Department of Energy

FUEL PRICING IN SOUTH AFRICA
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The Government objectives are

- To promote a climate that would be conducive to reasonable profits and sustained investments in the liquid fuel industry;
- To set margins in a fair and transparent manner in order to encourage investments in the industry;
- To ensure that the liquid fuels products are sold to the end-user at the cheapest possible price.
- To balance between the cheapest possible price and reasonable return on investments.
BASIC FUEL PRICE (BFP)
Introduction

• **Three** basic forms of fuel pricing globally
  
  • **Ad hoc pricing** - Prices set irregularly, No transparency – common in countries that have own oil (highly subsidised)
  
  {It is an illusion – keeping the prices constant even when the markets are bullish, hoping that the prices will go down e.g. Bolivia.}

  • **Formula based / automatic pricing adjustments** – Prices are published (but not the formulas in some countries) e.g. RSA publish both prices and the formula

  • **Liberalised pricing system** – the market set the prices (depoliticised) but there is a formula e.g. Australia.

  {The Australian Competition and Consumer Commission (ACCC) act as a watchdog to ensure that there is no price collusion}
Policy Position

- **Regulation of liquid fuels prices**
  - Petrol, diesel and illuminating paraffin (IP) – retail prices
  - LPG for households since 14 July 2010

- **Import parity principle (IPP) applies**

  Define: The price an importer has to pay to purchase a product in the world market and have it delivered for domestic sale.

  - Deemed pricing
  - Zonal pricing – magisterial district zones (MDZ)
  - Transport modes – based on least cost mode
  - Cost recovery - Pass through cost
Regulatory / Policy Instruments

- Petroleum Products Act, 1977 (Act No. 120 of 1977);
- Central Energy Fund Act, 1977 (Act No. 38 of 1977);
- Gas Act, 2001 (Act No. 48 of 2001);
- Petroleum Pipelines Act, 2003 (Act No. 60 of 2003);
- Gas Regulator Levies Act, 2002 (Act No. 75 of 2002);
- Petroleum Pipelines Levies Act, 2004 (Act No. 28 of 2004);
- National Energy Regulator Act, 2004 (Act No. 40 of 2004);
and
- National Energy Act, 2008 (Act No. 34 of 2008)
Definition

The Basic Fuel Price (BFP) is based on the import parity pricing principle i.e. what is would cost a South African importer of petrol to buy the petrol from an international refinery, transport the product from that refinery, insure the product against losses at sea and land the product on South African shores.

NB: The Central Energy Fund (CEF) (Pty) Ltd was appointed by Cabinet in 1994 as an impartial body to determine BFP’s (prevent manipulation by any interested party)

Daily and average monthly BFP’s for price regulated fuels are calculated by (CEF) in terms of the Working Rules to administer the BFP

Monthly BFP calculations, price changes to be effected and monthly Fuel Price Media Statement audited by independent auditors appointed by the DOE
BFP WORKING RULES

- Make provision for all grades of petrol, all grades of diesel and illuminating paraffin (IP)
- BFP to be adjusted on the first Wednesday of a month
- Over/under recoveries incurred in a fuel price review period will be cleared in the next one

**Important months**

**April** – transport tariffs, fuel levy and RAF adjustments

**September** – Forecourts attendants wage adjustments

**October** – wholesale and retail margins adjustments including secondary storage and transport

**Quarterly** – Octane differential adjustments
ELEMENTS OF THE BFP

- Free-on-Board (FOB)-value
- Freight and Average Freight Rate Asses
- Insurance
- Ocean loss
- Demurrage
- Cargo Dues
- Coastal Storage
- Stock Financing costs
Free-on-Board [FOB] value (spot prices)

**Platts**: A price reporting agency. Mean quoted FOB-values used

**Petrol**: 50% MED (USD/ton)+50% Singapore (USD/bbl)

**Diesel**: 50% MED (USD/ton)+50% AG (USD/bbl)

**IP**: 50% MED (USD/ton)+50% Singapore (USD/bbl)

**NB**: Argus and Bloomberg are other agencies.
Different reference markets are used to determine the Basic Fuel Price (BFP) for petrol, diesel and IP.
FUEL LEVIES (1)

