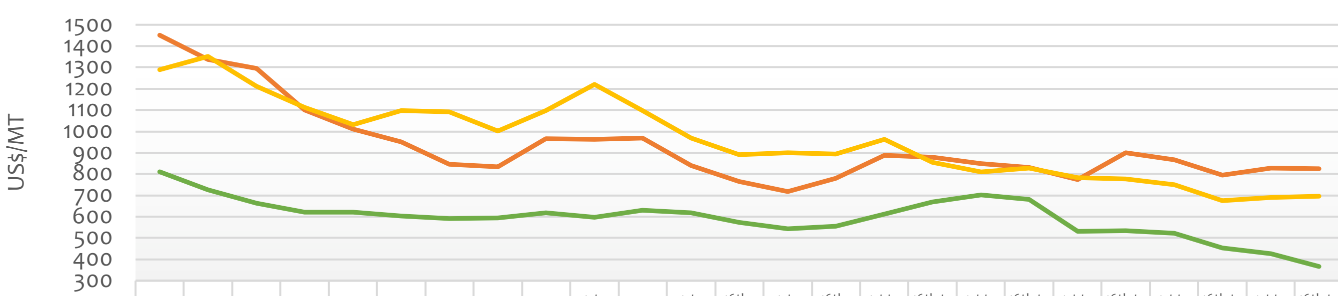
CBOD MARKET OUTLOOK

16th to 30th June 2023 Pricing Window

Refined Products Price Review and Outlook

Global crude oil and refinery product prices continue to tumble due to uncertainties regarding the global economic outlook and unprecedented high inflation rates in the US and Europe. Although global crude prices rose slightly in April due to the surprise announcement by some OPEC+ nations to voluntarily cut production in May through to the end of 2023, crude prices have fallen considerably since then to about $72.46 per barrel. Crude prices rose to about $85/bbl in April when the announcement was made, however, crude prices have declined by over 10% from April to June. The downward trajectory has raised concerns among the oil-producing countries. Even though OPEC+ maintain their optimism of potential growth in demand benchmarking on prospective growths in China, industry experts are skeptical of the next actions of the organization if prices continue to fall.

Average International Market Prices
June 2022 - June 2023



	16-30 June 2022	1-15 July 2022	16-31 July 2022	1-15 Aug 2022	16-31 Aug 2022	1-15 Sept 2022	16-30 Sept 2022	1 - 15 Oct 2022	16 - 31 Oct 2022	1st - 15th Nov 2022	16th - 30th Nov	1st - 15th Dec 2022	16th - 30th Dec 2022	1st - 15th Jan 2023	16th - 31st Jan 2023	1st to 15th Feb 2023	16th to 28th Feb 2023	1st to 15th Mar 2023	16th to 31st March 2023	1st to 15th April 2023	16th to 30th April 2023	1st to 15th May 2023	16th to 31st May 2023	1st to 15th June 2023	16th to 30th June 2023
Gasoline	1451	1336	1296	1099	1010	951	847	834	965	963	968	839	764	718	780	888	878	848	830	773	900	868	795	829	826
Gasoil	1289	1352	1211	1113	1032	1099	1093	1001	1097	1221	1097	970	892	900	894	961	854	809	829	784	777	750	675	691	697
LPG	810.	725	663	620	620	603	591	596	618	598	630	618	573	543	555	611	669	703	681	530	535	523	453	427	367

Due to the slump in China's economy evidenced by the industrial output and retail sales growing below forecasted rates, one of the major oil-producing countries, Saudi Arabia, has indicated it would most likely further cut down production by 500,000bpd. According to Reuters News, the economic recovery witnessed in the first quarter of the year lost momentum, compelling the central bank of China to cut some key interest rates in June, for nearly the first time in one year. Industrial output grew by about 3.5% in May compared to a growth of about 5.6% in April while the retail sales index, which measures the confidence of consumers slumped to about 12.7% in May from about 18.6% in April. With this weakening momentum in the world's largest importer of crude, product prices will most likely continue to fall in the coming quarter.

Petrol and Diesel prices in the world market declined marginally by 0.3% and 0.9% respectively while LPG declined significantly by 14% relative to the previous window. Industry experts are attributing the recent reductions in prices to the gloomy global economy.

On a year-on-year basis, Petrol, Diesel, and LPG prices declined by 43%, 45%, and 45% respectively. On a year-to-date basis, Diesel and LPG prices have declined by 23% and 33% respectively, while Petrol prices surged by 15%.

