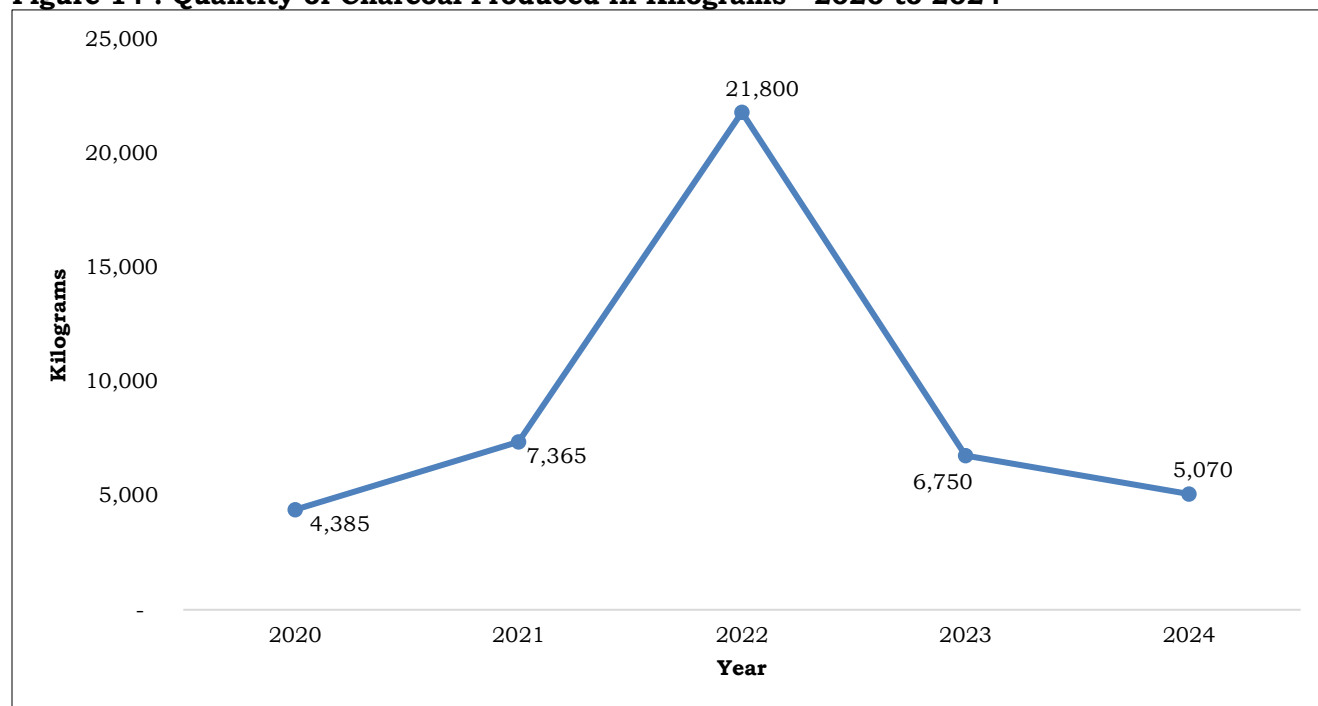
## 5.0 Charcoal Production

Charcoal is made by heating wood or other organic materials above 400° C (750° F) in an oxygen-starved environment. The process, called pyrolysis, is exothermic – meaning it gives off heat once started.

<https://ext.vt.edu/natural-resources/charcoal/charcoalmaking.html#:~:text=Charcoal%20is%20made%20by%20heating,gives%20off%20heat%20once%20started>. A few companies in Lesotho produce charcoal on a small scale and sell locally.

Quantity of charcoal produced in kilograms (kg) from 2020 to 2024 is depicted by figure 14. About 5,070kg of charcoal was produced in 2024. Charcoal production was lowest in 2020 with 4,385kg. Production increased immensely from 2021 (7,365kg) to 2022 (21,800kg) by 14,435kg and thereafter dropped tremendously by 69.0 percent to 6,750kg in 2023. A slight decrease of 24.9 percent is noticed from 2023 to 2024.

