FABSTOVE

MAKES & BURNS GAS FROM BIOMASS

*The **FabStove** is a clean burning and efficient biomass pellet cookstove and heater that replaces open wood fires, charcoal and paraffin stoves as a better environmental solution to domestic heating and cooking*

- ***Designed for and built in Africa***
  - Strong sturdy frame for large pots
  - Easy loading with removable gasifier
- ***Small internal fan controls combustion***
  - Complete heat control
  - Multiple battery power options
- ***Safe to use indoors***
  - Low emissions (Smoke & CO)
- ***Uses Renewable Biomass Fuel***
  - Uses 6 or 8mm biomass pellets
  - Made from recycled waste or specifically grown energy crops

The core of our cooking system is the

FABSTOVE GASIFIER ENGINE KIT

An efficient 2 stage biomass combustion kit with a replaceable stainless steel fire chamber

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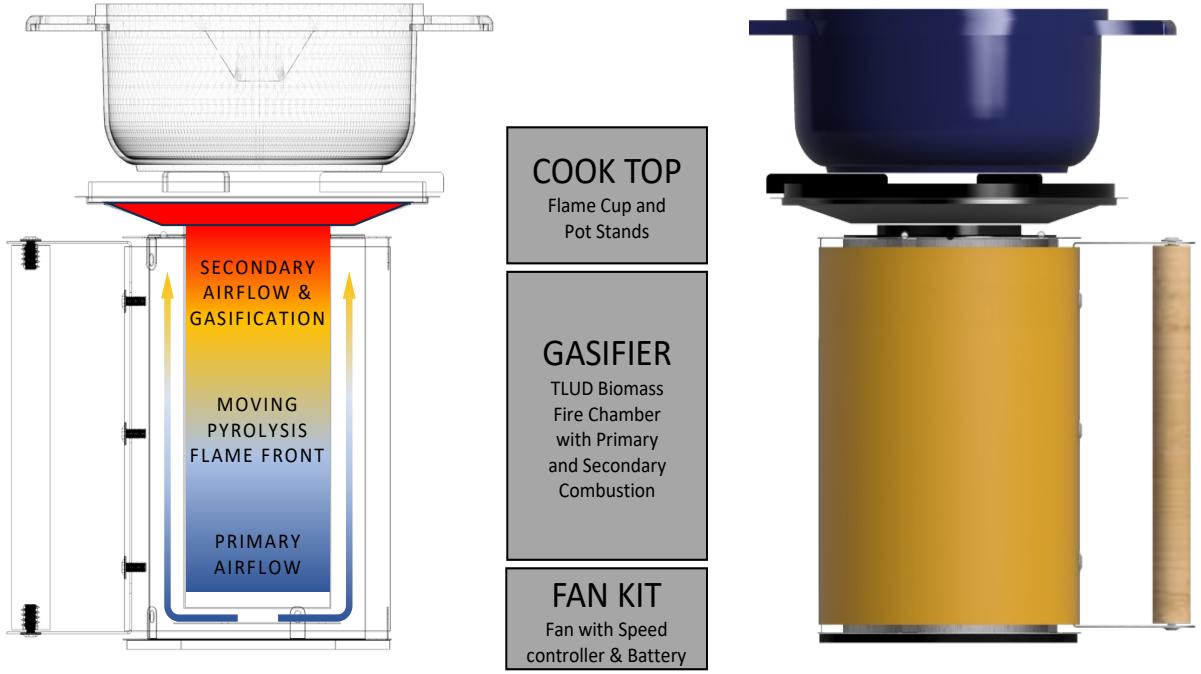

- *TLUD Gasifier Principles*
- *Fan Assisted Air Flow*
- *>40% Combustion Efficiency*
- *Low CO emissions*
- *Replaceable Fire Chamber*
- *Modular Design & Assembly*
- *Optimised for Biomass Pellets*

Our modular stove kit approach focuses on stove reusability and serviceability of energy appliances in remote areas, lowering the cost of ownership

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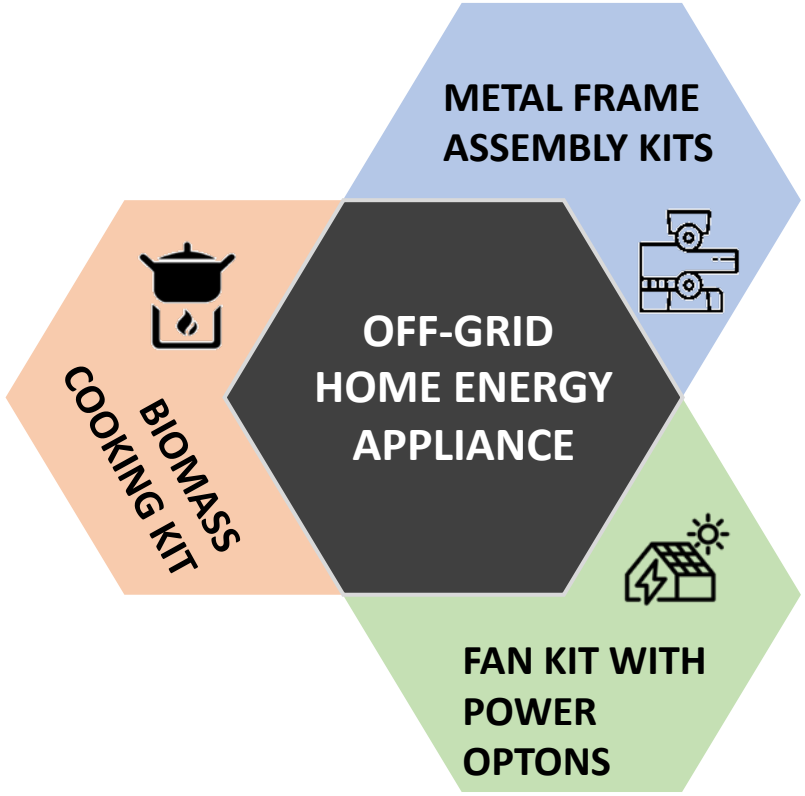

