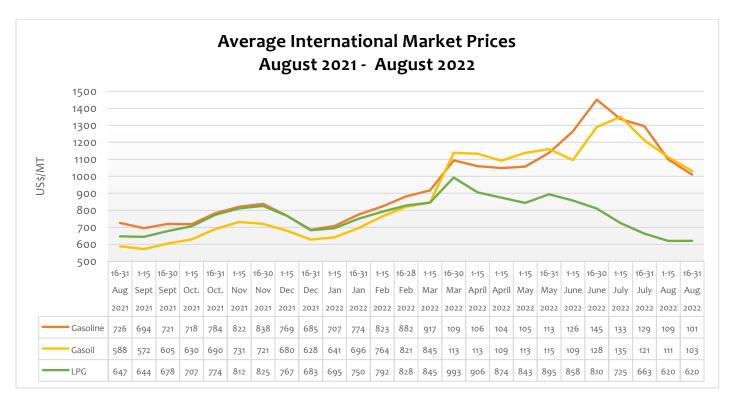


CBOD MARKET OUTLOOK

16th to 31st August 2022 Pricing Window

Refined Products Review and Outlook

The international market prices of gasoline and gasoil in the 27th July to 11th August 2022 international pricing window which are premiums applicable to the selling window of 16th – 31st August 2022, declined by 8% and 7% respectively, while that of LPG remained unchanged relative to the previous window of 12th to 26th July 2022. This is an indication that international prices for the fourth consecutive window have been declining. In absolute terms, the international market prices for gasoline and gasoil plummet from US\$1,099.36/mt and US\$1112.66/mt in the previous window to US\$1,010.15/mt and US\$1032.00/mt, being an average change of US\$89/mt and US\$80/mt respectively. However, LPG price at the international market remained the same as previous window's price (US\$620/kg).



After the international prices of refined petroleum products piked in June 2022, the subsequent declines in prices have brought the year-to-date changes in prices at the international market to 43%, 61% and -11% for gasoline, gasoil and LPG respectively.

Compared to the same period last year (1st to 15th August 2021), the international prices of gasoline and gasoil have increased by 39% and 75%, while that of LPG has tumbled by 11%. The recent tumbling in fuel prices can be attributed to concerns about expected global economic slowdowns amidst increasing crude production by the United States and the world's top exporter of oil, Saudi Aramco. The report of weak economic performance of China (the world largest oil importer) over the past weeks, have raised concerns of a global fall in demand.

FuFeX

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 second pricing window of August ($16^{th} - 31^{st}$ August 2022) is estimated at GHS11.8000/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.

Window	Percentage Offered	Auction FX Rate (GHS/USD)
1 - 15 Apr 2022	85%	7.3886
16 - 30 Apr 2022	50%	7.4995
1 - 15 May 2022	50%	7.5014
16 - 31 May 2022	29%	7.5547
1 - 15 June 2022	24%	7.6144
16 - 30 June 2022	21%	7.7451
1 - 15 July 2022	21%	7.9252
16 - 31 July 2022	27%	7.9756
1 - 15 Aug 2022	42%	8.2620
16 - 31 Aug 2022	29%	8.8192

SUMMARY REPORT OF BANK OF GHANA FX AUCTIONS TO BIDECS

¹ The Fufex30 is a 30-day Ghs/USD forward fx rate used as a benchmark rate for BIDECs ex-ref price estimations. Page | 2

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*.

(International Market Price+ CBOD Benchmark Premium) × Fufex30 XPI = ______ Conversion Factor

Ex-ref Price Effective 16th – 31st August 2022

PRICE COMPONENT	PMS	AGO	LPG
Average World Market Price (US\$/MT)	1,010.15	1,032.00	620.38
CBOD Benchmark Breakeven Premium (US\$/MT)	120	250	170
FuFex30 (GHS/USD)	11.8000	11.8000	11.8000
Volume Conversion Factor (ltr/mt)	1324.50	1183.43	1000
Ex-ref Price (Ghs/ltr)	10.0685	12.7828	9.3265/kg
Price Tolerance	+1%/-1%	+1%/-1%	+1%/-1%

Taxes, Levies, and Regulatory Margins

Total taxes, levies, and regulatory margins for the 1st – 15th August 2022 selling window remained the same as the previous window. The NPA on July 1st 2022 restored the UPPF back to Ghp29/ltr, which increased the TRM on petroleum on gasoline, gasoil, LPG, and kerosene by Ghp9/ltr. This restoration became necessary after the government through the NPA reduced the margins on the petroleum price build-up by Ghp15/ltr for a 3-month period (1st April to 30th June) to contain the rising cost of petroleum products at the pumps. The restoration of the UPPF back to Ghp29/ltr means that the reduction of the petroleum margins which was Gho15/ltr from 1 April has now been reduced to Ghp6/ltr effective 1st July. Therefore, total taxes, levies, and regulatory margins for the window under consideration stood at

Ghp237/ltr for gasoline, Ghp235/ltr for gasoil and Ghp153/kg for LPG, accounting for 22% and 18% of expump prices of gasoline and gasoil respectively.

