

OVERVIEW OF THE PETROL AND DIESEL MARKET IN SOUTH AFRICA BETWEEN 2013 AND 2022



**mineral resources
& energy**

Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA



OVERVIEW OF THE PETROL AND DIESEL MARKET IN SOUTH AFRICA BETWEEN 2013 AND 2022

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FOREWORD

It gives me a great honour to introduce the report: Overview of petrol and diesel market in South Africa between 2013 and 2022. This report is based on information collated from government departments, the petroleum industry and research papers, with the purpose of keeping stakeholders informed about the latest developments as well as key issues affecting the liquid fuels industry. The report gives an insight into the overall petrol and diesel market dynamics as well as the relationship between the two products nationally and provincially.

Petrol and diesel play a central role in the socio-economic development in South Africa, whilst simultaneously providing the much-needed infrastructural economic base for the country to become an attractive host for foreign investment in the energy space. The liquid fuels industry contributes significantly to both the GDP and sustaining employment opportunities within the country. The Department of Mineral Resources and Energy is working hard to ensure the accurate, timely and reliable provision of data in its publications and hopes that this report will become a source of reference among energy analysts in South Africa and abroad.

I extend my utmost sincere thanks and appreciation to the Energy Economics and Statistics 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 could be addressed to Publications@energy.gov.za.

Mr. J. Mbele

Director-General

Department of Mineral Resources and Energy

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ABBREVIATIONS AND ACRONYMS

BFP	-	Basic Fuel Price
CIF	-	Cost, Insurance and Freight
CPI	-	Consumer Price Index
CTL	-	Coal-To-Liquid
DMRE	-	Department of Minerals Resources and Energy
DOE	-	Department of Energy
FOB	-	Free on Board
FOR	-	Free on Road
GDP	-	Gross Domestic Product
GTL	-	Gas-To-Liquid
IBLC	-	In-Bond-Landed-Cost
IEA	-	International Energy Agency
LPG	-	Liquefied Petroleum Gas
LRP	-	Lead Replacement Petrol
NERSA	-	National Energy Regulator of South Africa
OECD	-	The Organisation for Economic Co-operation and Development
OPEC	-	Organization of the Petroleum Exporting Countries
PPM	-	Parts per million
StatsSA	-	Statistics South Africa
ULP	-	Unleaded Petrol
USD	-	United States Dollar



1. INTRODUCTION

Petroleum products, Petrol and Diesel are required for any economy to function and grow. The South African Fuel Industry has been evolving and therefore must adapt to both opportunities and threats in demand, supply and emerging technologies within the strict environmental regulations and policy frameworks.

The Ukraine War in February 2022 has created a new risk to the South African Economy and has caused more challenges in the supply of oil to the country. The closing down of 3 refineries in the country further caused more bottlenecks in the fuel industry. As a result, South Africa has been heavily relying on the Import of Fuel to meet its local demand in the recent 2 years. According to the latest estimates in the BP's 2021 Statistical Review of World Energy, Petroleum and other liquids is the second largest energy carrier that accounted for most of South Africa's total primary energy consumption. (EIA 2021)¹.

The National Development Plan envisages that by 2030, South Africa will have an energy sector that promotes:

- Economic growth and development through adequate investment in energy infrastructure. The sector should provide reliable and efficient energy service at competitive rates while supporting economic growth through job creation
- Social equity through expanded access to energy at affordable tariffs and through targeted, sustainable subsidies for needy households.
- Environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change. (NDP 2030:163)².

The Department of Mineral Resources and Energy aims to ensure sustainability and security of the supply of fuel in the country. South Africa has been on Clean Fuels 1 (CF1) specification which aims to cut high levels of sulphur found in South African-produced fuels. The Department issued a notice on the 24th of June 2022 to move the CF2 implementation date from the 1st of September 2023 to the 1st of June 2027.

1. EIA- US Energy Information Administration: Country Analysis Executive Summary

2. National Development Plan 2030

1.1 OUTLOOK

The increase in the demand for petroleum products is determined by the country's GDP, GDP Per Capita, the rate of urbanisation and population growth. Other factors that have an impact on the demand and supply of petroleum products includes political reasons, growth in demand, environmental constraints and sustainability of resources. According to Stats SA, the real GDP took two years to return to pre-pandemic levels, after a sharp downturn in the second quarter of 2020. Despite the 0,4% rise in the first quarter of 2023, GDP remains below its peak. Future growth may be hampered by the continued high level of global economic risks, notably those associated with the conflict that transpired between Russia and Ukraine. The rate of growth in the petroleum sector will also depend on the intensity of energy demand in South Africa. Future expansion will be hampered by weaker international backing and ongoing power outages. South Africa has a large, energy-intensive coal mining industry mostly using coal to meet its energy needs. With a mounting pressure to meet Clean Fuels² specifications, South Africa has to reduce coal usage and start producing cleaner fuels in future. South Africa has low resources in terms of Oil and the security of supply will depend on the economic and political stability in the OPEC countries.

The consumption of Petrol and Diesel remains the most important component in the economic growth of South Africa as the country's transport system depends on petroleum fuels for almost all its energy needs. According to BP Outlook (2023), As activity grows, electricity will increasingly replace oil products as the main energy carrier of light vehicles. The decarbonization of heavier vehicles will lead to a more diverse range of alternative fuels, with electricity taking the biggest share. Energy consumption by all sectors will peak by 2030, the key sectors that make up energy demand are transport, buildings, and industry. Energy demand in road transport over the same period will shrink by 10-30% as Internal Combustion Engines (ICE) cars and trucks will be replaced by more efficient ICE models and electric vehicles by 2030. (BP Outlook 2023)³.

3. BP Energy Outlook 2023 edition.

1.2 LEGISLATION AND REGULATION GOVERNING THE PETROLEUM INDUSTRY.

The Department of Mineral Resources and Energy is mandated to oversee the development of energy policy and implementation. The department's strategic goals, among others, are to ensure that the energy supply and demand are well managed and that there is an efficient and diverse energy mix for universal access within a transformed energy sector, and also to implement policies that adapt to and mitigate the effects of climate change. Energy policy and its subsequent legislative and regulatory frameworks are the foundation upon which the regulator and investors make decisions and consumers make choices about which energy solution to use.

Following the 1994 South Africa's democratic elections; the new government reviewed and developed policies in the energy sector driven by international trends. As a result, the White Paper on Energy Policy was developed in 1998 and it has been used as the premier policy document that guides all subsequent policies, strategies and legislation within the energy sector. The objectives of the White Paper are to increase access to affordable energy services, improve energy governance, stimulate economic development, manage energy-related environmental and health effects and secure supply through diversity.

This was reiterated in the National Development Plan 2030 that was adopted in 2013 as a blueprint for future economic and socio-economic development strategy for the country. The plan envisages that by 2030 South Africa will have an energy sector that promotes economic growth and development through adequate investment in energy infrastructure. The plan also envisages that by 2030 South Africa will have an adequate supply of electricity and liquid fuels to ensure that economic activities and welfare are not disrupted.

Subsequently, to achieve these objectives, new policies and strategies were developed and the existing policies were amended. The following are legislative regulations about the petroleum sector post the promulgation of the White Paper: -

- **National Energy Act, 2008:** - The aim of the National Energy Act No 34 of 2008 is to ensure that diverse energy resources are available, in sustainable quantities and affordable prices, to the South African economy in support of economic growth and poverty alleviation, taking into account environmental management requirements and interactions amongst economic sectors; to provide for energy planning, increased generation and consumption of renewable energies, contingency energy supply, holding of strategic energy feedstocks and carriers, adequate investment in, appropriate upkeep and access to energy infrastructure; to provide measures for the furnishing of certain data and information regarding energy demand, supply and generation; to establish an institution to be responsible for promotion of efficient generation and consumption of energy and energy research; and to provide for all matters connected therewith.
- **Petroleum Products Amendment Act:** - The Act was promulgated in 1977 but has since undergone several amendments, of which the last two were during 2003 and 2008. The objectives of the Act are for the government to limit the number of licences allocated. The Act prohibits manufacturers and wholesalers from holding a retail licence except for training purposes. Also, it aims to facilitate transformation of the South Africa's petroleum and liquid fuels industry, ensure a system for the allocation of licences, prescribe offences and penalties, and provide for appeal and arbitration as well as annexure the liquid fuels charter.
- **Regulations Regarding Petroleum Products Specifications and Standards for South Africa:** - The aim of the regulation is to recommend the tightening of fuel specifications by further reducing the levels of sulphur in both petrol and diesel as well as the reduction of benzene and aromatic levels in petrol to levels equivalent to Euro 5 emissions standard.

