

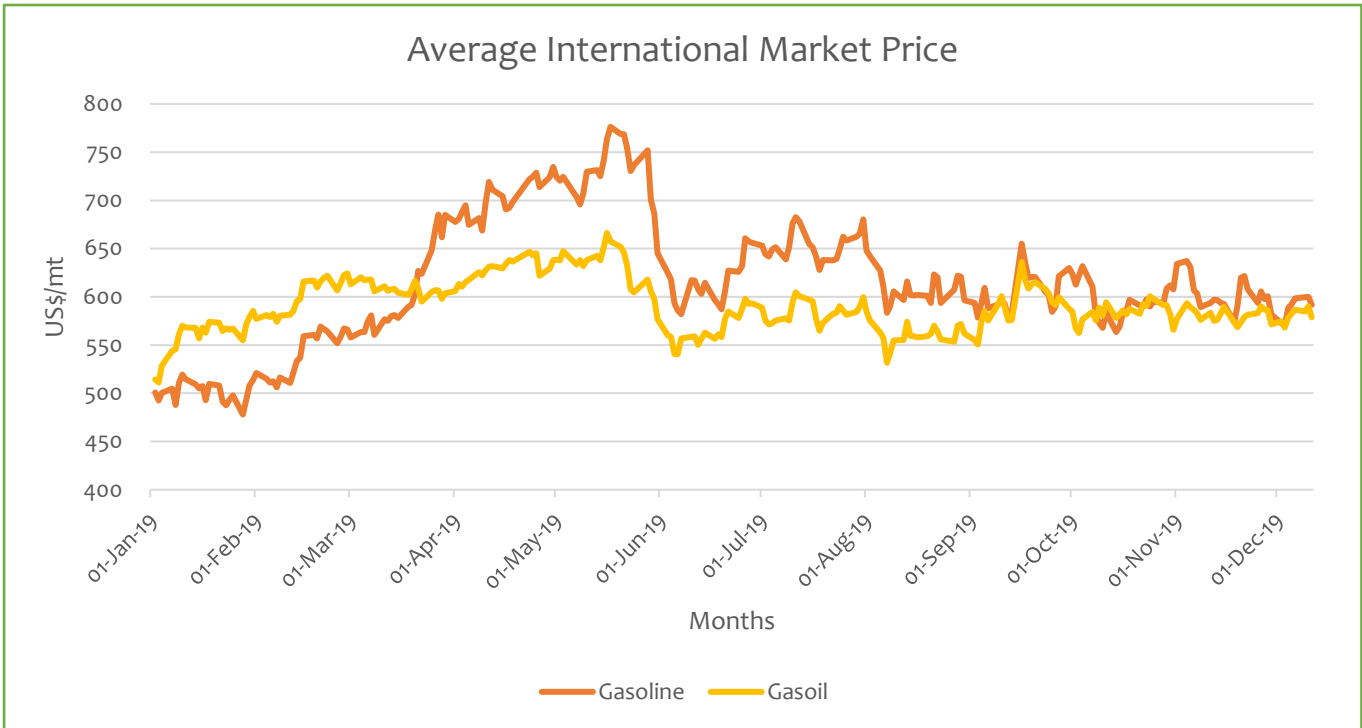


CBOD PETROLEUM PRICE OUTLOOK

16th to 31st December

Refined Products Review and Outlook

The international market prices of gasoline and gasoil for the second pricing window of December (27th November to 11th December) averaged \$590.32/mt and \$580.70/mt respectively. Average gasoline prices fell by 1.5% from the previous average window price of \$599.36/mt. The downward pressure in gasoline prices can be attributed to the jump in US gasoline inventories late November and the use of relatively cheaper gasoline winter blends among other factors. Gasoline stock build reached 452 million barrels in November, the highest since July this year and about 3% above the five-year average for this time of year according to the Energy Information Administration. Average gasoil prices for the current window, however, remained relatively stable with a marginal increase of 0.23%.