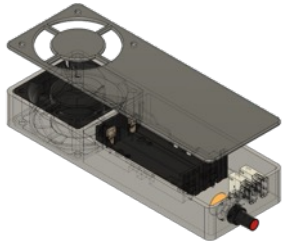

The Fabstove is manufactured by Ener-G-Africa and forms part of a full EGA stove line up, including the SuperPot, which fits perfectly onto our cooktop frame.

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*The EGA **SuperPot** is a stainless-steel pot range with a unique double insulation wall and aluminum base to ensure maximum heat transfer and minimum heat loss. The **SuperPot** can improve overall thermal efficiency by over 20% and with a gasifier provide > 55% thermal efficiency and lower emissions*

Biomass Micro-Gasification, Climate Change and the Environment

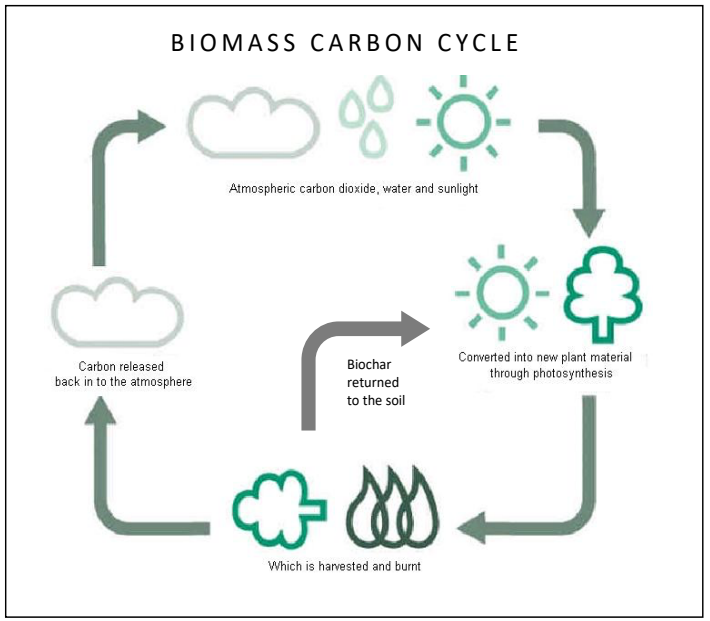
Using biomass gasification with a TLUD stove has several important impacts when considering the impact of biomass cooking and the carbon cycle.

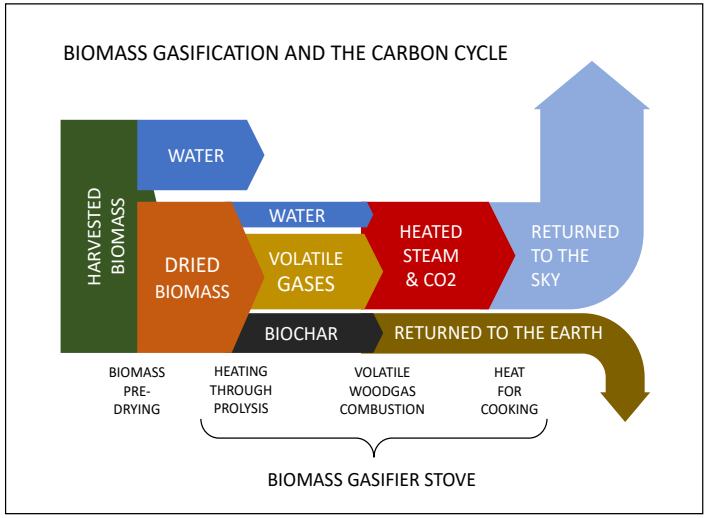
IMPACT 1 – SUSTAINABLE FUEL: *The biomass pellet fuels used for combustion can be sourced and manufactured from several different sustainable sources.*

IMPACT 2 – HIGH EFFICIENCY: *The higher thermal efficiency of a gasification stove is evidenced in many cookstove tests. This results in lower per capita fuel consumption and consumer spend.*

IMPACT 3 – LOW EMISSIONS: *The two-stage combustion process ensures that the volatile gases generated during the pyrolysis stage are burned efficiently at a high heat that eliminates small carbon particles and carbon monoxide.*

IMPACT 4 – CARBON FRIENDLY: *A gasifier stove utilizes the volatile carbon energy in biomass and produces a* ***carbon rich biochar*** *as a by-product.*





How we plan to approach the gasifier stove market?

