

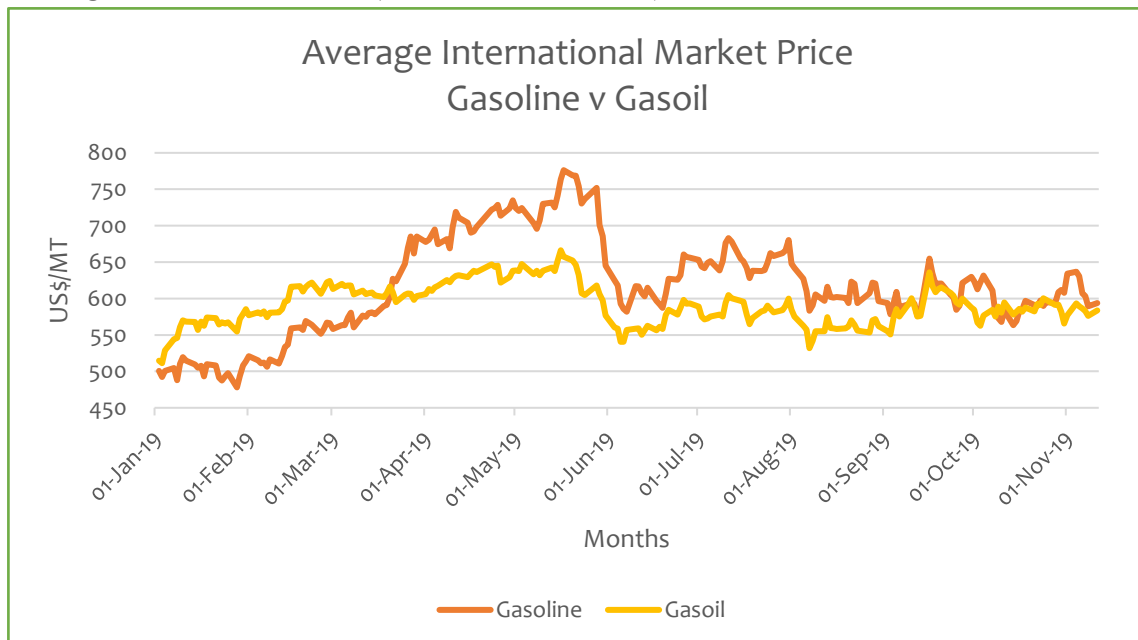


CBOD PETROLEUM PRICE OUTLOOK

16th to 30th November 2019

Refined Products Review and Outlook

The international market prices of gasoline and gasoil for the second pricing window of November (27th October to 11th November) averaged \$610.66/mt and \$583.52/mt respectively. The average price of gasoline for the current pricing window witnessed a 4% increase relative to the previous average window price while average gasoil price in the current window fell by about 1% relative to the previous window. The average price of gasoline witnessed an increase in the current window after experiencing a downward trend for the previous two windows. The current average window prices for gasoline and gasoil respectively are 19% and 9% lower than the highest window prices (12th May to 26th May) observed this year.



Fufex

The Fufex30¹ which is a 30-day forward Ghs/USD FX rate for the petroleum downstream industry is estimated at **Ghs 5.65/USD** for the second pricing window of November (27th October to 11th November). The FufeX30 is estimated using the average quoted indicative forward forex rate from major oil financing banks adjusted by the covered-interest parity pricing model and the CBOD internal research outlook.

The Ex-refinery Price Indicator (Xpi)

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

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

Ex-ref Price for 27th October to 11th November

PRICE COMPONENT	PMS	AGO
Average World Market Price (US\$/MT)	610.66	583.52
CBOD Benchmark Breakeven Premium (US\$/MT)	100	90
FuFex30 (GHS/USD)	5.65	5.65
Volume Conversion Factor (ltrs/mt)	1324.50	1183.43
Ex-ref Price (Ghs/ltr)	3.032	3.216

