

Demystifying Downstream

Episode 2

Petroleum Pricing





History of Pricing

Pre Independence

- No Oil Refinery
- No Crude Oil processing in Ghana.
- Importation of refined petroleum products by Shell, BP, Texaco, Mobil & Agip (All multinationals companies)
- Price dictated by Market forces i.e. No price control.
- The companies had the right to set the prices of the products without interference by the colonial government.

Post Independence

- The Tema Oil Refinery (TOR) was established as a fully-owned Italian company in 1961 and called GHAIP
- Crude Oil processing commenced in 1963
- Crude importation was done by the same multinationals Shell, BP, Texaco, Mobil & Agip
- Prices remained liberalised till 1980



History of Pricing

· Government's Involvement

- 1974: GoG earns 50% of GHAIP Profits.
- 1974: GoG acquires AGIP and renames it GOIL
- 1977: GoG becomes sole shareholder of GHAIP
- 1980: GoG Dominates the petroleum industry and assumes responsibility for:
 - 1. Importation/Procurement of crude oil and Petroleum Products into Ghana
 - 2. Pricing of petroleum products in this country.
- 1988: GoG Introduces Taxes on Petroleum Products.
- 1996: GoG commences the implementation of the deregulation Policy



History of Deregulation

1996

- TOR assumes crude importation responsibility
- Introduction of Automatic Adjustment Formula
- Revision of petroleum pricing model from TOR Cost Plus to import parity pricing model.

1998

- Petroleum distribution decentralized using Bulk Oil Storage & Transport Company Limited (BOST) facilities
- Licensing of first indigenous Oil Marketing Company (OMC)

2003

• Distribution margins adjusted to comparable levels within West African sub-region to provide adequate incentives for the private sector to participate in the procurement, marketing and sale of petroleum products

2005

• Creation of the National Petroleum Authority (NPA) as the Downstream Regulator

2007

• Formation of the Bulk Distribution Company (BDC) function to encourage private indigenous participation in the import of refined products and investment in infrastructure



The Pricing Model

COST Plus Model

- Crude + TOR Refining Cost + Margin + Taxes & Levies Subsidy= Petroleum Price
- Prices were often announced Annually after annual estimates of key variables.
- Applied from 1980 to 1996

Cost Plus Model Defects

- There were no benchmarks to assess the efficiency of the prices (i.e. What the Refinery claimed to be its cost was the cost).
- No competition to encourage efficiency.
- Price fairness was subject to the Refinery's efficiency and the Trading agency's effectiveness.
- A study of west African refineries confirmed that TOR and other refineries operated at very high levels of inefficiency which was being passed on to the consumer through pricing.



THE Pricing Model

Import Parity Model

Operating Principle

- Locally refined products should at worse be as competitive as imported products.
- Pricing Set by the NPA/GoG every 2-weeks (1-15th and 16th to the last day of each month)- Selling windows
- The Price is benchmarked to the world market prices quoted on international trading platforms.

Pricing Model

INTERNATIONAL MARKET REFERENCE PRICE

PLUS

BDC PREMIUM

PLUS OR MINUS

OVER RECOVERY OR SUBSIDY

PLUS

TAXES & LEVIES

PLUS

REGULATORY MARGINS

PLUS

OMC & DEALER MARGINS

EX-PUMP PRICE



PRICING POLICY

There are three key policy objectives:

- Ensure full cost recovery of investment.
- Generate revenue for government.
- Ensure prices of petroleum products are the same throughout the country.

Petroleum Pricing is guided by L.I. 2186

- ✓ The first, and most important policy objective of the prescribed petroleum pricing formula is to ensure FULL COST RECOVERY OF INVESTMENT at every stage of the supply chain.
- ✓ One way this policy is achieved is by providing BDCs with a SUPPLIERS' PREMIUM to cater for all costs associated with importing petroleum products into the country.



INTERNATIONAL MARKET REFERENCE (IMR)

- 2 week historical Market References are used for each pricing.
 - Free On Board (FOB) quotes as stated on Platts and Argus trading platforms are used.
- The average daily quotes over the Pricing windows are used to set ex-refinery prices for the Selling window.

Pricing Windows	Selling Windows				
12 th to 26 th of each month	1st-15th of each month				
27 th to 11 th	16 th to 31 st of each month				

- The Market references are publicly traded on the respective platforms. Subscriptions are however required to access information.
- The reference quotes are FOB based. i.e. the estimated cost of the refined product after loading into the vessel and does not include the cost of freight or insurance.

The BDC Premium

Charge Category	Charge Description	Billing Agent
International Oil Trader's Charges (IOT)	Freight	IOT
	Marine Insurance	IOT
Fixed Charges		
	Storage Fees	Storage Companies
	Rack Loading (Gantry) Fees	Storage Companies
	Demurrage	IOT
	Mooring /Port Fees	Mooring Company/GPHA
	Booster Pump Fees	Mooring Company
	In-Plant Losses	Storage Company
	Sample Analysis	Laboratory (Mainly TOR)
	Dyeing	Storage Company/Refinery



The BDC Premium

Charge Category	Charge Description	Billing Agent			
Variable Cost	 Financing Charges (LC) 	Banks			
	• Inspection & Agency Fees	Inspection Companies (eg. SGS)			
	Operating Margin				
	NPA License Renewal Fees	NPA			
	Trade Risk Management	Hedge Counterparty			
	Annual Facility Fees	BANK			
	Insurance	INSURANCE COMPANY			
	Inter Depot Transfer Fee	TOR			
	Discharge Assistance	TOR			
	Credit Risk Management	BDC			
	Selling And General Expenses				
	Profit Margin				



Taxes & Levies

Petroleum Taxes & Levies are set by Government and approved by Parliament.
 Taxes range between 12% & 22% of June 16th 2015 ex-pump prices.

