

2022 SOUTH AFRICAN ENERGY TRADE REPORT

DIRECTORATE:
ENERGY ECONOMICS
AND STATISTICS



mineral resources
& energy

Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA





FOREWORD

It gives me great pleasure to introduce the 2022 South African Energy Trade Report. This report is based on imports and exports energy data collated mainly from the South African Revenue Service (SARS). This report presents us with the opportunity to inform and update all the relevant stakeholders about energy trade between South Africa and other countries.

This report is published annually with data and analysis based on the SARS Trade Statistics. We have made remarkable progress in improving the overall quality of our energy data in order to ensure that accurate, timely and reliable data is provided in all our publications and hope that this report will become a source of reference among energy analysts in South Africa and abroad. We will continuously collaborate with all our data providers to ensure that our energy data is of highest quality possible.

I extend my most sincere thanks and appreciation to the Energy Data Collection, Management and Analysis Directorate for the hard work that went into the compilation of this publication. I would also like to record my appreciation to all the energy data providers who have helped us to accomplish the compilation of this report. Comments and inputs are welcome and should be addressed to Publications@energy.gov.za.

Mr. Jacob Mbele

Director General

Department of Mineral Resources & Energy

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LIST OF ABBREVIATIONS

DRC	Democratic Republic of Congo
DMRE	Department of Mineral Resources & Energy
GTL	Gas-To-Liquid
GWh	Gigawatt hours
IP	Illuminating Paraffin
LPG	Liquified Petroleum Gas
MT	Megaton
MW	Megawatts
OPEC	Organisation of the Petroleum Exporting Countries
PetroSA	Petroleum Oil and Gas Corporation of South Africa
UAE	United Arab Emirates
UK	United Kingdom
USA	United States of America





1. BACKGROUND AND INTRODUCTION

South Africa's energy products are derived mainly from fossil fuels, that is, coal, oil and natural gas. The country has abundant coal reserves, limited oil reserves and insignificant resources of natural gas. Given the growing need for energy in the country, South Africa is a significant player in the world's energy trading.

About all of South Africa's oil requirements are imported. The oil is used to produce various petroleum products. However, South Africa's petroleum products demand currently exceeds the country's production. As such, the excess demand is satisfied by imports. The petroleum products imported in the country are namely, petrol, diesel, jet fuel, illuminating paraffin (IP), natural gas and liquid petroleum gas (LPG).

Bituminous or steam coal is the main export of coal with anthracite having to be imported due to declining reserves. South Africa uses a large amount of its coal production to generate electricity. The electricity is traded with the Southern African Power Pool (SAPP) member countries namely, Mozambique, Botswana, Malawi, Angola, Lesotho, Namibia, DRC, Swaziland, Tanzania, Zambia, Zimbabwe.

Offshore shallow gas reserves in South Africa provide PetroSA's Gas-To-Liquids (GTL) operation, which however, has been in strong decline over the past number of years. The development of the Pande and Temane natural gas fields in Mozambique and the construction of a pipeline, the ROMPCO pipeline, to transport that gas from Pande / Temane to Secunda is the most significant supply to South Africa.

The figures and analysis covered in this section will give an overview of imports and exports for crude oil, petroleum products fuels, natural gas, coal and electricity for 2022.



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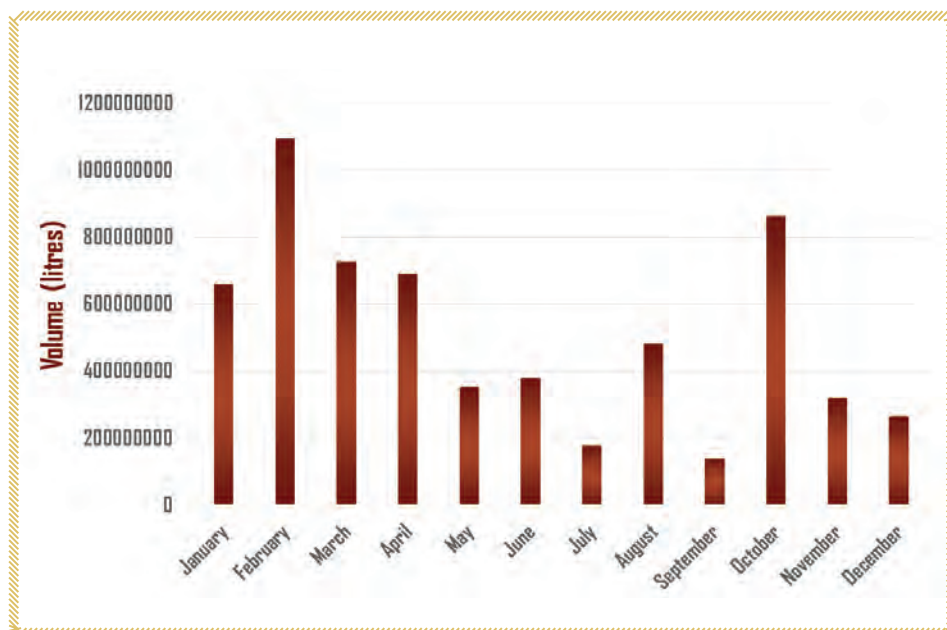
2. ENERGY TRADE DATA ANALYSIS

2.1 Crude Oil and Petroleum Products

2.1.1 Imports and exports

In 2022, the total of 6.2 billion litres of crude oil was imported in South Africa, with 1.1 billion litres imported in February, which is the highest volumes imported for the year in review. In September, oil imports declined reaching its lowest for the year at 138 million litres. However, crude oil imports went up significantly in October to 865 million litres then decreased in November and December to 320 million litres and 264 million litres respectively (Figure 1).

Figure 1: Crude oil imports



Source: South African Revenue Service (SARS)

Diesel was mostly imported among petroleum products in 2022, followed in ranking by petrol, jet fuel and liquefied petroleum gas (LPG). South Africa imported 11.9 billion litres (63 percent) of diesel and 5.5 million litres (29 percent) of petrol, while import volumes for Jet fuel and LPG were 810 million litres (4 percent) and 369 million litres (2 percent) respectively (Figure 2).