**Figure 14 : Quantity of Charcoal Produced in Kilograms - 2020 to 2024**



Source: Charcoal Producing Companies

## 6.0 Summary

Electricity generation in Lesotho was mainly from Muela with 383.3 GWh in 2024. Ramarothole electricity generation was highest in October with 5797.9MWh. LEC imported 535,279MWh from Eskom and 45,745MWh from EDM to meet its electricity demand. LEC uses diesel to generate electricity in its mini grid in Semonkong. Diesel used for electricity generation in Semonkong increased by 25.8 percent from 2023 to 2024.

The Highest electricity tariff is for general Purpose consumers at M1.9624 and the lowest for Industrial High Voltage and Commercial High voltage consumers (M0.2928). Electricity loads were high in July at 90.22GWh. Petrol 93 and Petrol 95 prices were highest in May with M23.25 and M23.70 respectively. Paraffin and Diesel prices were M17.60 and M23.35 from March to May. Imports were highest in 2022 and lowest in 2020 with 837,102L and 94,900L separately. LPG was mostly imported in December, followed by July with 1,146t. About 159,873L of Jet-A1 fuel were imported in 2024. Quantity of charcoal produced in 2024 was 5,070 kgs.

## 7.0 Annex

**Table 1: Installed Capacity of Electric Power Stations in Megawatts (MW)**

| Areas        | Generation Method | Capacity |
|--------------|-------------------|----------|
| Semonkong    | Hydro             | 0.18     |
| Semonkong    | Diesel            | 0.50     |
| Mantsonyane  | Hydro             | 2.00     |
| Muela        | Hydro             | 72.00    |
| Moshoeshoe 1 | Solar             | 0.28     |
| Ha-Makebe    | Solar             | 0.04     |
| Ha-Makebe    | LPG               | 0.02     |
| Mashai       | Solar             | 0.03     |
| Mashai       | LPG               | 0.01     |
| Tlhakanyu    | Solar             | 0.03     |
| Tlhakanyu    | LPG               | 0.04     |
| Matsoaing    | Solar             | 0.03     |
| Matsoaing    | LPG               | 0.04     |
| Health       | Solar             | 0.35     |
| Solar lights | Solar             | 0.08     |
| Ramarothole  | Solar             | 30.00    |

**Source: Lesotho Highlands Development Authority, Lesotho Electricity Company, Department of Energy, One Power, Solar Lights, Sectors Energy Consumption Survey**

**Table 2: Installed Solar PV Capacity for Water Pumping in Kilowatt (KW) by District-2022/2023**

| District      | KW          |
|---------------|-------------|
| Leribe        | 3.4         |
| Berea         | 6.4         |
| Maseru        | 1.1         |
| Mafeteng      | 4.3         |
| Mohale's Hoek | 2.0         |
| Quthing       | 1.4         |
| <b>Total</b>  | <b>18.6</b> |

**Source: World Vision Lesotho**

**Table 3: Electricity Generated by 'Muela Power Station, Sales to LEC and Exports in Gigawatt-hours (GWh) by Month - 2024**

| Months       | GWh           |               |               |
|--------------|---------------|---------------|---------------|
|              | Generated     | Sales to LEC  | Export        |
| January      | 43.76         | 43.66         | 0.1017        |
| February     | 37.05         | 37.05         | 0             |
| March        | 40.78         | 40.78         | 0.0011        |
| April        | 38.15         | 38.15         | 0             |
| May          | 37.44         | 37.44         | 0             |
| June         | 36.87         | 36.87         | 0             |
| July         | 53.10         | 53.10         | 0.0014        |
| August       | 50.89         | 50.89         | 0.0005        |
| September    | 45.27         | 45.26         | 0.0104        |
| October      | 0.00          | 0.00          | 0             |
| November     | 0.00          | 0.00          | 0             |
| December     | 0.00          | 0.00          | 0             |
| <b>Total</b> | <b>383.31</b> | <b>383.19</b> | <b>0.1151</b> |

