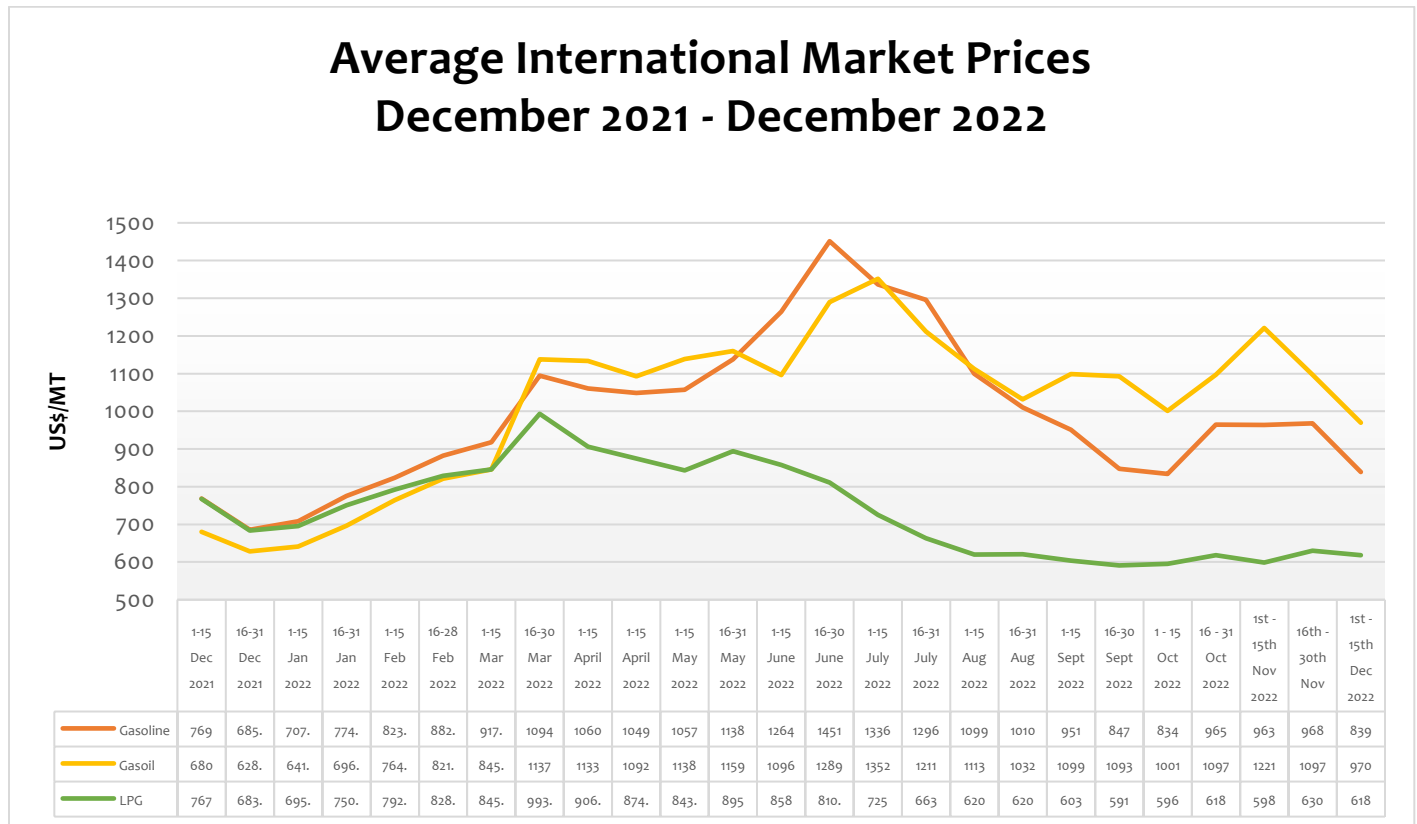


# CBOD MARKET OUTLOOK

## 1<sup>st</sup> to 15<sup>th</sup> December 2022 Pricing Window

### Refined Products Review and Outlook

The international market prices of refined petroleum products in the 12<sup>th</sup> to 26<sup>th</sup> November 2022 international pricing window, which are premiums applicable to the selling window of 1<sup>st</sup> to 15<sup>th</sup> December 2022, witnessed a decline for all products relative to the previous window. Thus, petrol, diesel, and LPG prices in the world market stooped by 13.45%, 11.63%, and 1.88% respectively relative to the previous pricing window of 27<sup>th</sup> October to 11<sup>th</sup> November 2022. The rising concerns of the global economic recession as well as the rising Covid-19 cases in China are majorly responsible for the downturn in the fuel prices this window.