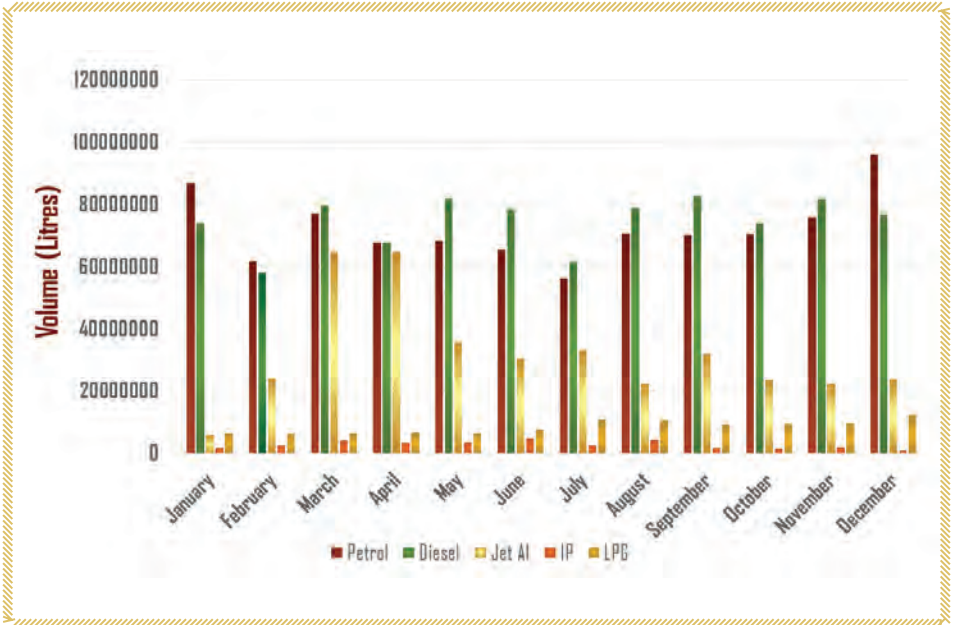
Figure 2: Petroleum products imports



Source: South African Revenue Service (SARS)

Diesel was again the most exported petroleum product in 2022, with the total of 898 million litres (39 percent), while petrol came second with total exports of 866 million litres (38 percent) during the same period. In the third place is Jet A1 with 385 million litres (17 percent) (Figure 3).

Figure 3: Petroleum products exports

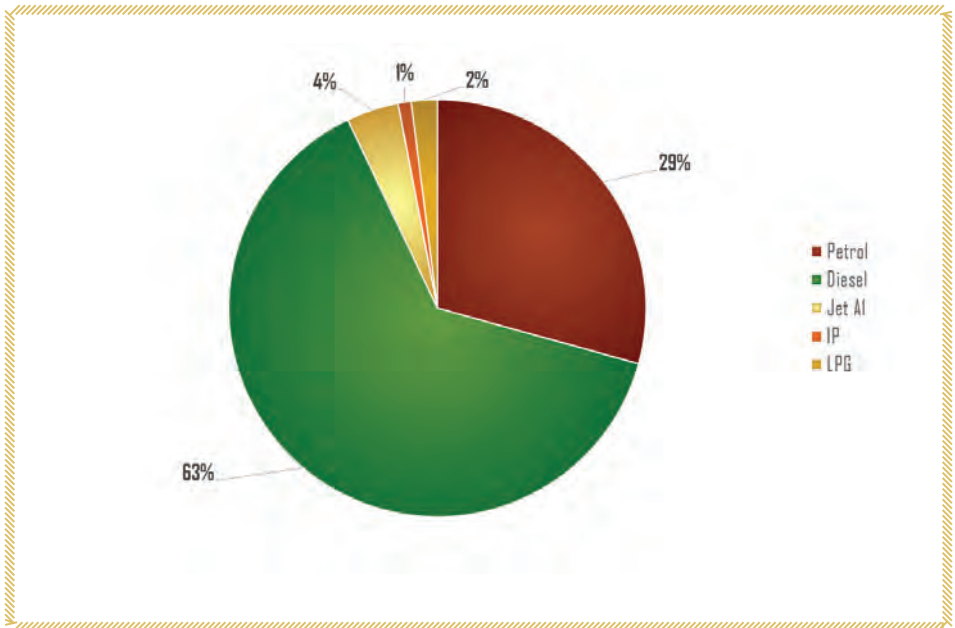


Source: South African Revenue Service (SARS)

2.1.2 Petroleum products trade shares

Diesel made up 63 percent (11.9 billion) of the refined fuel imported in South Africa in 2022, followed by petrol at 29 percent (5.5 million) and jet fuel at 4 percent (810 million). LPG and illuminating paraffin made up to 2 percent (369 million) and 1 percent (253 million), respectively of the total imported fuels (Figure 4).

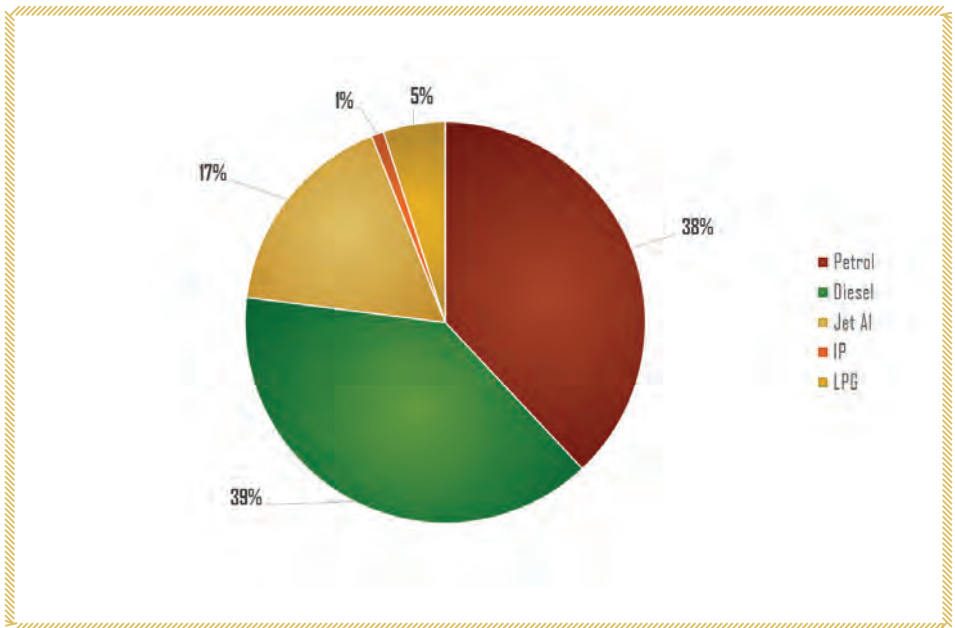
Figure 4: Petroleum products imports percentage share



Source: South African Revenue Service (SARS)

In 2022, diesel made up to 39 percent (898 million) of refined fuel exports followed by petrol at 38 percent (866 million) and jet fuel at 17 percent (385 million). Illuminating paraffin and LPG made up the rest of the liquid fuels exported in South Africa, (34 million or 1 percent) and (103 million or 5 percent) (Figure 5).

