

Opportunities for Investment in the East African Bio-Economy

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Background

SouthSouthNorth (SSN) is a climate change consultancy and NGO based in Cape Town engaged in successful project delivery track record in sub Saharan Africa for 20 years. Further details can be found at www.southsouthnorth.org.

Mobilising Investment is a program managed by SSN, funded by the German Government under the International Climate Initiative, that supports seven developing countries to meet their commitments to the Paris Agreement. Key objectives of Mobilizing Investment are to address barriers and mobilize private sector finance to fund NDC's.

The Kenyan country programme have evaluated the case for investment into a local bio-ethanol industry as feedstock for clean cooking and is completing an Ethanol for Cooking Masterplan.

In Ethiopia, SSN is working with Government & the private sector to support the financing of mini-grids for agriculture productive use.

Both country programmes provide opportunities for investment in sectors that have momentum, government support and significant climate, food security and social co-benefits and are aligned with multiple SDG's.



Kenya: bioethanol for clean-cooking

CAPEX requirements for 50% local production ranges from USD \$130m to \$750m

Dirty (smoke and soot producing) cooking fuels such as kerosene, charcoal and wood are associated with significant environmental damage & health challenges, particularly for women and children.

Bioethanol is a viable clean burning alternative, if competitively priced, with reduced environmental, social impact and scope for local economic benefits. Bioethanol provides a springboard into the bio-economy sector.

The GoK is enabling the bioethanol sector through the implementation of policy reform and fiscal incentives.

SSN has supported the development of a sub-sector Masterplan using sugarcane and cassava as feedstocks. CAPEX requirements for 50% local production ranges from USD \$130m to \$750m depending on the technology and feedstock pathway.

Co-benefits include up to 370,000 jobs, KES 51 billion in new income generated, additional income of KES 180,000 per year for smallholder farmers, 54 million trees saved, GHG emissions: Up to 13.4 billion kgs of Co2 equivalent saved.

Key Stakeholders engaged:

- Ministries of Environment & Forestry, Industrialization, Energy & Agriculture
- Private sector: KOKO Networks, Giraffe Energy, members of the clean cooking alliance.
- Development partners – UNIDO, GIZ



Ethiopia: electrification of rural agriculture clusters

Energy access for rural communities is a key objective of Ethiopia's Climate Change and Electrification Policy.

Barriers include high up-front capital cost and the commercial model – these can be solved through blended finance, removing regulatory barriers, tariff structures and investing in capacity of enabling agencies

Opportunity for PV mini-grid installations linked to agricultural Commercialization Clusters. There are 2000 clusters countrywide consisting of 200 households, 180 Ha under cultivation, SMEs and public facilities, priority crops (wheat, maize, sesame, malt barley, tomato, onion, banana, mango and avocado) accounting for 75% of the country's crop production.

Access to electricity will allow for increased efficiency & productivity for clusters through irrigation pumps accessing ground water, cold storage, drying, mechanization and EVs.

Key stakeholders engaged

- MoWIE - Ministry of Water Irrigation and Energy
- EEA, EEU – Ethiopian Electricity Authority, Ethiopian Electricity Utility
- Agriculture Transformation Agency (ATA)
- ERG – Ethio Resources Group, Powerhive



Investment Opportunities – Kenya

Opportunities

- Entry into cooking fuel market, through alternative cook stove technology.
- Bioethanol production infrastructure: 2 – 7 plants required depending on pathway.
- Investment in Cassava and Sugarcane feedstock production
- Bioethanol for clean cooking to secondary cities in Kenya, & elsewhere
- Support SME's to benefit from the value-chain, particular feedstock out growers in sugar and cassava.
- Support GoK to access climate finance.

Potential role for WBCSD

- Engage with and outreach to private sector partners (multinationals with operations in Kenya, who are directly and indirectly affected by the regional energy issues) – such partners' CSI activities may align or there may be opportunities for new ringfenced CSI support.
- Identify synergies with existing circular economy aligned interventions in Kenya and East Africa – e.g. synergies for alternative bio-ethanol feedstocks, feedstock solutions, logistics, off-takers etc
- Enable private sector engagement

SouthSouthNorth will facilitate market entry by:

- Leveraging network of contacts in government, private sector and donor agencies
- Bring stakeholders together to share ideas, discuss solutions and plan implementation
- Look for sources for concessional finance to de-risk early stage projects.
- Undertake scoping studies and market analysis

Investment Opportunities – Ethiopia

Opportunities

- Feasibility studies and development of agriculture productive use mini-grid sites.
- Public private partnerships for agriculture and energy infrastructure.
- Focus on export agriculture value chains

Potential role for WBCSD

- WBCSD's focus is on mini-grid solutions aligned to commercial and industrial users and has direct insight in the financing challenges and solutions as well as access providers of capital and technology
- Promoting and supporting eco-inclusive agri-business activities – which in turn provide offtake points for mini-grid operators.

SouthSouthNorth will facilitate market entry by:

- Leveraging network of contacts in government, private sector and donor agencies
- Brokering PPP arrangements where appropriate.
- Bring stakeholders together to share ideas, discuss solutions and plan implementation
- Look for sources for concessional finance to de-risk early stage projects.
- Undertake scoping studies and market analysis

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