TAX	RATE
EXCISE DUTY	• Charged on all products except Premix. Petrol- GHp 2.78, Diesel- GHp-1.80, LPG- GHp 0.7246
TOR DEBT RECOVERY LEVY	 Petrol-GHp 8, Diesel-GHp 8, LPG- GHp 5
ROAD FUND	Petrol-GHp 7.3231, Diesel-GHp 7.3231
ENERGY FUND	 GHp 0.05/Ltr Charged on all products except Premix, LPG and MGO. Meant for the Energy Commission
EXPLORATION LEVY	 GHp 0.1/ltr Charged on all products except LPG. Meant to support GNPC's exploration activities
CROSS-SUBSIDY LEVY	• Charged mainly on Petrol (GHp 5.0), Diesel (GHp -2.6987), LPG (-18.4042)
SPECIAL PETROLEUM TAX	• 17.5% of Ex-depot prices. As at 16 June 2015 pricing, Petrol (GHp 46.2983, Diesel (GHp 44.8089), LPG (38.8209)



Regulatory Margins

Set by the NPA and paid to GoG agencies.

Margin	Rate
PRIMARY DISTRIBUTION MARGIN	GHp 4.5/Ltr charged on Petrol, Diesel and Kerosene.
BOST MARGIN	GHp 3/Ltr charged on Petrol, Diesel and Kerosene Paid to BOST.
	GHp 1.5/Ltr Used to fund fuel marking cost to guard against fuel adulteration. GHp 9/Ltr. Used to fund transportation of products across the country. Key
DISTRIBUTION COMPENSATION MARGIN	mechanism in ensuring uniform pricing nationwide. GHp 5/ltr charged on LPG to fund LPG usage promotion.
PROMOTION MARGIN	GHp 7/Ltr Charged kerosene only. For the promotion or kerosene use.
Admin Costs	Charged on

Regulatory margins account for between 4% and 9% of 16th June ex-pump prices.



Marketer's and Dealer's Margin

- The marketer's margin represents the gross earnings due an Oil Marketing Company for every litre sold.
- The Dealer's Margin is the gross earnings due a Petroleum Retailer operating under an OMC.
- The above margins are negotiated from time to time subject to major changes in key economic variables.





Price Build-Up

PETROLEUM PRODUCTS PRICE BUILD-UP EFFECTIVE 16TH JUNE, 2015

PRICES IN GHANA PESEWAS

		PRICES IN GHANA PESEWAS							
	PREMIUM	KEROSENE (DOMESTIC)	KEROSENE (MINES)	GASOIL	MGO LOCAL	RFO	LPG	PREMIX	UNIFIED
EX-REFINERY PRICE - CORE	269.5123	259.1923	259.1923	260.5966	260.5966	179.0963	242.748	260.5286	269.5123
MARINE MIX								23.1130	
RECOVERY MARGIN		3.6574	3.6574		2.8342		12.6796	0.26081	
PRICE STABILIZATION MARGIN	-37.2037	-23.2051	0.6247	-28.1200	-30.9817	-44.0620	-20.9142	-164.2816	0.2027
EX-REFINERY PRICE	232.3086	239.6446	263.4744	232.4766	232.4491	135.0343	234.5134	119.62081	269.7150
EXCISE DUTY	2.7800	1.0375	1.0375	1.8000	0.2945	3.2094	0.7246		2.7800
TOR DEBT RECOVERY LEVY	8.0000			8.0000	3.0000	4.0000	5.0000		8.0000
ROAD FUND	7.3231			7.3231					7.3231
ENERGY FUND	0.0500	0.0500	0.0500	0.0500		0.0500			0.0500
EXPLORATION	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000		0.1000	0.1000
CROSS-SUBSIDY LEVY	5.0000	-4.8449	-4.8449	-2.6987	-6.2287	-1.3937	-18.4042	-0.3608	5.0000
PRIMARY DISTRIBUTION MARGIN	4.5	4.5	4.5	4.5					
BOST MARGIN	3.0000	3.0000	3.0000	3.0000					
FUEL MARKING MARGIN	1.5000	1.5000	1.5000	1.5000	1.5000			1.5000	1.5000
EX-DEPOT	264.5617	244.9872	268.817	256.051	231.1149	141	221.8338	120.86001	294.4681
SPECIAL PETROLEUM TAX	46.2983	42.8728	47.0430	44.8089	40.4451		38.8209		51.5319
UPPF	9.0000	10.0000	9.0000	9.0000	9.0000		11.0000	9.0000	
MARKETERS MARGIN	16.0000	16.0000	16.0000	16.0000	16.0000		10.5950	15.7000	
DEALERS (RETAILERS/OPERATORS) MARGIN	11.1400	11.1400	11.1400	11.1400	11.1400		7.9750	11.1400	
LPG FILLING PLANT/Premix/MGOLocal Admin Costs					0.3000		4.7753	0.3000	
DISTRIBUTION COMPENSATION MARGIN					0.3000		5.0000		
PROMOTION MARGIN		7.0000	7.0000				0.0000		
TOWN TOWN MICHORN		7.0000	7.0000						
INDICATIVE MAXIMUM PRICE (EX-PUMP PRICE)	347.00	332.00	359.00	337.00	308.00	141.00	300.00	157.00	346.00