Figure 5: Petroleum Products exports percentage share

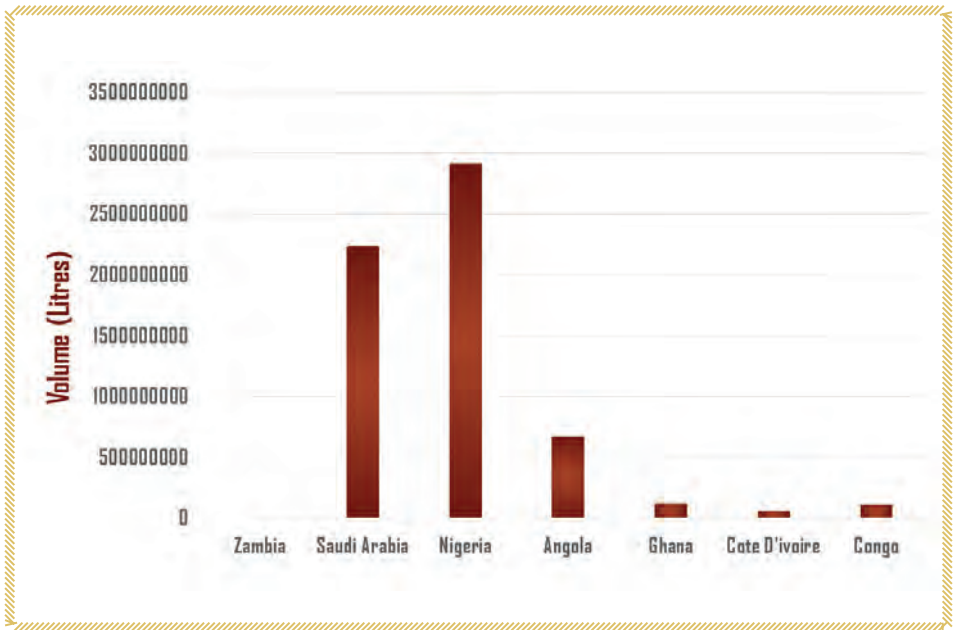


Source: South African Revenue Service (SARS)

2.1.3 Crude oil and petroleum products imports per country of origin

Crude oil imports were mostly from the Organisation of the Petroleum Exporting Countries (OPEC) in 2022, with 47 percent imported from Nigeria (2.9 billion litres) followed by Saudi Arabia at 36 percent (2.2 billion litres) and Angola at 11 percent (668 million litres). The remaining were small volumes from various producers (Figure 6).

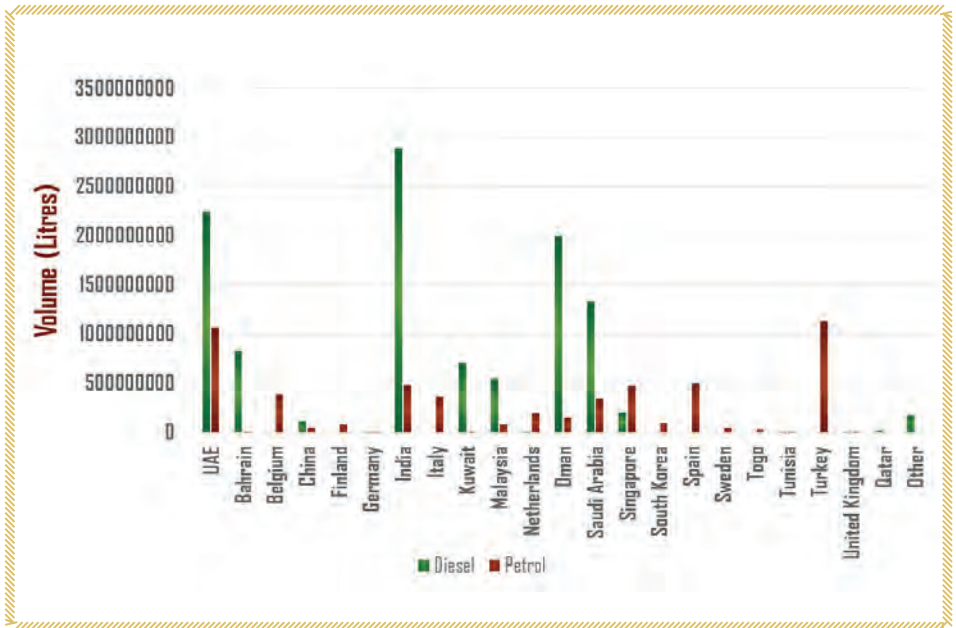
Figure 6: Crude oil imports per country of origin



Source: South African Revenue Service (SARS)

South Africa imported diesel largely from India at 24 percent (2.9 billion litres) of the total imported diesel in 2022, United Arab Emirates (UAE) followed at 19 percent (2.3 billion litres), then Oman at 17 percent (2 billion litres), Saudi Arabia at 11 percent (1 billion litres) and Bahrain at 7 percent (836 million litres), while small amounts were imported from other countries to make up the rest. Petrol on the other hand, was mostly imported from Turkey in 2022 at 21 percent (1.1 billion litres) and 20 percent (1 billion litres) from UAE. Singapore and Spain at 9 percent (478 million litres) and (505 million litres) are the third largest supplier, Belgium and Italy both contributed 7 percent (394 million litres and 368 million litres) and the rest was sourced from other countries in small quantities (Figure 7).

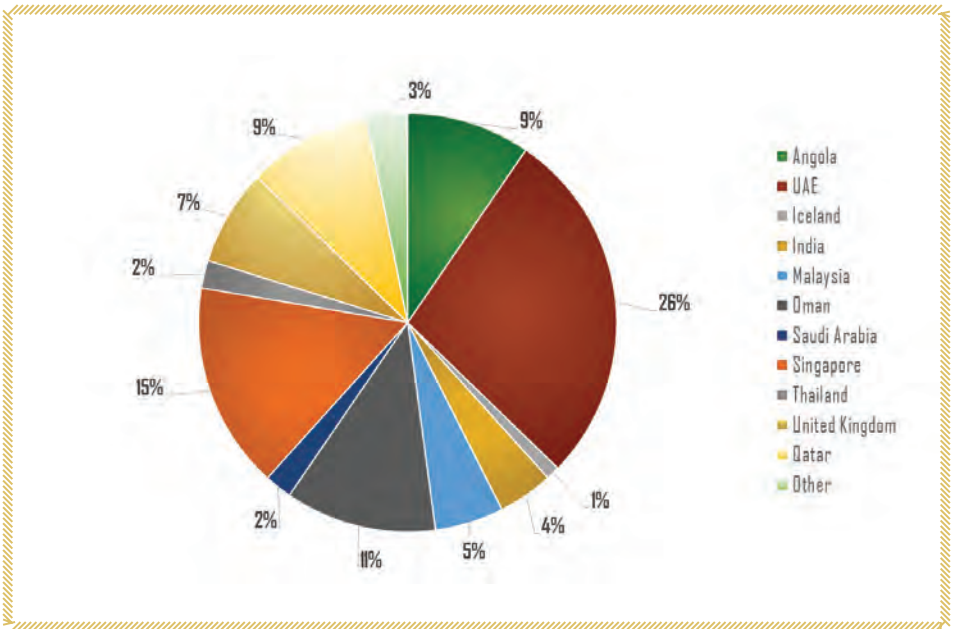
Figure 7: Diesel and petrol imports per country of origin