In absolute terms, the international market prices for petrol, diesel, and LPG declined from US\$969.08/mt, US\$1,097.35/mt, and US\$630.06/mt in the previous window to US\$838.78/mt, US\$969.70/mt, and US\$618.20/mt in the pricing window under consideration.

From the beginning of the year to date, the international market prices of petroleum products have changed by 18%, 51%, and -11% for petrol, diesel, and LPG respectively.

The price of petrol and diesel globally has increased by 9% and 43%, respectively, compared to the same time last year (1<sup>st</sup> to 15<sup>th</sup> December 2021), while the price of LPG has decreased by 19%.

### FuFeX30 And Spot Rates

The Fufex30<sup>1</sup> is a 30-day forward GHS/USD FX rate for the petroleum downstream industry. It is estimated using the average quoted indicative forward forex rate from major oil financing banks adjusted by the covered-interest parity pricing model. The Fufex30 for the first selling window of December (1<sup>st</sup> to 15<sup>th</sup> December 2022) is estimated at **GHS16.5000/USD**, which is the weighted average of quoted indicative 30-day forward forex rate from major oil financing banks as monitored on the market and the Bank of Ghana FX auction rate to the BIDECS. Hence, the estimated FX for a 30-day or 45-day credit sale is estimated at **GHS16.5000/USD**. The applicable spot rate for cash sales is **GHS15.0000/USD** based on average spot rates from commercial banks.

SUMMARY REPORT OF BANK OF GHANA FX AUCTIONS TO BIDECS		
Window	Percentage Offered	Auction FX Rate (GHS/USD)
16 <sup>th</sup> – 31 <sup>st</sup> May 2022	29%	7.5547
1 <sup>st</sup> – 15 <sup>th</sup> June 2022	24%	7.6144
16 <sup>th</sup> – 30 <sup>th</sup> June 2022	21%	7.7451
1 <sup>st</sup> – 15 <sup>th</sup> July 2022	21%	7.9252
16 <sup>th</sup> – 31 <sup>st</sup> July 2022	27%	7.9756
1 <sup>st</sup> – 15 <sup>th</sup> Aug 2022	42%	8.2620
16 <sup>th</sup> – 31 <sup>st</sup> Aug 2022	29%	8.8192
1 <sup>st</sup> – 15 <sup>th</sup> Sept 2022	30%	9.7554
16 <sup>th</sup> – 30 <sup>th</sup> Sept 2022	39%	9.8409
1 <sup>st</sup> – 15 <sup>th</sup> Oct 2022	50%	10.1716
16 <sup>th</sup> – 31 <sup>st</sup> Oct 2022	40%	10.7907
1 <sup>st</sup> – 15 <sup>th</sup> Nov 2022	36%	13.2474
16 <sup>th</sup> – 30 <sup>th</sup> Nov 2022	57%	13.3138
1 <sup>st</sup> – 15 <sup>th</sup> Dec 2022	59%	13.3390

<sup>1</sup> The Fufex30 is a 30-day Ghs/USD forward fx rate used as a benchmark rate for BIDECS ex-ref price estimations.

## The Ex-refinery Price Indicator (Xpi)

The Ex-ref price indicator (Xpi) is computed using the referenced international market prices usually adopted by BIDECS, factoring the CBOD economic breakeven benchmark premium for a given window and converted from USD/mt to GHS/ltr using the *FuFex30*.

$$XPI = \frac{(\text{International Market Price} + \text{CBOD Benchmark Premium}) \times \text{Fufex30}}{\text{Conversion Factor}}$$

