REFORMING SUBSIDIES IN KENYA’S POWER SECTOR

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Outline

• Overview of the Power Sector in Kenya
• Power Reforms and Tariff Determination
• Fiscal Policy Vs Power Subsidies
• Motivation of Power Subsidies
• Reforms in Power Subsidies in Kenya
• Lessons Learned in Power Subsidy Reforms
Overview of Power Sector Kenya

- Ministry of Energy Provides Policy Guidance
- ERC provides Technical and Economic Regulation
- KenGen and IPPs in Power Generation
- GDC in Steam exploration and drilling
- KETRACO and KPLC in Transmission
- KPLC and REA in power distribution and reticulation
- Off Grid stations run by REA and KPLC
- Almost a perfect Single Buyer Model
- RR recovered through KPLC retail tariff
- Over 6 regulated private sector minigrids
## Overview of the Power Sector in Kenya

### Summary Statistics

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Unit of Measure</th>
<th>September 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installed capacity</td>
<td>MW</td>
<td>2,351</td>
</tr>
<tr>
<td>Effective Capacity</td>
<td>MW</td>
<td>2,261</td>
</tr>
<tr>
<td>Peak demand</td>
<td>MW</td>
<td>1,832</td>
</tr>
<tr>
<td>Commissioned Generation Projects since March 2013</td>
<td>MW</td>
<td>685</td>
</tr>
<tr>
<td></td>
<td></td>
<td>364(pre-commissioning)-1,049</td>
</tr>
<tr>
<td>Electricity access</td>
<td>%</td>
<td>74%</td>
</tr>
<tr>
<td>Total number of connected customers</td>
<td>No.</td>
<td>6,800,853*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(as at 31st August 2018)</td>
</tr>
<tr>
<td>Universal Access</td>
<td>%</td>
<td>Year 2022</td>
</tr>
</tbody>
</table>
From Independence in 1963 to 1997, the power sector was HIGHLY subsidized.

Major Electricity Reforms - Began with *Power Act 1997* - Unbundled Generation from Transmission and Distribution.

The *World Bank* has been key in supporting power reforms in Kenya.


Power prices in Kenya are currently regulated based on best practices.

Revenue Requirements are recovered in the retail tariff.

... but some form of subsidies do exist.....
• **Section 45 (3)**-In considering a contract under subsection (1), the Commission shall:
  (a) ensure that the rates or tariffs established in the contract are just and reasonable

• **(4)** … just and reasonable tariff shall mean a rate that enables a licensee to, *inter alia*
  (a) maintain its financial integrity;
  (b) attract capital;
  (c) operate efficiently
  (d) fully compensate investors for the risks assumed.
Kenya’s Fiscal Policy Vs Power Subsidies

- The National Budget has grown over time to meet needs of expanding economy
- A new Constitution in 2010 created devolved systems of Government since 2013 (47 County Governments)-Increase in Expenditure
- Increase in financing of basic needs such as Water, Healthcare, Education, Shelter and Electricity etc.
- Reforms instituted at the National Treasury to increase GoK revenue and improve utilization of the available resources
- Public Private Partnerships (PPP)-PPP Act 2013
- Need for Social Equity Objectives in power tariffs to enhance affordability by poor households
- Need to attract investments by providing competitive tariffs
Kenya’s Fiscal Policy Vs Power Subsidies:

Types of Power Subsidies in Kenya

- Extension of National Grid to the Rural and Informal sector Communities-Not always economically viable
- Connection subsidy in the last mile connectivity program (Universal Access by 2022-(GoK and World Bank/Development Partners).
- Transmission Network Development subsidy to KETRACO to support transmission of electricity from generation to load centers.
- Subsidization of capex for off grid systems by the Government-(REA and KPLC)
- Subsidization of capex in privately run mini grids with grants from development partners-(for example Power hive, Sidonge, Talek Power)
- Rebates to Manufacturers (CI1 to CI5) targets to be set in line with Finance Act 2018
- Export Processing Zones Exempted from VAT only
Kenya’s Fiscal Policy Vs Power Subsides

Power Subsidies % of GDP

• The Development budget in the power sector has gone to steam exploration and drilling, extension of the National Grid, Rural electrification, last mile connectivity program.
• Estimated GoK Development allocation to power sector ranges from 0.48% to 0.87% of the GDP at market prices.
• The direct Last Mile Connectivity Subsidy ranges from 0.01% to 0.03% of the GDP.
• Allocation for grid extension, transformers, substations and system improvement are long term in nature and MAY NOT be seen as direct subsides to the tariff.
• Cross subsidies in the retail tariffs-life line tariff-much lower than tariffs charged to other consumers.
• Life line tariff meets the cost of generation.
Kenya’s Fiscal Policy Vs Power Subsidies:
Rebates in the Power Sector to Support Big 4 Agenda

Rebates-A partial refund to someone who has paid too much for tax, rent, or a utility.