Source: South African Revenue Service (SARS)

In 2022, Jet fuel was imported mostly from UAE at 26 percent (208 million litres) followed by Singapore at 15 percent (120 million litres), Oman is on the third place at 11 percent (85 million litres), Qatar at 9 percent (69 million litres) and the United Kingdom at 7 percent (56 million). The rest of the countries each contributed smaller volumes (Figure 8).

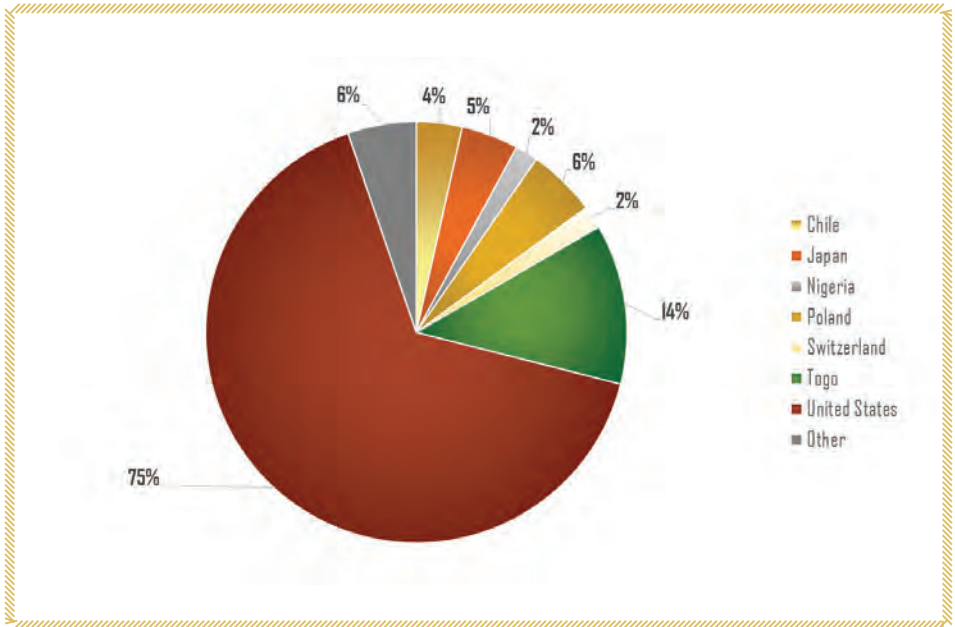
Figure 8: Jet fuel imports per country of origin percentage share



Source: South African Revenue Service (SARS)

The United States was the largest supplier of LPG in 2022 at 75 percent (278 million kilograms), Togo follows at 14 percent (50 million kilograms), Poland and Other both at 6 percent (20 million kilograms) then Japan at 5 percent (18 million kilograms) (Figure 9).

Figure 9: LPG imports per country of origin percentage share

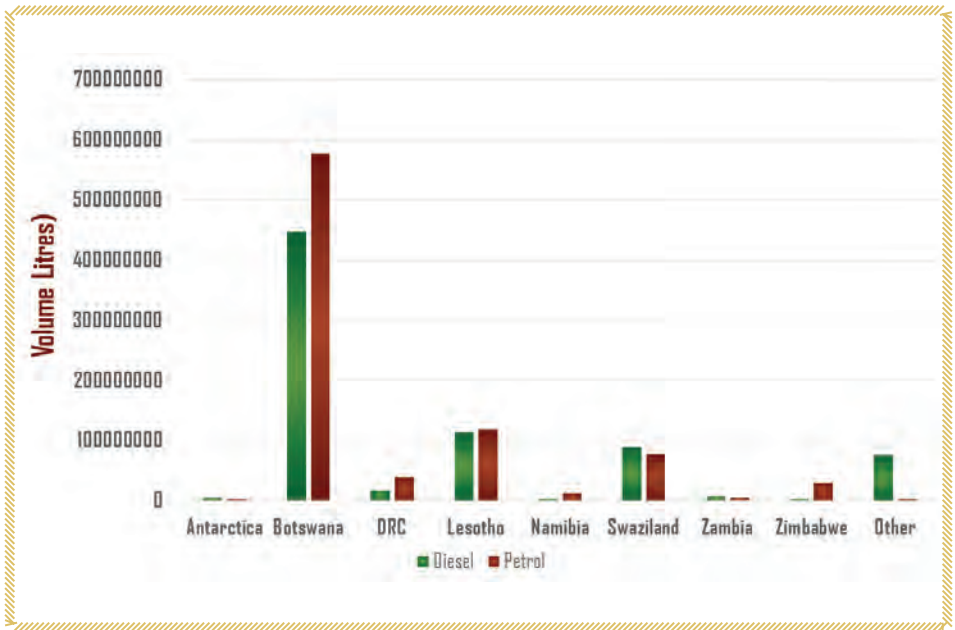


Source: South African Revenue Service (SARS)

2.1.4 Petroleum products exports per destination country

South Africa exported petrol and diesel mainly to Botswana, at about 577 million litres (67 percent) and 447 million litres (50 percent), respectively. South Africa also exported petrol to other South Africa's neighbouring countries namely Lesotho, Swaziland, DRC, Zimbabwe and Namibia. Diesel exports were mainly to Lesotho, Swaziland, Other countries, DRC and Zambia (Figure 10).