## Ex-ref Price Effective 1<sup>st</sup> to 15<sup>th</sup> December 2022

Price Component	Petrol	Diesel	LPG
Average World Market Price (US\$/MT)	838.7800	969.7000	618.20000
CBOD Benchmark Breakeven Premium (US\$/MT)	120	230	170
Spot FX Rates	15.0000	15.0000	15.0000
FuFex30 (GHS/USD)	16.5000	16.5000	16.5000
Volume Conversion Factor (ltr/mt)	1324.50	1183.43	1000.00
Ex-ref Price (Ghs/ltr) Cash Sales	10.8582/Ltr	15.2062/Ltr	11.8230/kg
Ex-ref Price (Ghs/ltr) 45-day Credit Sales	11.9440/Ltr	16.7268/Ltr	13.0053/kg
Price Tolerance	+1%/-1%	+1%/-1%	+1%/-1%

## Taxes, Levies, and Regulatory Margins

The National Petroleum Authority (NPA) reviewed the Primary Distribution Margin (PDM) from GHp7/Lt of petrol, diesel, and kerosene to GHp13/Lt, effective 1<sup>st</sup> November 2022. Hence, all Oil Marketing Companies (OMCs) were advised to apply the new margins in their price build-ups.

Moreover, the NPA suspended subsidies on Residual fuel Oil (RFO) effective 1<sup>st</sup> November 2022 as an interim measure to ease the financial burden on the Price Stabilization and Recovery Account (PSRA). Therefore, total taxes, levies, and regulatory margins for the 16<sup>th</sup> to 30<sup>th</sup> November 2022 selling window stood at Ghp250/ltr for petrol, Ghp248/ltr for diesel, and Ghp162/kg for LPG, accounting for 15%, 12%, and 10% of ex-pump prices of petrol, diesel, and LPG for the selling window respectively.

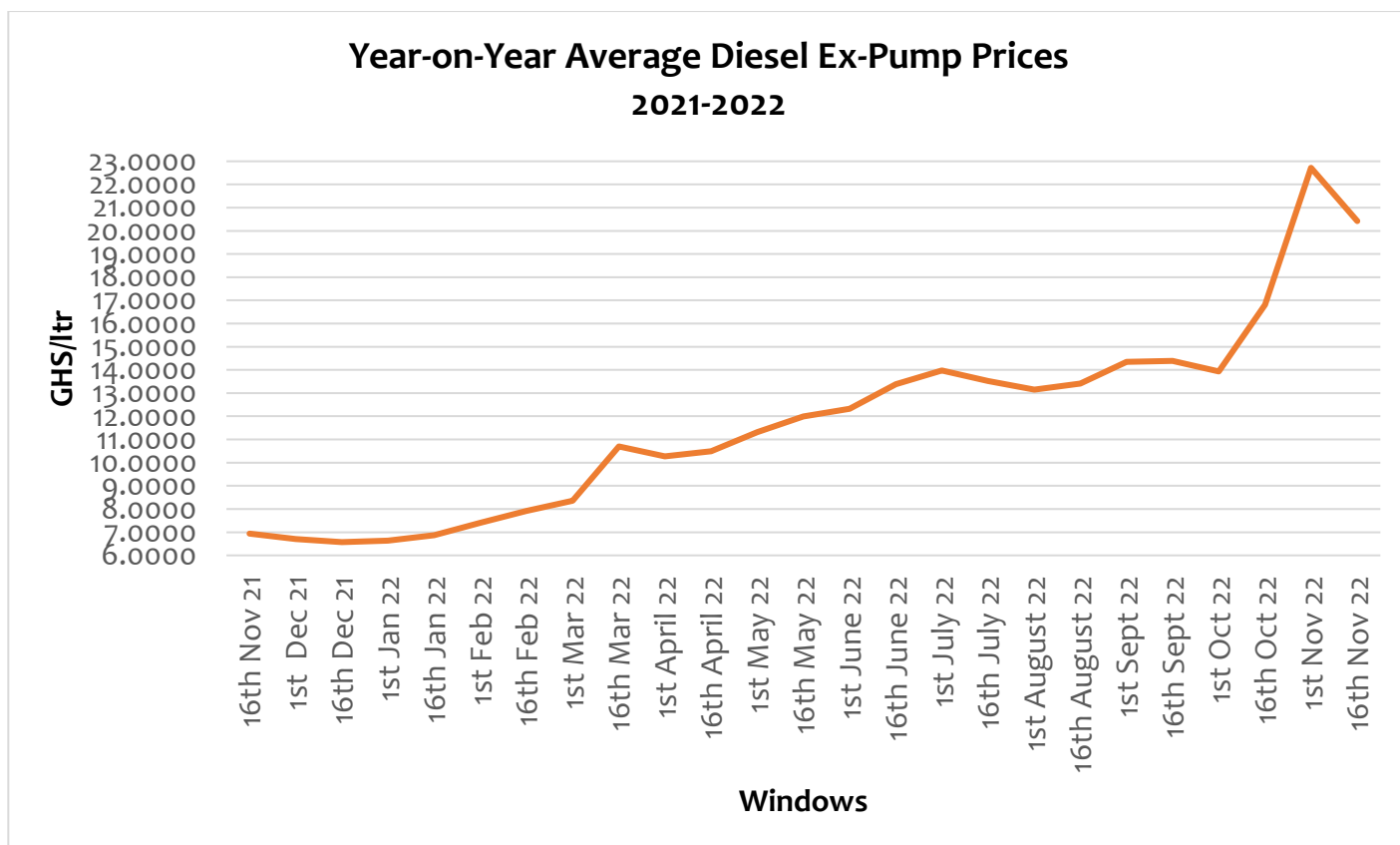
### Window 16<sup>th</sup> to 30<sup>th</sup> November 2022