- **The regulations on the Mandatory Provision of Energy Data:** - The regulations were gazetted in 2012 to enable the Department to collect, collate and publish quality energy data and information effectively and efficiently. The regulations also empower the Department to stipulate the type, manner and form of energy data and information that must be provided by any data provider.
- **Petroleum Products Act, 1977:** - The aim of Petroleum Products Act, 120 of 1977 is to Provide measures in the saving of petroleum products and an economy in the cost of the distribution thereof, the maintenance and control of a price, for the furnishing of certain information regarding petroleum products, and for the rendering of services of a particular standard, in connection with petroleum products ; provide for the licensing of persons involved in manufacturing and sale of certain petroleum products; Promote transformation of the South African petroleum and liquid fuels industry; provide for the promulgation of regulations relating to such licenses; and to provide for matters incidental.
- **Central Energy Fund Act, 1977:** - The aim of Central Energy Fund Act 38 of 1977 is to provide for the payment as a charge to the State Revenue Fund of certain moneys into the state Oil fund and for the utilisation and investment thereof, and for incidental matters.
- **The Gas Act, 2001:** - The aim of Gas Act No. 48 of 2001 is to promote the orderly development of the piped gas industry; To establish a national regulatory framework; To establish a National Gas Regulator as the custodian and enforcer of the national regulatory framework; and to provide for matters connected therewith.
- **Petroleum Pipelines Act, 2003:** - The Petroleum Pipelines Act No. 60 of 2003 intends to establish a National Regulatory framework for petroleum pipelines; To establish a petroleum Pipelines Regulatory Authority as the custodian and enforcer of the National Regulatory Framework and To provide for matters connected therewith.

- **Gas Regulator Levies Act, 2002:** - The Gas Regulator Levies Act No 75 of 2002 aims to provide for the imposition of levies by the National Gas Regulator; and to provide for matters connected therewith.
- **Petroleum Pipelines Levies Act, 2004:** - The Petroleum Pipelines Levies Act No 28 of 2004 aims to provide for the imposition of levies by the Petroleum Pipelines Regulatory Authority, and to provide for matters connected therewith.
- **National Energy Regulator Act, 2004:** - The aim of The National Energy Regulator Act No 40 of 2004 is to establish a single regulator to regulate the electricity, piped-gas and petroleum pipeline industries; and to provide for matters connected therewith.

Aspects of the South African petroleum value chain are regulated largely under the mandate of the Department of Mineral Resources and Energy (DMRE) and administered either directly or by the National Energy Regulator of South Africa (NERSA). The then DOE (Department of Energy) was responsible for the setting of various price levels for petroleum products and licensing activities throughout the downstream liquid fuels value chain in terms of the Petroleum Products Act, No 120 of 1977, as amended. NERSA sets tariffs for the infrastructure linked to the value chain e.g., petroleum pipelines and storage facilities.

This report presents a detailed analysis on South Africa's petrol and diesel market, which includes sources and the overall petrol and diesel market dynamics, as well as the relationship between the two products. Also included in the overview is a brief discussion on the influence of the transport sector on the fuel market and a discussion on prices. Due to a lack of reliable data at a disaggregated level, the report only focuses on national and provincial analysis as well as retail and commercial sales for petrol and diesel. Commercial sales include products sold by the oil companies to independent wholesalers as well as products sold to different economic sectors.

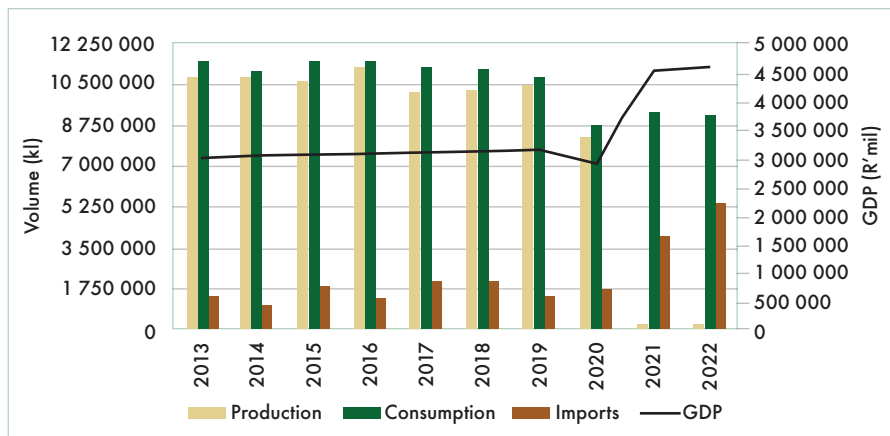
2. OVERVIEW OF PETROL AND DIESEL MARKET IN SOUTH AFRICA

South Africa imports over 90% of its crude oil to meet the local demand for fuels. According to U.S. Energy Information Administration (US EIA,2022), South Africa holds proved oil reserves of 15 million barrels as of January 2022. The total liquid fuels production in 2021 was about 112 000 barrels per day of which only 1000 barrels per day was crude oil. South Africa's synthetic fuels, which are derived from coal and natural gas, account for almost all the country's total liquid fuel production. South Africa imported about 232,000 barrels per day of crude oil as of 2021 (US EIA,2022). South Africa imports mainly from countries in the Middle East and in Africa, Nigeria and Saudi Arabia. South Africa also imported small volumes from Ghana and Angola. (US EIA,2022)⁴.

Petrol production declined at an average rate of 16% per annum from 10.8 billion litres in 2013 to 208 million litres in 2022. The production of petrol started dropping massively in 2020 going into 2021 with 97%, This was due to lockdown restrictions during the Covid-19 pandemic as everything came to a halt. A further decline of 18% surfaced in the year 2022 compared with the year 2021 because of refineries shutting down post-pandemic. Petrol consumption was at a low during the year 2020. Consumption slowly picked up in the year 2021 and 2022. The excess demand was met by imports. Petrol imports increased significantly by 133% between 2020 and 2021 from 1.7 billion litres to 4 billion litres respectively. (Figure 1).

4. US Energy Information Administration: Country Analysis Executive Summary South Africa (August 2022)

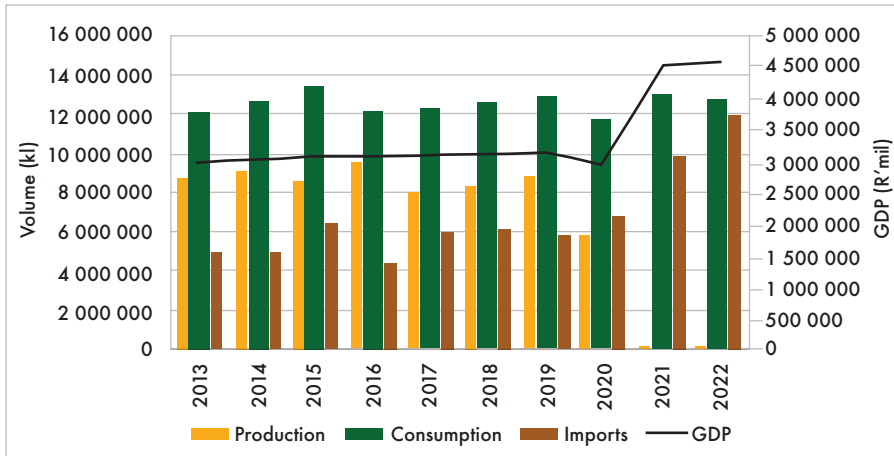
Figure 1: Supply and demand of petrol, 2013 - 2022



Source: Supply, demand and imports - Department of Mineral Resources and Energy (DMRE), GDP - South African Reserve Bank (SARB, 2022)

Diesel production declined significantly at an average rate of 18% per annum from 8.7 billion litres in 2013 to 135 thousand litres in 2022. Consumption grew at an average rate of 1% in 10 years. Consumption remains high as demand exceeded the domestic supply, of which most of the local demand was met by diesel imports. Imports increased significantly from the year 2020 because of refineries closing down. Diesel imports grew at an average rate of 11,5% per annum between 2013 and 2020. GDP is fairly recovering since 2020 as illustrated in Figure 2.

