

Beyond The Grid Fund For Africa (BGFA) – Bioenergy Workshop

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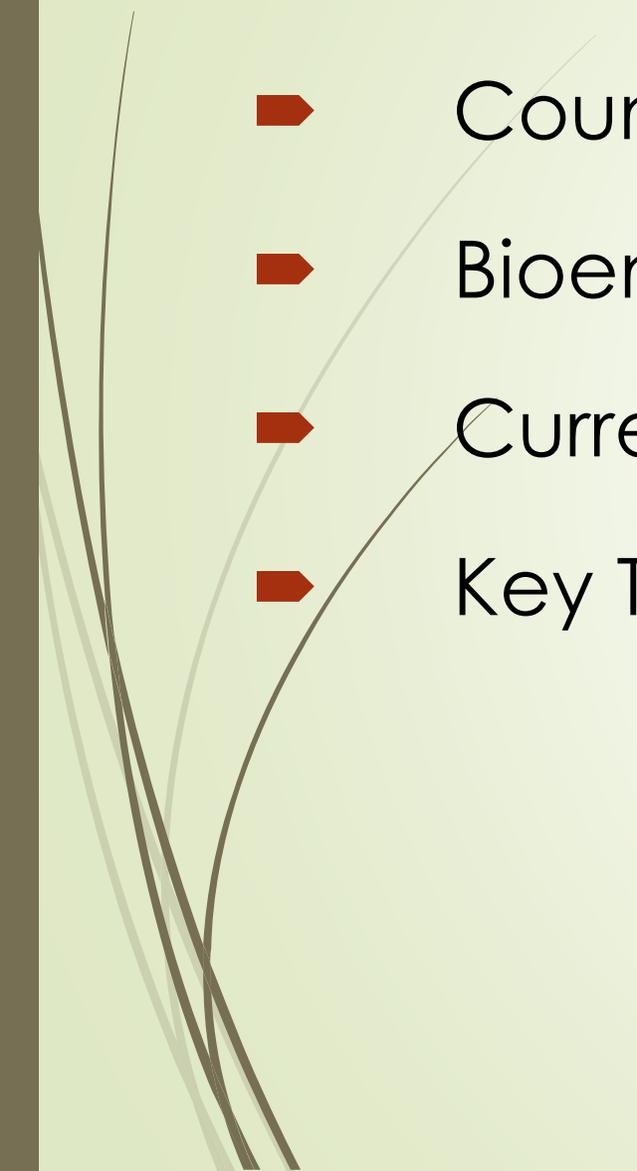


**Presentation on Bioenergy in Zambia, Current and
Pipeline Initiatives**

Lusaka, Zambia
19 September, 2019

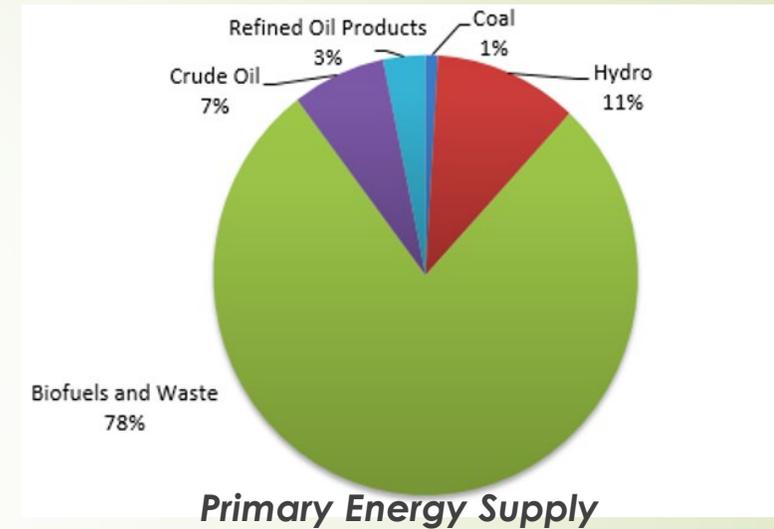


Outline

- Country Context
 - Bioenergy Policy Framework
 - Current and pipeline of projects
 - Key Take-Aways
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Country context

- Bioenergy contributes over 70% to total energy consumption
 - wood fuel (firewood and charcoal),
 - agricultural wastes,
 - forestry waste, etc.
- Woodlands and forests are estimated to cover about 50 million hectares or 66 percent of Zambia's total land area.



- high rate of deforestation estimated between 250,000 to 300,000 hectares per year.
- Households account for about 88% of woodfuel consumption out of which 60.9% of households use firewood for cooking and 24.3% used charcoal.
- In rural areas, 87.7% use wood for cooking, 9.5% use charcoal
- Only 4.4 percent of the rural population has access to electricity while access is higher in Urban Areas at 67%.
- 2013 Study indicates 500 MW potential

Bioenergy Policy Framework

- ▶ Country's development blueprint – **Vision 2030, and the Seventh National Development Plan (7NDP)**
- ▶ the Vision 2030 is to achieve universal access to clean, reliable and affordable energy at the lowest total economic, financial, social and environmental cost. Specific goals for the vision include;
 - ▶ ensuring abundant and reliable supply of affordable energy to both urban and rural areas;
 - ▶ increased renewable alternative sources of energy;
 - ▶ Becoming an export led energy industry; and
 - ▶ **reduced share of wood fuel to 40%.**

Bioenergy Policy Framework cont..

