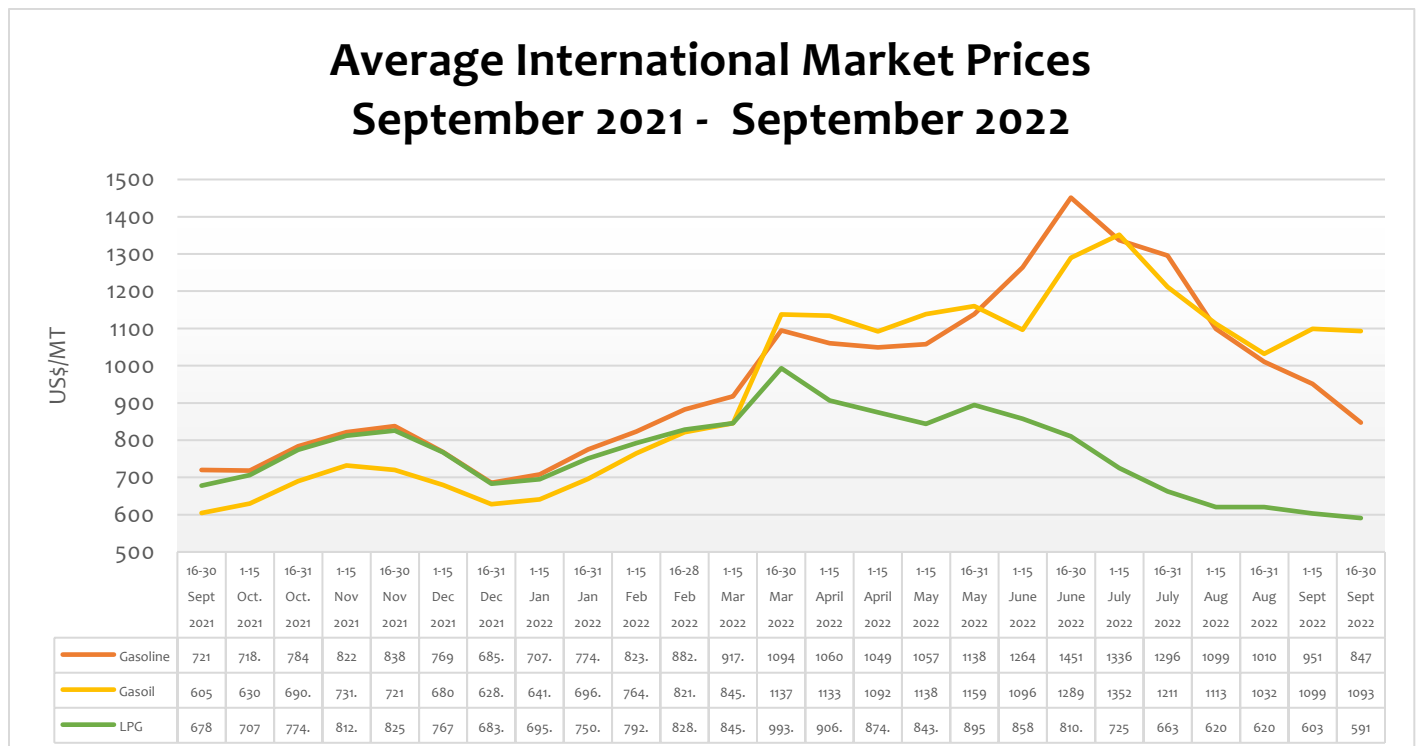


CBOD MARKET OUTLOOK

16th to 30th September 2022 Pricing Window

Refined Products Review and Outlook

The international market prices of refined petroleum products in the 27th August to 11th September 2022 international pricing window, which are premiums applicable to the selling window of 16th to 30th September 2022, witnessed varied movements as petrol prices declined significantly by 11.0% while that of diesel and LPG declined marginally by 0.5% and 2.1% respectively relative to the previous pricing window of 12th to 26th August 2022. Concerns of a global economic slowdown and rising interest rates in the US and Europe continue to drive down demand for petroleum products. Moreover, China’s continual restriction in some provinces to manage the spread of Covid-19 has negatively affected the demand for crude oil. However, diesel prices are not tumbling due to Russia's cut down in natural gas supply to Europe, which has tightened the demand for diesel.