Figure 2: Supply and demand of diesel 2013 - 2022



Source: Supply, demand and imports - Department of Mineral Resources and Energy (DMRE), GDP - South African Reserve Bank (SARB, 2022)

The fuel pump price in South Africa is composed of several price elements and these can be divided into international and domestic elements. South Africa’s fuel prices are heavily influenced by trends in the global oil market and are linked to the global market by the international element, Basic Fuel Price (BFP) system, which replaced the In-Bond-Landed-Cost (IBLC) system in 2003. The BFP determines the movement of international petroleum products prices as well as the United States (US) Dollar/Rand exchange rate.

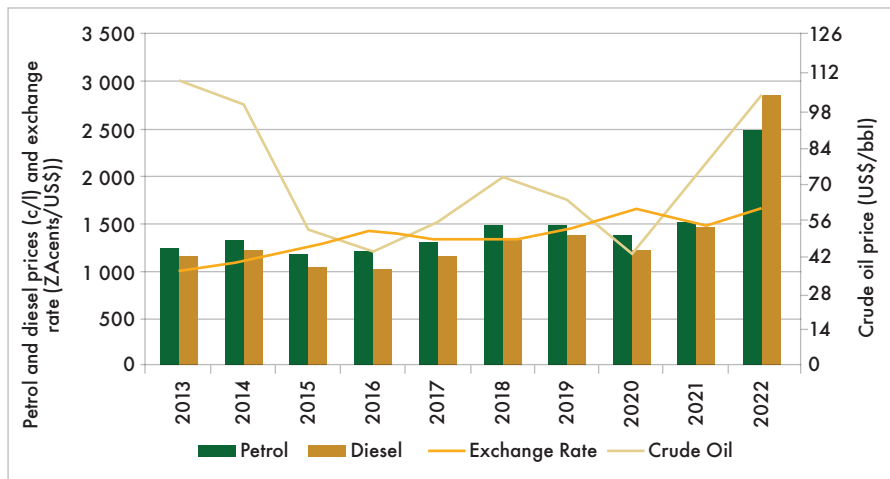
The largest component of the BFP is the price that one would be paying on international markets when physically importing product to South Africa and it includes freight, insurance, ocean loss, landing, wharfage, coastal storage, the financing of the coastal storage and demurrage from refining centres in the Mediterranean, Arab Gulf and Singapore. In turn, the BFP constituted approximately 36% of the retail fuel price in 2020 (DMRE, 2021).

The remaining 64% was made up of domestic elements which are subject to government control. These elements are comprised of fuel tax, equalisation fund levy, customs and excise levy, Road Accident Fund, Slate levy, transport costs, wholesale margins, retail margins and service costs. The domestic elements are then added to the BFP to make the

OVERVIEW OF THE PETROL AND DIESEL MARKET IN SOUTH AFRICA BETWEEN 2013 AND 2022

final pump price in the different pricing zones (magisterial district zones). There has been a significant rise in the price of petrol and diesel between the year 2021 and 2022. This resulted from lower inventories of oil globally and the closure of 3 refineries in South Africa.

Figure 3: Petrol and diesel prices, 2013 - 2022



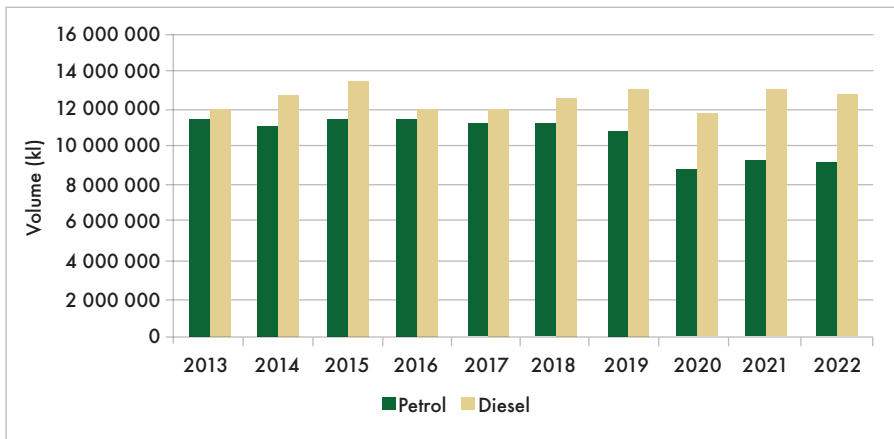
Sources: Petrol and diesel prices - Department of Mineral Resources and Energy (DMRE), Exchange rates - South African Reserve Bank (SARB), Crude oil prices - Energy Information Administration (EIA,2022)

3. NATIONAL PETROL AND DIESEL MARKET TRENDS

3.1 CONSUMPTION PER PRODUCT TYPE

Petrol consumption in South Africa declined at an average rate of 2% per year from 11 billion to 9 billion in 2013 and 2022 respectively at a national level. Petrol consumption reached a low in 2020 and it increased by 6% going into 2021. Diesel consumption increased at an annual average rate of 1% from 12 billion litres in 2013 to 12.7 billion litres in 2022 as shown in Figure 4 below.

Figure 4: Petrol and diesel consumption, 2013 - 2022



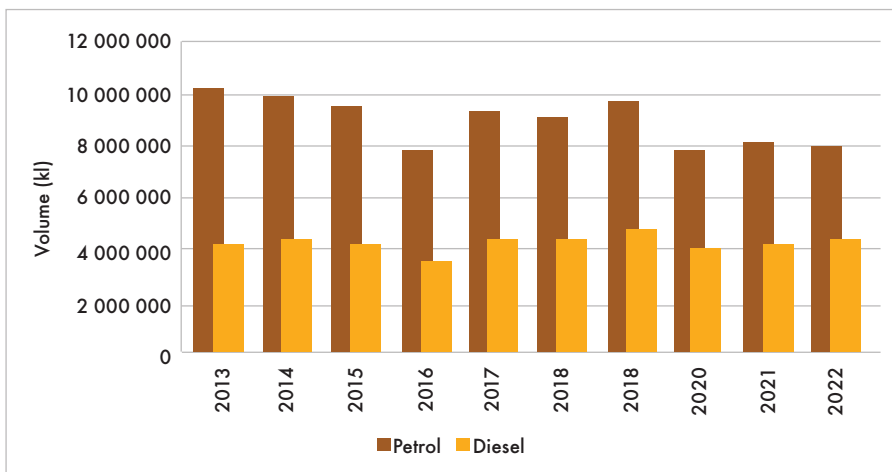
Source: Department of Mineral Resources and Energy (DMRE)

3.2 PETROL AND DIESEL CONSUMPTION PER TRADE SECTOR

3.2.1 RETAIL

The most common fuel in South Africa’s retail sector is still petrol. Petrol consumption in the retail sector declined at an annual average rate of 2% from 10.2 billion litres in 2013 to 8 billion litres in 2022. Petrol market share continued to decline from 71% in 2013 to 64.2% in 2022 in the retail sector. Diesel consumption in the retail sector increased slightly from 4.1 billion litres in 2013 to 4.4 billion litres in 2022, with an annual average decline rate of 2% as shown in Figure 5 below.

Figure 5: Petrol and diesel consumption in the retail sector, 2013 - 2022

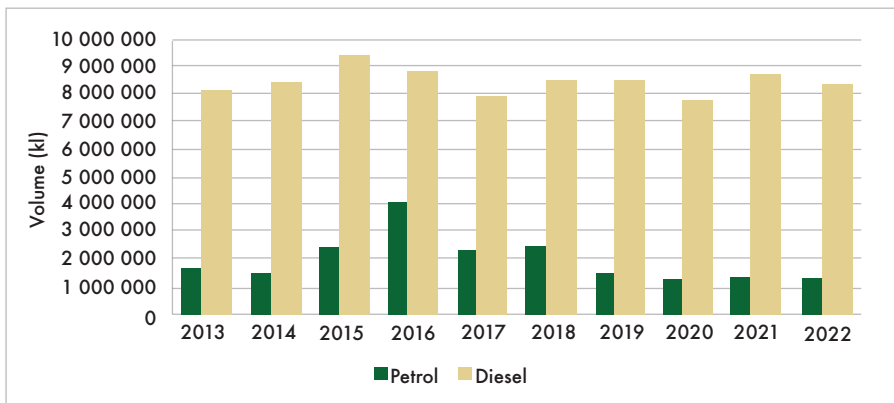


Source: Department of Mineral Resources and Energy (DMRE)

3.2.2 COMMERCIAL

Diesel was the most consumed fuel in the commercial sector in South Africa in the 10-year study. Consumption of diesel in the commercial sector increased from 8.1 billion litres in 2013 to 8.3 billion litres in 2022. The consumption of petrol in the commercial sector declined from 1.7 billion litres in 2013 to 1.3 billion litres in 2022 as shown in Figure 6 below.