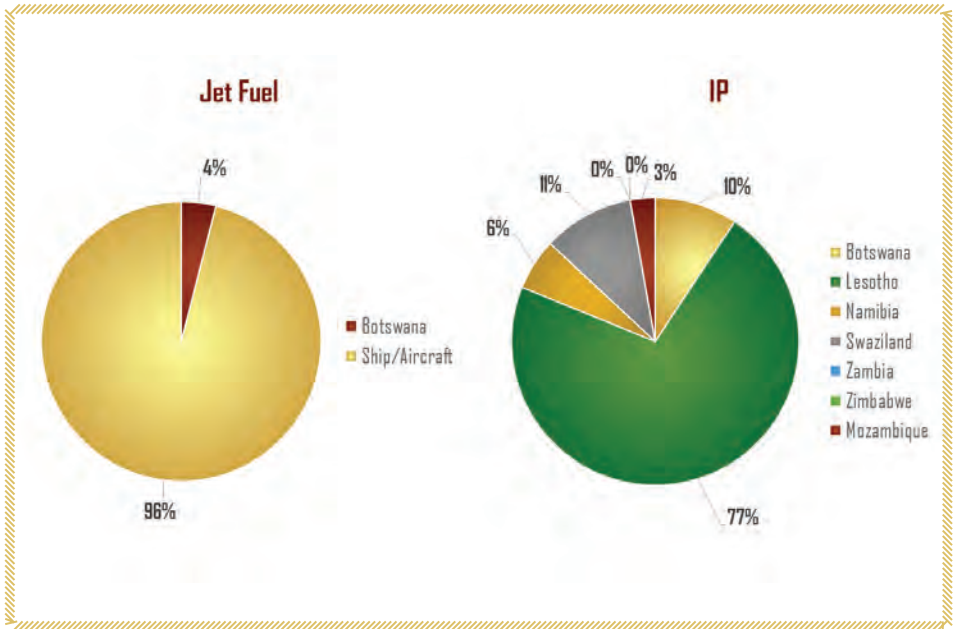
Figure 10: Petrol and diesel exports per destination country



Source: South African Revenue Service (SARS)

In 2022, majority of South Africa's jet fuel was sold to ships and aircrafts at 96 percent (370 million litres) and only 4 percent (14 million litres) was exported to Botswana, while IP was largely exported to Lesotho at 77 percent (26 million litres) followed by Swaziland, Botswana and Namibia at 11 percent (4 million litres), 10 percent (3 million litres), and 6 percent (210 thousand litres), respectively. The remaining exports went to other neighbouring countries (Figure 11).

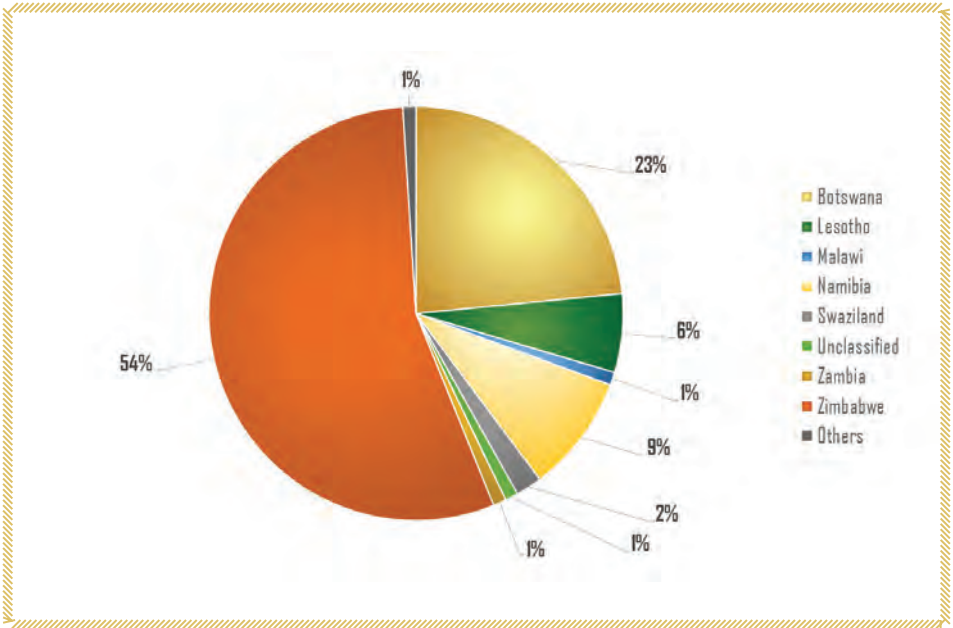
Figure 11: Jet fuel and IP exports per destination country



Source: South African Revenue Service (SARS)

Zimbabwe accounted for 54 percent (56 million kilograms) of South Africa’s total LPG exports, Botswana followed at 23 percent (24 million kilograms), Namibia at 9 percent (9 million kilograms), and Lesotho at 6 percent (7 million kilograms), smaller amounts were exported to other neighbouring countries in 2022 (Figure 12).

Figure 12: LPG exports per destination country



Source: South African Revenue Service (SARS)

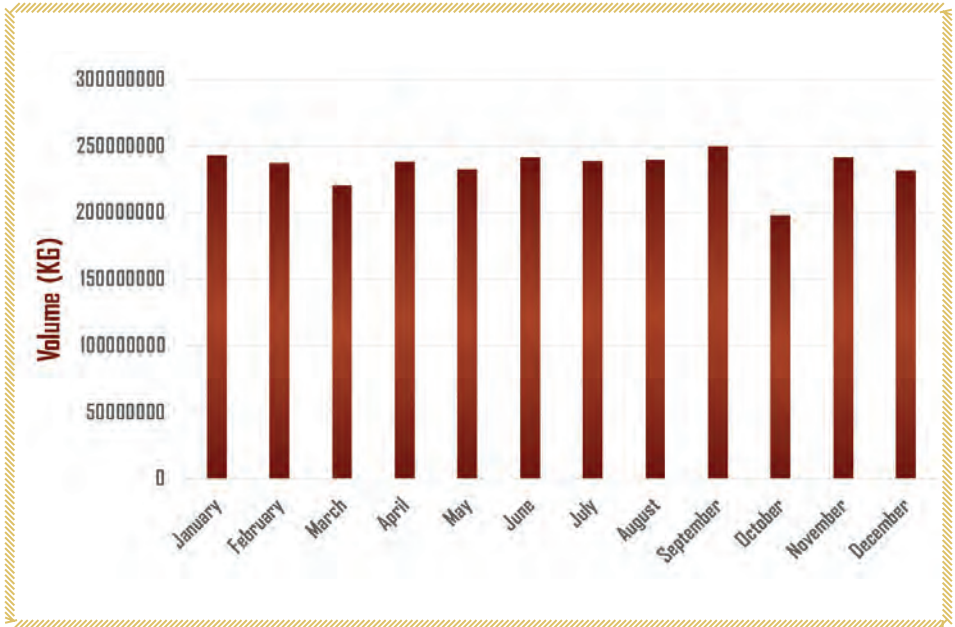




2.2 Natural gas

South Africa's Natural gas total imports was at 2.8 billion kilograms in 2022, with over 90 percent imported from Mozambique. (Figure 13).