According to Mint News, some central banks across the globe, in their bid to combat inflation, are now considering a pause in interest rate hikes as a potential end to the tightening cycles. As a result of these uncertainties in the global economic outlook, crude prices are expected to keep oscillating until the end of Q2. However, experts have indicated that the full implementation of the voluntary output cut by the OPEC+ nations will lead to a supply deficit and support prices at a time of strong demand to trend higher.

FuFeX30 And Spot Rates

The Fufex30[1] 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 selling window of June (16th to 30th June 2023) is estimated at **GHS12.0000/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. The applicable indicative spot rate for cash sales is **GHS11.8000/USD** based on average spot rates from commercial banks.

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

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

and converted from USD/mt to GHS/ltr using the *FuFex30* for sales on credit *and* spot *FX rate* for sales on cash.

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

Taxes, Levies, and Regulatory Margins

The National Petroleum Authority reviewed the UPPF and Fuel Marking Margins upwards by Ghp28/ltr and Ghp5/ltr respectively in the second pricing window of May. The upward review of the UPPF, according to the Regulator, is to ensure effective freight rates for the transportation of petroleum products to the retail outlets. The review of the Fuel Marking Margin is to guarantee consumers quality fuels. Hence, total taxes, levies, and regulatory margins on petroleum products for the 1st to 15th June 2023 selling window stood at Ghp296/ltr for petrol, Ghp294/ltr for diesel, and Ghp201/kg for LPG. These accounted for 25% of the ex-pump prices of petrol and diesel and 17% of the ex-pump price of LPG in the selling window under consideration.