Figure 6: Petrol and diesel sales volumes in the commercial sector, 2013 – 2022

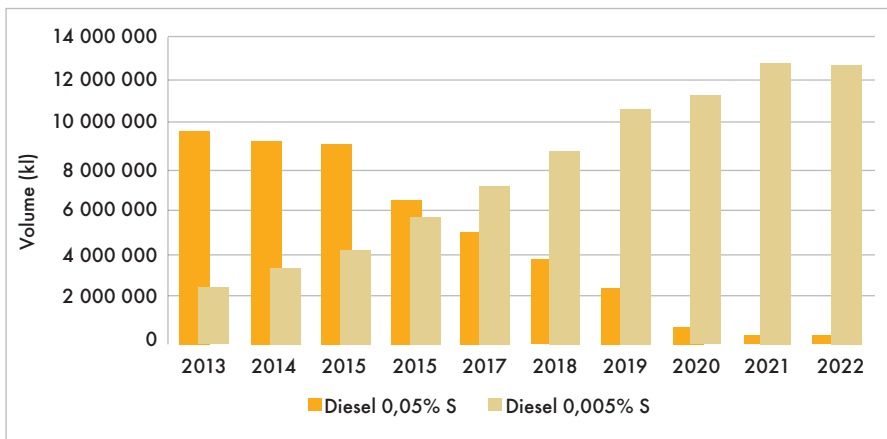


Source: Department of Mineral Resources and Energy (DMRE)

3.3 PETROL AND DIESEL CONSUMPTION PER GRADE

The consumption of diesel 500ppm declined at an average rate of 28% per annum as a result of a drop from 9 billion litres in 2013 to 251 million litres in 2022. In contrast, Diesel 50ppm grew at an average annual rate of 21% per annum from 2 billion litres in 2013 to 12 billion litres in 2022 as shown in Figure 7 below.

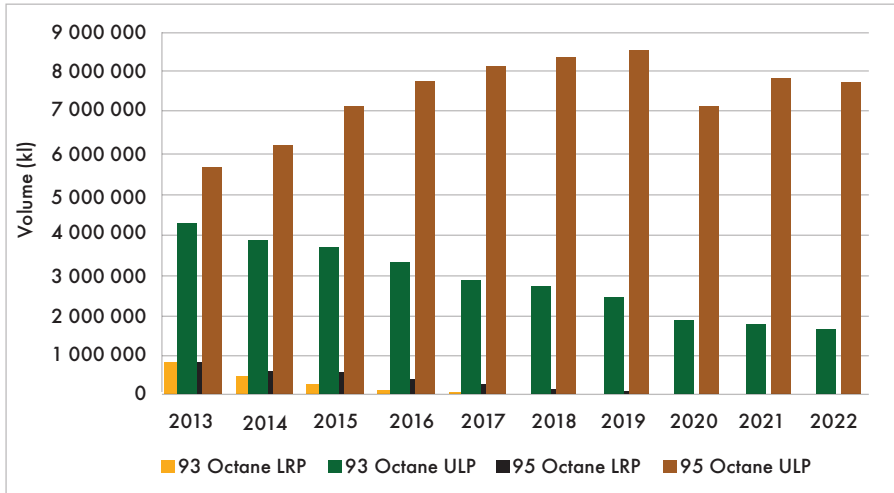
Figure 7: Consumption per grade of diesel, 2013 – 2022



Source: Department of Mineral Resources and Energy (DMRE)

The market share of ULP increased from 85% in 2013 to 100% in 2022, with the 95-octane ULP grade dominating the market from 48% in 2013 to 82% in 2022. The consumption of 93 octane ULP declined at an average rate of 9% per annum from 4.3 billion litres in 2013 to 1.6 billion litres in 2022 as shown in Figure 8 below.

Figure 8: Consumption per grade of petrol, 2013 – 2022



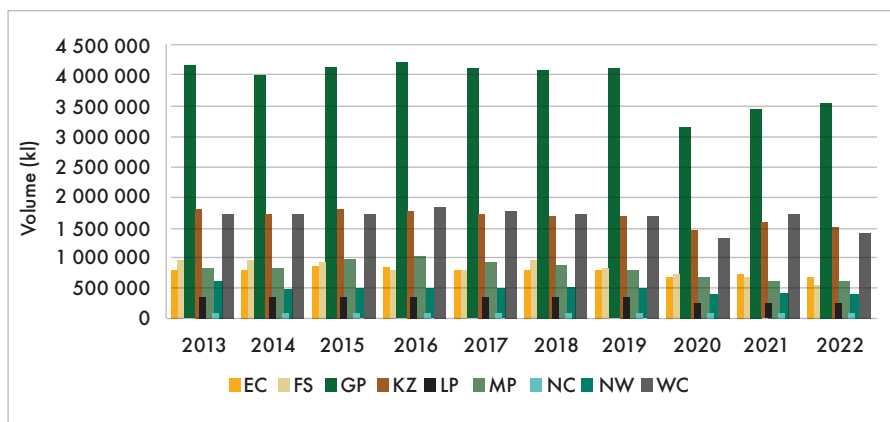
Source: Department of Mineral Resources and Energy (DMRE)

4. PROVINCIAL PETROL AND DIESEL MARKET TRENDS

4.1 PETROL CONSUMPTION PER PROVINCE

Gauteng Province continues to dominate as far as petrol consumption is concerned, compared to all other provinces. On average, Gauteng consumed 37% of the total consumption in the past 10 years, followed by Kwa-Zulu Natal at 16% and Western Cape at 15.4%. The rest of the other provinces consumed below 1 billion litres over the 10 years. Northern Cape continues to be the lowest consumer of Petrol compared to all other Provinces as shown in Figure 9 below.

Figure 9: Petrol sales volumes per province, 2013 – 2022

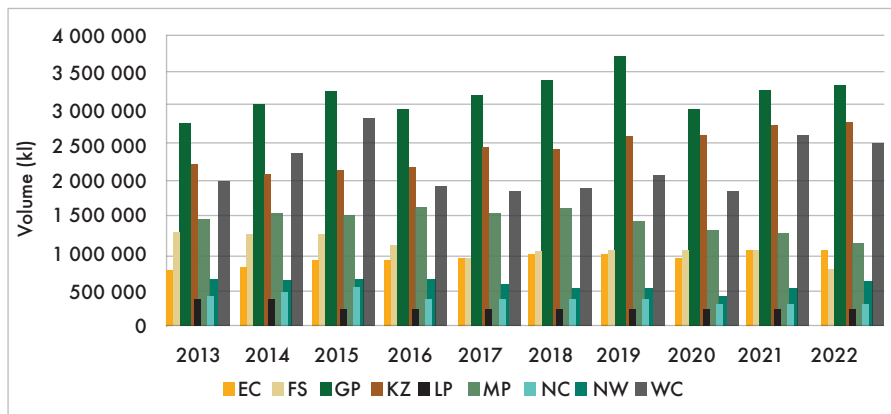


Source: Department of Mineral Resources and Energy (DMRE)

4.2 DIESEL CONSUMPTION PER PROVINCE

The consumption of Diesel per province was dominated by Gauteng at 25% followed by Kwa-Zulu Natal and Western Cape at 19% and 17% respectively. Mpumalanga was the fourth largest consumer of diesel at 12%. The remaining 5 provinces had a growth of less than 10% in the 10-year period. Figure 10 below.

