

Local Food, Local Energy

- Fiji's rice and tavioka mills use large volumes of expensive diesel to generate **combined heat and power**.
- High production costs mean these mills struggle to price-compete against imported goods.
- By displacing diesel with locally grown biomass, Fiji's agriculture sector can deliver local, sustainable & nutritious products at a better price.

GenLoco™

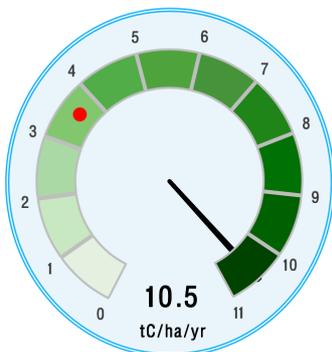
- Biomass powered
 - Zero reliance on fossil fuels
- Advanced-steam technology
 - Complete combustion; zero smoke, zero sparks & zero risk of explosion
 - Low-tech, simple & robust
 - Safe & practical
- Market ready solution

Facts

- Can scale from 5 kW to 1000+ kW
- Combined heat, power & steam
 - 3-phase electricity for the mill
 - 120+°C heat for flash drying
- Fuel consumption: 0.34 kg/kWh combined heat+power @ 25% dry basis moisture content
 - 2.48 kg/kWh electricity (@ 25% dbmc)

Why Biomass Energy

- Low Energy Investment
 - Few fossil inputs required
 - Low cost & easy to plant at scale
- Fuels include waste husks & residues
- Stable & safe to transport



Fiji's biomass production capacity exceeds the global average - IRENA

Tavioka Mill CHP

- 150 kW electrical output
- 600 kW heat output available
- Automated firing & control

Financials

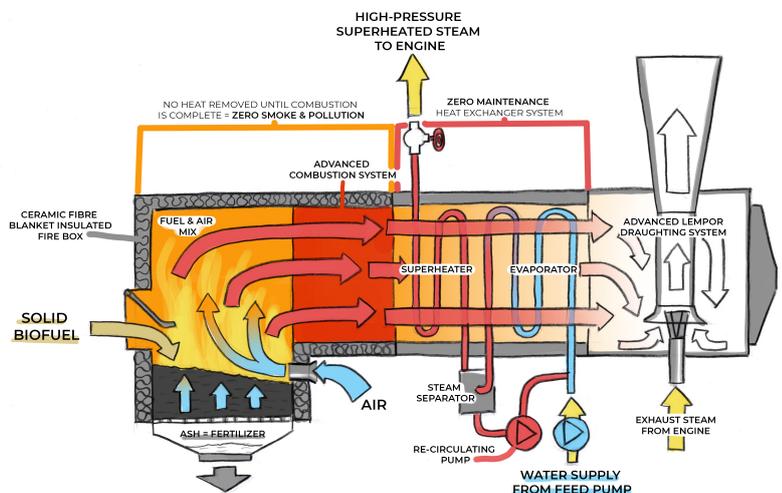
- US\$320,000* (FOB Lyttleton Port, NZ)
- ROI: 89%**
- Payback time: 1.1 years

* All prices and features are subject to change

** The following assumptions were made to calculate return on investment: US\$1.60/litre diesel, 74% load factor, 10 hours per day, 300 days per year, 10% interest rate, maintenance and repairs excluded.

Delivery

- 6-8 month lead time
- Shipped in one 20ft container
- Onsite installation and commissioning included



Mackwell Locomotive Co.'s advanced steam boiler