



NATIONAL ACTIVITIES TO PROMOTE CLEANER FUELS IN MALAWI

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PRESENTATION OUTLINE

1. Legal Framework
2. Petroleum Fuel Sources
3. Petroleum Fuel Products handled
4. Fuel Pump Prices
5. Fuel Import Share by Route
6. Market Share of Petroleum Products
7. Cleaner Fuel Initiatives in Malawi
8. Future Plans

Legal Framework for the Fuel Subsector

1. National Energy Policy (2003)
 - Upstream and Downstream activities of the Liquid Fuels and Gas supply Industry
 - Blending-petro:ethanol: 80:20
 - Fuel pricing
 - Fuel storage facilities
 - Out of date, reviewed and a draft New (Revised) policy is in place
 - The New policy includes diesel blending, diesel:straight vegetable Oil, 92:8

Legal Framework for the Fuel Subsector cont'

2. Liquid Fuel and Gas Supply Act of 2004
3. Liquid Fuel and Gas Supply Regulations of 2009
 - Provides technical requirements for Liquid Fuel and Gas (Production and Supply) which includes, compliance to the following, among others:
 - i. Occupational Safety, Health and Welfare Act;
 - ii. Environment Management Act;
 - iii. Malawi Standards approved by MBS
 - iv. Standard specifications for liquid fuels such as blending, low sulphur e.t.c, and
 - v. Road Traffic Act

Petroleum Fuel Sources

- Malawi is a landlocked country and does not produce petroleum fuels
- Petroleum fuel is imported from neighboring countries
- 70% of national requirement is imported from Mozambique through Beira and Nacala by road and rail respectively.
- 30% of national requirement is imported from Tanzania by road through Dar-es-Salaam

Petroleum Fuels Handled

- Diesel 50ppm from Tanzania
- Diesel 500ppm from Mozambique
- Unleaded petrol
- Blended petrol (80% unleaded petrol-20% Ethanol)
- Illuminating Petrol
- Jet A 1
- Diesel blended with Jatropha pure vegetable oil (92 %Diesel:8%Jatropha)

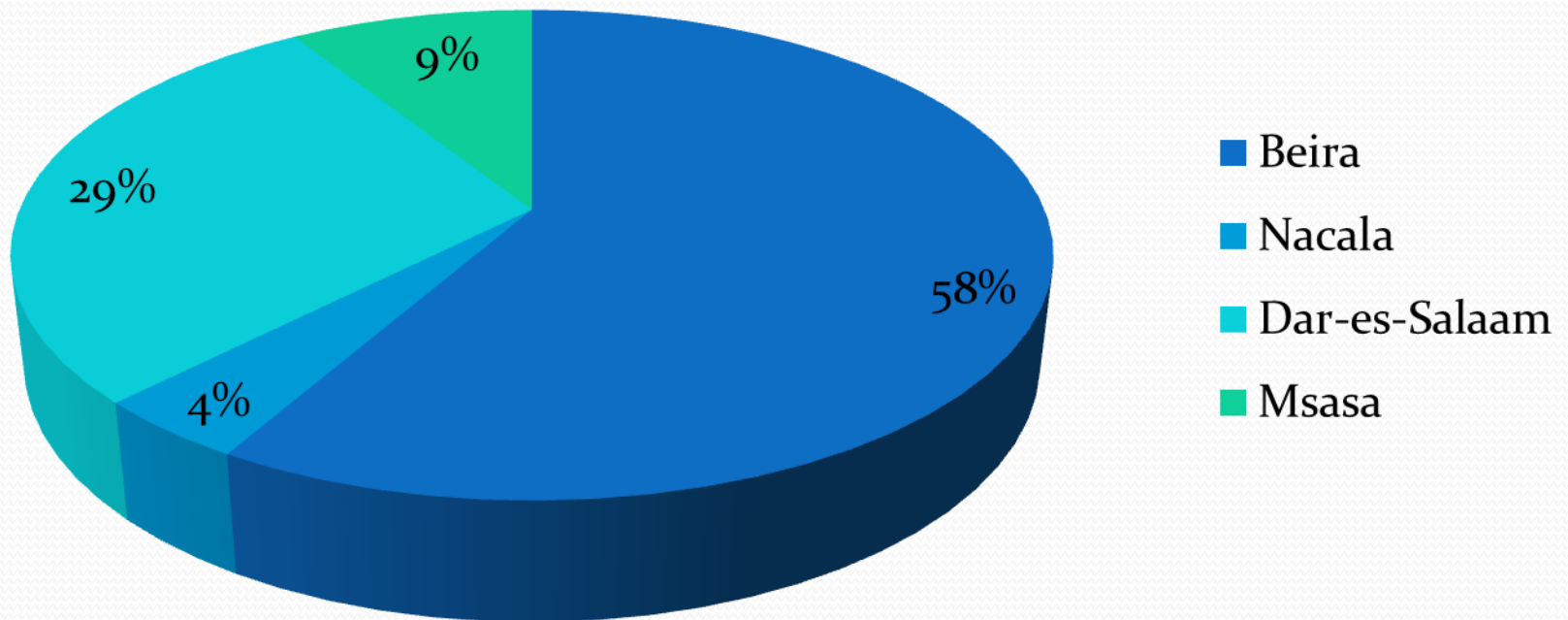
Fuel Pump Prices

- The table shows pump price revisions from January 2015 to March 2017 (Source: MERA)