In absolute terms, the international market prices for petrol, diesel, and LPG plummeted from US\$951.39/mt, US\$1098.89/mt, and US\$603.45/kg in the previous window to US\$847.11/mt, US\$1092.97/mt, and US\$603.45/kg in the pricing window under consideration.

After the international prices of refined petroleum products peaked in June 2022, the subsequent declines in prices have brought the year-to-date changes in prices in the international market to 20%, 70%, and -15% for gasoline, gasoil, and LPG respectively.

Moreover, when compared to the same period last year (27th August to 11th September 2021), the international prices of gasoline and gasoil are up by 18% and 81%, while that of LPG has tumbled by 13%.

FuFeX30

The Fufex30¹ 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 September (16th to 30th September 2022) is estimated at GHS11.0000/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.

SUMMARY REPORT OF BANK OF GHANA FX AUCTIONS TO BIDECS		
Window	Percentage Offered	Auction FX Rate (GHS/USD)
1 st – 15 th Apr 2022	85%	7.3886
16 th – 30 th Apr 2022	50%	7.4995
1 - 15 May 2022	50%	7.5014
16 th – 31 st May 2022	29%	7.5547
1 st – 15 th June 2022	24%	7.6144
16 th – 30 th June 2022	21%	7.7451
1 st – 15 th July 2022	21%	7.9252
16 th – 31 st July 2022	27%	7.9756
1 st – 15 th Aug 2022	42%	8.2620
16 th – 31 st Aug 2022	29%	8.8192
1 st – 15 th Sept 2022	30%	9.7554
16 th – 30 th Sept 2022		9.8409

¹ 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 16th to 30th September 2022

PRICE COMPONENT	Petrol	Diesel	LPG
Average World Market Price (US\$/MT)	847.11	1,092.92	590.97
CBOD Benchmark Breakeven Premium (US\$/MT)	120	230	170
FuFex30 (GHS/USD)	11.0000	11.0000	11.0000
Volume Conversion Factor (ltr/mt)	1324.50	1183.43	1000
Ex-ref Price (Ghs/ltr)	8.0319/Ltr	12.2966/Ltr	8.3707/kg
Price Tolerance	+1%/-1%	+1%/-1%	+1%/-1%

Taxes, Levies, and Regulatory Margins

The National Petroleum Authority (NPA) reviewed the Unified Petroleum Pricing Fund (UPPF) Margin effective 16th August 2022 and advised Oil Marketing Companies (OMCs) and Liquefied Petroleum Gas Marketing Companies (LPGMCs) to apply the new margins in their price build-up effective 16th August 2022. Therefore, total taxes, levies, and regulatory margins for the window under consideration stood at Ghp244/ltr for petrol, Ghp242/ltr for diesel, and Ghp162/kg for LPG, accounting for 21.5%, 16.9%, and 15.0% of ex-pump prices of petrol, diesel, and LPG respectively for the 1st to 15th September 2022 pricing window.