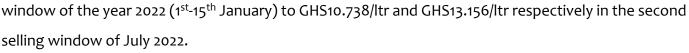
TRM Components	Gasoline (GHp/ltr)	Gasoil (GHp/ltr)	LPG (GHp/KG)
ENERGY DEBT RECOVERY LEVY	49	49	41
ROAD FUND LEVY	48	48	-
ENERGY FUND LEVY	1	1	-
PRICE STABILISATION & RECOVERY LEVY	16	14	14
SANITATION & POLLUTION LEVY	10	10	-
ENERGY SECTOR RECOVERY LEVY	20	20	18
PRIMARY DISTRIBUTION MARGIN	7	7	-
BOST MARGIN	7	7	-
FUEL MARKING MARGIN	4	4	-
SPECIAL PETROLEUM TAX	46	46	48
UPPF	29	29	27
DISTRIBUTION/PROMOTION MARGIN	-	-	5
TOTAL	237	235	153

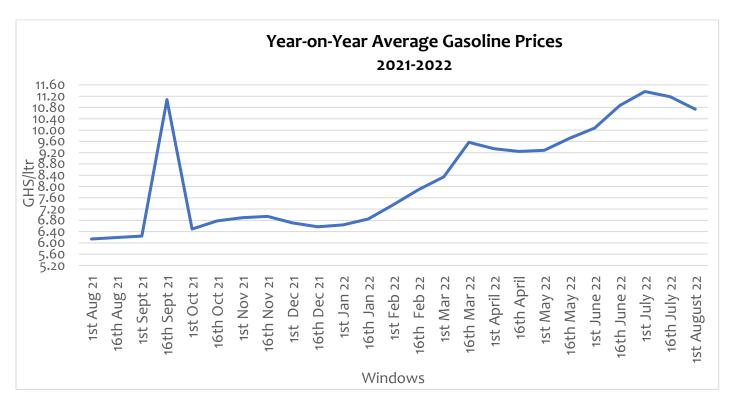
OMC Pricing Performance: 1st to 15th August 2022

Pump prices for gasoline and gasoil within the 1st to 15th August 2022 selling window plummet marginally by an average of 3.1 % and 2.7% respectively relative to the previous window (16th to 31st July 2022) pump prices. The continues decline in the pump prices is attributable to the decline in the international prices of petroleum products due to the growing concerns about the recent Covid-19 lockdowns in some provinces in China, increase in global production by US and speculations of increase supply by Saudi Arabia. Although the prices of the products in the international market declined by a larger margin, only a fraction of the decline was witnessed at the pumps in Ghana due to the sharp depreciation of the Cedi, which is a major determinant of pump prices in the country.

While the pump price of gasoline declined from an average of GHS11.080/ltr to GHS10.738/ltr, that of gasoil declined from GHS13.525/ltr to GHS13.156/ltr from the previous selling window of 16th to 31st July 2022. On a year-on-year basis, gasoline and gasoil ex-pump prices experienced about 75% and 114% 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 62% and 98% increases in price respectively, with gasoline and gasoil prices both increasing from GHS6.637/ltr in the first pricing

Year-on-Year Average Gasoil Ex-Pump Prices 2021-2022 14.000 13.500 13.000 12.500 12.000 11.500 11.000 $\begin{array}{c} 11.000\\ 10.500\\ 9.500\\ 9.500\\ 9.000\\ 8.500\\ 8.000\\ 7.500\\ 7.500\\ 7.600\\ 6.500\end{array}$ GHS/ltr 500 6.000 5.500 1st Aug 21 16th Aug 21 6th Mar 22 16th May 22 1st June 22 16th June 22 1st July 22 16th July 22 1st August 22 16th Sept 21 1st Dec 21 16th Dec 21 1st Jan 22 16th Jan 22 6th Feb 22 1st Mar 22 1st April 22 6th April 22 1st May 22 1st Sept 21 1st Oct 21 16th Oct 21 1st Nov 21 16th Nov 21 1st Feb 22 Windows

