



NAMMC
Promoting market access for South African agriculture



Input

Cost Monitoring

March 2020

An update on selected items



EXECUTIVE SUMMARY

❖ International and domestic price trends for selected fertilisers

From February 2019 to February 2020, the international price (Rand terms) of Di-Ammonium Phosphate (DAP), Muriate of Potash (MOP) and Urea, decreased by 17.3% (R5 435.19/ton to R4 493.97/ton), 16.9% (R3 941.55/ton to R3 276.54/ton) and 1.4% (R3 291.54/ton to R3 246.48/ton), respectively. During the same period the R/\$ exchange rate depreciated by 8.7% (R/\$13.83 to R/\$15.03).



From February 2019 to February 2020, the fertiliser index illustrates that the domestic price of Potassium Chloride (KCL) increased by 0.5% from 94.7 to 95.2, whilst Mono-Ammonium Phosphate (MAP) and Urea decreased by 19.2% (64 to 76) and 8.6% (107.9 to 98.7), respectively.

❖ Fuel prices & Illuminated paraffin

From March 2019 to March 2020, the price of petrol increased by 6.9% from R14.82/litre to R15.84/litre, while diesel declined by 0.2% from R14.05/litre to R14.03/litre. The price of crude oil (US\$ terms) decreased by 46.4% from US\$64.53/barrel to US\$34.61/barrel, with a 25.1% (R/\$13.38 to R/\$16.74) depreciation of the Rand. Crude oil prices dropped due to the ongoing Coronavirus (COVID-19) pandemic which hampers demand as it locked millions of people from transportation worldwide. China is the globe's largest oil importer, the epicentre of COVID-19 and a major driver of global demand. On the supply side, an uneasy partnership between OPEC and Russia has turned into a bitter breakup. The resulting war for market share has flooded the world with oil.



Between March 2019 and March 2020, the price of illuminated paraffin in both Coastal and Gauteng regions decreased by 6% (R8.39/litre to R7.89/litre) and 4.7% (R9.00/litre to R8.57/litre), respectively. In March 2020, the price of illuminated paraffin in Gauteng reached R8.57/litre compared to the Coastal regions' price of R7.89/litre.

❖ Freight Indices

From March 2019 to March 2020, the Baltic Dry Index (BDI) and the Grain and Oilseeds Freight Index (GOFI) decreased by 11.6% (676 to 598) and 10.5% (112 to 100), respectively. The impact of COVID-19 is already impacting the shipping industry as many freight operations were grounded or restricted. In March 2020, the BDI reached 598 index points and the GOFI reached 100 index points.



Table of Contents

	Page
1. Introduction	1
2. International price trends for selected fertilisers	1
3. Domestic price trends for selected fertilisers	2
4. Fuel prices	2
5. Baltic Dry Index	3
6. Illuminated paraffin	4
7. Composition of diesel price	4

1. Introduction

Agricultural inputs provide potential to improve agricultural productivity with the ultimate goal of maximising agricultural productivity. Agricultural inputs present an imperative determinant of yields in agricultural production. Agriculture has become extremely dynamic and the adoption of technology in the development of inputs has subsequently improved. The Input Cost Monitoring (ICM) report, published by the National Agricultural Marketing Council (NAMC), is a quarterly report analysing selected agricultural production input prices in both domestic and international markets. The objective of this report is to compile information that will track both historic and current price trends of selected agricultural production inputs in South Africa versus the international perspective.

The data for this publication is obtained from Grain South Africa (Grain SA), Department of Energy (DoE) and the South African Grain Information Service (SAGIS).

2. International price trends for selected fertilisers

The global economic growth and financial situation affects various sectors, including agriculture. The world fertiliser sector therefore, needs to be viewed from the perspective of the world economic growth situation. **Figure 1** illustrates international fertiliser prices of selected fertilisers from February 2014 to February 2020. The international price (**Rand terms**) of Muriate of Potash (MOP) increased by 4.9% from R3 124.68/ton to R3 276.54/ton while Di-Ammonium Phosphate (DAP) and Urea decreased by 12.7% (R5 147.47/ton to R4 493.97/ton) and 9.3% (R3 600.59/ton to R3 246.48/ton), respectively. During the depicted period the Rand/US Dollar (R/\$) exchange rate depreciated by 42.7% (R/\$10.53 to R/\$15.03). In terms of the US Dollar price of DAP, Urea and MOP, prices decreased by 38.8% (US\$489 to US\$299), 36.8% (US\$341.9 to US\$216) and 26.5% (US\$297 to US\$218), respectively.

