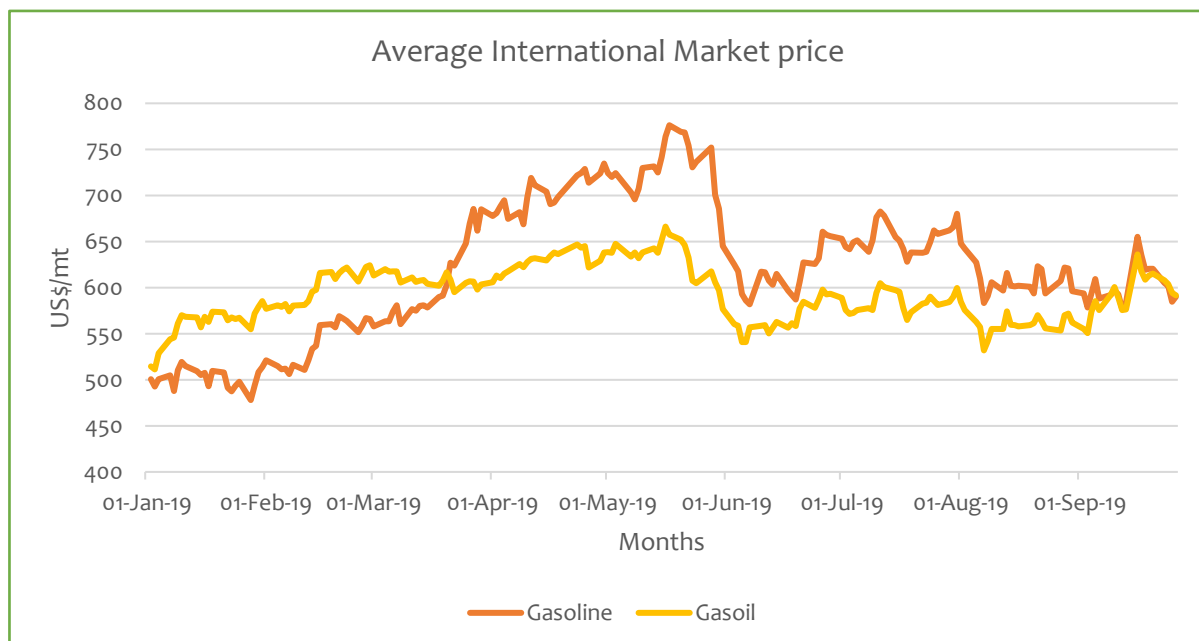


CBOD PETROLEUM PRICE OUTLOOK

Refined Products Review and Outlook

The international market prices of gasoline and gasoil for the first pricing window of October (12th to 16th September) averaged \$608.48/mt and \$603.64/mt respectively. This was 2% (\$9.23/mt) higher for gasoline and 5% (\$30.32/mt) higher for gasoil relative to the previous pricing window (27th August to 11th September). Market speculation drove prices up following attacks on Saudi Aramco’s oil processing facility affecting 5% of global oil production. Average international prices for the window were 18% lower year-on-year for both gasoline and gasoil respectively. Prices for the first pricing window of October (12th to 26th September) were 21% and 11% higher than average prices observed in the beginning pricing window of the year.



FuFeX

The forward FX rate (FuFeX) used is the average of the 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 Fufex30 to be applied for the first pricing window of October (12th September to 26th September 2019) is **Ghs5.64/USD**

The Ex-refinery Price Indicator (Xpi)

The Ex-ref price indicator (Xpi) is computed using the referenced international market prices as observed to be 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.