TRM Components	Gasoline (GHP/ltr)	Gasoil (GHP/ltr)	LPG (GHP/KG)
ENERGY DEBT RECOVERY LEVY	49	49	41
ROAD FUND LEVY	48	48	-
ENERGY FUND LEVY	1	1	-
PRICE STABILISATION & RECOVERY LEVY	16	14	14
SANITATION & POLLUTION LEVY	10	10	-
ENERGY SECTOR RECOVERY LEVY	20	20	18
PRIMARY DISTRIBUTION MARGIN	13	13	-
BOST MARGIN	7	7	-
FUEL MARKING MARGIN	4	4	-
SPECIAL PETROLEUM TAX	46	46	48
UPPF	36	36	36
DISTRIBUTION/PROMOTION MARGIN	-	-	5
<b>TOTAL</b>	<b>250</b>	<b>248</b>	<b>162</b>

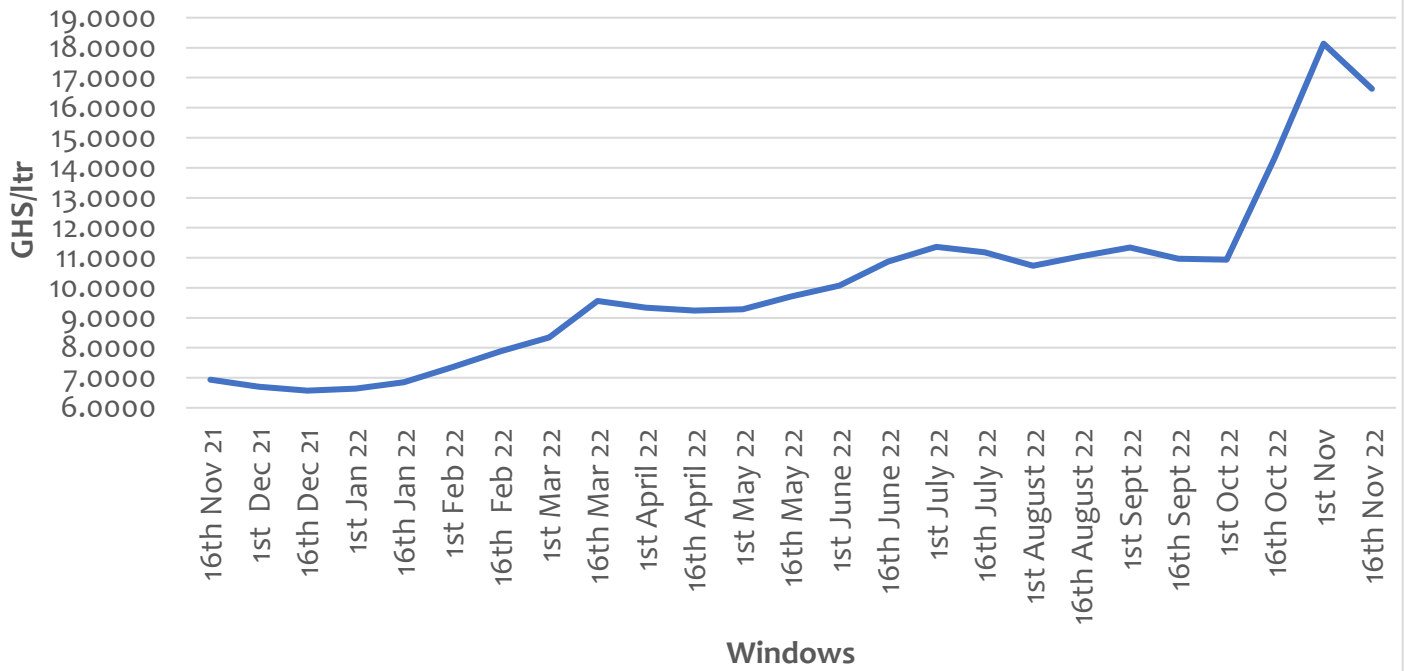
### OMC Pricing Performance: 16<sup>th</sup> to 30<sup>th</sup> November 2022