From February 2019 to February 2020, the international price (**Rand terms**) of DAP, MOP and Urea, decreased by 17.3% (R5 435.19/ton to R4 493.97/ton), 16.9% (R3 941.55/ton to R3 276.54/ton) and 1.4% (R3 291.54/ton to R3 246.48/ton), respectively. During the same period the R/\$ exchange rate depreciated by 8.7% (R/\$13.83 to R/\$15.03).

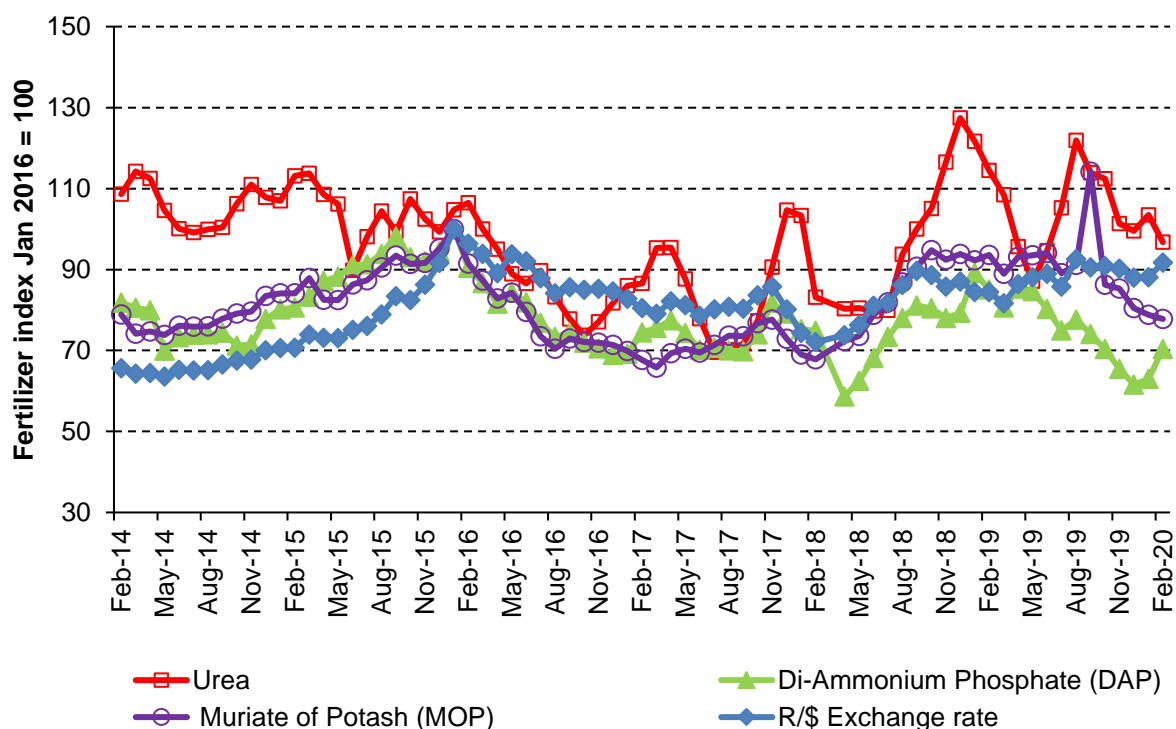


Figure 1: International price trends for selected fertilisers

Source: Own calculations based on data from Grain SA, 2020.

3. Domestic price trends for selected fertilisers

Figure 2 shows the trends of domestic fertiliser prices between February 2014 and February 2020. The fertiliser index illustrates that from February 2014 and February 2020, the value of Potassium Chloride (KCL) and Mono-Ammonium Phosphate (MAP) increased by 12.2% (84.8 to 95.2) and 1.4% (74.9 to 76), respectively, while Urea declined by 4.1% (102.9 to 98.7). From February 2019 to February 2020, the domestic price of KCL increased by 0.5% (94.7 to 95.2), whilst MAP and Urea decreased by 19.2% (64 to 76) and 8.6% (107.9 to 98.7), respectively.