Fufex

The Fufex30¹ which is a 30-day forward GHS/USD FX rate for the petroleum downstream industry is estimated at **GHS5.85/USD** for the second pricing window of December (27th November to 11th December). 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.

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

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

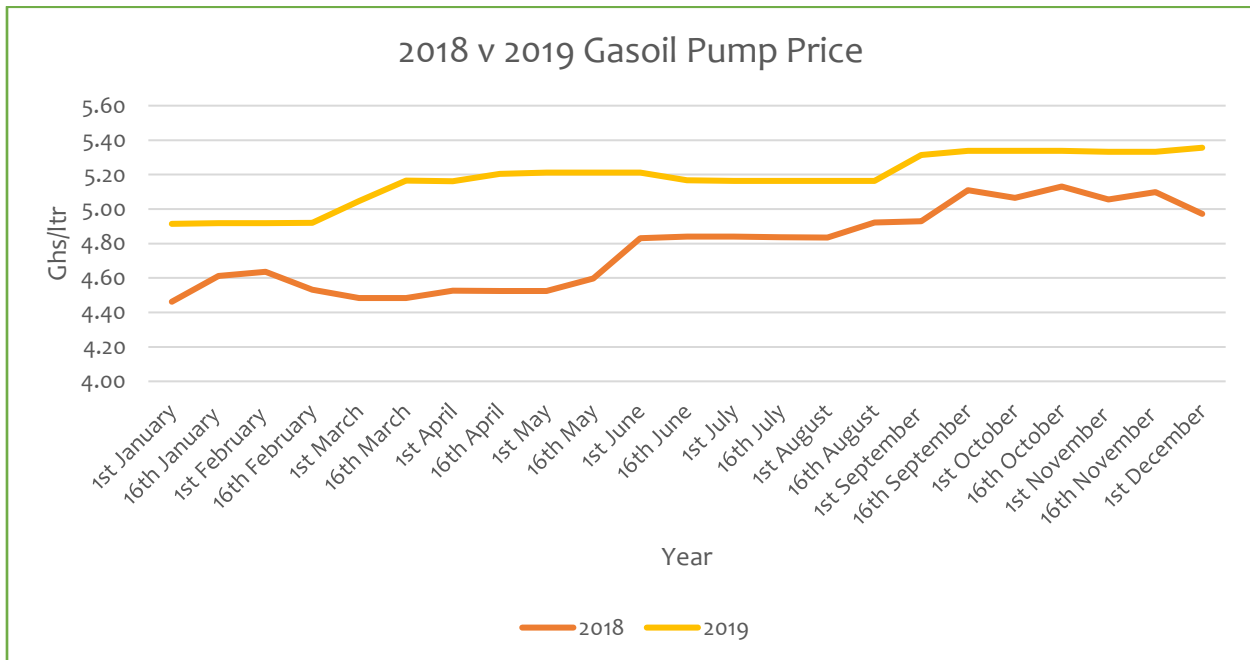
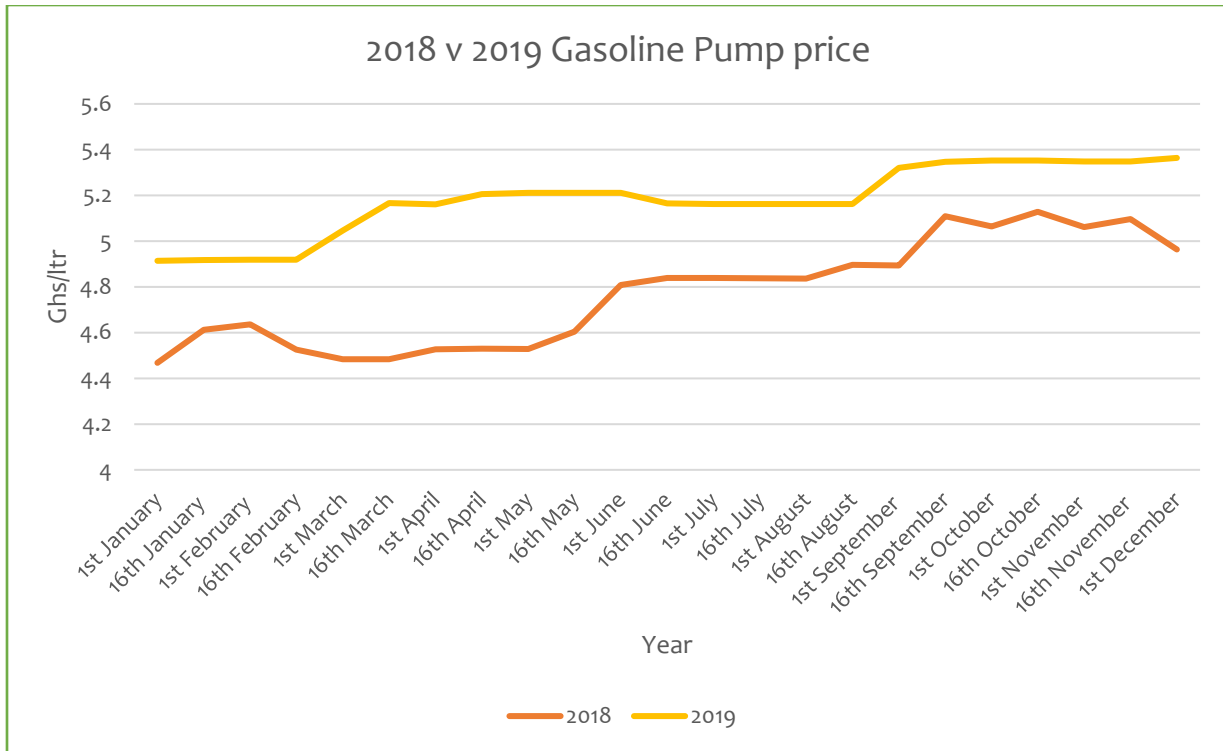
Ex-ref Price for 27th November to 11th December