Product	Jan 15	Dec 15	Jan 16	Dec 16	Jan 17	Mar 17
Petrol	760.40	711.90	711.90	824.70	824.70	824.70
Diesel	785.40	732.70	732.70	815.80	815.80	815.80
Paraffin	678.80	573.10	573.10	648.70	648.70	648.70

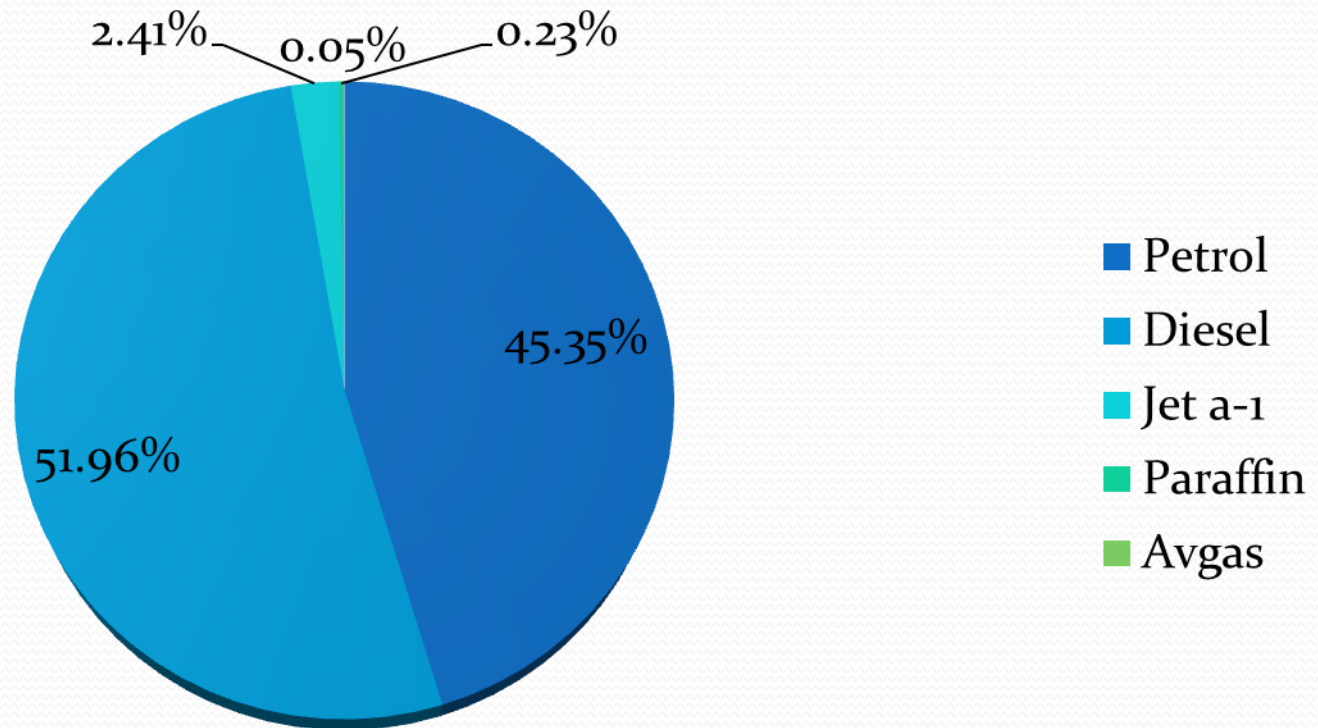
Fuel Import Share by Route

Fuel Import Share by Route (2016)



Market Share of Petroleum Products

Petroleum Products-Market Share (2016)



Cleaner Fuel Initiatives in Malawi

- Just like other countries, air pollution in Malawi is recognized as one of the key environmental issues.
- Malawi has already put in place regulatory measures towards use of cleaner fuels in its quest to prevent air pollution.

Cleaner Fuel Initiatives Cont'

- The Government in collaboration with Malawi Bureau of Standards, Malawi Energy Regulatory Authority and other key stake holders, has:
 1. Completed the phase out of leaded gasoline(enacted in Petrol Malawi standard of 2006).
 2. Reviewed Diesel standard in order to reduce Sulphur level requirement from 500 ppm to 50 ppm (September, 2015) in order to align itself to regional requirements.

Cleaner Fuel Initiatives Cont

3. Promotes use of biofuels
4. Established Biofuel Advisory Council and Biofuels Association of Malawi to assist unlocking biofuel opportunities in the country
5. Fuel Ethanol Driven Vehicles-
 - Amended the MS 503 :2007 standard for industrial grade Ethanol to include an additional usage as fuel for flex vehicles.
 - Research showed that it is possible to use 100% ethanol to drive petrol vehicles after installation of fuel conversion kit

Fuel Ethanol Driven Vehicles

Cont'

- A study for the cost of ethanol production to delink it to Petrol pricing(current Ethanol price is at Par less K5 Petrol price) was finalised
- Service stations identified and pumps installed for rolling out the flex vehicles
- Ethanol producing companies are currently expanding production capacity to increase volumes from current 18million litres to 104 million litres per annum by 2020

Bio-Diesel Driven Vehivles

- Currently piloting 100% bio-diesel driven vehicles in the country
- Blending of Diesel to Straight Vegetable Oils at 92:8
- Jathropha production for bio-diesel production promoted in the country

Future Plans

- Malawi need to secure low sulphur fuels by reviewing logistics to segregate fuels and enhancing fuel quality enforcement and monitoring mechanisms
- Need to enforce regulations against procurement, sale and use of fuels not meeting current fuel specifications
- Need to enact regulations for mandatory vehicle emissions testing, maintenance and inspection .



THE END

THANK YOU