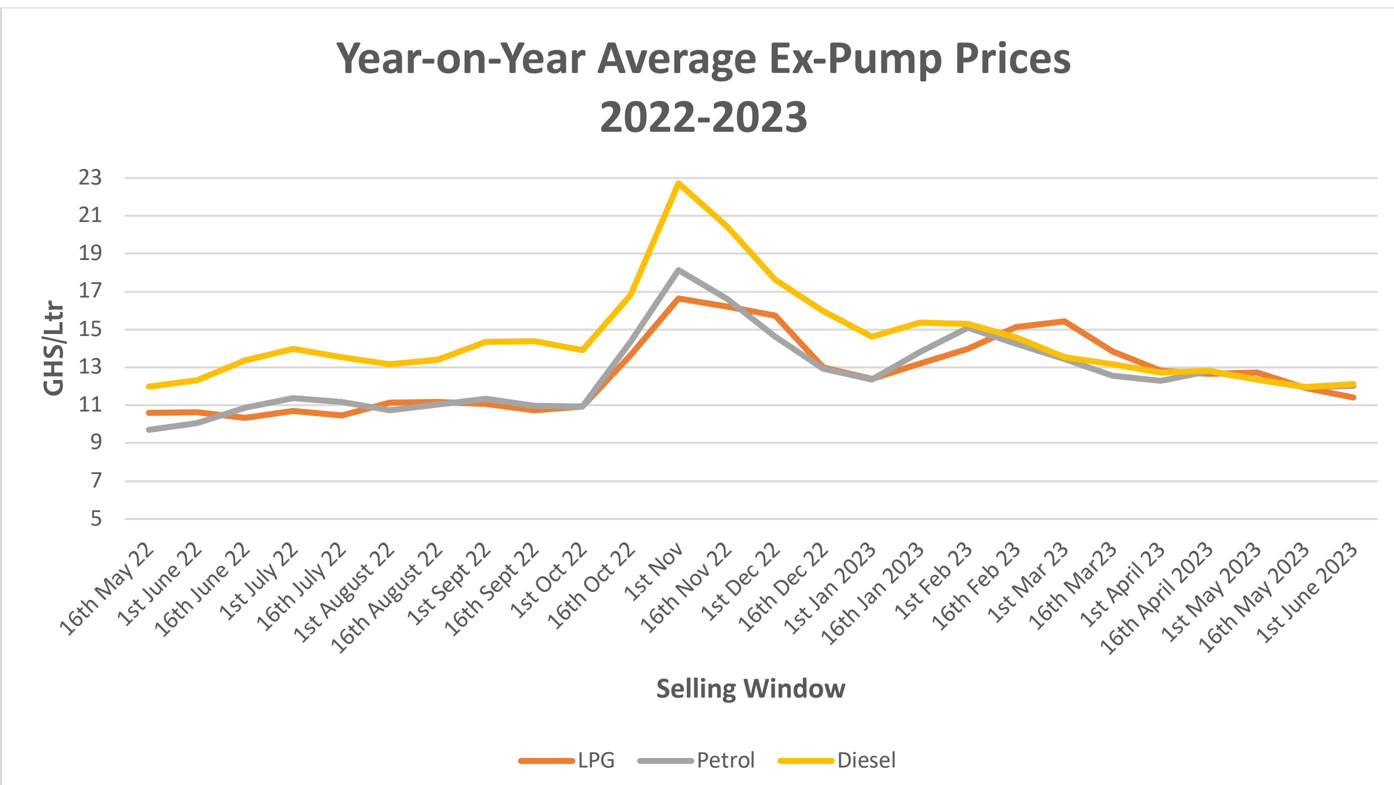
Selling Window 1st to 15th June 2023

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	9	9	-
FUEL MARKING MARGIN	5	9	-
SPECIAL PETROLEUM TAX	46	46	48
UPPF	75	75	75
DISTRIBUTION/PROMOTION MARGIN	-	-	5
TOTAL	296	294	201

OMC Pricing Performance: 1st to 15th June 2023

Consumers continue to enjoy relatively lower pump prices since the beginning of the year when the international refined product prices began to tumble, and the cedi also gained ground against the dollar. Compared to November 2022 when prices escalated significantly to about GHS18.1370 and GHS20.4270 per liter of petrol and diesel, ex-pump prices fell by about 34% and 47% for petrol and diesel respectively in the first selling window of June 2023. From the beginning of the year, pump prices of petrol and diesel have fallen by about 3% and 17% respectively. However, as the pump price of diesel has falling by 2% compared to the same period last year, that of petrol is about 20% higher compared to the same period.

The fall in pump prices in the second selling window of May was largely attributed to the slight appreciation of the cedi witnessed because of the IMF Board's approval of a $3 billion credit facility to the country. Moreover, international oil prices fell significantly within the period due to the rising fears of global economic recession and skepticism regarding the US Debt ceiling. However, pump prices rose marginally in the first selling window of June due to the sharp depreciation of the Cedi in the first week of the month.