Figure 10: Diesel sales volumes per province, 2013 – 2022



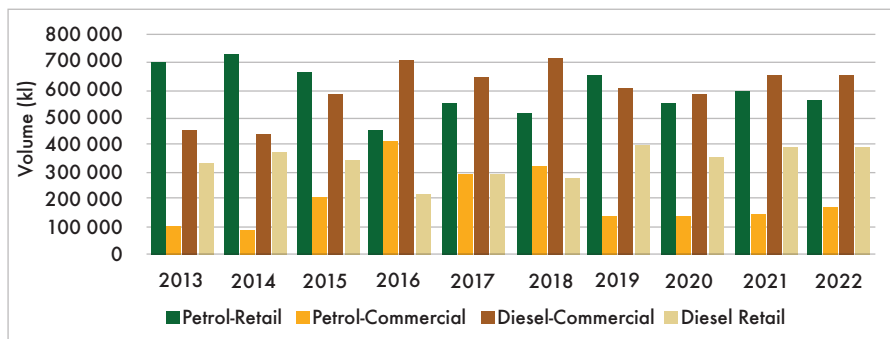
Source: Department of Mineral Resources and Energy (DMRE)

4.3 PROVINCIAL PETROL AND DIESEL CONSUMPTION PER TRADE SECTOR

4.3.1 EASTERN CAPE

Fuel consumption in the Eastern Cape was dominated by petrol in the Retail sector and diesel in the commercial sector. Petrol consumption in the retail sector reached a low in 2016 and overall declined at an average annual rate of 1% from 2013 to 2022 while commercial consumption of petrol increased at an annual average rate of 14% in the 10 years. Diesel consumption in the retail sector reached a low in 2016 and from there on increased at an average annual rate of 4%, while the use of diesel in the commercial sector grew at an average annual rate of 5% per annum in the 10 years as shown in Figure 11 below.

Figure 11: Petrol and diesel consumption per trade sector in Eastern Cape, 2013 – 2022

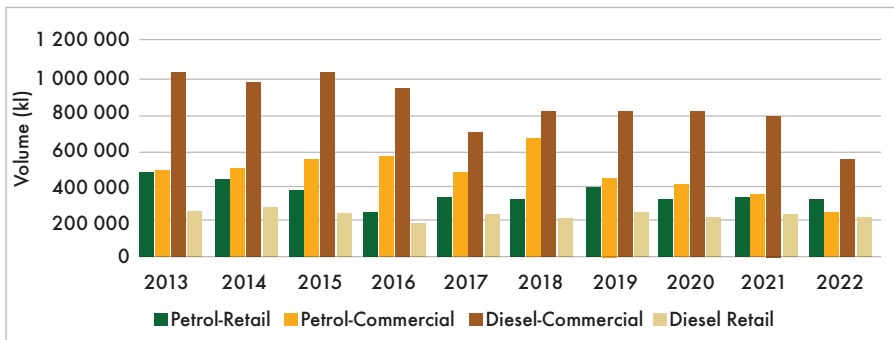


Source: Department of Mineral Resources and Energy (DMRE)

4.3.2 FREE STATE

Diesel accounted for the most consumed fuel in the Free State as compared to petrol, with the market share standing at 57% in 2022. Diesel consumption in the commercial sector declined at an average annual rate of 6% from 1 billion litres in 2013 to 545 million litres in 2022. Diesel consumption in the retail sector remained stagnant in the 10 years while consumption of petrol in the retail sector declined at an average annual rate of 2% per annum. The consumption of petrol in the commercial sector declined at an average rate of 5% per annum from 487 million litres in 2013 to 254 million litres in 2022 as shown in Figure 12 below.

Figure 12: Petrol and diesel consumption per trade sector in Free State, 2013 – 2022

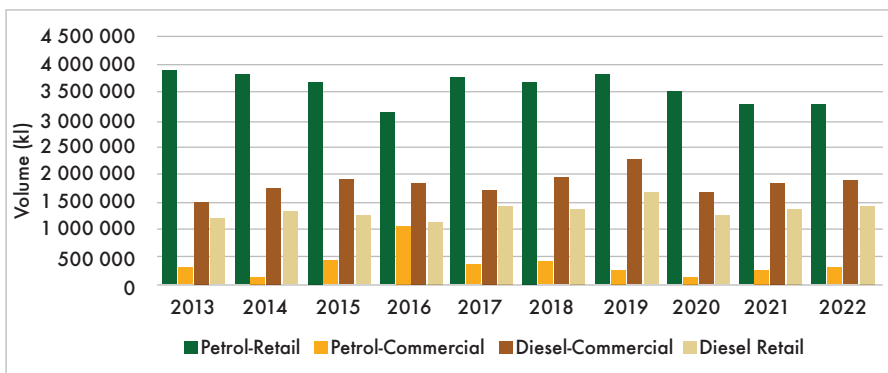


Source: Department of Mineral Resources and Energy (DMRE)

4.3.3 GAUTENG

Fuel consumption in Gauteng was dominated by petrol throughout the 10 years, regardless of a drop in its market share from 60% in 2013 to 51.8% in 2022. Petrol consumption in the retail sector declined from 3.8 billion litres in 2013 to 3.2 billion litres in 2022, while diesel consumption in the same sector grew at an average annual rate of 2%. Diesel consumption in the commercial sector grew from 1.5 billion litres in 2013 to 1.8 billion litres in 2022, while the consumption of petrol in the same sector declined from 329 million litres in 2013 to 307 million litres in 2022. Petrol consumption in the commercial sector was the highest in 2016, of which consumption was reported at 1 billion litres as shown in Figure 13 below.

Figure 13: Petrol and diesel consumption per trade sector in Gauteng, 2013 – 2022

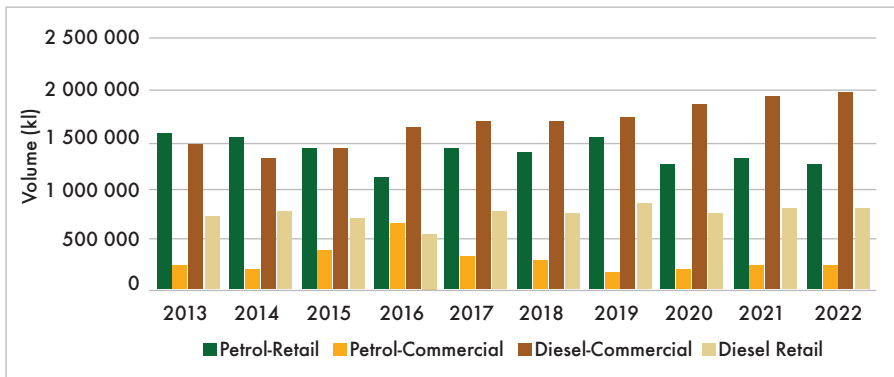


Source: Department of Mineral Resources and Energy (DMRE)

4.3.4 KWA-ZULU NATAL

Diesel use in Kwa-Zulu Natal has been dominant for the whole 10-year study and its market share has grown from 55% in 2013 to 65% in 2022. Petrol consumption in the retail sector had declined by only 1% while petrol use in the commercial sector declined at a very steady rate. Diesel consumption in the commercial sector increased at an average annual rate of 4% while consumption of diesel in the retail sector grew by an average rate of 2% per annum as shown in Figure 14 below.

Figure 14: Petrol and diesel consumption per trade sector in Kwa-Zulu Natal, 2013 – 2022

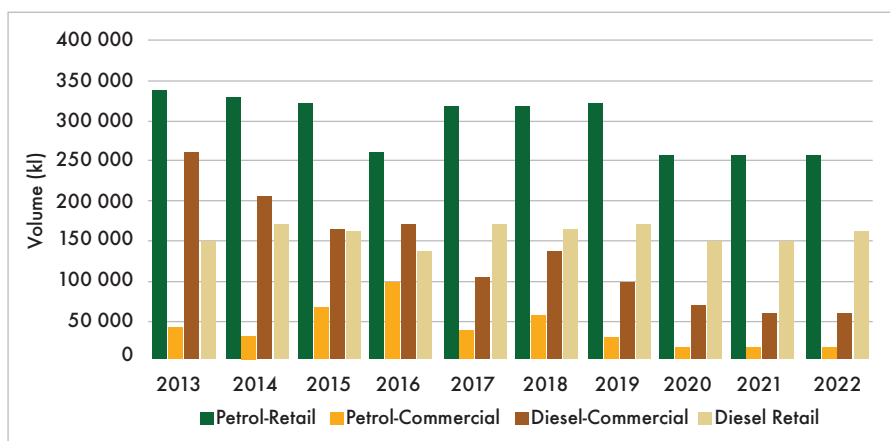


Source: Department of Mineral Resources and Energy (DMRE)

4.3.5 LIMPOPO

Petrol consumption in Limpopo decreased at an average rate of 2% in the retail sector. With regards to the commercial sector, petrol consumption declined from 42 million litres in 2013 to 17.7 million litres in 2022. The consumption of diesel in the commercial sector declined at an average annual rate of 13% while consumption in the retail sector increased at an average annual rate of 2% from 148 million litres in 2013 to 161 million litres in 2022 as shown in Figure 15 below.