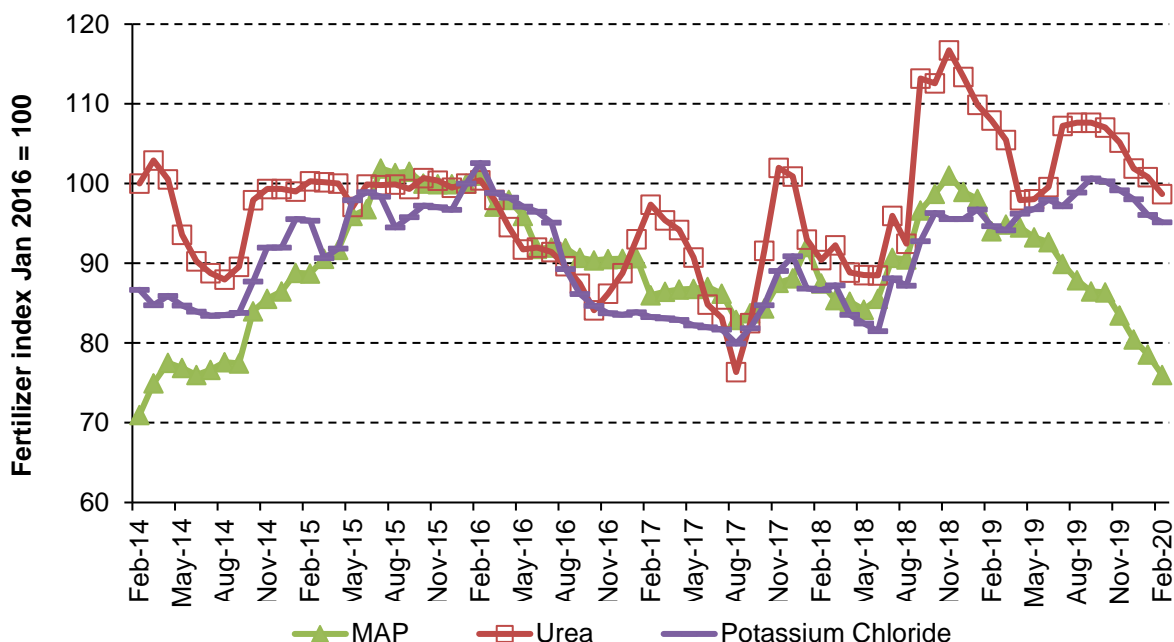


Figure 2: Domestic price trends for selected fertilisers

Source: Own calculations from price lists, 2020.

4. Fuel prices

The domestic fuel price is linked to the international price of crude oil (US\$ per barrel). Crude oil prices combined with the R/\$ exchange rate affect domestic fuel prices (DoE, 2019). In **Figure 3**, the price of crude oil, petrol and diesel follow similar trends. From March 2014 to March 2020, the price of petrol and diesel increased by 10.6% (R14.32/litre to R15.84/litre) and 4.8% (R13.39 to R14.03/litre) respectively, while the US\$ price of crude oil decreased by 67.9% (US\$107.73/barrel to US\$34.61/barrel). During the same period the price of crude oil (**Rand terms**) decreased by 48.9% (R8 282.59/ton to R4 229.41/ton).

From March 2019 to March 2020, the price of petrol increased by 6.9% from R14.82/litre to R15.84/litre, while diesel declined by 0.2% from R14.05/litre to R14.03/litre. The price of crude oil (**US\$ terms**) decreased by 46.4% from US\$64.53/barrel to US\$34.61/barrel, with a 25.1% (R/\$13.38 to R/\$16.74) depreciation of the Rand. Crude oil prices dropped due to the ongoing Coronavirus (COVID-19) pandemic which hampers demand as it locked millions of people from transportation worldwide. China is the globe's largest oil importer, the epicentre of COVID-19 and a major driver of global demand. On the supply side, an uneasy partnership between OPEC and Russia has turned into a bitter breakup. The resulting war for market share has flooded the world with oil.

