

Ministry of Forestry and Natural Resources Environmental Affairs Department





CLIMATE CHANGE APPLIED RESEARCH INNOVATION WINDOW

National Climate Resilience Programme



Green Impact Technologies



OBJECTIVES

Pay-as-you-cook distribution model of Liquefied Petroleum Gas (LPG)

To help solve deforestation through households shifting from the use of the highly consumed illegal charcoal to Liquefied petroleum gas for cooking.

BRIEF PROJECT DESCRIPTION

The pay as you cook LPG distribution model is a proven technology which is quick and efficient and that will provide clean healthy and affordable cooking for urban households in Malawi. The success of PAYGO lighting distribution has proven the PAYGO model as a way to increase impact and affordability of higher value goods for low-income households and the PAYGO lessons will be applied to a utility model for LPG. In partnership with Green impact, LPAYGO will create the user interface technology for customers to top up their usage little by little. The Gas flow from the cylinder will be controlled by a smart meter and customers will be purchasing credits through Airtel/TNM mobile money.



Malawi University of Science and Technology and Green Impact Technologies



OBJECTIVES

Help inform and promote the use of commercial biogas as an alternative source of modern energy services at Lizulu Vegetable Market in Ntcheu District.

Develop a commercial biogas plant at Lizulu Market that uses market waste to generate biogas and organic fertiliser

BRIEF PROJECT DESCRIPTION

Lizulu Market in Ntcheu District is one of the largest vegetable markets in Malawi and associated with huge quantities of vegetable waste. Waste remains uncollected and most of times dumped in open spaces thus presenting health and environmental risks. Therefore, the project seeks to use the market waste to generate biogas for consumption at the market and the surrounding households where a by-product, organic fertiliser shall be sold to local smallholder farmers. For sustainability reasons the biogas generation process will be commercialised where upon completion the biogas plant will be transferred to Green Impact Technology, a local company.







OBJECTIVES

Develop charcoal Replacement Waste Bin/Portable biogas system that converts food leftover into clean, renewable energy for economic, healthy and environmental benefits.

BRIEF PROJECT DESCRIPTION

Ecogen Seeks to integrate biogas technology and sustainable agriculture to reduce food shortage, poverty and climate change by deploying biogas technology to households and institutions. We will design, sell, distribute and install small, medium and large biogas systems to convert waste into biogas energy (clean energy) and bio fertilizer. Our product (technically advanced waste bin/ bio-digester) enables families to be self-reliance by turning the available home waste into clean energy. Every kilo of organic waste fed in the system gives an equal amount of ready to use fertilizer to use for production of dietary foods.





OBJECTIVES

Introducing electric motorbikes into Malawian motorbike taxi industry as a better and safer alternative in the motorcycle taxi industry in Malawi

BRIEF PROJECT DESCRIPTION

The project seeks to address the problem of greenhouse emission in the transport sector of Malawi through introduction of electric motorbikes as a better and safer alternative to petrol powered motorcycle in the now accepted motorcycle taxi industry in Malawi. Furthermore, the project outcomes promote evidence-based decision on adaptation of electric transport in Malawi. Additionally, it offers social-economic benefits through operation of the project motorbikes as social enterprise in the project impact area.







OBJECTIVES

Piloting the Commercialization of bamboo for firewood and charcoal production as a sustainable alternative

BRIEF PROJECT DESCRIPTION

The "Bamboo for Cooking" pilot project will demonstrate that a commercially viable sustainable charcoal value chain based on bamboos, can be established and contribute to restoration of degraded landscapes across Malawi. The project will identify and train smallholder farmers to produce bamboos, train charcoal merchants in production of charcoal using bamboos and link them to traders who sale charcoal in towns and cities targeting Salima and Lilongwe.