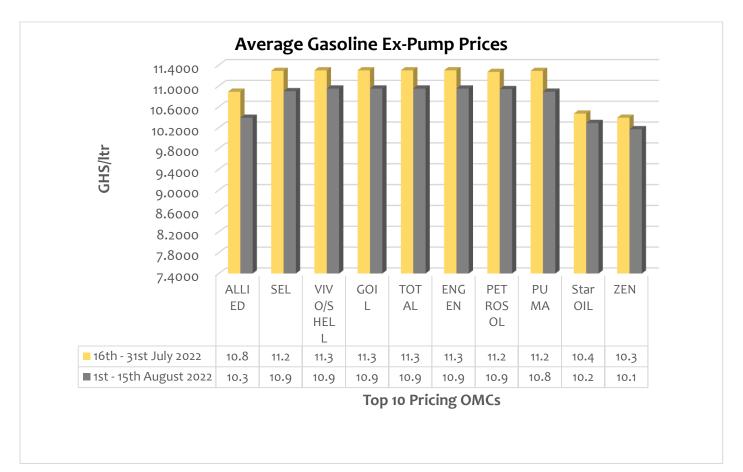




Page | 5

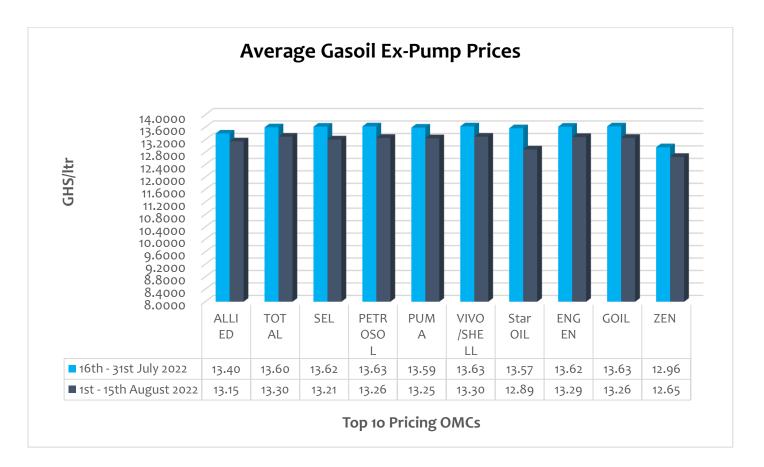
Average Gasoline Ex-pump prices (GHS/ltr)

ОМС	16th - 31st July 2022	1st - 15th August 2022	% Change
ALLIED	10.8900	10.3900	-4.6%
SEL	11.2900	10.9000	-3.5%
VIVO/SHELL	11.3000	10.9500	-3.1%
GOIL	11.3000	10.9500	-3.1%
TOTAL	11.3000	10.9500	-3.1%
ENGEN	11.3000	10.9500	-3.1%
PETROSOL	11.2700	10.9400	-2.9%
PUMA	11.2900	10.8900	-3.5%
Star OIL	10.4700	10.2900	-1.7%
ZEN	10.3900	10.1700	-2.1%
AVERAGE	11.080	10.738	-3.1%



Average Gasoil Ex-pump prices (GHS/ltr)

ОМС	16th - 31st July 2022	1st - 15th August 2022	% Change
ALLIED	13.4000	13.1500	-1.9%
TOTAL	13.6000	13.3000	-2.2%
SEL	13.6200	13.2100	-3.0%
PETROSOL	13.6300	13.2600	-2.7%
PUMA	13.5900	13.2500	-2.5%
VIVO/SHELL	13.6300	13.3000	-2.4%
Star OIL	13.5700	12.8900	-5.0%
ENGEN	13.6200	13.2900	-2.4%
GOIL	13.6300	13.2600	-2.7%
ZEN	12.9600	12.6500	-2.4%
AVERAGE	13.5250	13.1560	-2.7%



Weekly Petroleum Stock

The total petroleum stocks available in the country at the beginning of the week, Monday 8th August 2022, comprised of 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	1196.6	53.0	4 weeks	0	4 weeks
Petrol	162.7	49.0	3 weeks 2 days	101.2	5 weeks 2 days
LPG*	10.2	7.5	1 week 2 days	0	1 week 2 days
ATK	25.6	5.0	5 weeks	0	5 weeks
Kero**	5.2	0.15	34 weeks 2 days	0	34 weeks 2 days
Premix	1.2	2.1	2 days	0	2 days
RFO	3.2	1.7	2 weeks	0	2 weeks

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

Expected Cargoes in Week 32 (8th to 14th August 2022)

A total of about 101.192 million liters of petroleum products comprising only gasoline was expected to be imported within the period. No gasoil vessel was expected within the period.

Atuabo Gas Processing Plant

The Gas Processing Plant (GPP) at Atuabo is currently producing LPG at an average rate of about 335MT/day.

Tema Oil Refinery

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

Liquefied Petroleum Gas (LPG) Imports

There is no LPG cargo expected this week

Page | 8

Aviation Turbine Kerosene (ATK) Imports

There is no ATK cargo expected within the period.

Expected Cargoes in Week 32 (8th to 14th August 2022)

NO.	BIDEC	Laycan	Volume Diesel (Lts)	Volume Petrol (Lts)	Vessel Name	Status
1	Glencore	ТВС	-	51,523,050	Sea Clipper	Anchorage
2	BP	ТВС	-	49,668,750	PW Leopard	Anchorage
	Total		-	101,191,800		
	Expected weeks to la	ast	-	2 weeks]	

Source: National Petroleum Authority