Figure 15: Petrol and diesel consumption per trade sector in Limpopo, 2013 – 2022

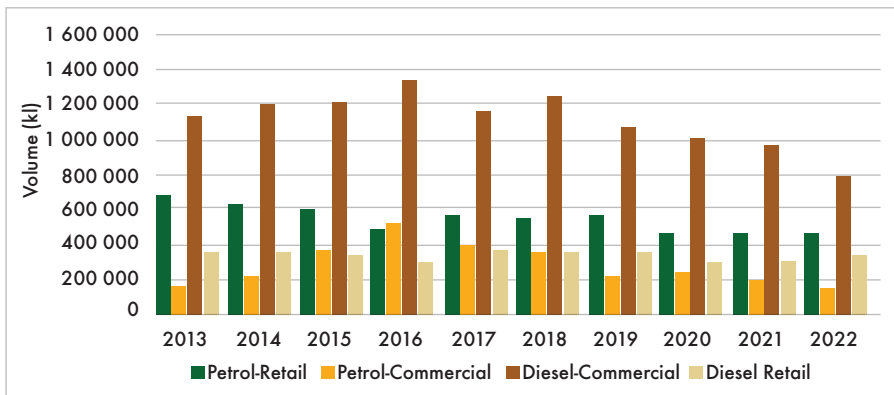


Source: Department of Mineral Resources and Energy (DMRE)

4.3.6 MPUMALANGA

The consumption of diesel in Mpumalanga declined by 3% In the commercial sector while consumption in the retail sector remained stable between 2013 and 2022. Fuel consumption in the Mpumalanga was dominated by diesel with a market share that grew from 63.4% in 2013 to 66% in 2022. Petrol consumption in the retail sector declined at an average annual rate of 4% from 678 million litres in 2013 to 462 million litres in 2022, while consumption of petrol in the commercial sector grew at an annual rate of 3% during the period of study.

Figure 16: Petrol and diesel consumption per trade sector in Mpumalanga, 2013 – 2022

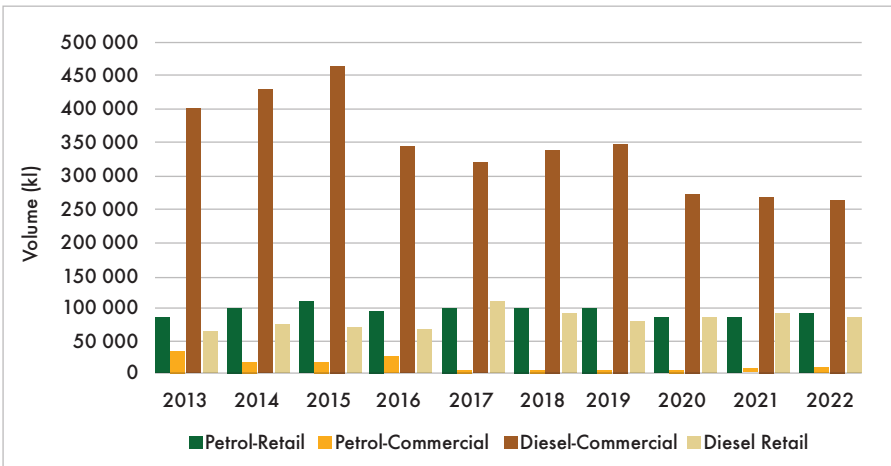


Source: Department of Mineral Resources and Energy (DMRE)

4.3.7 NORTHERN CAPE

Due to mining activity in the province, diesel has dominated the Northern Cape’s fuel demand during the previous 10 years, despite its market share falling from 79.2% to 77% between 2013 and 2022. Diesel consumption in the commercial sector reached its peak of 462 million litres in 2015, and it has since been declining up to a low of 266 million litres in 2022. The consumption of diesel in the retail sector grew at an average rate of 5% per year. Consumption of petrol in the retail sector grew at an average rate of 1% from 87 million litres in 2013 to 92 million litres in 2022 while commercial use dropped significantly from 34 million litres in 2013 to 8 million litres in 2022 as shown in Figure 17 below.

Figure 17: Petrol and diesel consumption per trade sector in Northern Cape, 2013 – 2022

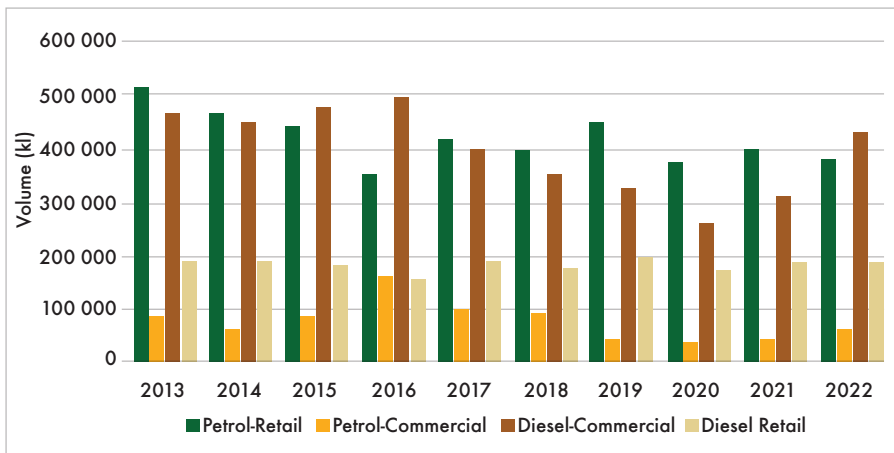


Source: Department of Mineral Resources and Energy (DMRE)

4.3.8 NORTHWEST

Consumption of diesel in the Northwest continued to dominate in the fuel market although there was a drop from 469 million litres in 2013 to 432 million litres in 2022 in the commercial sector. Consumption of diesel in the retail sector has been stable throughout the 10-year study. Petrol consumption in the retail sector declined at an average annual rate of 3% while the consumption of Petrol in the commercial sector decreased from 88 million litres in 2013 to 68 million litres in 2022 as shown in Figure 18 below.

Figure 18: Petrol and diesel consumption per trade sector in Northwest, 2011 – 2020

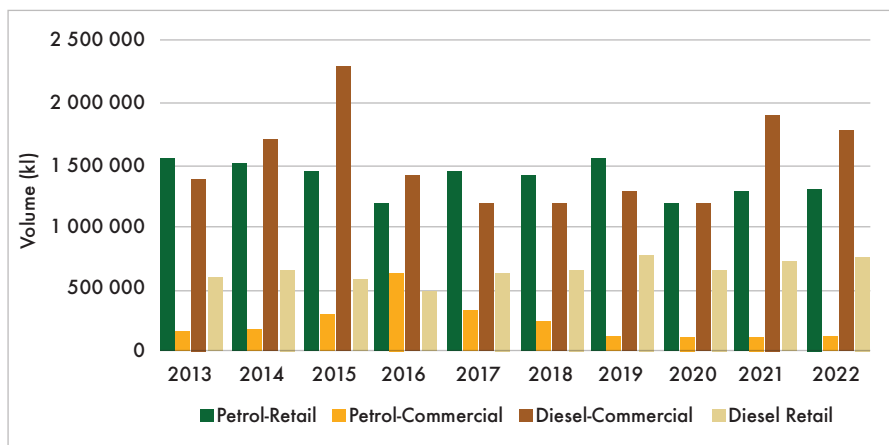


Source: Department of Mineral Resources and Energy (DMRE)

4.3.9 WESTERN CAPE

The Consumption of petrol in the Western Cape declined by an annual average rate of 1% in the retail sector and decreased from 179 million litres in 2013 to 130 million litres in 2022 in the commercial sector. Diesel consumption continued to dominate the total fuel consumption from 2013 with a market share of 54% to a 64% share in 2022. The consumption of Diesel in the commercial sector grew from 1.4 billion litres in 2013 to 1.7 billion litres in 2022. Diesel use in the retail sector increased at an average annual rate of 4% from 588 million litres in 2013 to 760 million litres in 2022 as shown in Figure 19 below.