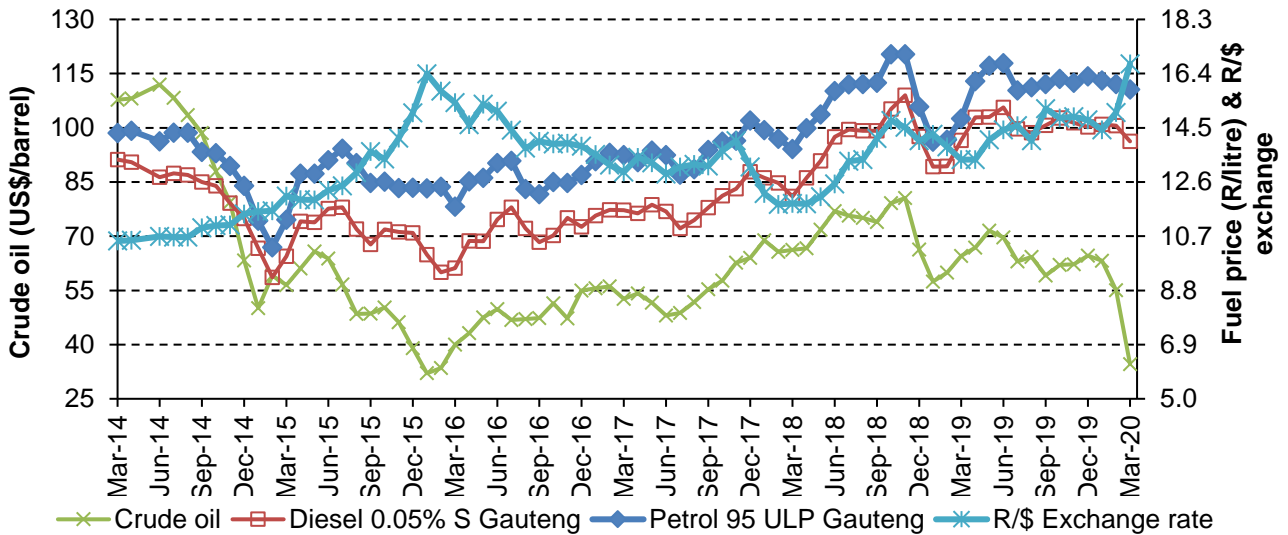


Figure 3: Crude oil and fuel prices

Source: Grain SA and DoE, 2020.

5. Baltic Dry Index

The Baltic Dry Index (BDI) measures international freight rates for dry bulk cargo affected by both the demand to move raw materials internationally and the supply of shipping capacity. The BDI is calculated on a monthly basis with May 2005 as its base of 6 000. The International Grains Council (IGC) introduced a new Grain and Oilseeds Freight Index (GOFI) with January 2013 as its base year which represents 68 major grain routes.

In **Figure 4**, between March 2014 and March 2020, the BDI and GOFI decreased by 60.2% (1 500 to 598) and 22.9% (130 to 100), respectively. From March 2019 to March 2020, the BDI and GOFI also decreased by 11.6% (676 to 598) and 10.5% (112 to 100), respectively. The impact of COVID-19 is already impacting the shipping industry as many freight operations were grounded or restricted. In March 2020, the BDI reached 598 index points and the GOFI reached 100 index points.