Window 1st to 15th September 2022

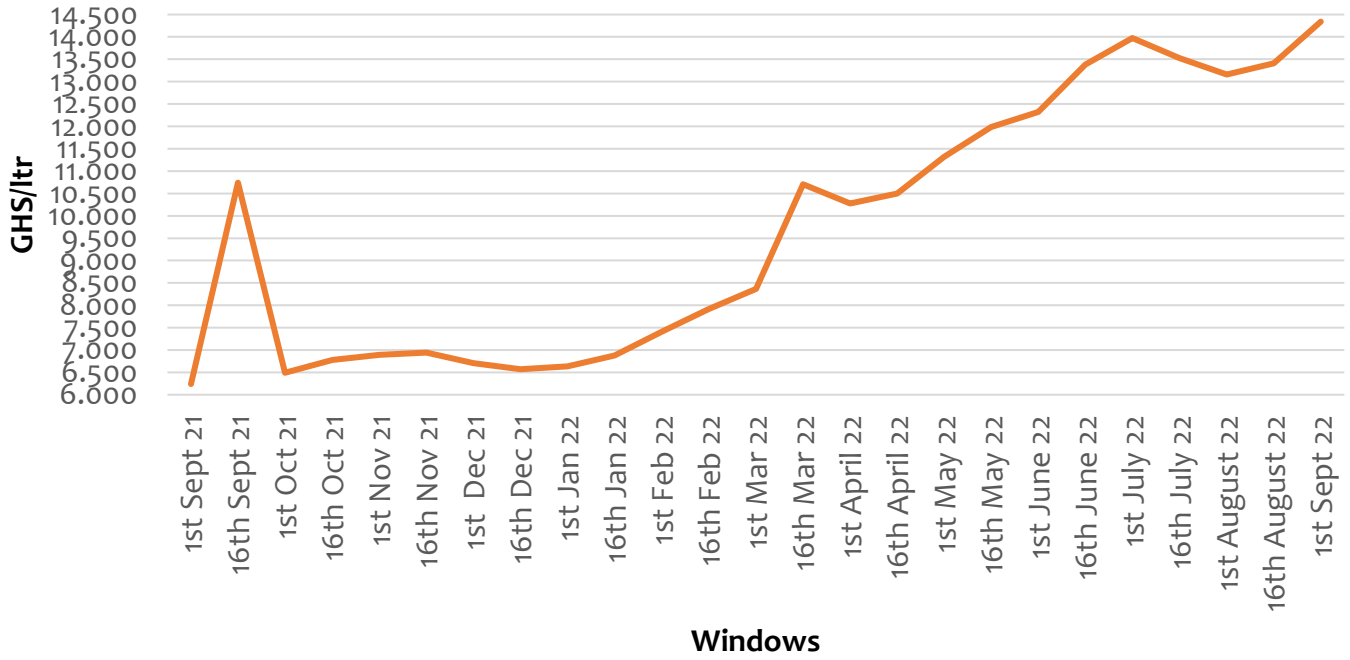
TRM Components	Gasoline (GHp/ltr)	Gasoil (GHp/ltr)	LPG (GHp/KG)
ENERGY DEBT RECOVERY LEVY	49	49	41
ROAD FUND LEVY	48	48	-
ENERGY FUND LEVY	1	1	-
PRICE STABILISATION & RECOVERY LEVY	16	14	14
SANITATION & POLLUTION LEVY	10	10	-
ENERGY SECTOR RECOVERY LEVY	20	20	18
PRIMARY DISTRIBUTION MARGIN	7	7	-
BOST MARGIN	7	7	-
FUEL MARKING MARGIN	4	4	-
SPECIAL PETROLEUM TAX	46	46	48
UPPF	36	36	36
DISTRIBUTION/PROMOTION MARGIN	-	-	5
TOTAL	244	242	162

OMC Pricing Performance: 1st to 15th September 2022

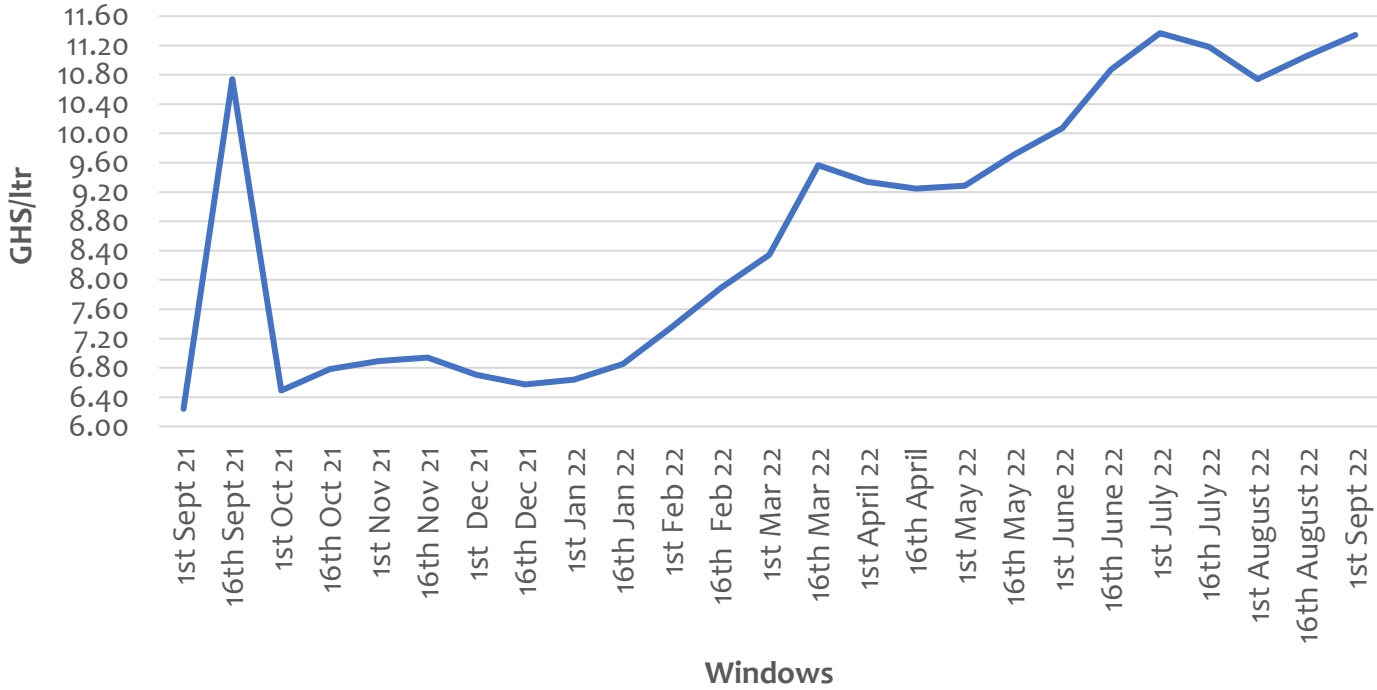
Pump prices for petrol and diesel within the 1st to 15th September 2022 selling window rose by an average of 3% and 7% respectively relative to the previous window (16th to 31st August 2022) pump prices. The rise in the pump prices in the window was attributable to the sharp depreciation of the cedi against the US dollar and the upsurge in the price of diesel at the international by about 6%. Although the international price of petrol fell within the window, a similar decline was not recorded at the pumps due to the sharp depreciation of the cedi, which is a major factor in the Ex-refinery and Ex-Pump Price Build-Ups. Prices of petrol continue to decline in the international market due to growing concerns of a global economic slowdown and Covid-19-related lockdowns in China, which are softening fuel demand. However, the price of diesel is marginally edging up due to the cut down in the Russian supplies of diesel to Europe.