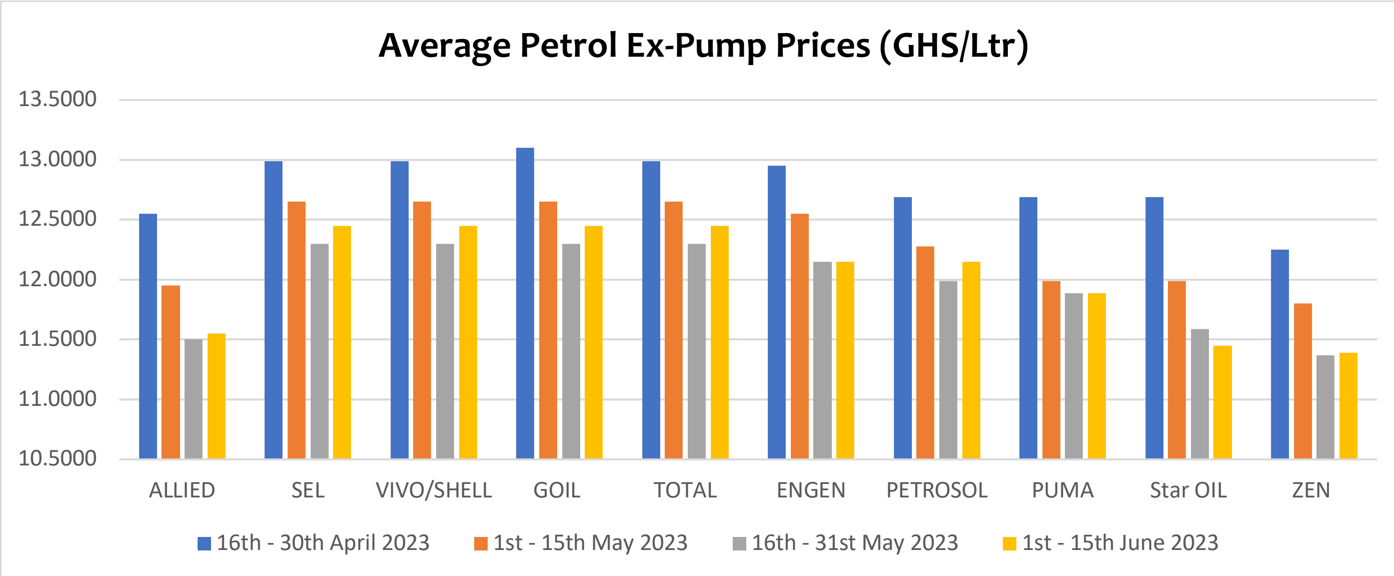


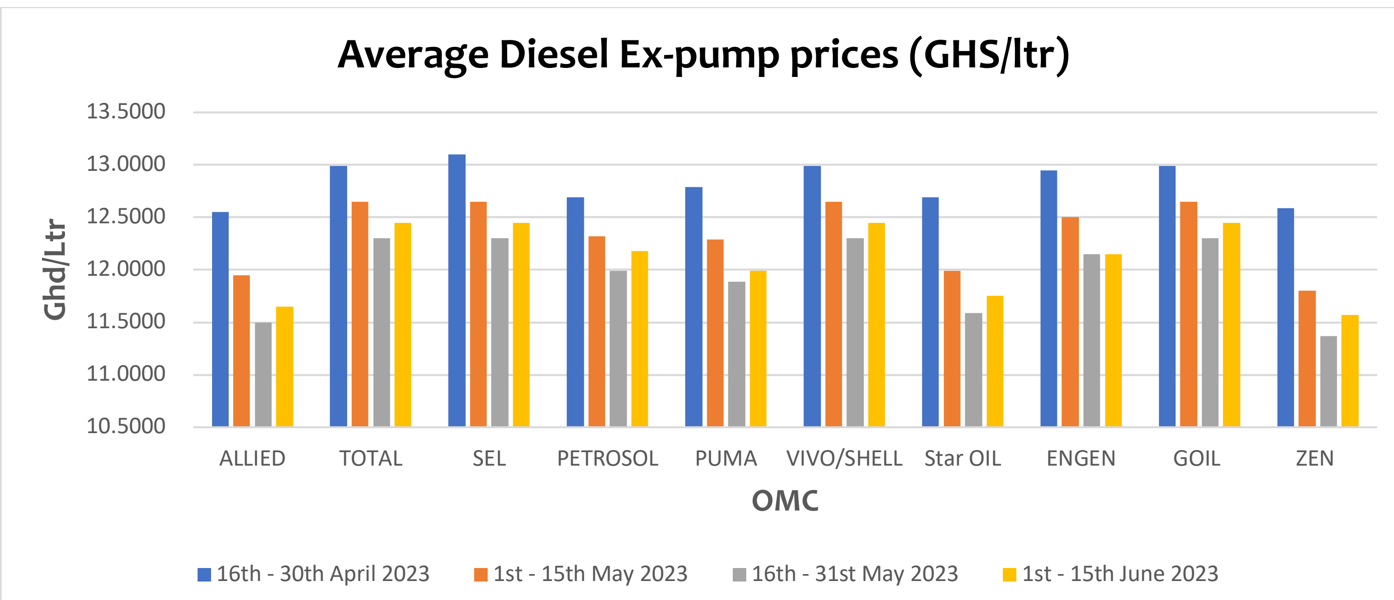
It is largely admitted that FX is a major determinant of petroleum prices at the pumps. The increase in pump prices is mostly accounted for by the depreciation of the cedi. This reinforces the need for government interventions aimed at achieving lower pump prices to target the stabilization of the local currency and making FX available to BDCs at competitive rates. The IMF bailout to the country is expected to stabilize the cedi and reduce the risk of FX losses associated with the importation of petroleum products as a result of exchange rate uncertainties.

SUMMARY REPORT OF BANK OF GHANA FX AUCTIONS TO BIDECs		
Window	**Percentage Offered**	**Auction FX Rate (GHS/USD)**
1st – 15th Nov 2022	36%	13.2474
16th – 30th Nov 2022	57%	13.3138
1st – 15th Dec 2022	59%	13.3390
16th – 31st Dec 2022	83%	9.4656
1st – 15th Jan 2023	60%	9.5579
16th – 31st Jan 2023	48%	10.5151
1st – 15th Feb 2023	29%	10.9875
16th – 28th Feb 2023	27%	11.9095
1st – 15th March 2023	29%	12.1203
16th – 31st March 2023	21%	12.0158
1st – 15th April 2023	20%	12.0000
16th – 30th April 2023	24%	11.4467
1st – 15th May 2023	20%	11.7575
16th – 31st May 2023	26%	11.6943
1st – 15th June 2023	39%	11.1657

The BoG's bi-weekly FX auction to BIDECs in the window under review for the purchase of petroleum products was 39% of BIDECs' bid. BoG auctioned USD20 million at a rate of GHS11.1657/USD to BIDECs for the purchase of petroleum products in the 1st to 15th June selling window. The FX rate auctioned by BOG to BIDECs was a slight appreciation of 4.7% compared to the previous auction rate.