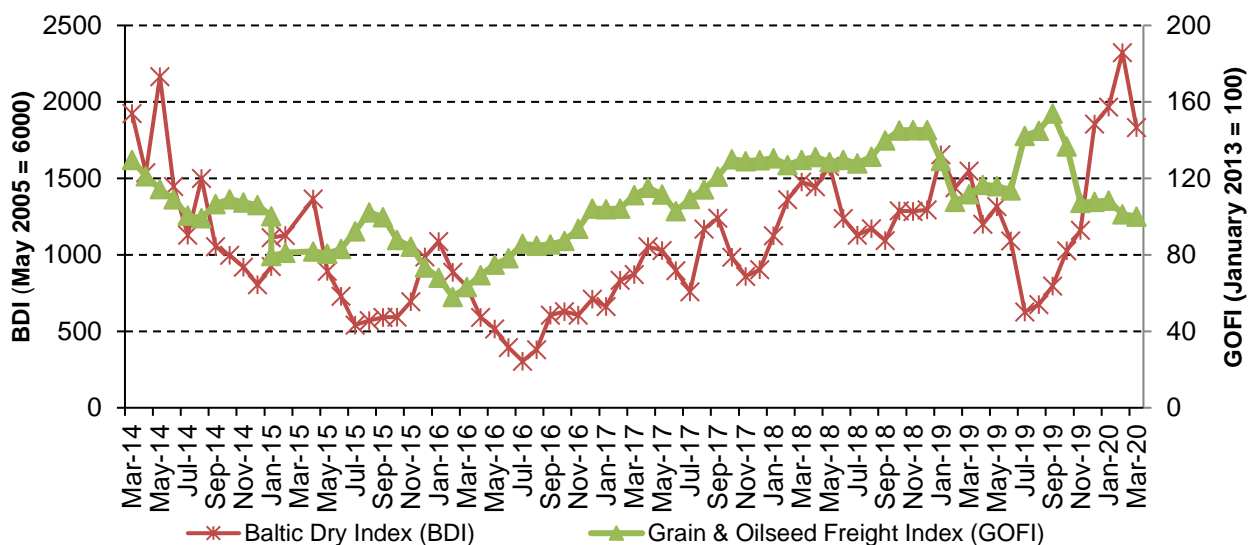


Figure 4: Baltic Dry Index versus Grain and Oilseeds Freight Index

Source: SAGIS, 2020.

6. Illuminated paraffin price

Consumers utilise paraffin as an alternative source to their household energy mix, classified as an essential backup fuel. **Figure 5** depicts the price of illuminated paraffin for the Coastal and Gauteng regions during March 2017 to March 2020. During this period, the price of illuminated paraffin for the Gauteng and Coastal regions increased by 14.3% (R7.50/litre to R8.57/litre) and 13.4% (R6.96/litre to R7.89/litre), respectively.

Between March 2019 and March 2020, the price of illuminated paraffin in both Coastal and Gauteng regions decreased by 6% (R8.39/litre to R7.89/litre) and 4.7% (R9.00/litre to R8.57/litre), respectively. In March 2020, the price of illuminated paraffin in Gauteng reached R8.57/liter compared to the Coastal regions' price of R7.89/liter.