The pump price of petrol and diesel soared from an average of GHS11.052/ltr and GHS13.406/ltr in the previous selling window (16th to 31st August 2022) to GHS11.341/ltr to GHS14.341/ltr. On a year-on-year basis, pump prices of petrol and diesel experienced about 82% and 130% increases over the period. This is also an indication that from the beginning of the year until now, the ex-pump prices of gasoline and gasoil recorded an average of 71% and 116% increases respectively, with gasoline and gasoil prices both increasing from GHS6.637/ltr in the first selling window of 2022 (1st-15th January) to GHS11.341/ltr and GHS14.341/ltr respectively in the first selling window of September 2022 (1st to 15th September).

Year-on-Year Average Diesel Ex-Pump Prices 2021-2022



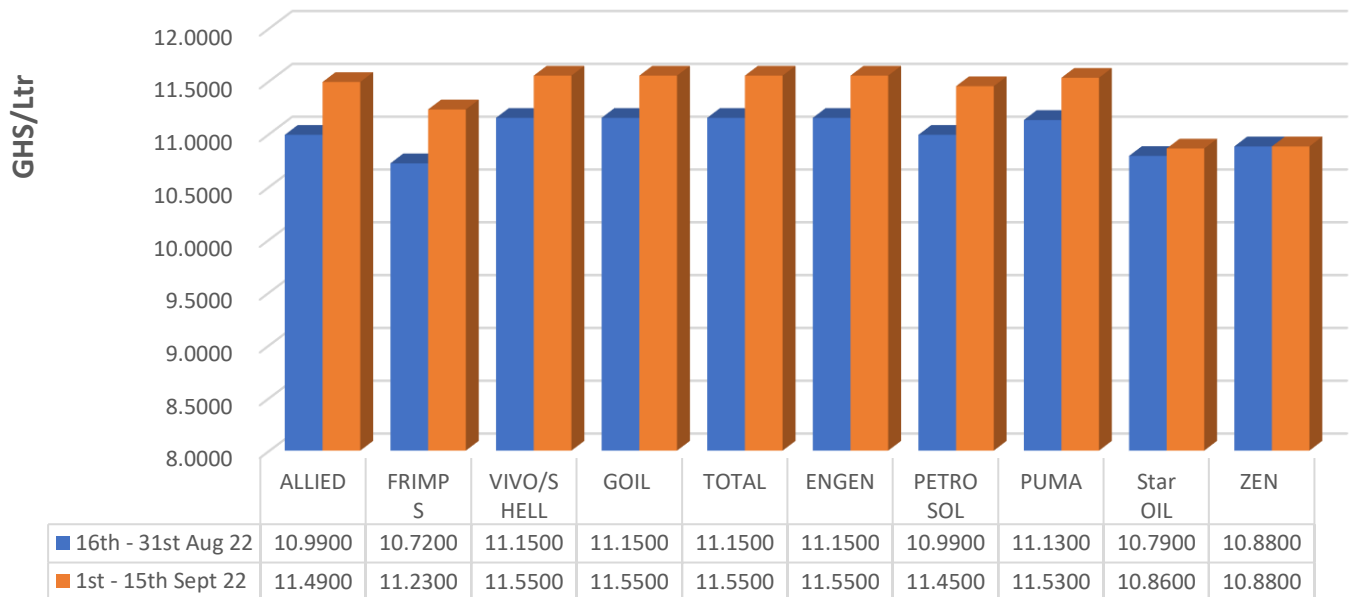
Year-on-Year Average Gasoline Prices 2021-2022