Pump prices for petrol and diesel within the 16<sup>th</sup> to 30<sup>th</sup> November 2022 selling window declined by an average of 8% and 10% respectively relative to the previous window (1<sup>st</sup> to 15<sup>th</sup> November 2022). The BoG's intervention by increasing the FX auction amount from \$60 million to \$90 million to the BDCs for the purchase of petroleum products has contributed largely to the decline in pump prices. Although the auction of the \$90 million was only about 50% of the amount BDCs required to import petroleum products, it has had a significant impact on the pump prices. Since the primary determinants of the Ex-refinery and Ex-Pump Prices are the GHS/USD exchange rate and the price of petroleum products in the global market, fluctuations in these variables will directly affect the prices of petroleum products at the pumps in Ghana. As a result, the decline of petroleum products price in the world market also had an impact on the decline of fuel prices at the pumps.

The pump price of petrol and diesel declined from an average of GHS18.1370/ltr and GHS22.7180/ltr in the previous selling window (1<sup>st</sup> to 15<sup>th</sup> November 2022) to GHS16.6280/ltr and GHS20.4270/ltr. On a year-on-year basis, pump prices of petrol and diesel experienced approximately 140% and 194% increases over the period. This is an indication that from the beginning of the year until now, the ex-pump prices of petrol and diesel recorded an average of 151% and 208% increases respectively, with petrol and diesel prices both increasing from GHS6.6370/ltr in the first selling window of 2022 (1<sup>st</sup>-15<sup>th</sup> January) to GHS16.6280/ltr and GHS20.4170/ltr respectively in the second selling window of November 2022 (16<sup>th</sup> to 30<sup>th</sup> November).



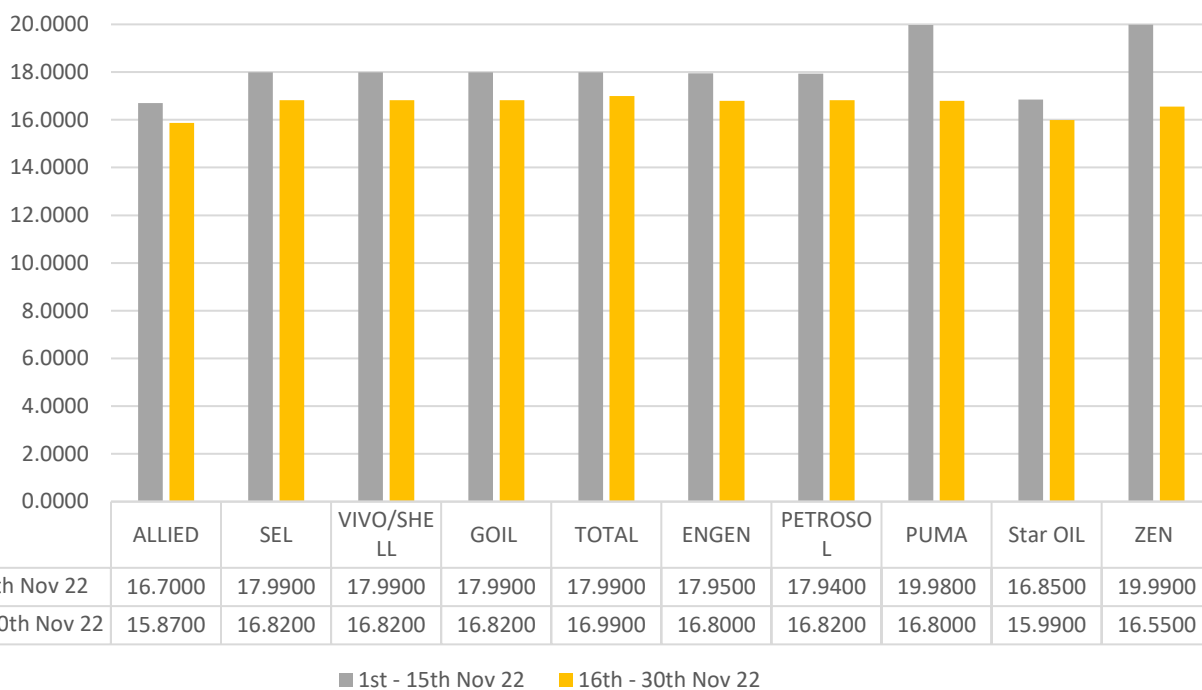
### Year-on-Year Average Gasoline Prices 2021-2022