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

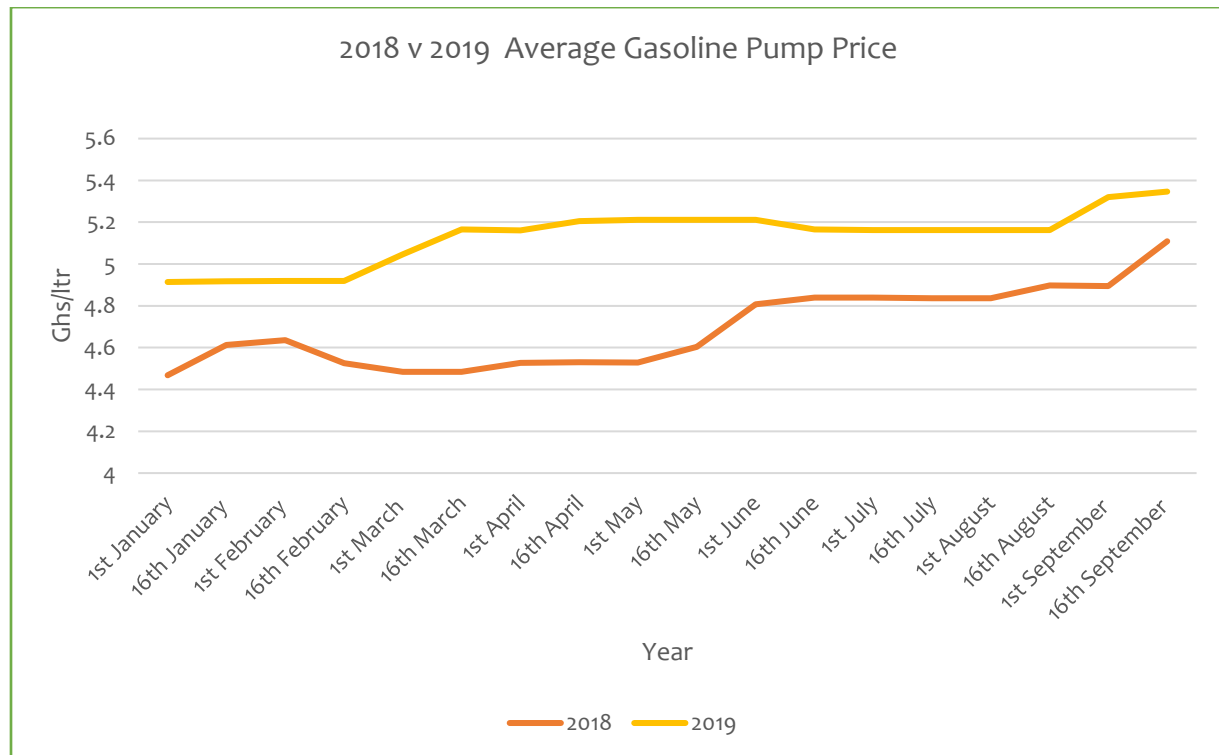
Ex-ref Price for 12th to 26th September 2019