PRICE COMPONENT	PMS	AGO
Average World Market Price (US\$/MT)	590.32	580.70
CBOD Benchmark Breakeven Premium (US\$/MT)	100	90
FuFex30 (GHS/USD)	5.85	5.85
Volume Conversion Factor (ltrs/mt)	1324.50	1183.43
Ex-ref Price (Ghs/ltr)	3.049	3.315
Price Tolerance	+1%/-1%	+1%/-1%

OMC Pricing Performance

The average ex-pump prices for gasoline and gasoil for the first selling window of December (1st to 15th December) increased by 0.30% and 0.43%. Average prices increased from Ghs5.348/ltr and Ghs5.333/ltr to Ghs5.364/ltr and Ghs5.356/ltr, the highest prices recorded this year. Average ex-pump prices of gasoline and gasoil have increased by 9% year-to-date, compared to the 11% increase same period last year and a year-on-year increase of about 8% for gasoline and gasoil respectively.

Ex-pump prices for gasoline and gasoil are expected to increase between Ghp4/ltr and Ghp9/ltr for the next selling window (16th to 31st December) mainly due to the depreciation of the cedi against the dollar. Year-to-date currency depreciation currently stands at 15%.



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 December, the top three highest selling OMCs sold gasoline and gasoil at an average price of Ghs5.385/ltr respectively. Frimps Oil displayed the

lowest price at the pump for both gasoline and gasoil, with a price of Ghs5.335/ltr for gasoline and Ghs5.325/ltr for gasoil at its pumps.

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

OMCs	Gasoline	Gasoil
Vivo Energy Shell	5.385	5.385
Total	5.385	5.385
Goil	5.385	5.385
Glory Oil	5.374	5.374
Petrosol	5.370	5.355
Radiance	5.360	5.345
Puma Energy	5.355	5.355
Star Oil	5.350	5.320
Allied Oil	5.340	5.330
Frimps	5.335	5.325

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