### Average Petrol Ex-pump prices (GHS/ltr)

OMC	1 <sup>st</sup> – 15 <sup>th</sup> Nov 22	16 <sup>th</sup> – 30 <sup>th</sup> Nov 22	% Change
ALLIED	16.7000	15.8700	-5.0%
SEL	17.9900	16.8200	-6.5%
VIVO/SHELL	17.9900	16.8200	-6.5%
GOIL	17.9900	16.8200	-6.5%
TOTAL	17.9900	16.9900	-5.6%
ENGEN	17.9500	16.8000	-6.4%
PETROSOL	17.9400	16.8200	-6.2%
PUMA	19.9800	16.8000	-15.9%
Star OIL	16.8500	15.9900	-5.1%
ZEN	19.9900	16.5500	-17.2%
<b>AVERAGE</b>	<b>18.1370</b>	<b>16.6280</b>	<b>-8.3%</b>

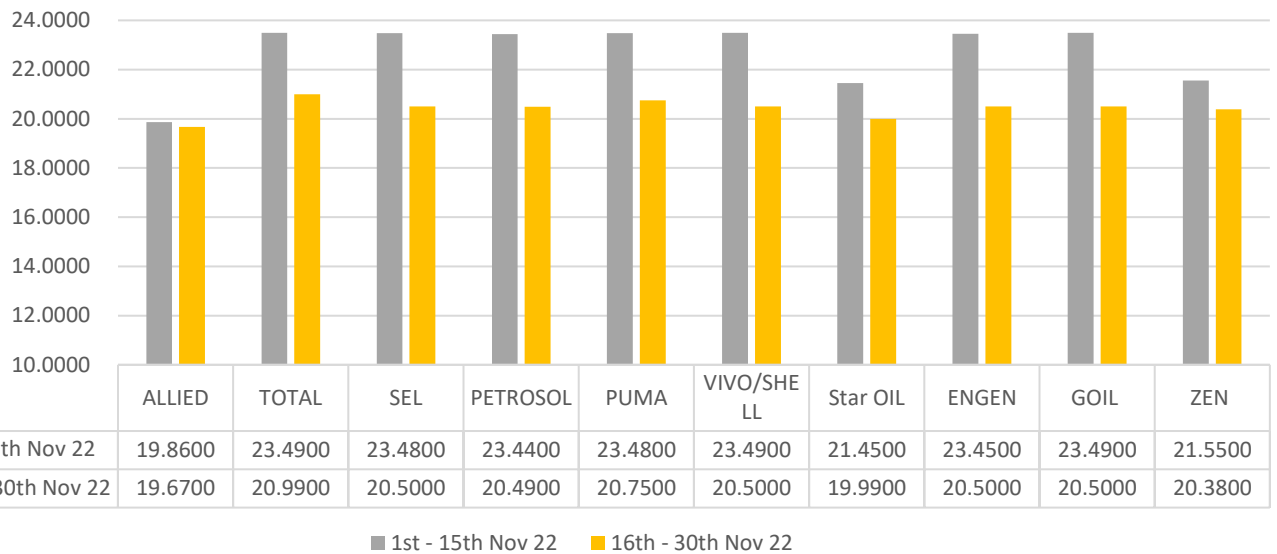
## Average Petrol Ex-Pump Prices (GHS/Ltr)