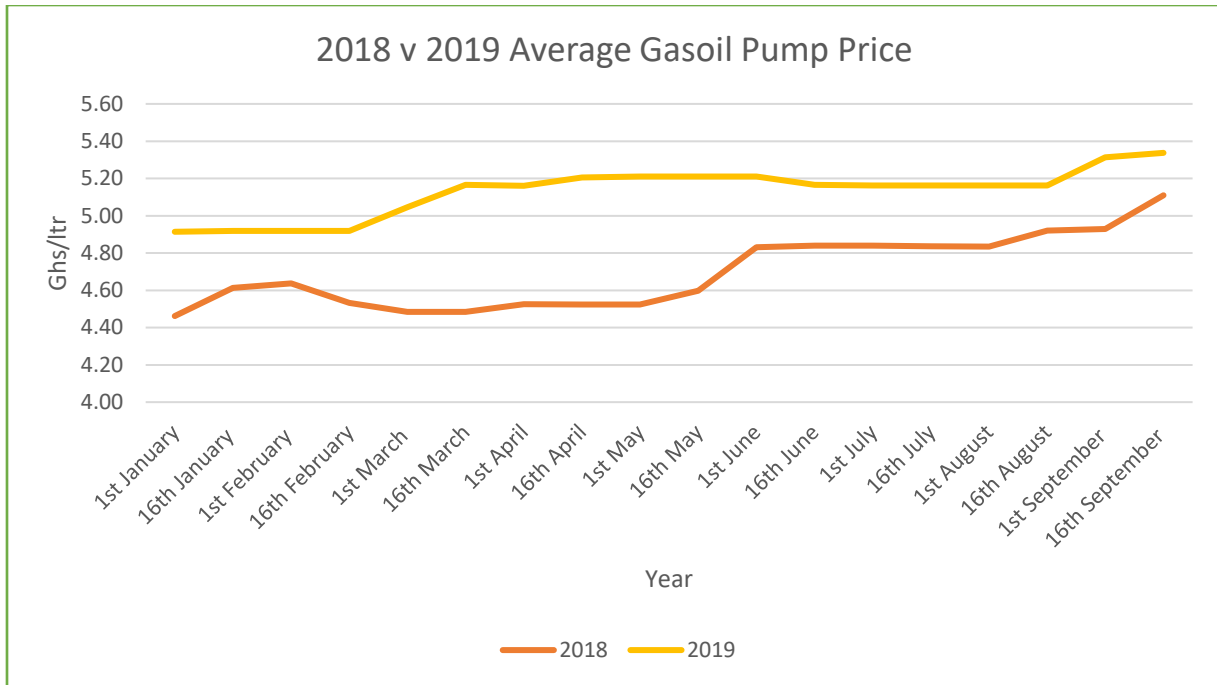
PRICE COMPONENT	PMS	AGO
Average World Market Price (US\$/MT) 12 th to 26 th September Pricing window	608.477	603.636
CBOD Benchmark Breakeven Premium (US\$/MT)	70	90
FuFex30 (GHS/USD)	5.64	5.64
Volume Conversion Factor (Itrs/mt)	1324.50	1183.43
Ex-ref Price (Ghs/ltr)	2.889	3.306
Price Tolerance	+1%/-1%	+1%/-1%

OMC Pricing Performance

Average ex-pump prices for gasoline and gasoil for the second selling window of September (16th to 30th September) were up by about 0.5% from Ghs5.320/ltr to Ghs5.346/ltr for gasoline and by 0.45% from Ghs5.314/ltr to Ghs 5.337/ltr for gasoline and gasoil respectively. This marks the highest price observed in the year. Average ex-pump prices of gasoline and gasoil have increased by 9% year-to-date, compared to the 14% increase same period last year and a year-on-year increase of about 5% and 4% for gasoline and gasoil respectively.

Ex-pump prices for gasoline are expected to increase by about Ghp4/ltr while gasoil is expected to increase by about Ghp14/ltr in the next selling window (1st to 15th October), all other things being equal, as a result of the changes in the international market prices of gasoline and gasoil.





OMC Pricing Performance

Out of the top 10 OMCs, Vivo Energy Shell, Goil and Total displayed the highest prices at their pumps. For the second selling window of September (16th to 30th September) the top three highest selling OMCs sold gasoline and gasoil at an average price of GHS 5.385/ltr and Ghs5.370/ltr respectively. Puma Energy displayed the least price at the pump for both gasoline and gasoil, with a price of Ghs 5.203/ltr at its pumps for both gasoline gasoil respectively.

Average Ex-Pump prices for 16th to 30th September 2019 (Ghs/ltr)

OMCs	Gasoline	Gasoil
Vivo Energy Shell	5.385	5.385
Total	5.385	5.385
Goil	5.385	5.340
Star Oil	5.360	5.300
Petrosol	5.350	5.385
Radiance	5.350	5.320
Allied Oil	5.340	5.330
Glory Oil	5.339	5.379
Frimps Oil	5.320	5.300
Puma Energy	5.203	5.203

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