The pump price of Petrol and Diesel rose marginally by 0.6% and 1.2% to an average of GHS12.0380/ltr and GHS12.1090/ltr in the selling window respectively. LPG price per kilogram declined from an average of GHS15.4300/kg mid-February this year to an average of GHS12.6500/kg in the first selling window of April, representing a fall of about 18%. This represents a year-on-year LPG price increase of about 38%. Further indicating that the pump price of LPG has increased by about 9% since the first of January 2023. Currently, LPG prices at the pumps has declined by about 26% since March 2023. This has been largely attributed to the falling LPG prices on the international Market and the recent firming up of the Cedi against the Dollar.





The Dangote Oil Refinery (Nigeria)

The Dangote refinery project in Nigeria was commissioned in May 2023 at a completed cost of $19bn. The refinery which is the largest in Africa, is expected to produce 650,000 b/d with about 4.7 bn liters storage capacity extending to about 1,000 km to handle 3 bn SCF (standard cubic foot) of gas per day. The refinery is the biggest among the world's single-train facilities and the largest pipeline in the world for petroleum products marketing via pipeline and sea to feed local petroleum needs and export to other nations particularly the market under AFCFTA in Africa.

It is a private sector-driven project aimed at refining cleaner crude derivatives to feed the growing petroleum needs of the Nigerian economy and the Sub-region, which has been largely dependent on the importation of refined products. The refinery is estimated to hold Nigeria's market value of $21bn per month of the country's crude as value addition. This will contribute immensely to the Nigerian economy since is one of the top crude oil producers in Africa producing about 1.2 mn b/d. Economic and Financial analysts suggest that the operation of the refinery will strengthen the Nigerien petroleum industry and render it economically powerful within the African sub-region. This will stimulate regional trading among components States (ECOWAS) and will boost local reserves and inflows.

Reports have it that the Dangote refinery has been commended for being the first private refinery in Nigeria to function in the absence of the state-owned refineries, which are undergoing long-term rehabilitation causing the country to import substantially high volumes petroleum products (385,00 b/d) and associated blending components and spending over $7.5bn on petroleum products subsidies in the 2022 fiscal year to meet local consumption and industrial use since the mini modular refineries have limited production muscle. This has substantially turned Nigeria into an import-dependent nation within the West African sub-region. With the incorporation of the Dangote refinery, it is estimated that the petroleum profile of the country will change significantly moving the country from a net importer of petroleum products to a net exporter of petroleum products and repositioning Nigeria for growth.

Given the current projections, the refinery will prepare Nigeria toward assuming the role of petroleum producer across the petroleum streams in Africa which will enable petroleum diversification and competition of imported products to address the shaking petroleum derivatives production and prices of petroleum products in Africa and also increase demand for naira (Nigeria currency) or local currencies to improve exchange rate stability. This will enable Nigeria and Africa to meet local specifications for affordable and high-standard petroleum products to meet local consumption.

The Refinery is considered a potential strategy to address Nigeria's petroleum supply challenges within the sub-region and to boost domestic capacity in the oil industry. Moreover, it will reduce Africa's continuous import dependency (cutting import bills) and promote healthy regional oil marketing among States.

The impact of the Refinery on Ghana's downstream petroleum industry

The impact of the Dangote Oil Refinery on the Ghanaian downstream sector is a bit uncertain in the sense that the modalities for market engagement within the supply chain are yet to be established. The good news is that countries with effective bilateral and multilateral relationships with Nigeria like Ghana are expected to benefit with high certainty in terms of product negotiations and market priorities. Energy experts hypothesized that the refinery is most likely a gear to revitalize the African Continental Free Trade Area (AfCFTA) among component states and offer members a competitive advantage to access refined petroleum products within the sub-region. The cost of sourcing petroleum products into the country will most likely reduce to provide consumers with some form of relief. On the issue of regional exchange rate volatilities, no information has been provided on currency usage for marketing among neighboring countries and in the international market.