Department of Energy

PRESENTATION TO THE PARLIAMENTARY PORTFOLIO COMMITTEE ON ENERGY ON FUEL PRICING

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Presentation Outline

- Introduction
- Policy position and key pricing mechanisms
- BFP – The Basic Fuel Price for liquid fuels
- SMNRP – The Single Maximum National Retail Price of illuminating paraffin (IP)
- MRGP – The Maximum Refinery Gate Price for liquefied petroleum gas (LPG)
- Frequently asked questions
- Closure

Introduction

- **<u>Three</u>** basic forms of fuel pricing globally
  - ***Ad hoc pricing*** - Prices set irregularly, No transparency – common in countries that have own oil (highly subsidized)

    {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
  - ***Liberalized pricing system*** – the market set the prices (depoliticized) 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**

Definition: 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

- Energy White Paper on Energy Policy of November 1998
- 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)

BASIC FUEL PRICE (BFP)

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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

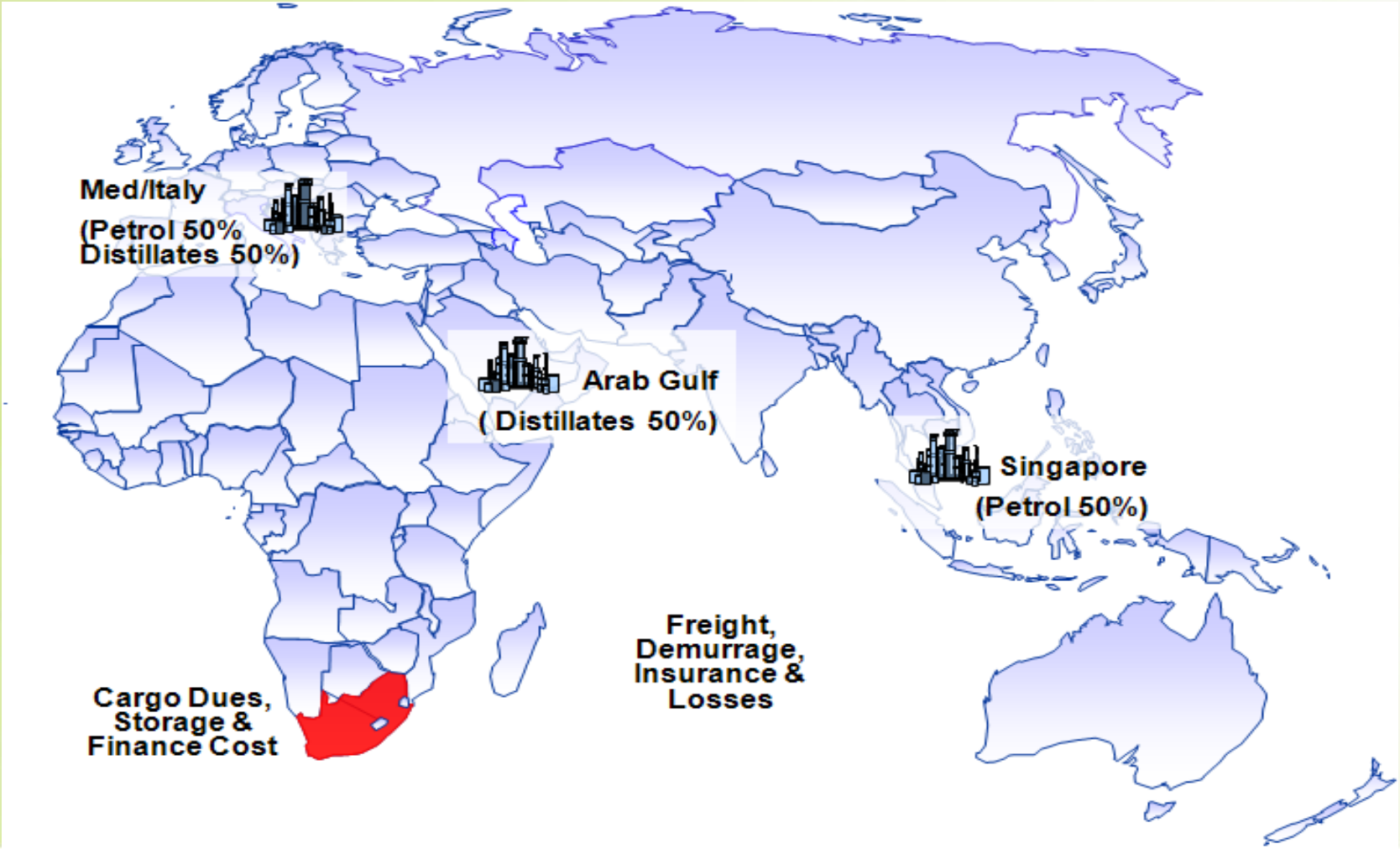
Petrol: 50% Mediterranean (MED) (USD/ton)+50% Singapore (USD/bbl)