Source: Lesotho Highlands Development Authority

**Table 4: Electricity Generated and Sales to LEC in Gigawatt-hours - 2020 to 2024**

| Year | GWh        |              |
|------|------------|--------------|
|      | Generation | Sales to LEC |
| 2020 | 426.3      | 425.9        |
| 2021 | 531.4      | 530.3        |
| 2022 | 480.3      | 479.5        |
| 2023 | 470.6      | 470.6        |
| 2024 | 383.3      | 383.19       |

Source: Lesotho Highlands Development Authority

**Table 5: Electricity Purchased in MWh from 'Muela, Eskom, EDM and Ramarothole by Month - 2024**

| Month        | Eskom          | Muela          | EDM           | Ramarothole   | Total            |
|--------------|----------------|----------------|---------------|---------------|------------------|
| January      | 25,344         | 43,663         | 3,720         | 4,504         | 77,231           |
| February     | 27,157         | 37,046         | 3,480         | 4,901         | 72,584           |
| March        | 27,099         | 40,777         | 4,805         | 5,050         | 77,731           |
| April        | 38,400         | 38,152         | 4,650         | 3,617         | 84,819           |
| May          | 43,482         | 37,439         | 4,720         | 4,756         | 90,397           |
| June         | 47,256         | 36,869         | 5,970         | 3,895         | 93,989           |
| July         | 40,390         | 53,099         | 3,100         | 4,658         | 101,247          |
| August       | 39,889         | 50,887         | 3,100         | 5,237         | 99,113           |
| September    | 35,195         | 45,261         | 3,000         | 4,544         | 88,000           |
| October      | 74,113         |                | 3,100         | 5,053         | 82,066           |
| November     | 67,692         |                | 3,000         | 4,302         | 71,995           |
| December     | 69,261         |                | 3,100         | 4,364         | 76,725           |
| <b>Total</b> | <b>535,279</b> | <b>383,194</b> | <b>45,745</b> | <b>54,879</b> | <b>1,015,897</b> |

Source: Lesotho Electricity Company

**Table 6: Electricity Generated and Quantity of Diesel Used for Generation in Semonkong - 2024**

| <b>Month</b> | <b>Kilowatt-hours</b> | <b>Litres</b>  |
|--------------|-----------------------|----------------|
| January      | 71,941.41             | 14,280         |
| February     | 64,448.52             | 20,160         |
| March        | 72,980.41             | 17,930         |
| April        | 81,490.77             | 19,320         |
| May          | 83,472.25             | 13,440         |
| June         | 80,966.09             | 19,670         |
| July         | 92,052.07             | 23,310         |
| August       | 90,695.15             | 16,380         |
| September    | 84,585.61             | 11,760         |
| October      | 82,938.19             | 31,274         |
| November     | 81,998.13             | 14,611         |
| December     | 85,235.33             | 17,230         |
| <b>Total</b> | <b>972,803.93</b>     | <b>219,365</b> |

**Source: Lesotho Electricity Company****Table 7: Quantity of Electricity Consumed by Economic Sectors - 2024**

| <b>Economic Sector</b>                                                                             | <b>MWh</b>       | <b>Sector allocation</b> |
|----------------------------------------------------------------------------------------------------|------------------|--------------------------|
| Agriculture, hunting and forestry                                                                  | 1,092.7          | 0.1                      |
| Mining and quarrying                                                                               | 20,625.0         | 2.4                      |
| Manufacturing                                                                                      | 211,930.4        | 24.4                     |
| Electricity, gas and water supply                                                                  | 12,412.9         | 1.4                      |
| Construction                                                                                       | 1,000.3          | 0.1                      |
| Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods | 15,021.5         | 1.7                      |
| Hotels and restaurants                                                                             | 8,945.7          | 1.0                      |
| Transport, storage and communications                                                              | 16,923.9         | 1.9                      |
| Financial intermediation                                                                           | 9,124.7          | 1.0                      |
| Real estate, renting and business activities                                                       | 27,868.9         | 3.2                      |
| Public administration and defence; compulsory social security                                      | 7,102.0          | 0.8                      |
| Education                                                                                          | 16,390.0         | 1.9                      |
| Health and social work                                                                             | 22,289.7         | 2.6                      |
| Other community, social and personal service activities                                            | 61.2             | 0.0                      |
| Extraterritorial organizations and bodies                                                          | 25,693.1         | 3.0                      |
| Residential sector                                                                                 | 472,623.1        | 54.3                     |
| Others (street lights)                                                                             | 585.4            | 0.1                      |
| <b>Total</b>                                                                                       | <b>869,690.3</b> | <b>100</b>               |