Figure 19: Petrol and diesel consumption per trade sector in Western Cape, 2013 – 2022



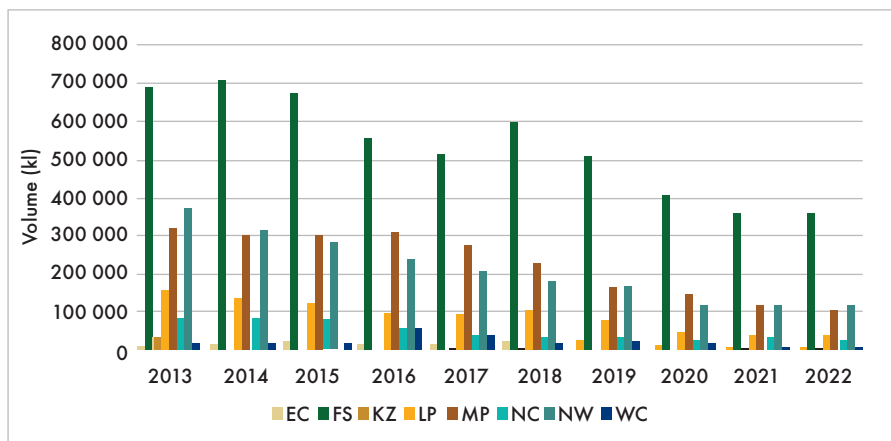
Source: Department of Mineral Resources and Energy (DMRE)

4.4 PROVINCIAL PETROL AND DIESEL CONSUMPTION PER GRADE

4.4.1 PETROL

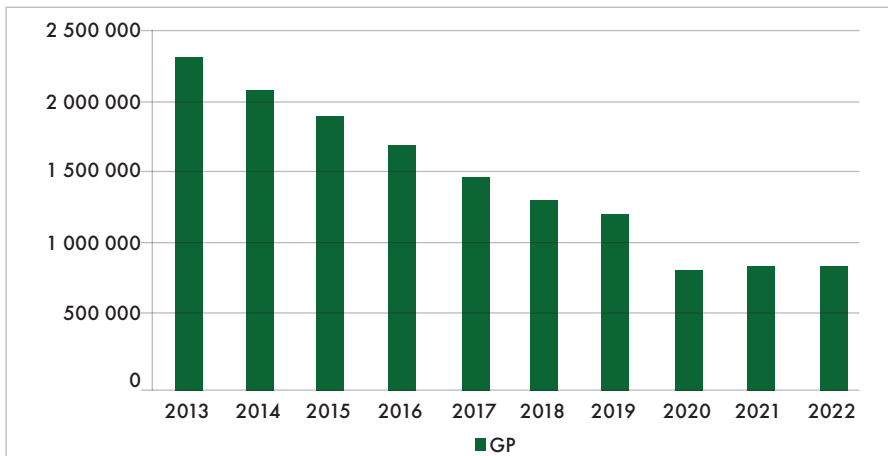
The consumption of ULP 93 was dominated by Gauteng and the market share increased from 58.2% in 2013 to 59.3% in 2022. The use of ULP in Gauteng declined from 2.3 billion litres in 2013 to 880 million litres in 2022. Gauteng’s ULP 93 consumption reached a low in 2020 at 848 million litres. Free State followed as the second highest consumer of ULP 93 which also declined from 686 million in 2013 to 287 million litres in 2022. Mpumalanga was the third highest with Northwest the fourth highest consumer in general, all the 9 provinces experienced negative trends in the last 10 years as shown in Figure 20 below.

Figure 20: 93 Unleaded Petrol (ULP) consumption per province, 2013 – 2022



Source: Department of Mineral Resources and Energy (DMRE)

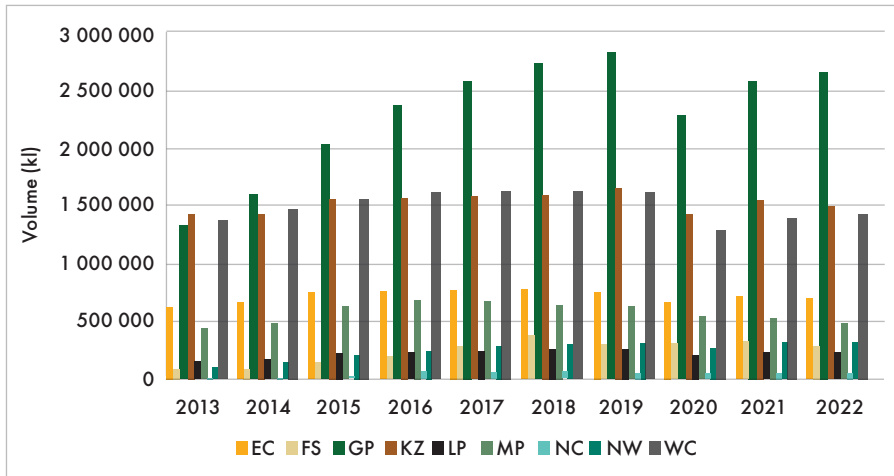
GAUTENG



Source: Department of Mineral Resources and Energy (DMRE)

Gauteng’s consumption of ULP 95 grew at an average rate of 9% per year, from 1.3 billion litres to 2.6 billion litres between 2013 and 2022. The rest of the 8 provinces followed a positive trend. Eastern Cape, Kwa-Zulu Natal and Western Cape grew at an annual average rate of 1% while Free State had an annual average growth rate of 15%. Limpopo, Mpumalanga, Northern Cape and Northwest grew by 5%,2%,13% and 12% per annum respectively as shown in Figure 21 below.

Figure 21: 95 Unleaded Petrol (ULP) consumption per province, 2013 – 2022

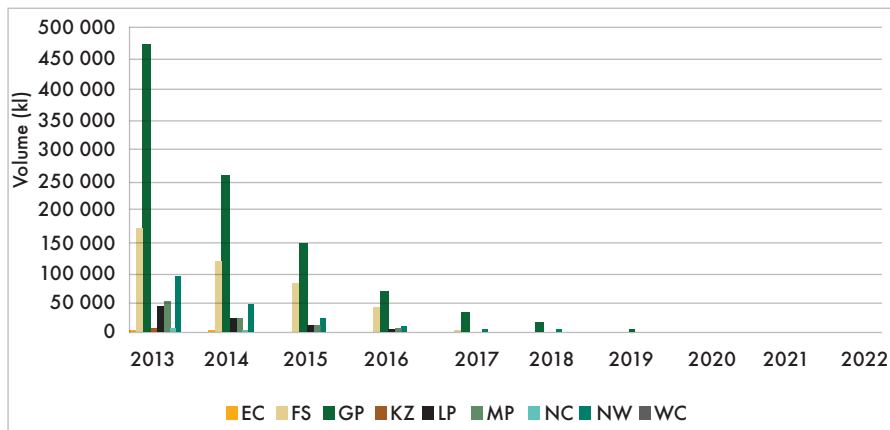


Source: Department of Mineral Resources and Energy (DMRE)

OVERVIEW OF THE PETROL AND DIESEL MARKET IN SOUTH AFRICA BETWEEN 2013 AND 2022

The consumption of 93 LRP Octane in South Africa has intensely dropped in the past 10-year period from 2013 to 2022. The consumption went down from 867 million litres in 2013 to 145 thousand litres in 2022. Consumption mainly came from Gauteng, with other provinces not reporting any consumption at all in the last 4 years as shown in Figure 22 below.

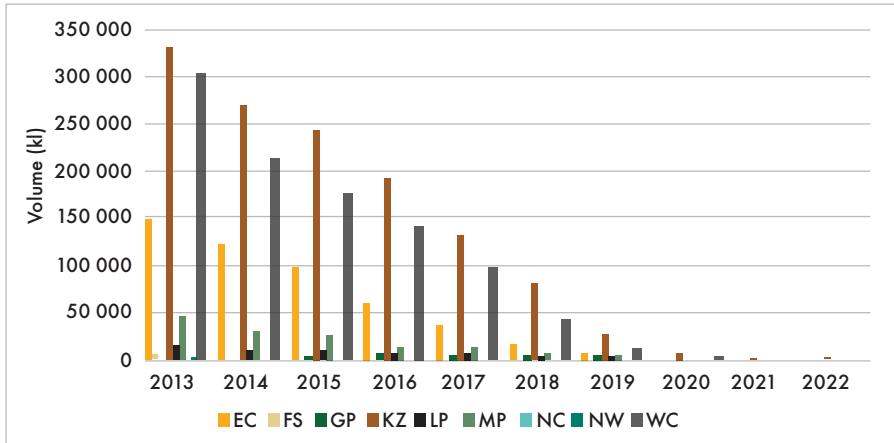
Figure 22: 93 Lead Replacement Petrol (LRP) consumption per province, 2013 – 2022



Source: Department of Mineral Resources and Energy (DMRE)

The consumption of 95 LRP grade in the country has also declined drastically in the past 10 years, from a total of 856 million litres in 2013 to 5.8 million litres in 2022. The consumption of 95 LRP was dominated by Kwa-Zulu Natal followed by Western Cape and Eastern Cape respectively as shown in Figure 23 below.