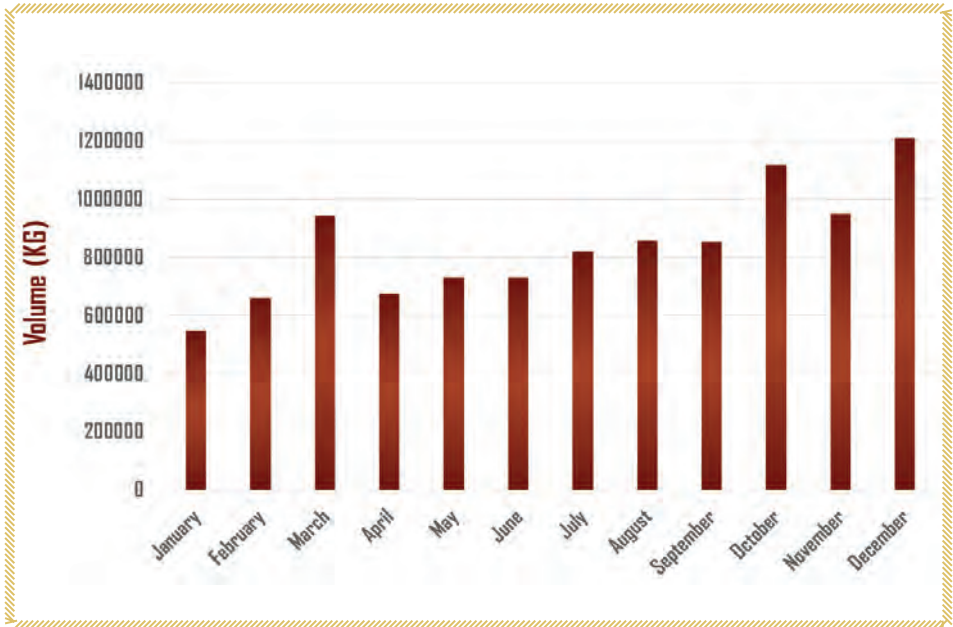
Figure 13: Natural gas imports



Source: South African Revenue Service (SARS)

Natural gas exports amounted to 10 million kilograms in 2022 (Figure 14). Majority of the exports were destined to Lesotho at 47 percent (5 million kilograms), followed by Swaziland at 31 percent (3 million kilograms) and Zimbabwe at 16 percent (2 million kilograms), respectively. The rest was exported to other neighbouring countries in smaller quantities.

Figure 14: Natural gas exports



Source: South African Revenue Service (SARS)



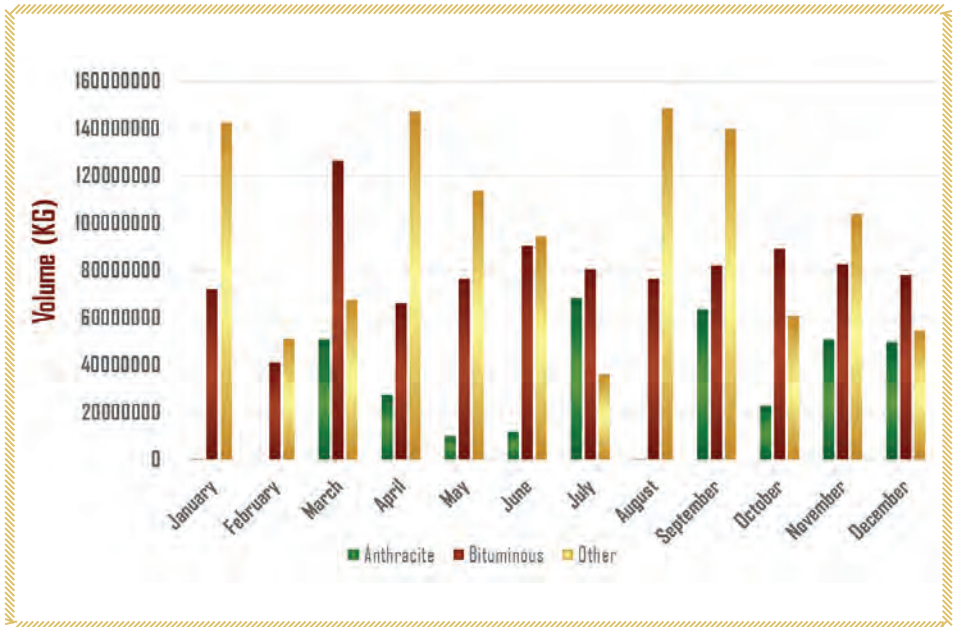


2.3 Coal

2.3.1 Coal imports and exports

South Africa imported a total of 1.2 billion kilograms (47 percent) of other types of coal, 965 million kilograms (39 percent) of bituminous coal and 357 million kilograms (14 percent) anthracite in 2022 (Figure 15).

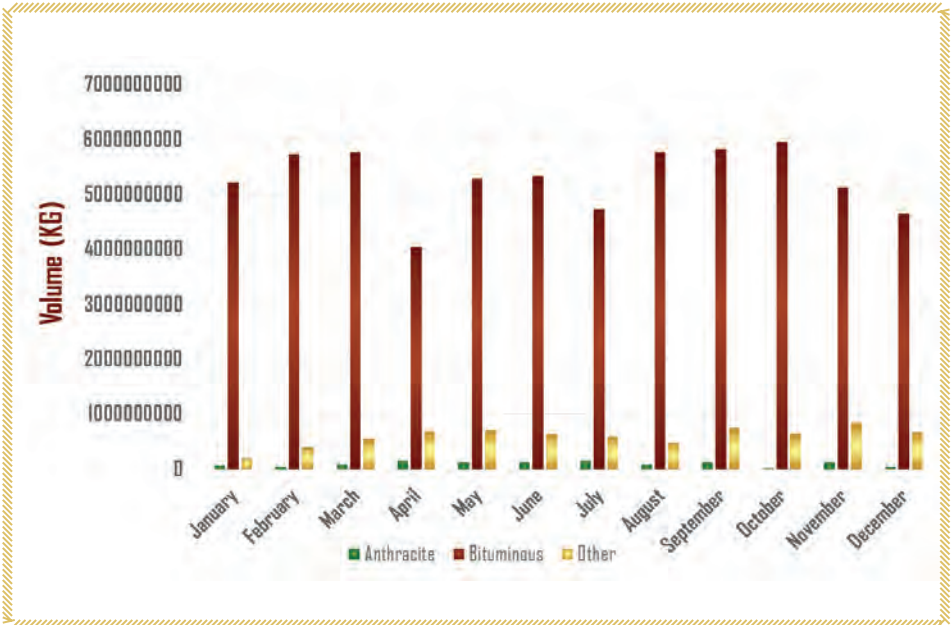
Figure 15: Coal imports



Source: South African Revenue Service (SARS)

In 2022, bituminous coal was the most exported coal in South Africa with the total of 64 billion kilograms (88 percent), other types of coal exports were 7.2 billion kilograms (10 percent) and anthracite coal exports total came to 1.1 billion kilograms (2 percent) for the year (Figure 16).

