

Khainza Energy produces high-quality methane from organic waste obtained from farms and households and distributes it in affordable, recyclable cylinders along with cooking appliances. Khainza Energy incorporates local women, farmers, and youth along its distribution channels, creating value for consumers as well as local communities.



SEED Low Carbon Award Winner 2018 Khainza Energy Limited

Khainza Energy Limited, Uganda

🏆 SEED LOW CARBON AWARD WINNER 2018 🏆

Business model

Khainza Energy is committed to providing clean, safe, and affordable cooking fuel solutions to Ugandans. It is an innovative circular economy business that obtains organic waste from smallholder farms and local households for processing and refinement into high-purity methane. It then distributes cooking appliances and affordable, recyclable biogas cylinders locally, incorporating local women, youth, and farmers along its value chain and distribution channels.

Khainza Energy's eco-inclusive business model provides low-cost cooking fuel solutions to low-income Ugandans, and creates jobs for a multitude of local partners, suppliers, employees, and customers.

Enterprise fast facts

Location	Kampala, Uganda
Year founded	2017
Sector	Energy
Product / Service	Biogas Cylinders

Contribution to the SDGs:



Social impacts:

- Generating fuel savings of 25% per customer compared to traditional fuel sources;
- Bringing clean, affordable, and safe cooking fuel to over 20,000 households by 2021;
- Reducing the incidence of hygiene-related disease by popularising safer waste management strategies;
- Offering skills training on biogas production to motivated youth, empowering them to launch their own small and medium-sized enterprises.

Environmental impacts:

- Collecting up to one tonne of organic waste locally every week by 2021 and transforming it into value-added biogas;
- Mitigating climate change by creating savings of more than a tonne of Carbon Dioxide Equivalent (CDE) by 2021;
- Conserving up to 8000 Eucalyptus trees by 2021 by offering clean biogas as a charcoal substitute.

Economic impacts:

- Generating over 350 jobs directly and indirectly by 2019;
- Stimulating local economic growth by producing 9000 cylinders of clean, affordable biogas and generating revenue in excess of USD 100,000 by 2019

“ We encourage equal opportunities among staff and empower women to take up leadership positions in the enterprise. These efforts are strengthened by our female CFO and Marketing Executive.”

Scaling up activities:

- Establishing three largescale biogas digesters, including cutting-edge biogas purification and liquefaction equipment, in the next 5 years;
- Establishing an output of 400 cylinders of biogas per week in the next 5 years;
- Offering low-cost fuel and cooking solutions to low-income households in Kenya and Rwanda in the next 5 years.



Partnerships

- **Uganda Industrial Research Institute (UIRI)** provides Khainza Energy with full access to state-of-the-art labs, scientific experts, and market and regulatory assistance.
- **Gudie Leisure Farm (GLF)** supplies organic waste and has allocated land for largescale biogas production facilities.



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About SEED

SEED is a global partnership for action on sustainable development and the green economy. SEED was founded by UNEP, UNDP and IUCN at the 2002 World Summit on Sustainable Development in Johannesburg. SEED supports innovative and locally-driven eco-inclusive enterprises around the globe who integrate social and environmental benefits into their business models. SEED Low Carbon Awards is an awards scheme designed to find the most promising, innovative and locally led start-up eco-inclusive enterprises making significant contributions to mitigating and/or adapting to climate change in countries with developing and emerging economies.

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