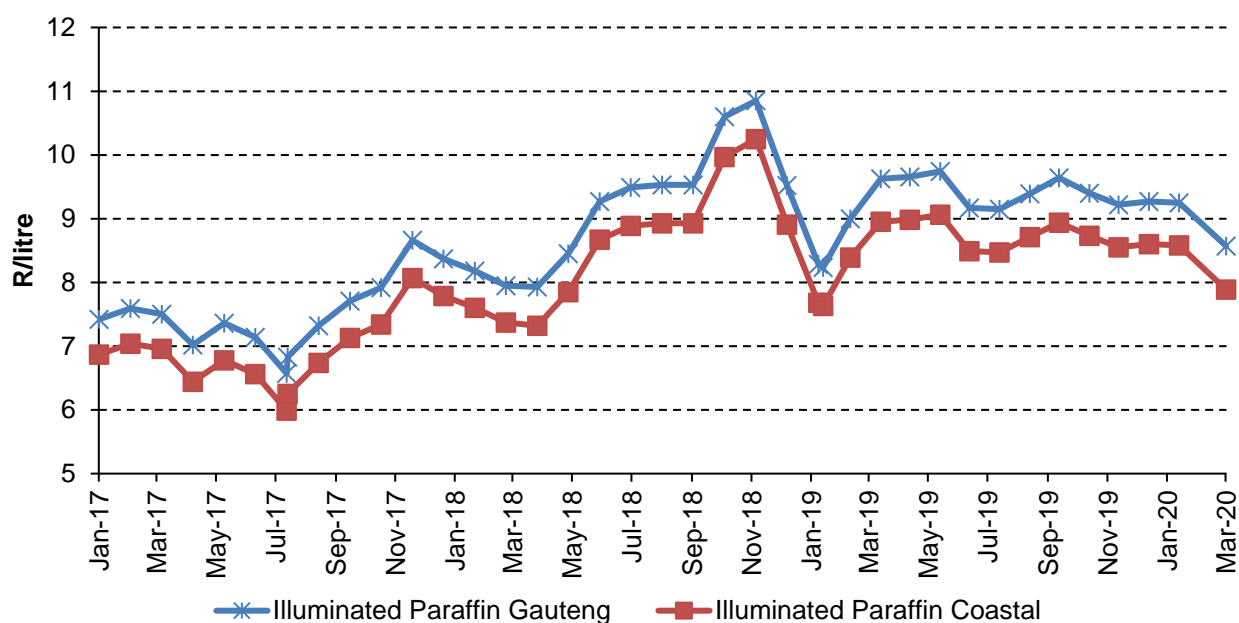


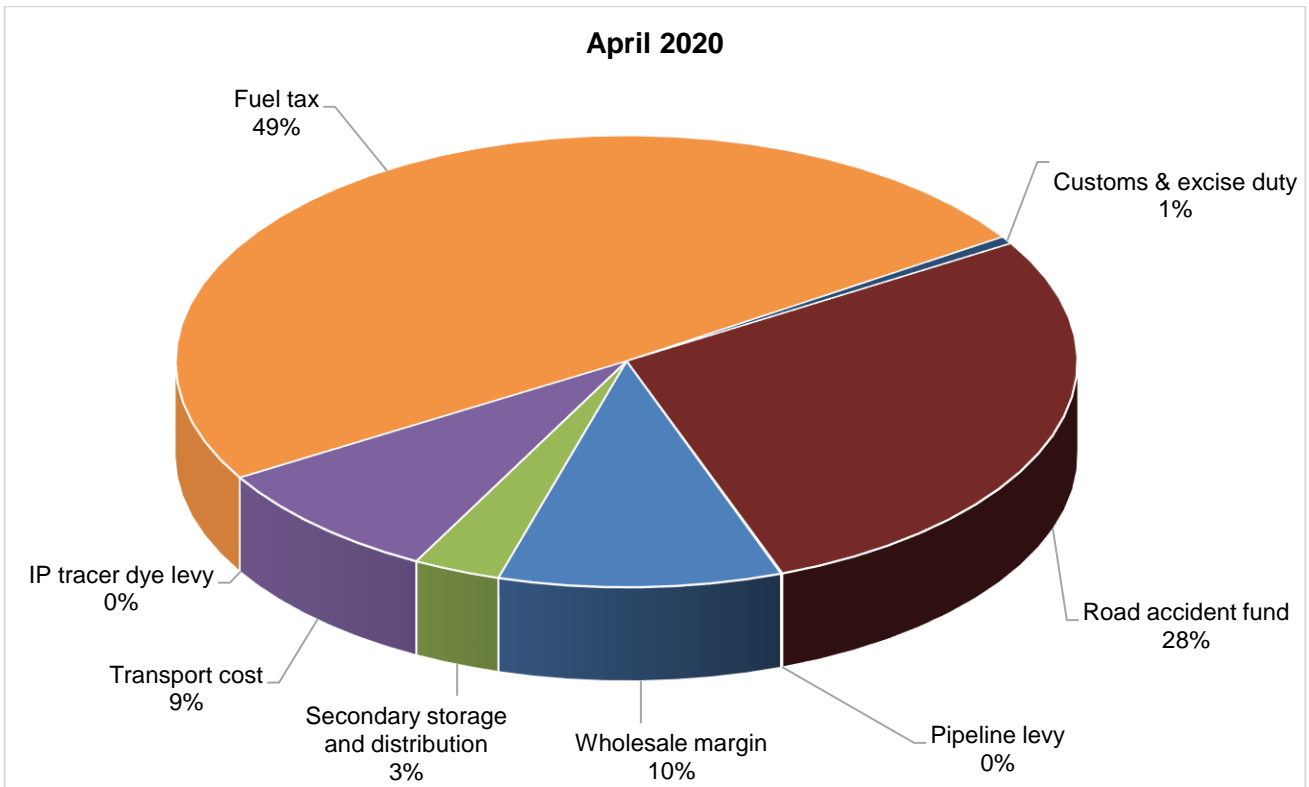
Figure 5: Comparison of illuminated paraffin price between Coastal regions and Gauteng

Source: Department of Energy, 2020.

7. Composition of diesel price

Figure 6 depicts the composition of the inland 0.05% Sulphur diesel price during April 2020 vs. April 2019. During April 2019 the total margins, taxes and levies added up to 667.99 cents/litre or 44.9% of the wholesale pump price of diesel. The Basic Fuel Price was 783.63 cents/litre or 52.7% of the wholesale pump price of 0.05% Sulphur diesel in Gauteng.