• **Incremental Inland Transport Recovery levy**: to finance incremental inland transport costs due to the 100% capacity utilisation of the Durban/Johannesburg petroleum products pipeline

• **Petroleum products levy**: to reimburse the pipeline users for the applicable NERSA tariff on transporting fuel through the pipeline - levy set by the Ministers of Energy and of Finance in line with the expenditure budget of NERSA

• **IP Tracer dye levy**: to reimburse the oil industry for buying IP tracer dye and to inject it into IP to curtail the mixing of IP and diesel (loss to the Fiscus)

• **Slate levy**: to finance the cumulative under recovery of the industry. Only applicable when the cumulative Slate balance exceeds R250 million (under recovery)
FUEL LEVIES (2)

- **Fuel levy**: Tax levied by Government (Minister of Finance).
- **Custom and Exercise levy**: A duty collected in terms of the Customs Union Agreement.
- **Road Accident Fund (RAF) levy**: To compensate for people involved in vehicle accidents.
- **Demand Side Management levy (DSML)**: Introduced in 2006 to curtail the use of ULP 95 in the inland market.
## FUEL PRICE COMPOSITION

<table>
<thead>
<tr>
<th></th>
<th>Petrol 95 ULP c/l</th>
<th>Petrol 93 ULP &amp; LRP c/l</th>
<th>Diesel 0.05% S c/l</th>
<th>IP c/l</th>
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<tbody>
<tr>
<td>Wholesale margin</td>
<td>35.600</td>
<td>35.600</td>
<td>67.660</td>
<td>67.660</td>
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<tr>
<td>Secondary Storage</td>
<td>17.900</td>
<td>17.900</td>
<td>17.900</td>
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<td>Secondary Distribution</td>
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<td>Router Differential</td>
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<td>Retail margin</td>
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<td>Zone differential in Gauteng</td>
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<td>41.000</td>
<td>57.200</td>
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<td>IP Tracer levy</td>
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<td>Fuel levy</td>
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<td>Customs &amp; excise duty</td>
<td>4.000</td>
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<td>RAF levy</td>
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<td>Petroleum Products levy</td>
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<td>Slate levy</td>
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<tr>
<td>DSML</td>
<td>10.000</td>
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<td>Equalisation Fund Levy</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<tr>
<td>Pump Rounding</td>
<td>(0.400)</td>
<td>(0.400)</td>
<td></td>
<td></td>
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<tr>
<td>Sub-total</td>
<td>741.130</td>
<td>731.130</td>
<td>572.200</td>
<td>167.460</td>
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<td>Contribution to the Basic Fuel Price</td>
<td>612.870</td>
<td>598.870</td>
<td>588.630</td>
<td>583.128</td>
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<tr>
<td>Retail Price</td>
<td>1354.00</td>
<td>1330.00</td>
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<tr>
<td>Wholesale price</td>
<td></td>
<td></td>
<td>1160.830</td>
<td>750.588</td>
</tr>
</tbody>
</table>

**Department: Energy**

**Republic of South Africa**
FREQUENTLY ASKED QUESTIONS

1. Why are the fuel prices changing every month?
2. What is over (under) recovery?
3. Why is petrol cheaper in neighboring countries and yet they purchase it from RSA?
4. Why is SASOL not selling petrol at lower prices because they produce it from coal and they are placed in GP?
5. Why is the government not deregulating fuel prices?
6. Why is ULP95 more expensive than ULP93 in GP, but the cost the same price in coastal areas?
7. Why is the government not buying oil from African countries at a lower prices?
REGULATORY ACCOUNTING SYSTEM (RAS)
Background

Prior to RAS, industry margins were determined using the Marketing of Petroleum Asset Retail (MPAR) methodology.