Figure 23: 95 Lead Replacement Petrol (LRP) consumption per province, 2013 - 2022

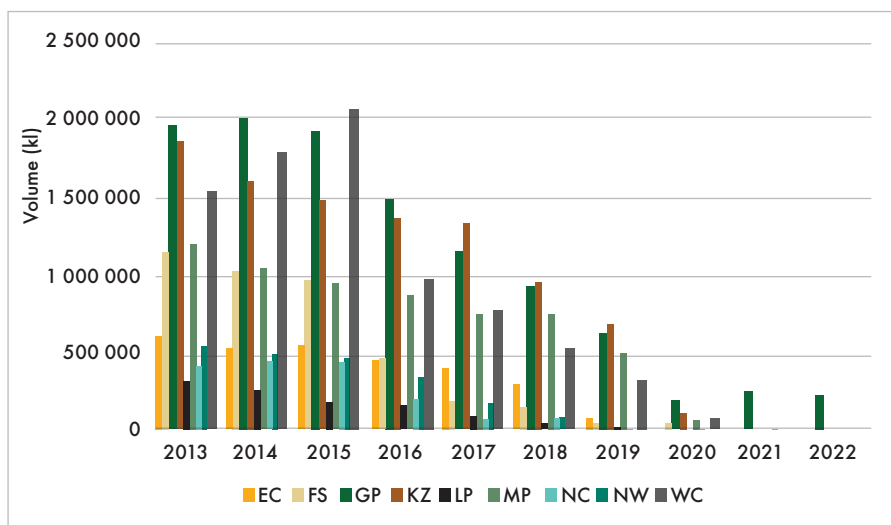


Source: Department of Mineral Resources and Energy (DMRE)

4.4.2 DIESEL

The use of diesel with a maximum content of 0.05% has drastically declined in the 10 years reported. Gauteng and Western Cape remained the highest consumers of Diesel at 0,05% although at a declining rate, with other provinces following a similar trend in the 10-year study. The lowest drop in consumption was reported in 2020, with Gauteng showing a recovery in 2021 and 2022 as compared to other provinces as shown in Figure 24 below,

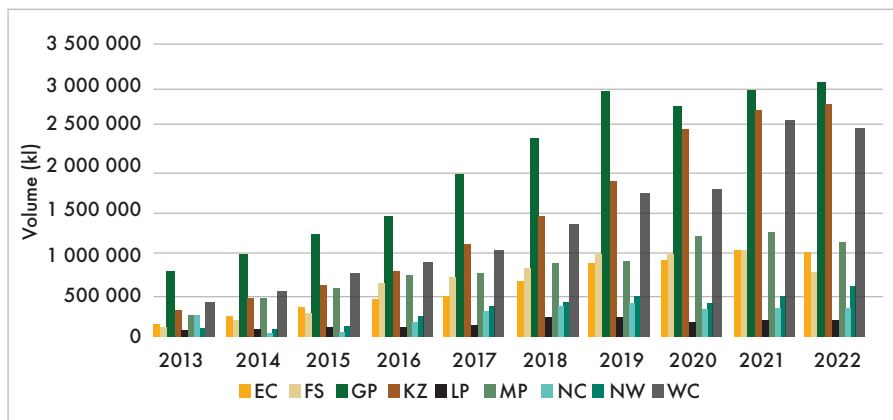
Figure 24: 500 ppm sulphur diesel consumption per province, 2013 – 2022



Source: Department of Mineral Resources and Energy (DMRE)

The consumption of diesel with the maximum sulphur content of 0.005% was dominated by Gauteng. The use of Diesel with the lower sulphur content in Gauteng has increased at an average rate of 17% with an increase from 804 million litres in 2013 to 3 billion litres in 2022. Kwa-Zulu Natal also had the highest consumption reported from 347 million litres in 2013 to 2.7 billion litres in 2022. The third largest consumer of Diesel 0,005% was Western Cape with an increase from 434 million litres in 2013 to 2.4 billion litres in 2022 as shown in Figure 25 below.

Figure 25: 50 ppm sulphur diesel consumption per province, 2013 – 2022



Source: Department of Mineral Resources and Energy (DMRE)

5. CONCLUSION

The supply of petrol and Diesel in South Africa has been fairly growing until 2020 when the world came to a halt due to the Covid-19 pandemic. Since 2020, South Africa has been importing significantly high volumes of petrol and diesel to meet the local demand. Local production declined massively due to the closures of refineries. The War Between Russia and Ukraine has negatively affected the supply of Crude Oil as a result hurt the economy of South Africa.

Amid the above challenges, diesel and petrol remain to be in high demand, with Diesel being the most imported fuel, from 4.9 billion litres in 2013 to 11.9 billion litres in 2022. There has been an increase in the consumption of Diesel in South Africa due to shortages in electricity, as Diesel is currently being used to generate electricity. Petrol was traded mostly in the retail sector while Diesel consumption dominated in the Commercial sector during the 10-year study period. On a provincial level, Gauteng remains the main highest consumer of both Petrol and Diesel followed by Kwa-Zulu Natal and Western Cape respectively. These provinces remain the economic hubs of South Africa which contributes more to the country's GDP.

The Fuel consumption patterns per trade sector have been differently displayed and are unique for each province. Diesel was mostly used in the Commercial Sector in all other provinces except for Gauteng and Limpopo which had a high consumption of petrol in the retail sector and Diesel in the retail sector. Northwest had a high consumption of Petrol in the retail sector and Diesel in the commercial sector. The use of Lead Replacement Petrol consumption continued to decline to almost nothing in 2022 while consumption of Diesel with 0,05% maximum sulphur has also been on a negative trend.

The Department of Mineral Resources and Energy promotes economic growth and development, social equity, and environmental sustainability. This is in line with the goals and the implementation of the NDP 2030 which aims to achieve environmentally sustainable green products and services which will contribute to the creation of jobs in niche markets where South Africa can develop a competitive advantage.

6. REFERENCES

1. DMRE. n.d. Available at: <https://www.dmre.gov.za>. (Accessed on: 24/07/2023)
2. Energy Outlook | Energy Economics | Home. n.d. Available at: <https://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html>. (Accessed on: 12/07/2023)
3. International - U.S. Energy Information Administration (EIA). n.d. Available at: <https://www.eia.gov/international/analysis/country/ZAF>. (Accessed on: 26/07/2023)
4. Making Business Easy. n.d. Available at: <https://www.gulfstreamenergy.co.za>. Accessed on: 12/07/2023)
5. National Treasury. n.d. Available at: <https://www.treasury.gov.za/documents/national%20budget/2023/speech/speech>. (Accessed on: 27/07/2023)
6. Overview. n.d. Available at: <https://www.worldbank.org/en/country/southafrica/overview>. (Accessed on: 13/07/2023)
7. SAPIA | South African Petroleum Industry Association. n.d. Available at: <https://www.sapia.org.za>. (Accessed on: 12/07/2023)
8. South African Government. n.d. Available at: <https://www.gov.za/sites/default/files/>. (Accessed on: 24/07/2023)

7. APPENDIX A: DATA SCOPE

The report was compiled with data from the following sources:

Fuel Sales Volume (FSV) data: The data was collected by DOE from the 7 oil companies in South Africa.

Petrol and Diesel trade data: The data was collected by DOE from the South African Revenue Services (SARS).

SA Gross Domestic Product (GDP) data: The data was collected by DOE from the South African Reserve Bank.

DOE Annual Energy Balances: SA Energy Balances are compiled and published annually by the Department of Mineral Resources and Energy (DMRE).

Vehicle Sales data: The data was collected by DOE from the National Association of Automobile Manufactures of South Africa (NAAMSA)

South African Petrol and Diesel Prices: The data was published on DOE's website.

Crude Oil Prices: The data was collected by DOE from the United States Energy Information Administration (EIA).





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