Figure 16: Coal exports

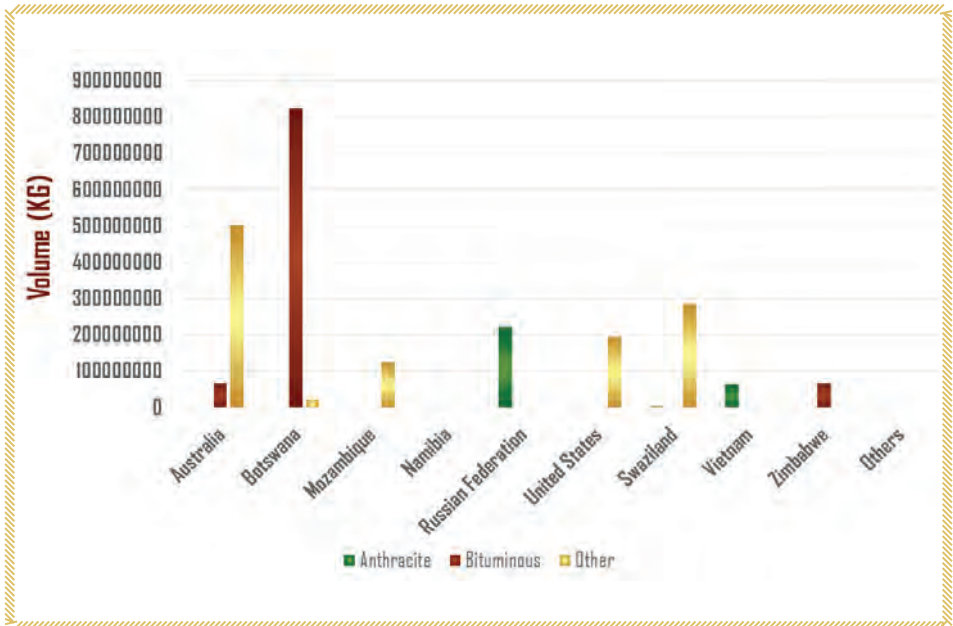


Source: South African Revenue Service (SARS)

2.3.2 Coal trade between South Africa and other countries

Botswana contributed 34 percent (848 million kilograms) of South Africa's total coal imports in 2022, Australia followed at 22 percent (570 million kilograms) and Swaziland 11 percent (291 million kilograms). The country imported bituminous coal largely from Botswana at 85 percent (825 million kilograms), while Australia and Zimbabwe accounted for 7 percent each (66 million kilograms) and (67 million kilograms). On the other hand, the country imported 43 percent (504 million kilograms) of other coal from Australia, 24 percent from Swaziland (287 million kilograms) and 17 percent (195 million kilograms) from the United States of America. Anthracite coal was mostly imported from Russia at 62 percent (222 million kilograms) and Vietnam 18 percent (64 million kilograms) (Figure 17).

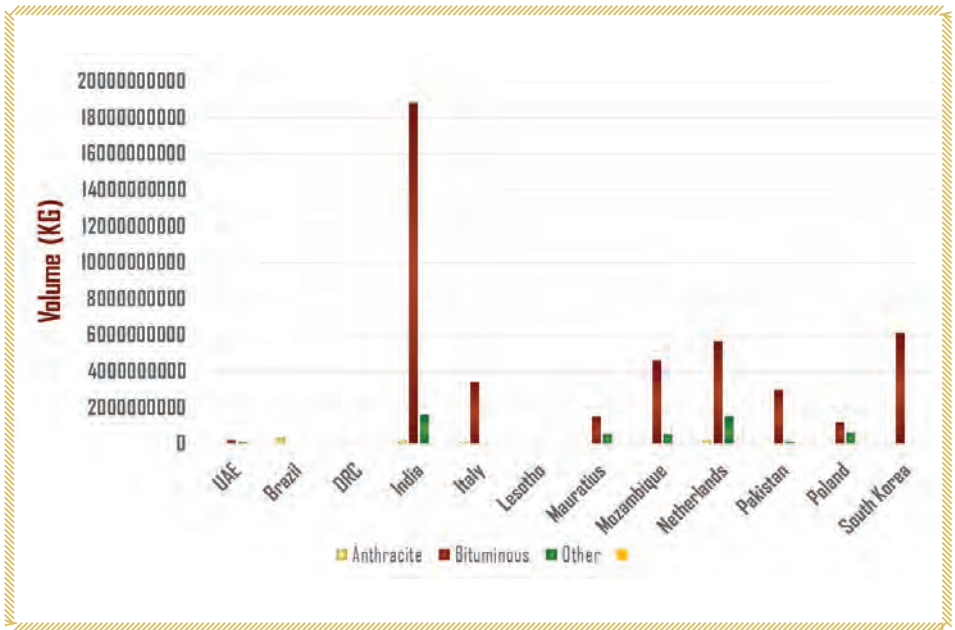
Figure 17: Coal imports by country of origin



Source: South African Revenue Service (SARS)

In 2022, South Africa exported large volumes of bituminous coal to India amongst other countries, with 29 percent (19 billion kilograms) of the total coal exports. South Korea came second at 10 percent (6 billion kilograms) then Netherlands and Mozambique at 9 percent (5 billion kilograms) and 7 percent (4 billion kilograms) respectively. The other countries made up smaller shares of the total exports each (Figure 18).

Figure 18: Coal exports per destination country



Source: South African Revenue Service (SARS)