Average Petrol Ex-pump prices (GHS/ltr)

OMC	16th - 31st Aug 22	1st - 15th Sept 22	% Change
ALLIED	10.9900	11.4900	4.5%
FRIMPS	10.7200	11.2300	4.8%
VIVO/SHELL	11.1500	11.5500	3.6%
GOIL	11.1500	11.5500	3.6%
TOTAL	11.1500	11.5500	3.6%
ENGEN	11.1500	11.5500	3.6%
PETROSOL	10.9900	11.4500	4.2%
PUMA	11.1300	11.5300	3.6%
Star OIL	10.7900	10.8600	0.6%
ZEN	10.8800	10.8800	0.0%
AVERAGE	11.010	11.364	3.2%

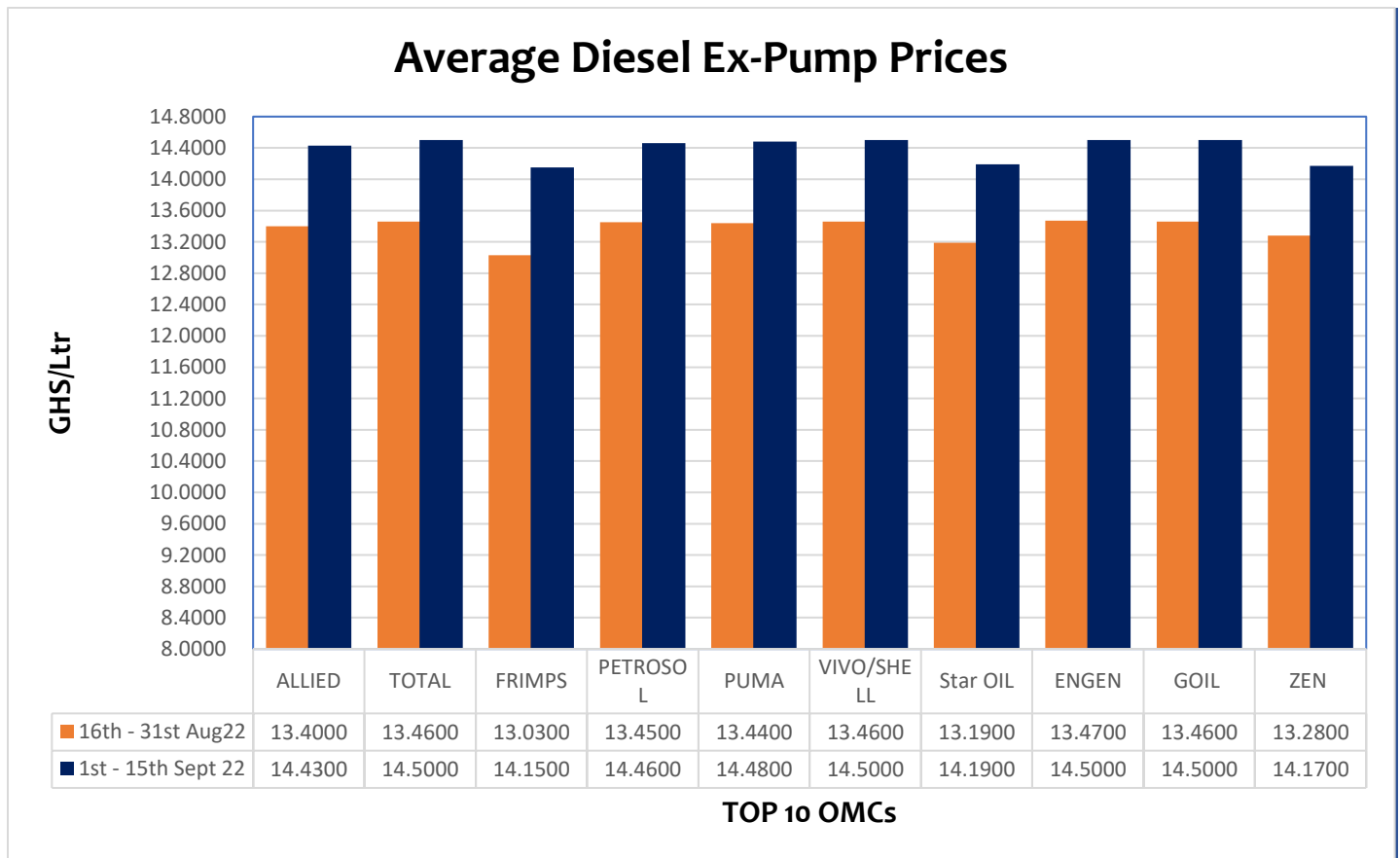
Average Petrol Ex-pump prices (GHS/ltr)