• Finance Act 2018 has been amended to allow for rebates at thirty percent of electricity cost incurred by manufacturers in addition to the normal electricity expense, subject to conditions set by the Ministry of Energy.

• The scheme targets Commercial and Industrial Customers with a 9.0 US¢/kWh tariff.

• CI1 to 5 total non fuel tariff ranges from 10.10 US¢/kWh to 12.00 US¢/kWh; SMEs Tariff is 15.6 US¢/kWh

• The National Treasury and MOE conditions are based on Key Performance Indicators (KPI)-such as increase in Labor, growth in demand/consumption, increase local labor force, increase in electricity demand.
Motivation of Power Subsidies in Kenya

Why subsidies

- To achieve *affordability of power to low income* households and business enterprises
- Support industrial growth-EPZ, *Increase share of manufacturing to the GDP*
- Enhance *bankability* of projects for example LTWP
- Reduce cost of power generation – *Subsidize Steam Drilling* in geothermal Power generation
- The Government owes its citizens *quality supply* of electricity which is is a key aspect of better living standards
Reforms in Power Subsidies in Kenya:
Impact of subsidies in the Power Sector

**Positives**

- Accelerate access and electrification
- Affordability of electricity by low-income households
- Promotion of industrial growth, as they lower the cost of electricity as an input.

**Negatives**

- Can lead to tariffs that are not cost reflective
- Can affect economic feasibility and financial viability of power utilities
- Negates adjusting tariffs in the future---consumers will resist an increase in tariffs in the new future
Reforms in Power Subsidies in Kenya:
Efforts to Reduce Power Subsidies

- Good Energy Policy 2004 introduced further reforms in the energy sector
- Energy Act 2006 - Cemented reforms that reduced the number of subsidies
- Ensure we have cost reflective tariffs in the electricity sub sector
- The *Life Line Tariff* covers the cost of generation
- Ensure *Revenue Requirements (RR)* in the Power sector are recovered in the retail tariff
- All O&M Costs in T&D recovered in RR
- Introduced Steam Cost Charge - Pay loans and O&M of GDC
- Rural Electrification Levy - 5% of Power consumption
- Timely review of electricity tariffs to ensure enough revenues to the sector
- Introduce *rebates that are based on performance (KPIs)* to promote industrial growth and spur employment instead of direct subsidies
Reforms in Power Subsidies in Kenya: Achievements in Power Subsidies in Kenya

• ERC has ensured that Kenya has a cost reflective tariffs in the electricity sub sector

• Timely review of electricity tariff despite electioneering period. Kenya had two presidential elections but the Commission still managed to review the tariff

• The Life Line Tariff has been reduced from 50kWh to only 10kWh to ensure that only vulnerable members of community enjoy this tariff

• The life line customers pay for the Cost of Generation including the pass through costs (FCC, Forex, Inflation adjustment and WRMA levies

• Introduced a Steam Charge in Geothermal power-paying (O&M) and loans to GDC

• Finance Act 2018 has Introduced rebates that are based on performance (KPIs)

• Introduced a Wheeling Tariff for KETRACO Lines based on O&M
Lessons in Power Subsidy Reforms

• Subsidizing consumers will lead to non cost reflective tariff
• Subsidies will compromise financial integrity of utilities as well as their financial health
• Subsidy reforms should be gradual and well thought out to abate resistance
  i. Get consumers used to paying a cost reflective tariff
  ii. Nobody wants to pay higher electricity bills and removal of subsidies will be resisted...the reduction of Lifeline Tariff from 50kWh to 10kWh faced resistance
  iii. Rebates based on KPI are better than subsiding tariffs for the industry
  iv. Good policy and legislation are required to support and good tariff reform regime
Thank you