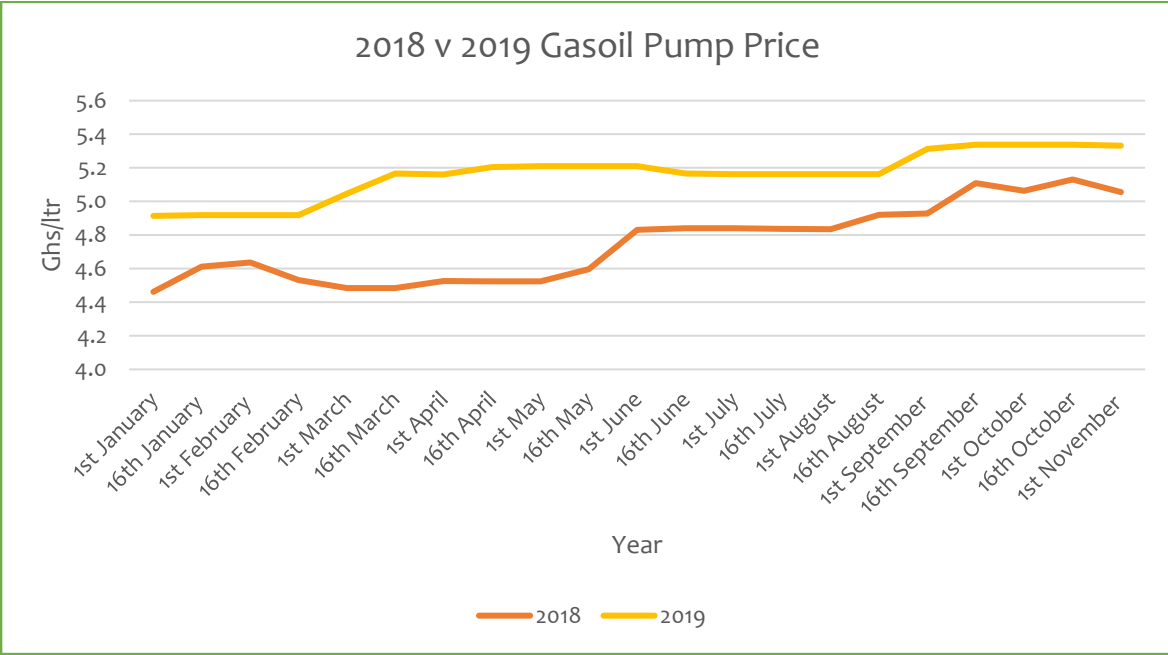
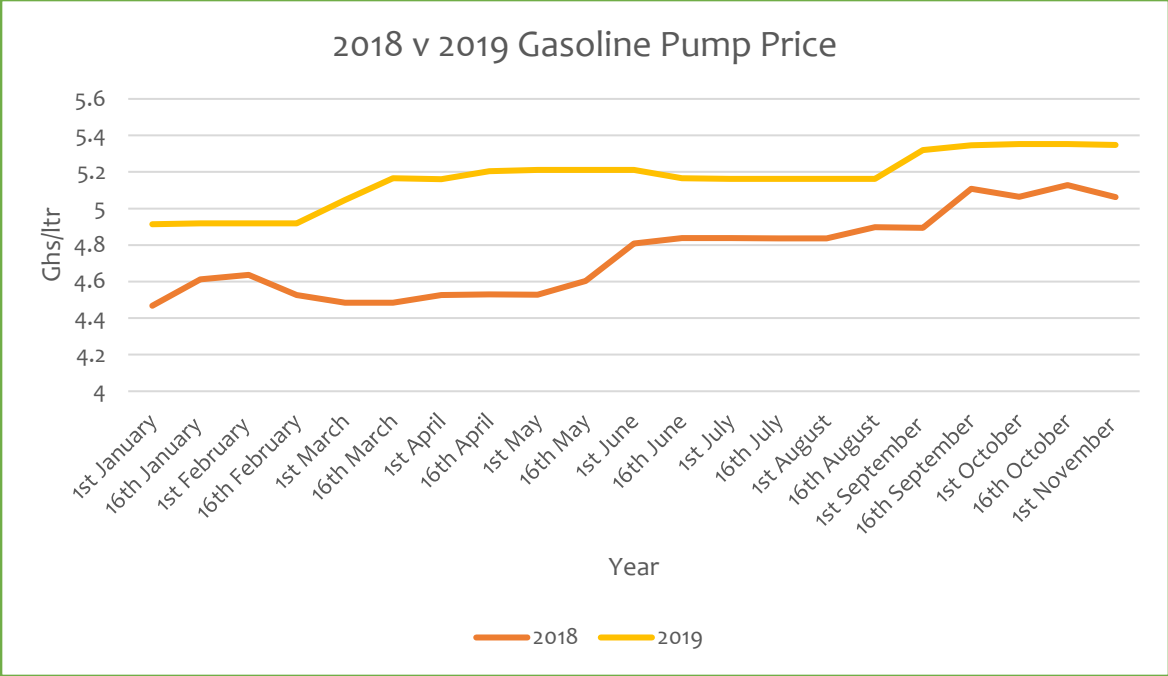
¹ The FufeX30 is a 30-day Ghs/USD forward fx rate used as a benchmark rate for BDC ex-ref price estimations.

Price Tolerance	+1%/-1%	+1%/-1%
-----------------	---------	---------

OMC Pricing Performance

The average ex-pump prices for gasoline and gasoil for the first selling window of November (1st to 15th November) saw a marginal drop of about 0.10%. Prices fell from Ghs5.353/ltr and Ghs5.338/ltr to Ghs5.348/ltr and Ghs5.333/ltr for gasoline and gasoil respectively. Average ex-pump prices of gasoline and gasoil have increased by 9% year-to-date, compared to the 13% increase same period last year and a year-on-year increase of about 6% for gasoline and gasoil respectively.

Ex-pump prices for gasoline are expected to increase by about Ghp17/ltr, while gasoil prices are expected to increase by about Ghp1/ltr respectively in the next selling window (16th to 30th November), as a result of increases in international suppliers' premium, all other things being equal.



Out of the top 10 OMCs, Vivo Energy-Shell, Goil and Total displayed the highest prices at their pumps. For the first selling window of November (1st to 15th), the top three highest selling OMCs sold gasoline and gasoil at an average price of Ghs 5.360/ltr and Ghs5.360/ltr

respectively. Frimps displayed the lowest price at the pump for both gasoline and gasoil, with a price of Ghs 5.320/ltr for gasoline and Ghs5.300/ltr for gasoil at its pumps.

Average Ex-Pump prices for 1st to 15th November 2019 (Ghs/ltr)

OMCs	Gasoline	Gasoil
Vivo Energy Shell	5.360	5.360
Total	5.360	5.360
Goil	5.360	5.360
Star Oil	5.360	5.300
Glory Oil	5.358	5.358
Petrosol	5.350	5.320
Radiance	5.350	5.320
Allied Oil	5.340	5.330
Puma Energy	5.320	5.320
Frimps Oil	5.320	5.300

NB: Table is arranged in descending order, from the highest priced OMC to the lowest priced OMC