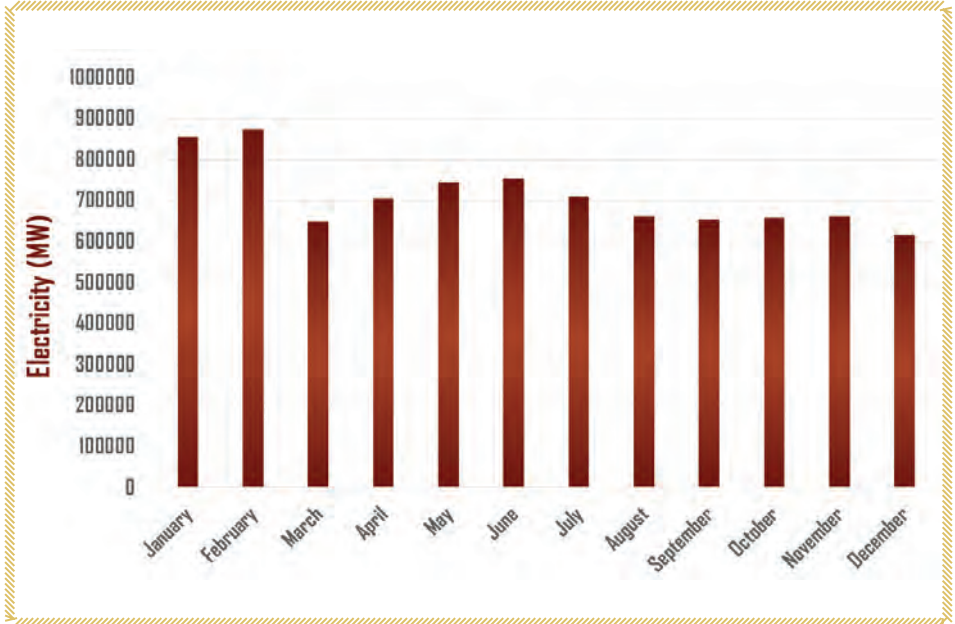




2.4 Electricity

South Africa's electricity imports came to the total of 8 541 GWh in 2022 (Figure 19). Electricity imports were mainly from Mozambique in 2022 with 7 775 GWh.

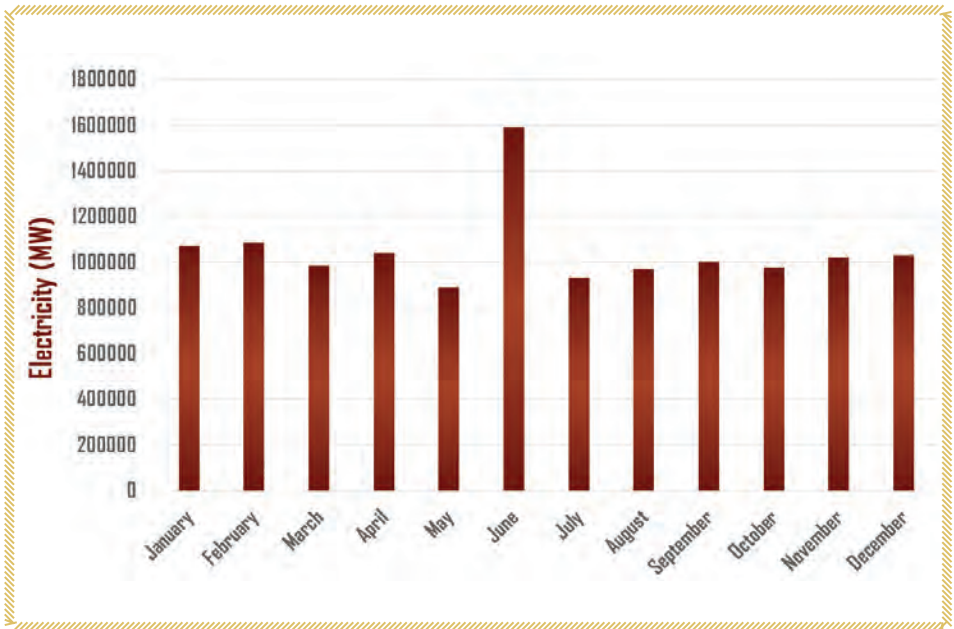
Figure 19: Electricity imports



Source: South African Revenue Service (SARS)

South Africa exported 12 601 Gigawatt hours (GWh) of electricity in 2022, which on average was 1 050 GWh of electricity exported each month. In June, the country exported 1 593 GWh of electricity, the highest volume exported for the year. (Figure 20)

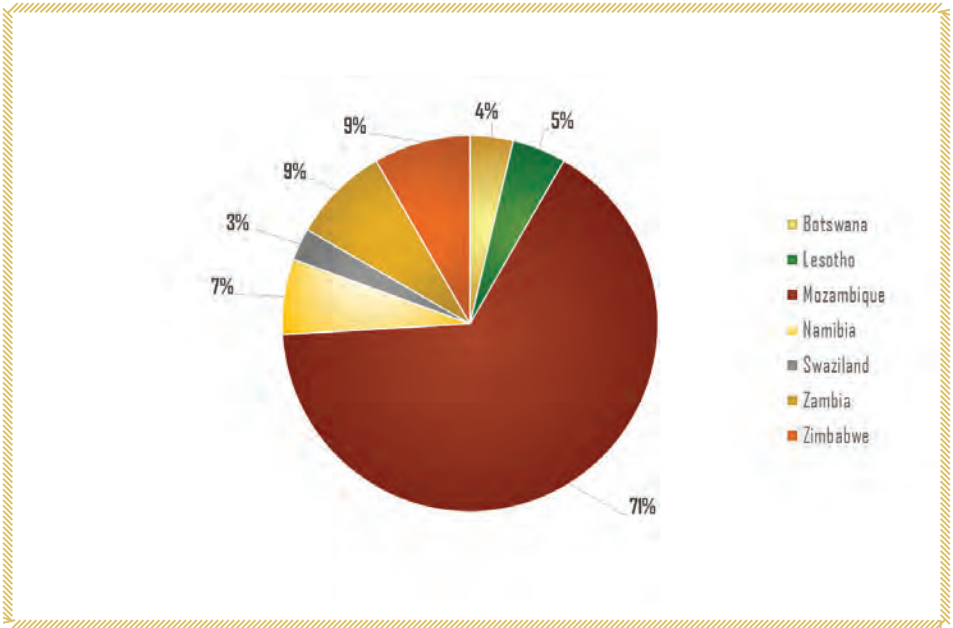
Figure 20: Electricity exports



Source: South African Revenue Service (SARS)

Mozambique was the biggest recipient of electricity exports from South Africa at 71 percent (8 billion GWh), followed by Zambia and Zimbabwe both at 9 percent (1 million MW), then Namibia at 7 percent (886 thousand MW), Lesotho at 5 percent (632 thousand MW), lastly Botswana and Swaziland at 5 percent (527 thousand MW) and 3 percent (429 thousand MW) respectively (Figure 21).

Figure 21: Electricity exports per destination country



Source: South African Revenue Service (SARS)



3. CONCLUSION

South Africa was a net importer for crude oil and natural gas in 2022. The country was also a net importer of most of the petroleum products except for illuminating paraffin. These products were mainly imported to meet the local supply shortfall. Due to a high supply of bituminous coal, South Africa continued to be a net exporter of bituminous coal and net importer of other coal types. Bituminous coal was the most exported coal type mainly due to its abundance in the country. South Africa was a net exporter of electricity and exported 12 601 GWh of electricity and imported 8 541 GWh of electricity in 2022.

REFERENCES

All the data used in the Report was sourced from South African Revenue Service (SARS).

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