- **2008 National Energy Policy**
- "To create conditions that will ensure the availability of adequate supply of energy from various sources, which are dependable, at the lowest economic, financial, social and environmental cost consistent with national development goals".
- The NEP "seeks to ensure environmentally sustainable exploitation of the biomass resource by ensuring efficiency through better management and introduction of new and modern cooking technologies such as, improved biomass cookstoves and biogas especially for rural areas, briquetted, Liquefied Petroleum Gas (LPG) and others".
- **2015 Nationally Determined Contributions**
- **2008 Rural Electrification Master Plan (REMP):** 100% access in urban areas and 50.6% access to electricity in rural areas by 2030

Bioenergy Policy Framework cont..

- **Zambia Sustainable Energy for All initiative (SE4ALL)**
- Aligns with the Global Sustainable Energy for All (SE4ALL) 2030 targets on clean cooking
- Implemented over two cycles: the first one being from 2019 – 2025 and the second one from 2026 - 2030
- The first cycle will stretch slightly over five years and overlap with the remainder of the 7th National Development Plan, 2017 -2021.
- Outlines 2030 national targets and Identifies clean cooking programmes for the period 2019 to 2025



Objective: To increase **access to modern and Clean Energy Cooking Solutions**

Scope: **clean cooking solutions** (such as LPG, Electricity, biogas & improved cooked stoves)

Outcomes/Benefits

- Improve **health outcomes**
- **Increased Productivity**

Rationale: **Low access to Clean Cooking Systems**

Current and Pipeline Bioenergy Initiatives

1. SE4ALL Access to Clean Cooking Projects

Project 1

Scaling biogas installations
Target - 3,500 4m² domestic digesters by 2025
Total Investment (USD) – \$3,545,500
Financing Gap - \$3,545,500
Developer – Public Private Partnership

Project 2

Integrated clean cooking project
Target - Deploy 800,000 ICS, 100 LPG distribution and storage centers by 2024
Total Investment (USD) – \$9,400,000
Financing Gap - \$9,400,000
Developer – Public Private Partnership

Project 3

Modern clean cooking solutions
Target - 100,000 stoves by 2025,
10,000 tons of wood pellets per year,
200,000 tons per year by 2025.
Total Investment (USD) – \$36,000,000
Financing Gap - \$12,000,000
Developer – Private



Current and Pipeline Bioenergy Initiatives cont...

2. Scaling-up Renewable Energy Programmes (SREP)

- ▶ SREP - Energy Access in Rural and Peri-Urban Areas component
 - ▶ Increasing access to electricity and clean cooking solutions for rural, peri-urban and urban households;
 - ▶ providing partial grants and subsidies to support private sector led projects

3. Electricity Service Access Project (ESAP).

- ▶ ESAP Clean Cooking Component
 - ▶ will build both a public sector framework amenable to transforming the country to a reliance on cleaner and more efficient cookstoves and fuels as well as
 - ▶ investing through Result-Based-Financing (TBF) in strengthening the supply chain for the supply of more efficient stoves and clean stoves and fuels.

Current and Pipeline Bioenergy Initiatives cont...

4. Energy for Agriculture Project

- Implemented by SNV, the Netherlands Development Agency in collaboration with the Ministry
- aims at developing the biogas market in Zambia in order to increase households' access to clean cooking energy solutions.
- In addition, the project seeks to improve livelihoods through increased fuel savings and income generation, stimulate consumer demand for cooking solutions through promotion and access to finance, and supports demonstration of productive use of bio-slurry for agricultural purposes.
- has resulted in the development of about 4000 biodigesters country wide
- **The government seeks to implement the second phase of the project**

Current and Pipeline Bioenergy Initiatives cont...

5. Bioenergy and Food Security (BEFS) Assessments

- ▶ define to what extent sustainable bio-energy can contribute to the country's energy mix (including cooking)
- ▶ develop a Bioenergy Action Plan for sustainable development of the bioenergy sub-sector based on a comprehensive analysis of the agriculture, energy food security and economic context.
- ▶ The outputs of the project will be:
 - ▶ Capacity building and multi-stakeholder institutional dialogue.
 - ▶ Bioenergy assessment for rural energy (Electricity and clean cooking)
 - ▶ Bioenergy assessment for transport
 - ▶ Bioenergy action plan
- ▶ The first presentation of the results of the BEFs Assessments results will be done in November, 2019.



Key Take-Aways

- ▶ Successful implementation of Bioenergy investment pipeline will require close collaboration with Cooperating Partners and the private sector for financial and technical Support
- ▶ It is envisioned that the BGFA will contribute towards the attainment of National targets as well as achieve the following;
 1. mobilization of resources
 2. provide an opportunity for increased private sector participation in the quest to deliver sustainable energy to all Zambians.
 3. the development of bankable and viable projects,



Thank You For Your Attention!