

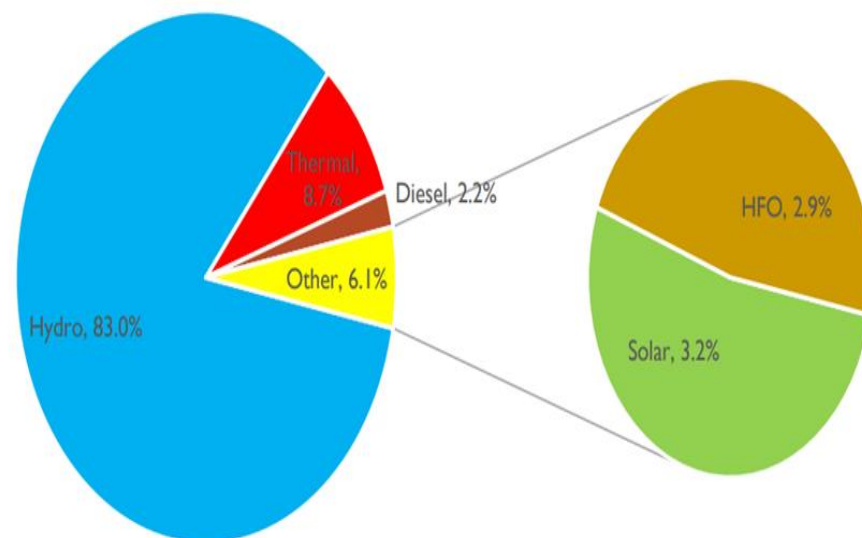
Workshop on Lessons Learned from the UNCTAD Pilot Project on Technology Assessment in Africa"



Assessment of Technology for Renewable Energy (Biogas) Transition in Zambia



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PRESENTATION OUTLINE

TA Process

**TA Outcomes and
Insights**

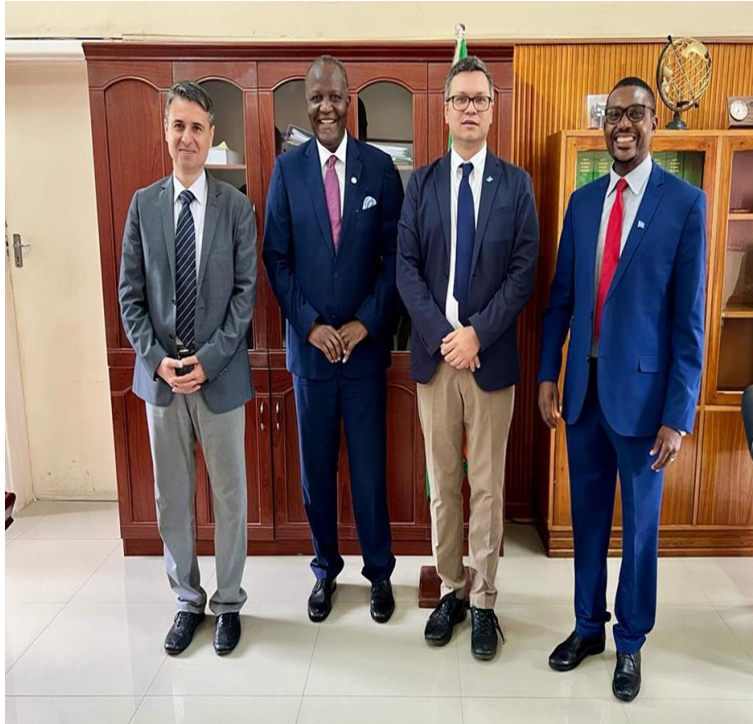
**Lessons Learnt and
Actions**

Next Steps



Outline

PROCESS - TA OF BIOGAS TECHNOLOGY IN ZAMBIA (2019 - 2023)



- **Endorsement by Zambian Authority to participate in TA Project – 2019**
- **Formation of EG and SC Committees – 2019**
- **Launch and 1st National Stakeholders Workshop – April 2022**
- **Implementation of UNCTAD TA Methodology in Energy sector - Biogas**



PROCESS - TA OF BIOGAS TECHNOLOGY IN ZAMBIA (2019 - 2023)

According to the UNCTAD TA Methodology, the Assessment for Biogas Technology was aimed at achieving the following Objectives:

1. To allow policy makers, universities, public and private sectors understand better, the concept of Technology Assessment in national development;
2. To identify gaps in Technology Assessment, especially in agriculture and energy;
3. To identify priority areas for Technology Assessment in energy and agriculture for Zambia;
4. To develop a work plan for Zambia's participation in the UNCTAD project; and
5. To design Zambia's Technology Assessment Methodology in partnership with UNCTAD.



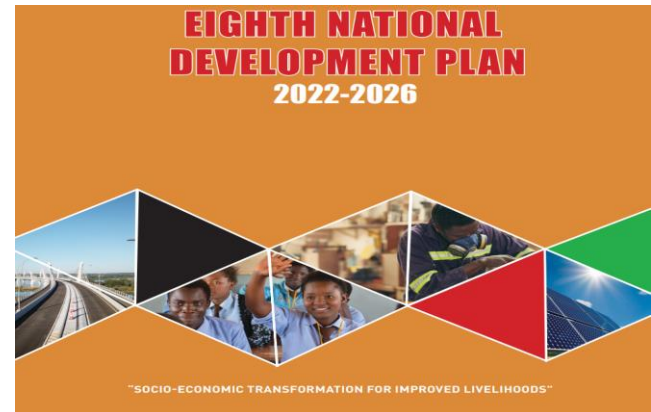
PROCESS - TA OF BIOGAS TECHNOLOGY IN ZAMBIA (2019 - 2023)

1. SC membership of 14 at Director level, representing Government, Universities, R&D institutions, NGOs and Private sector. (about 5 were committed, while other sent representatives)
2. EG membership of 17 of Experts, representing Government, Universities, R&D institutions, NGOs and Private sector. (about half were committed and a few sent representatives)
3. Stakeholders in Biogas were contacted brought to Lusaka, from all the ten (10) Provinces of Zambia
4. Survey Questions were developed and shared electronically and physically, and groups discussions during National Workshop to stakeholders to gather data and evidence on Biogas which has been ably captured in the UNCTAD TA Report on Biogas assessment in Zambia.