## Average Diesel Ex-pump prices (GHS/ltr)

OMC	1 <sup>st</sup> – 15 <sup>th</sup> Nov 22	16 <sup>th</sup> – 30 <sup>th</sup> Nov 22	% Change
ALLIED	19.8600	19.6700	-1.0%
TOTAL	23.4900	20.9900	-10.6%
SEL	23.4800	20.5000	-12.7%
PETROSOL	23.4400	20.4900	-12.6%
PUMA	23.4800	20.7500	-11.6%
VIVO/SHELL	23.4900	20.5000	-12.7%
Star OIL	21.4500	19.9900	-6.8%
ENGEN	23.4500	20.5000	-12.6%
GOIL	23.4900	20.5000	-12.7%
ZEN	21.5500	20.3800	-5.4%
<b>AVERAGE</b>	<b>22.7180</b>	<b>20.4270</b>	<b>-10.1%</b>

## Average Diesel Ex-Pump Prices



## Weekly Petroleum Stock

The total petroleum stock available in the country at the beginning of the week, Monday 28<sup>th</sup> November 2022, comprised Petrol, Diesel, LPG, ATK, Kerosene, Premix, and RFO. The breakdown of the total stocks and expected weekly consumption in the country is presented below.

Product	Total Stocks (Million Lts)	Forecasted Weekly Consumption (Million Lts)	Week-to-Last	Cargoes at anchorage (Million Lts)	Week-to-Last including cargoes at anchorage
Diesel	194.2	53.0	3 weeks 3 days	22.5	4 weeks 1 day
Petrol	132.4	49.0	2 weeks 3 days	148.1	5 weeks 3 days
LPG*	16.6	7.5	2 weeks 1 day	7.0	3 weeks 1 day
ATK	31.9	5.0	6 weeks 2 days	13.6	9 weeks
Kero**	3.0	0.15	19 weeks 4 days	0	19 weeks 4 days
Premix	0.87	2.1	2 days	0	2 days
RFO	3.7	1.7	2 weeks 1 day	0	2 weeks 1 day

\*LPG figures are in million kilograms \*High Kerosene stocks are from previous productions by TOR / Woodfields



### Expected Cargoes in Week 48 (28<sup>th</sup> November to 2<sup>nd</sup> December 2022)

A total of about 170.6 million liters of petroleum products comprising 22.5 million liters of diesel and 148.1 million liters of petrol are expected within the week.

#### Atuabo Gas Processing Plant

The Gas Processing Plant (GPP) at Atuabo is currently producing LPG at an average rate of about 226.21MT/day.

#### Tema Oil Refinery

The RFCC unit at TOR remains shut down due to reconstruction, while CDU is also shut down due to a lack of Crude Oil.

#### Liquified Petroleum Gas (LPG) Imports

MT Surville and Sapet Gas are discharging 4,000 MT and 3,000 MT LPG on behalf of Fueltrade and Alfapetro respectively.

#### Fuel Oil Import

There is no Fuel Oil vessel expected for this week.

#### Aviation Turbine Kerosene (ATK) Imports

There is no ATK vessel expected for this week.

### Expected Cargoes in Week 46 (28<sup>th</sup> November to 2<sup>nd</sup> December 2022)

NO.	BIDEC	Volume Diesel (Lts)	Volume Petrol (Lts)	Laycan	Vessel Name	Status
1	Go Energy MOSL Vihama		51,830,334	Best Efforts	Seaclipper	Discharging
2	Dominion		48,609,150		Nave Equinox	Financial Hold
3	Sage				British Officer	Anchorage
4	BP		-		British Captain	Financial Hold
5	BP	22,485,170				
<b>Total</b>		<b>22,485,170</b>	<b>148,121,484</b>			
<b>Expected weeks to last</b>		<b>4 days</b>	<b>3 weeks</b>			

Source: National Petroleum Authority