COOKING FUEL FIRST

Follow a fuel first Business Strategy

SUSTAINABLE FEEDSTOCK

Study the Fuel Value Chain

CLIMATE FRIENDLY

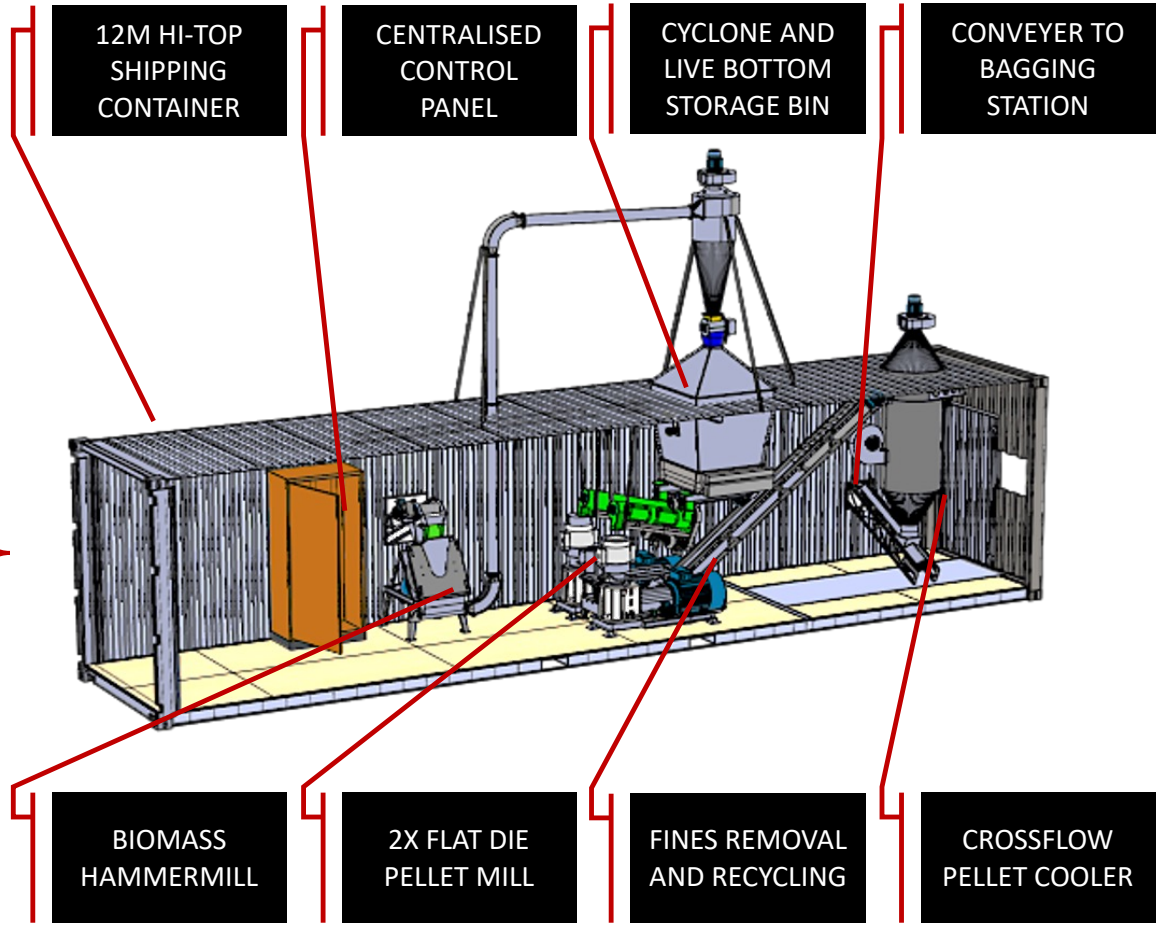
Lock into “Net Zero Carbon” growth

DISTRIBUTION PLAN

Affordable, accessible and available

FABTAINER

TURNKEY CONTAINER BIOMASS PELLET PLANT



- *MANUFACTURED IN AFRICA*
- *FULLY MOBILE*
- *SECURE CONTAINER*
- *EASY TO OPERATE*
- *LEASE FINANCING OPTIONS*

Key lessons learned over the last 5 years

- Cooking Market Approach
  - Cooking Fuel Strategy will always be key
  - Financing the entire value chain
  - Unit of scale important
- Biomass Pellet Production
  - Check your feedstock sources carefully
  - Do not underestimate pre-processing
  - Moisture control is vital
  - Plant reliability
- Stove Design and Manufacture
  - CAD/CAM integration
  - Manufacturing processes
  - Cost of one-off custom tooling

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For more info visit
http://www.fabstove.com

Dave Lello
Ekasi Energy