✓ Assets of retail service station
✓ Wholesale margin on petrol, diesel and paraffin
✓ Assets of secondary storage and secondary distribution (service differential)

**Definition:** The MPAR involves petroleum related activities outside the refinery gate and other related activities, namely, storage, transportation, distribution, marketing and administration. The profit margin, in terms of the MPAR formula, is determined to yield a benchmark industry average of 15% rate of return (10%-20% range with a one year lag) on the depreciated book value of assets for the year ended December. (Lambrecht and Doppegieter, 1993). If the returns go above 20%, then a margin decrease is indicated, and if it falls below the 10% floor, then a margin increase will be recommended.
Bates White Recommendations

✓ Margins on activities be based on Regulatory Accounts
✓ Activities post-refinery gate should be ring-fenced
✓ Assets, costs and ROA be ring-fenced to that activity – ABC methodology
✓ CAPM and WACC be applied to determine the ROA of each activity
✓ Identified activities were:
  ✓ Wholesale activities
  ✓ Secondary storage
  ✓ Secondary distribution
  ✓ Service station retail activities (BSS)
ME 686 Project / IPSR Study (1)

✓ To determine the margins for wholesale, coastal storage & handling and secondary storage and distribution and return on assets for the benchmark service station (BSS)

1. The goal was to develop a uniform and transparent set of regulatory accounts where costs are allocated according to predetermined methods – to provide certainty

2. By ring-fencing regulated from unregulated activities in order to eliminate actual and potential cross-subsidies
ME 686 Project / IPSR Study (2)

- Develop an **activity based** approach to set margins for wholesaling, secondary storage/handling, secondary distribution and Bench Mark Service Stations.
- Determine the costs that should be allowed in each part of the petroleum value chain – ring-fenced activity
- Separate non-regulated activities from the cost base of regulated ring-fenced activities
- Determine the rate of return (ROR) that would be applicable to each part of the value chain using CAPM and WACC to arrive at cents per litre margin
Full RAS Implementation (1)

✓ Implemented in **December 2013**

- No rental fees
- Wholesale margin reduced because the retail assets were moved to retail
- Service differential separated into (a) secondary storage and (b) secondary distribution
Challenges

✓ Selective Regulations along the value chain
✓ RAS applicable to petrol only
✓ Margins allocations / Ownership of the margins
✓ Relationship between oilcos and retailers
✓ Lack of information on RAS
## Full RAS Implementation (2)

<table>
<thead>
<tr>
<th></th>
<th>Petrol</th>
<th>Diesel</th>
<th>IP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail Margin</strong></td>
<td>Dealer OPEX = 96.8 c/l</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Entrepreneurial fee = 24.8 c/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAPEX = 54.8 c/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total = 176.4c/l</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wholesale Margin</strong></td>
<td>35.6 c/l</td>
<td>67.660 c/l</td>
<td>67.660 c/l</td>
</tr>
<tr>
<td><strong>Secondary Storage</strong></td>
<td>17.9 c/l</td>
<td>17.9 c/l</td>
<td>17.9 c/l</td>
</tr>
<tr>
<td><strong>Secondary Distribution</strong></td>
<td>17.3 c/l</td>
<td>17.3 c/l</td>
<td>17.3 c/l</td>
</tr>
</tbody>
</table>
Advantages of RAS

• There is regulatory certainty (stakeholders in agreement) and Transparency

• Guaranteed return on investment for each activity along the value chain

• Guidelines on how to split the retail assets (BSS matrix)

• Challenges could be resolved by affected parties if they embrace the spirit of RAS
How the Retail margin is calculated

• Historically a survey by SBAB (annually)
  – Annual operating costs (OPEX)
  – Average annual petrol sales
• Other costs adjusted by CPI
• Asset Base adjusted by PPI
• Total volumes (oilcos)
• Electricity (NERSA)
• Salaries for Forecourt workers (MIBCO)
Current Retail Margin

• Three parts
  – CAPEX = 54.8 c/l
  – OPEX = 96.8 c/l
  – EC = 24.8 c/l

• RAS BSS Matrix
  – Provides a breakdown in cents per litre of all the costs item that are required to built and operate a benchmark service station (BSS)