Policy Directions

Zambia 8NDP

- The UNCTAD TA Project came at right time when Zambia was about to launch the Eighth National Development Plan (8NDP).
- The 8NDP calls for investment in Green and Renewable Energy (Biogas) for Zambia to achieve:
- **Strengthen Climate Change Mitigation (8NDP)**
 - support interventions in forestry, agriculture and energy
 - Increase percent of renewable energy in the national from 3 percent to 10 percent . Enough availability of Biomass in the country
 - More focus towards promotion of alternative affordable energy , in the event of hydro - electricity challenges
- ☐ **2020 National STI Policy**
- ☐ **2019 National Energy Policy**
- ☐ **Zambia's Vision 2030**
- ☐ **SDGs Achievements**



TA Outcomes and Insights

Although Biogas Technology is well established in developed Countries, it is relatively new in developing countries, including Zambia. Therefore, the TA in Biogas Technology for Zambia has reviewed and brought to the fore the following:

- The importance and quick wins of supplementing energy sources using biogas especially for cooking and lighting in the short term,, with priorities especially in the peri-urban and rural areas.
- Electricity access challenges require sustainable solutions like Biogas adoption.
- Awareness on Biogas Technology still remains very low in the country.
- Needs for incentivizing citizens to move from tradition way of cooking and lighting to safer, cleaner and more efficient methods such as Biogas.
- In the event of load-shedding caused by climate change due to dependence on hydro-electricity Biogas has been highlighted to have potential of improving access to electricity, security of supply, power needs of the population, renewable in nature, and has potential to have an impact on the social, economic and environmental challenges of the country.
- Hence, the need to actualize the ten (10) recommendations in the UNCTAD TA project assessment on Biogas Technology cannot be over emphasized.
- The TA on Biogas Technology has been appreciated in Zambia as a tool that can be used in assessing other appropriate technologies to support socio-economic and environmental development as provided for in Zambia's 8NDP.

Highlights on outcomes

Actions Resulting from TA in Zambia

Areas Needing Attention

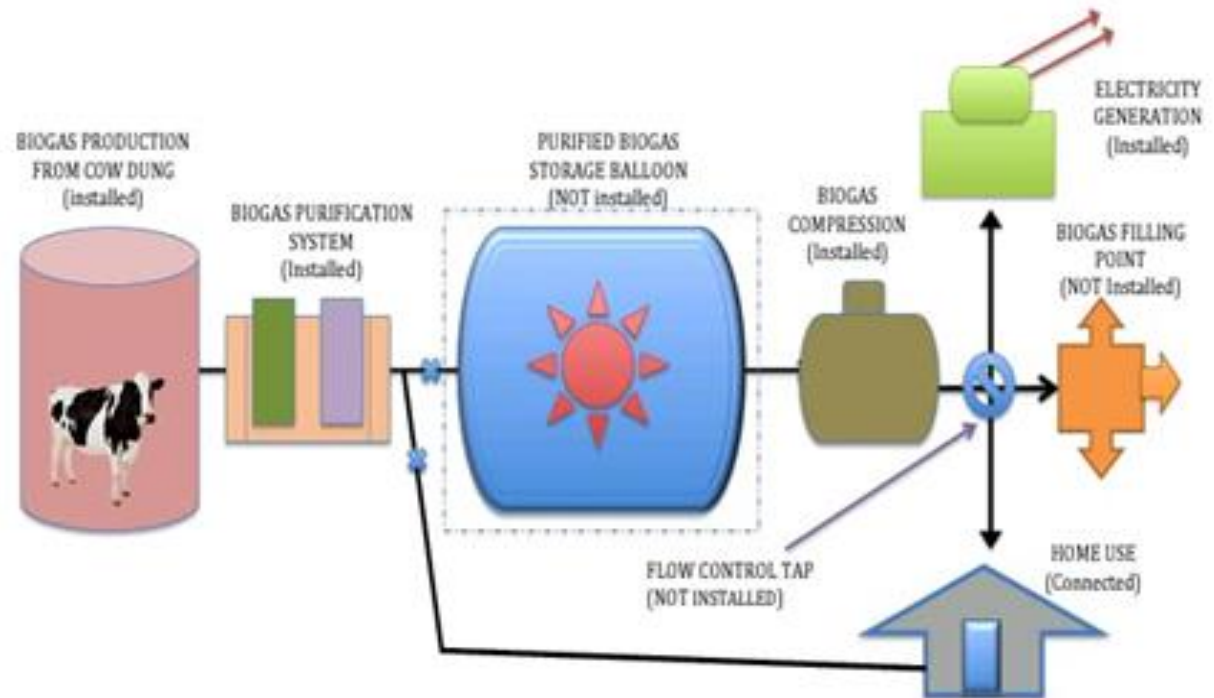
- Affordability and safety of appropriate Biogas Digester
- Packaging
- Feedstock
- Bio-Fertilizer
- Safe use of Biogas for cooking and lighting
- Purification



FUTURE INITIATIVES FOR PROMOTING BIOGAS IN ZAMBIA

Next Steps

THE IDEAL BIOGAS PURIFICATION, ELECTRICITY GENERATION AND PACKAGING PROCESS (NO SHORTCUTS)



Thank
You!