Diesel: 50% MED (USD/ton)+50% Arab Gulf (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



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FREIGHT

London Tanker Brokers Panel

MR Vessel: 35,000 to 39,999 tons

Average of 37,499.5 tons used in calculation

Freight costs:

Petrol: 50% Med+50% Singapore

Diesel: 50% Singapore+50% AG

IP: 50% MED+50% AG

NB: 15% premium to supply RSA

INSURANCE, OCEAN LOSS AND CARGO DUES

Insurance=0.15% of (FOB-value+ Freight)

CIF-value=[Costs(FOB)+Insurance]+Freight

Ocean Loss= 0.3% of CIF-value

Cargo dues= Tariff set by the National Ports Authority

DEMURRAGE

- Demurrage is the time spent in a harbour to load and discharge a cargo - hourly rent of vessel, but not operating
- Demurrage rate: World Freight Rate Association
- Rate for petrol:50%MED+50% Singapore
- Rate for diesel and IP: 50% Singapore+50% AG
- Days allowed: 3 days in total

COASTAL STORAGE (CS)

2002: Assessed at $3/bbl or 2.5 SA c/l per month

25 days allowed for storage =2.038 SA c/l

Adjusted annually in line with the movement in the Producer Price Index (PPI)

{CS=PPIn/PPIb*2.083 c/l}

STOCK FINANCING COST (SFC)

25 days of stock-holding

Interest rate: Standard Bank's prime interest rate less 2%

SFC= [LCV*(PR-2)*25/365]

LCV: Landed Cost Value

PR: Prime Interest Rate

SUMMARY OF INTERNATIONAL FACTORS

- Average exchange rate: USD1=R10.60
- Average FOB: 587.146 c/l
- Freight rate and AFRA: 21.002 c/l
- Demurrage: 0.632 c/l
- Insurance: 0.913 c/l
- Ocean Leakage: 1.829 c/l
- Cargo dues: 2.648 c/l
- Coastal Storage: 3.603 c/l
- Stock financing costs: 2.890 c/l

International conversion factors used

WHAT FACTORS INFLUENCE THE MAGNITUDE OF THE BFP?

- International crude oil prices
- International product supply/demand balances
- Product inventory levels
- Geo-politics
- Rand/US Dollar exchange rate
- International refining margins
- Weather patterns in the Northern Hemisphere

NB: go to CEF website: cefgroup.co.za

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
- **Illuminating Paraffin 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

	Petrol 95 ULP c/l	Petrol 93 ULP & LRP c/l	Diesel 0.05% S c/l	Diesel 0.005% S	Illumi-nating Paraffin c/l
Wholesale margin	31.000	31.000	61.200	61.200	61.200
Secondary Storage	17.100	17.100	17.100	17.100	17.100
Secondary Distribution	11.700	11.700	11.700	11.700	11.700
Router Differential	0.000	0.000	0.000	0.000	7.400
Retail margin	139.100	139.100	0.000	0.000	0.000
Zone differential in Gauteng	33.100	33.100	33.100	33.100	52.700
IP Tracer levy	0.000	0.000	0.010	0.010	0.000
Fuel levy	224.500	224.500	209.500	209.500	0.000
Customs & excise duty	4.000	4.000	4.000	4.000	0.000
RAF levy	104.000	104.000	104.000	104.000	0.000
Petroleum Products levy	0.150	0.150	0.150	0.150	0.000
Slate levy	4.380	4.380	4.380	4.380	0.000
DSML	10.000	0.000	0.000	0.000	0.000
Incremental Inland Transport Recovery levy	0.000	0.000	0.000	0.000	0.000
Pump Rounding	0.400	0.400			
Sub-total	579.430	569.430	445.140	445.140	150.100
Contribution to the Basic Fuel Price	853.570	838.570	839.630	844.030	840.128
Retail Price	1,433.00	1,408.00			
Wholesale price			1,284.770	1,289.170	990.228

