



Scaling up a feedstock supply chain for biomass briquetting in rural Kenya



Rural maize farmers now have agricultural waste as a source of income.

Background

Existing biomass briquetting plants in Kenya generally operate at a very small scale and are often unable to cater for large-scale industrial and consumer demand.

GSSL is a private sector company that aims to establish large-scale biomass briquetting plants in strategic locations around Kenya.

Their business model integrates both small-scale and larger producers of agricultural waste and caters to both industrial and consumer demand for solid fuels, at a scale ensuring long-term viability.

Private sector investors and donors are funding the hardware for the pilot large-scale briquetting plant. REEEP funding will help demonstrate a replicable strategy for an effective feedstock supply chain that impacts local communities and provides green jobs.

Project purpose

To establish a first large-scale briquetting plant that provides a commercially viable and replicable feedstock model suited to conditions in Kenya.



Main activities and outputs

- Undertake a Kenya-wide survey of feedstock types, their locations and quantities; select plant location
- Design and commission installation of briquetting plant
- Secure sufficient feedstock to run the pilot plant on a commercial basis
- Optimise feedstock via tests to determine calorific value for pricing, calibrate briquette production
- Develop a scale up strategy taking into account local sources of feedstock and demand for briquettes
- Identify related feedstock producers, aggregators, community associations and integrate other rural enterprise schemes into the supply chain
- Assess carbon impact of the project, develop strategy to utilise carbon income and emission reductions

Expected impacts

- Establishment of a replicable and scalable business model for large scale briquetting in Kenya
- Replacement of non-sustainable fuels with briquettes
- Reduced pressure on forests: estimated 65,000 trees saved per briquetting plant
- Creation of market for previously worthless agricultural waste
- Integration of approx., 6,000 rural low income households into the feedstock supply chain
- Creation of employment opportunities at the plant
- Enhanced fuel security from indigenous renewable sources
- Release of follow on investment from commercial sources for scale up and replication of the business model

Project Information

Location:

Kenya

Duration:

2013–2014

Sector:

Renewable energy

Thematic focus:

Business

Total project budget:

€ 915,000

REEEP grant:

€ 150,000

REEEP donor:

Norway

Co-funding:

€ 765,000 from Global Supply Solutions, Africa Enterprise Challenge Fund (REACT) and other investing partners

Implementing partner:

Global Supply Solutions Limited