LPG market
Conditions in Uganda

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Overview of the presentation

- energy access in Uganda
- Energy and basic needs in Uganda
- why Liquefied Petroleum Gas (LPG)
- Marketing and distribution in Uganda
- Strategies and Approaches
- Wana Delivery Model
- Sector structure and pricing levels
- Impact of market size on price levels
- Challenges and solutions
- Future Plans and Goals
Energy access in Uganda

- 0.5 – 1% of a population of 33 million use LPG
- 0.45kg per capita lowest in the region
- 80% of most population live in fragmented rural areas
- 89% of the population use fuelwood as a source of energy.
- Under 1% of rural folks have access to energy
- According to CIA world Report 35% of Uganda live below poverty line??
- Lack of clean energy led to 27000 pneumonia deaths
- Women and children are involved in search for traditional fuels
Energy and basic needs in Uganda

- Although not associated to any MDG it is represented at every level of those goals
- Domestic uses (heating and cooking and light commercial industries such as hotels, local brew)
- Household tasks (water pumping, grinding and milling)
- Productive purposes (brick and ceramics firing, metal working, fish smoking)
- Social services (health care, education) use paraffin and fuelwood
Why LPG in Uganda

- A readily available, clean-burning, modern energy carrier
- Liquefied Petroleum Gas is an option which can support sustainable rural development
- LPG has demonstrated health and environmental benefits
- LPG is critical for household and productive uses
- However, availability of fuel, canister size, financing of first costs, and refilling costs are constraints
Marketing and distribution in Uganda

- Currently only 11 companies are involved in the importation and marketing of LPG in the whole country
- No baseline national safety standards and minimal training for dealers
- Lack of storage facilities hence constrained availability
- Lack of awareness although recently there has been an investment in this sector from Wana and Total
- There is no such distributions in rural areas
- Concentration of marketers and distributors in the urban area
- There are several distributors but with minimal training
The trend of LPG consumption between 2005 - 2010

\[ y = 747.05x - 1E+06 \]

\[ R^2 = 0.7696 \]

Yearly Consumption

Linéaire (Yearly Consumption)
LPG Comparison to other petroleum energies

Comparison between Petroleum products used for cooking

<table>
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<tr>
<th></th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Kerosene</td>
<td>39 836,3</td>
<td>42 896,9</td>
<td>34 309,1</td>
<td>74 397,0</td>
<td>81 037,7</td>
<td>57 391,7</td>
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<tr>
<td>Fuel Oil</td>
<td>44 423,2</td>
<td>38 289,4</td>
<td>34 383,8</td>
<td>29 278,8</td>
<td>194 823,0</td>
<td>124 735,6</td>
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<tr>
<td>LPG</td>
<td>4 487,6</td>
<td>5 800,0</td>
<td>7 272,5</td>
<td>8 272,0</td>
<td>8 598,7</td>
<td>7 837,9</td>
</tr>
</tbody>
</table>
Industry sales of LPG, K, Fuel Oil between Jan’10 – Dec’10

- **Kerosene**
- **Fuel Oil**
- **LPG**

**Monthly Sales**

- Oct-09
- Jan-10
- May-10
- Aug-10
- Nov-10
- Feb-11

**Months - Jan'10 - Dec'10**
Wana delivery model

- Selection of optimal “baskets” – fuels and appliances
- Demand side facilitation – customer/market approach
- Coordinated implementation with stakeholders
Strategies and Approaches

- Credit to mainly salaried Staff through employee – Wana – Employer relationship
- Deliver to customers premises as advised by household
- Health and safety training to households during installations
- Cages at local supermarket and or at work places
- Seminars and Presentations to Schools, Hospitals and Companies, such as banks
- Provide subsidised packages to community leaders
- Employing women entrepreneurs as LPG Dealers
- Customers are treated on individual basis
Sector Structure and pricing levels

Ownership structure
- Existence of monopoly supplier
- Market concentration
- Storage and cylinders needed before market entry

Pricing Policy
- Price control: price ceilings, pan-territorial pricing, Specified prices
- Import tariff for Bulk and Whole unsymmetrical
- Ad hoc government intervention to smooth prices - VAT

Inadequate regulations or enforcement
- Outdated legal framework
- Competition from illegal refills and cheaper fuelwood
- No effective check on short-selling, mislabelling, and failure to meet quality specifications
Impact of market size on price levels

Is the market a large or small consumer of LPG? Economies of scale affect the cost of supply: import, transport and distribution infrastructure, and competition in the market.

Is there a local filling plant?

Storage and filling plant are they large enough to be able to compete with imports if efficiently structured?

If domestic market is too small, the storage size can not be increased to sufficient levels with low returns?

What is the state of competition across the supply chain?

Can there be several competitors of comparable size without losing scale economy?

What is the status of transport infrastructure?

Are there alternative transport modes that could be cheaper and why are they not used?
Challenges and Solutions

- Lack of government commitment in including LPG in National energy planning
- No regulations and policies which regulate LPG use in Uganda
- High cost of LPG accessories due to taxes and VAT
- Lack of awareness amongst the population both in rural and urban areas
- Lack of storage facility hence population reverting to traditional fuels wherever there is a shortage
Challenges

- Low density of LPG target population
- Low purchasing power and even sometimes barter communities
- Need for local credit facilities, issues with collateral
- Lack of safety culture and regulations
- Strong competition of cheaper alternative energy sources
- Inadequate energy State policy to stimulate LPG development
- Weakness of LPG distribution networks in remote rural area
Solutions to challenges

- Improve market information for both suppliers and purchases. If the public is well informed it becomes difficult to ignore sector inefficiencies.

- Provide historical price information to the public as this makes it difficult for perception prices to be checked against actual price trends.

- Fuel shortages have had serious adverse effects on price levels hence pushing customers back to traditional fuels.

- Over the longer term, in order to ensure sufficient fuel stocks there need be a enough storage facilities in the industry.

- An effective and well regulated competitive market imposes relentless pressure on participants to improve efficiency.
Future Plans and Goals

- Formation of a national Association as a voice of LPG fraternity
- Advocacy for National regulation and safety standards
- Training for distributors marketers and points of sale
- Research and development – working with Medical groups, women groups
- Put in place a mechanism of enabling rural folks to access LPG as a clean and sustainable energy
- Plan to increase LPG consumption from the current 1% in 2010 to 20% by 2020
- Invest in women entrepreneurs as dealers in LPG
Thanks you all

we welcome you all

to

the inauguration of Uganda Liquefied Petroleum Gas Association

in Kampala

8th July 2011 – Serena Hotel