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SINGLE MAXIMUM NATIONAL RETAIL PRICE FOR PARAFFIN

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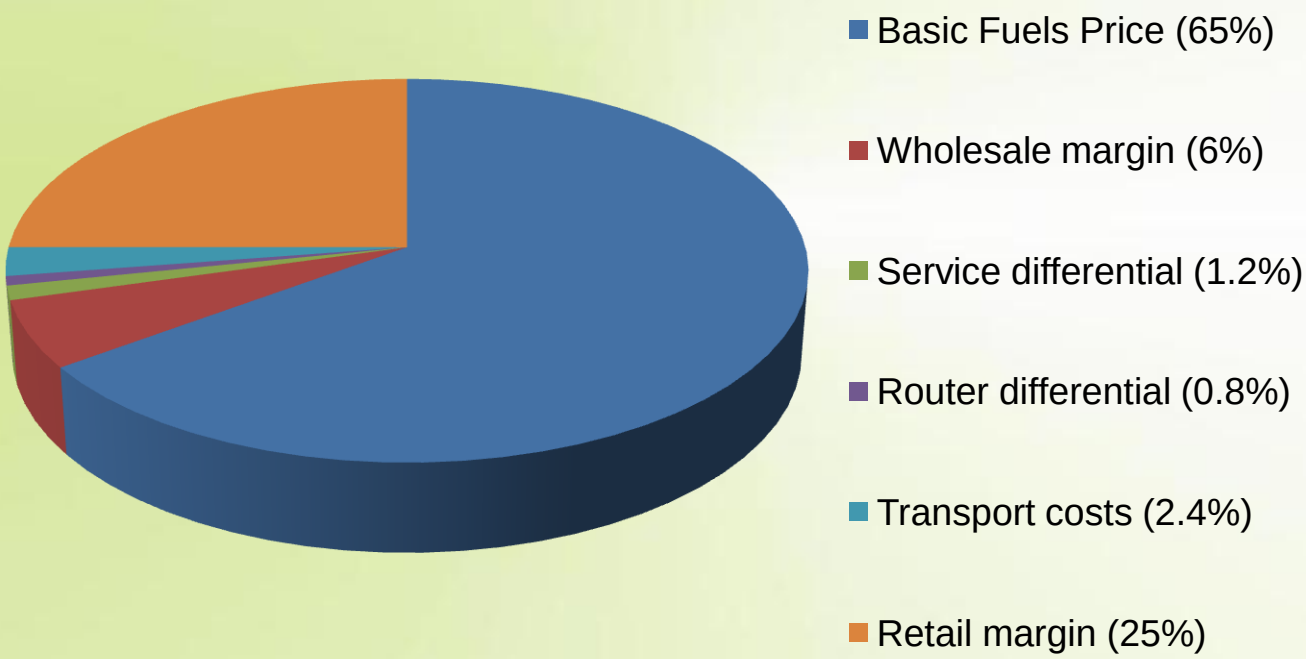
COMPOSITION OF THE SMNRP FOR ILLUMINATING PARAFFIN (IP)

Price component	Cents per litre
Basic Fuels Price	840.128
Wholesale margin	61.200
Service differential	28.800
Router differential	7.400
Transport costs	52.700
Sub-total	**990.228**
Retail margin: (33,3% of 687.013)	301.772
SMNRP (Linked to BFP)	**1292.0 (rounded to full cents)**

The maximum retail price at which "loose" Illuminating Paraffin, i.e. excluding cost of package/ packaging, may be sold at any place in South Africa is R12.92 per litre, in "own container" supplied for filling.

COMPOSITION OF THE SMNRP FOR ILLUMINATING PARAFFIN (IP)



MAXIMUM RETAIL PRICE FOR LPGAS

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COMPOSITION OF THE MAXIMUM RETAIL PRICE FOR LPG

Maximum refinery gate price	1110.821	1110.820
Primary transport costs	37.120	175.960
Operating expenses	343.000	343.000
Working capital	26.000	26.000
Depreciation	126.000	126.000
Gross margin: Cylinder-filling plant	161.000	161.000
Sub-total (1)	**1803. 940**	**1942.780**
Retail Margin: (15% of Subtotal (1))	270.591	291.417
Sub-total (2)	**2074.531**	**2234.197**
Value Added Tax (14% Sub-total (2))	290.434	312.788
Maximum Retail Price (Rounded to full cents)	**2365.000**	**2547.000**

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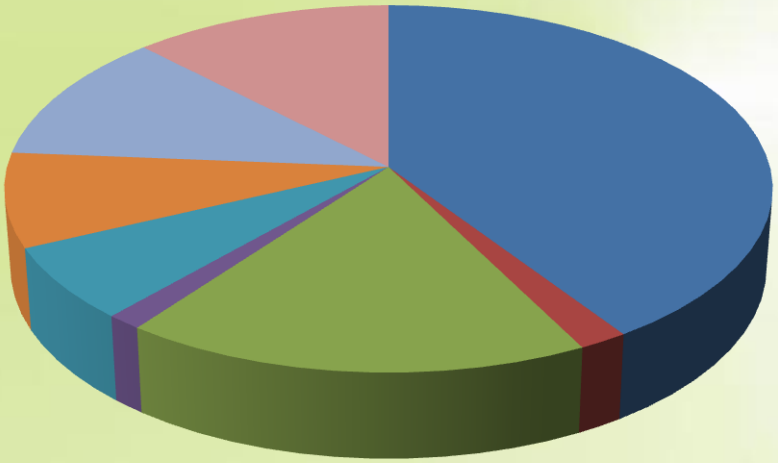
NB: Linked to petrol 93 octane

COMPOSITION OF THE MAXIMUM RETAIL PRICE FOR LPG



- MRGP (41%)
- Primary Transport (2%)
- Opex (18%)
- Working Capital (1.3%)
- Depreciation (6%)
- Gross margin (8%)
- Retail Margin (11%)
- VAT (12%)

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?

QUESTIONS