Top 10 Pricing OMCs

Average Diesel Ex-pump prices (GHS/ltr)

OMC	16th - 31st Aug22	1st - 15th Sept 22	% Change
ALLIED	13.4000	14.4300	7.7%
TOTAL	13.4600	14.5000	7.7%
FRIMPS	13.0300	14.1500	8.6%
PETROSOL	13.4500	14.4600	7.5%
PUMA	13.4400	14.4800	7.7%
VIVO/SHELL	13.4600	14.5000	7.7%
Star OIL	13.1900	14.1900	7.6%
ENGEN	13.4700	14.5000	7.6%
GOIL	13.4600	14.5000	7.7%
ZEN	13.2800	14.1700	6.7%
AVERAGE	13.3640	14.3880	7.7%



Weekly Petroleum Stock

The total petroleum stocks available in the country at the beginning of the week, Monday 12th September 2022, comprised Gasoline, Gasoil, 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	191.1	53.0	4 weeks	154.4	5 weeks
Petrol	154.7	49.0	3 weeks	175.4	7 weeks
LPG*	13.7	7.5	2 weeks	0	2 weeks
ATK	31.3	5.0	6 weeks	0	6 weeks
Kero**	3.5	0.15	23 weeks	0	23 weeks
Premix	0.78	2.1	1 day	0	1 day
RFO	0.19	1.7	1 day	10.09	6 weeks

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

Expected Cargoes in Week 37 (12th to 16th September 2022)

A total of about 229.87 million liters of petroleum products comprising gasoline and Gasoil are expected this week. About 54.43 million liters of gasoil and 175.43 million liters of gasoline are expected. Currently, 6 vessels are at anchorage and ready to discharge.

Atuabo Gas Processing Plant

The Gas Processing Plant (GPP) at Atuabo is currently producing LPG at an average rate of about 331MT/day.

Tema Oil Refinery

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

Liquefied Petroleum Gas (LPG) Imports

There are no LPG cargoes expected this week

Aviation Turbine Kerosene (ATK) Imports

There are no ATK cargoes expected this week

Expected Cargoes in Week 35 (12th to 16th September 2022)

NO.	BIDEC	Laycan	Volume Diesel (Lts)	Volume Petrol (Lts)	Vessel Name	Status
1	TBC	Best Efforts	-	49,006,500	Orpheus	Anchorage
2	TBC	Best Efforts	-	50,331,000	British Captain	Anchorage
3	TBC	Best Efforts	39,053,190	-	Baltic Mariner	Anchorage
	TBC	Best Efforts		47,350,875	Sea Clipper	Anchorage
	TBC	Best Efforts	15,384,590	-	Northern Ocean	Anchorage
4	TBC	Best Efforts	-	28,741,650	Ester	Anchorage
Total			54,437,780	175,430,025		
Expected weeks to last			1 Week	3 weeks 3 days		

Source: National Petroleum Authority