During April 2020 the basic fuel price was 518.72 cents/litre or 40.9% of the wholesale pump price of 0.05% Sulphur diesel in Gauteng. During this time the total margins, taxes and levies accounted for 735.73 cents/litre or 58% of the wholesale price of diesel.



versus

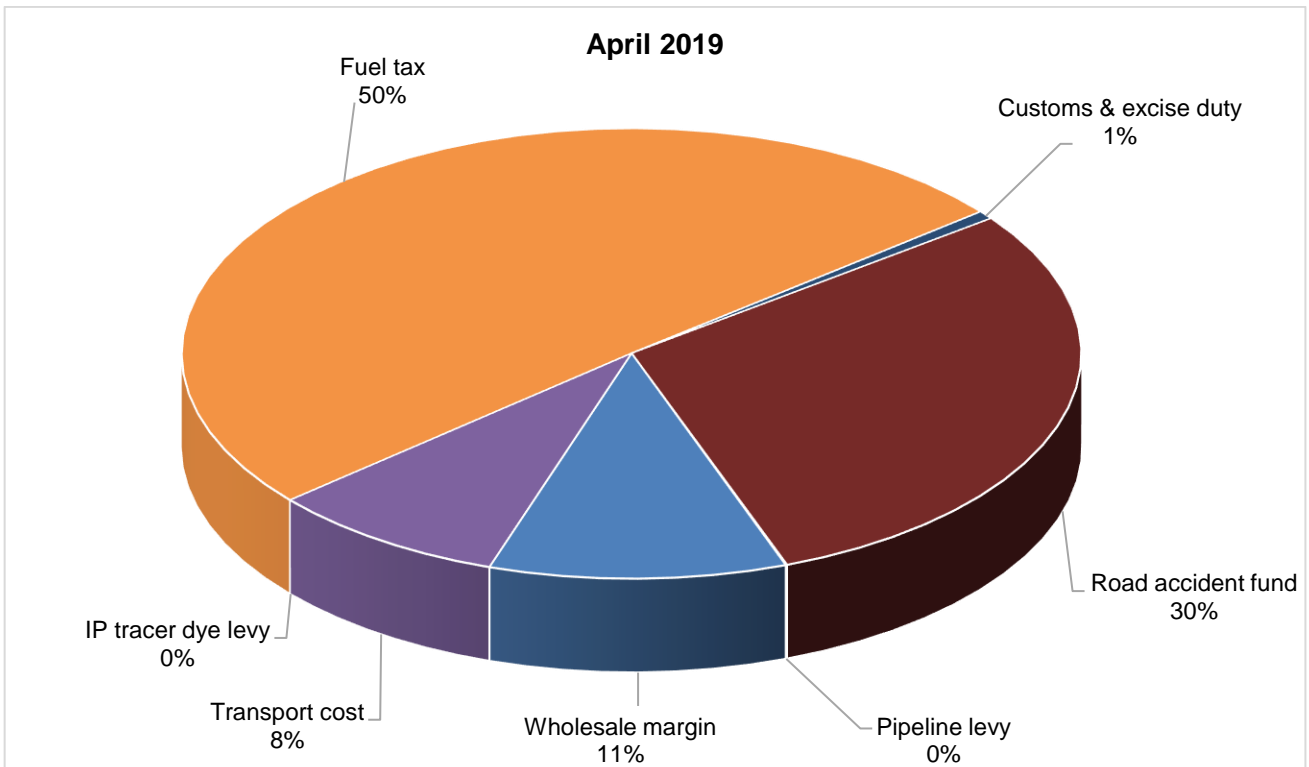


Figure 6: Composition of diesel price, April 2020 vs. April 2019
 Source: Own calculations based on Dept of Energy, 2020.

Compiled by:

Trends and discussion on selected topics:

Fezeka Matebeni

Thabile Nkunjana

Corné Dempers

Rika Verwey

Enquiries: Dr Christo Joubert: +27 12 341 1115 or christo@namc.co.za

© 2020. National Agricultural Marketing Council.

Disclaimer:

Information contained in this document results from research funded wholly or in part by the NAMC, acting in good faith. Opinions, attitudes and points of view expressed herein do not necessarily reflect the official position or policies of the NAMC. The NAMC makes no claims, promises or guarantees about the accuracy, completeness or adequacy of the contents of this document and expressly disclaims liability for errors and omissions regarding the content thereof. No warranty of any kind, implied, expressed, or statutory, including but not limited to the warranties of non-infringement of third party rights, title, merchantability, fitness for a particular purpose or freedom from computer virus is given with respect to the contents of this document in hardcopy, electronic format or electronic links thereto. Reference made to any specific product, process, and service by trade name, trade mark, manufacturer or another commercial commodity or entity are for informational purposes only and do not constitute or imply approval, endorsement or favouring by the NAMC.