

Supporting Biogas Energy in Eastern Africa: First ever wastewater treatment plant set up by sugar factory in rural Uganda

15,000 tons
of CO₂ avoided

1,800 growers
provided with
natural fertilizers

25 local jobs
created

Support

Skills Transfer
Renewable Energy
Local Jobs

Fight

Climate Change
Fossil Fuel
Dependence

Sugar Corporation of Uganda's Anaerobic digestion and heat generation project is an Effluent Treatment Plant (ETP) processing vinasse waste generated by its new distillery. Anaerobic digestion avoids methane emissions due to the vinasse decomposition. The biogas collected is combusted into a boiler to produce heat. Sludge surplus from the digestion process are used as manure for sugarcane fields.



Carbon program operational since 2013
Registered under the CDM and VCS standards
Verified by Carbon Check auditors
Tracked in APX registry ID 1393
Located in Lugazi, Uganda.

UN Sustainable Development Goals

Ensure sustainable consumption and production patterns through biogas recovery for fossil-free heat production & reduction of chemical inputs thanks to the production of natural fertilizers using bagasse. **Decent work and economic growth** for 25 permanent full time staff at above-law wage levels and social benefits (free housing and medical facilities, covered/subsidized tuition fees children). **Industry, innovation and infrastructure.** A first in Uganda, this project avoids fossil-fuel for boiler's operation and chemical fertilization of sugarcane fields thanks to state-of-the art circular recycling. **Climate action.** Emission reductions arise primarily from methane avoidance thanks to chemical activity reduction effect on CH₄ intensity of the wastewater reactor, and secondarily from heat generation based on the recovered biogas instead of fossil fuel CO₂ emissions.