**Source: Lesotho Electricity Company**

**Table 8: Petroleum Imports in Kilolitres - 2024**

| <b>Months</b> | <b>Kilolitres</b> |                  |                  |                  |
|---------------|-------------------|------------------|------------------|------------------|
|               | <b>Petrol 93</b>  | <b>Petrol 95</b> | <b>Diesel</b>    | <b>IP</b>        |
| January       | 2,632.04          | 8,039.19         | 10,942.51        | 1,275.85         |
| February      | 2,550.31          | 7,023.70         | 9,398.64         | 1,349.37         |
| March         | 2,418.29          | 7,957.66         | 11,058.18        | 776.00           |
| April         | 2,281.12          | 7,494.17         | 9,810.07         | 1,898.76         |
| May           | 2,315.10          | 7,166.33         | 10,685.93        | 1,540.17         |
| June          | 2,194.83          | 6,999.31         | 9,808.63         | 3,451.78         |
| <b>Total</b>  | <b>14,391.69</b>  | <b>44,680.36</b> | <b>61,703.96</b> | <b>10,291.93</b> |

**Source: Petroleum Fund****Table 9: Quantity of Aviation Fuel Imported by Type in Litres - 2024**

| <b>Month</b> | <b>Litres</b>  |               |
|--------------|----------------|---------------|
|              | <b>Jet A1</b>  | <b>Avgas</b>  |
| January      | 42,000         |               |
| February     |                |               |
| March        | 39,048         |               |
| April        |                | 25,000        |
| May          |                |               |
| June         |                |               |
| July         | 78,825         |               |
| August       |                |               |
| September    |                | 25,000        |
| October      |                |               |
| November     |                |               |
| December     |                |               |
| <b>Total</b> | <b>159,873</b> | <b>50,000</b> |

**Source: Aviation Companies****Table 10: Quantity of Liquefied Petroleum Gas Imported in Kilograms - 2024**

| <b>Months</b> | <b>Kilograms</b> |
|---------------|------------------|
| January       | 367,680          |
| February      | 425,000          |
| March         | 611,620          |
| April         | 667,818          |
| May           | 591,100          |
| June          | 622,080          |
| July          | 712,400          |
| August        | 580,580          |
| September     | 504,532          |
| October       | 478,640          |
| November      | 452,320          |
| December      | 1,146,020        |
| <b>Total</b>  | <b>7,159,790</b> |

**Source: LPG Companies**

**Table 11: Quantity of Charcoal Produced in Kilograms - 2020 to 2024**

| <b>Months</b> | <b>Kilograms</b> |              |               |              |              |
|---------------|------------------|--------------|---------------|--------------|--------------|
|               | <b>2020</b>      | <b>2021</b>  | <b>2022</b>   | <b>2023</b>  | <b>2024</b>  |
| January       |                  | 715          | 750           |              | 310          |
| February      |                  | 775          | 1,000         |              | 360          |
| March         | 440              | 775          | 1,050         |              | 335          |
| April         | 420              | 650          | 600           |              |              |
| May           | 335              | 500          | 900           |              | 170          |
| June          | 295              |              | 800           |              |              |
| July          | 235              |              | 855           |              |              |
| August        | 225              | 700          | 5,250         |              | 830          |
| September     | 285              | 850          | 6,560         |              | 300          |
| October       | 765              | 750          | 2,050         |              | 660          |
| November      | 750              | 850          | 790           |              | 1,000        |
| December      | 635              | 800          | 1,195         |              | 1,105        |
| <b>Total</b>  | <b>4,385</b>     | <b>7,365</b> | <b>21,800</b> | <b>6,750</b> | <b>5,070</b> |

**Source: Charcoal Companies**

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