



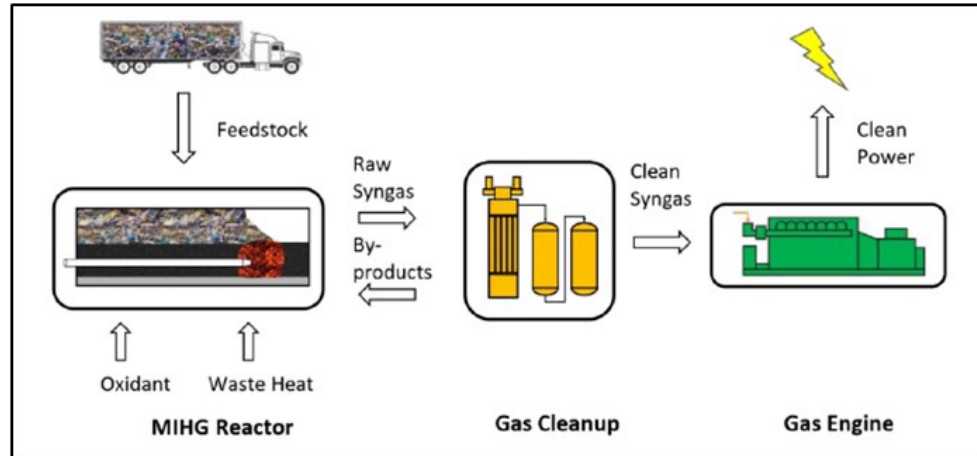
All Energy Pty Ltd  
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# Fact Sheet 4: Waste to Energy

## Energy Microgrid from Biomass and Waste

Renewable energy can be produced locally using non-recyclable solid waste such as commercial and industrial, municipal solid waste, mixed plastics, agricultural waste and urban biomass, converted into syngas to power or hydrogen. Modular scale plants can produce power locally and cost effectively to complement a microgrid while using waste that would be landfilled, thereby reducing the Greenhouse Gas (GHG) emission and carbon footprint.

### Waste to Energy Plant Process



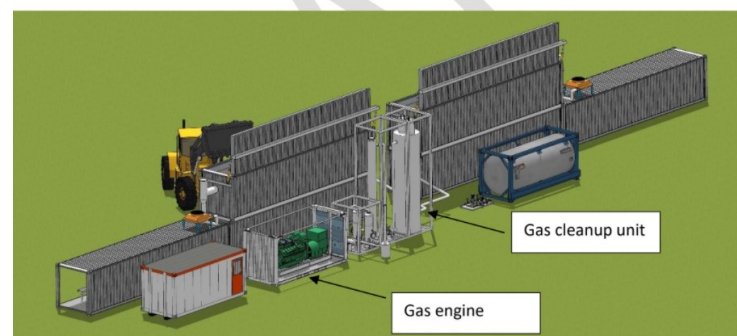
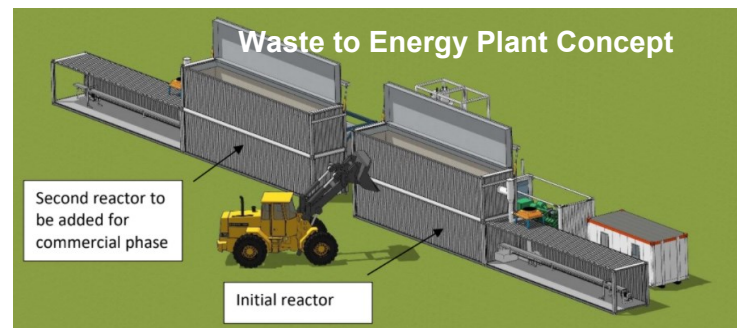
### How it Works?

Moving Injection Horizontal Gasification (MIHG) is a technology to improve variability of feedstocks. Process involves:

- Load waste into MIHG reactor, oxygen injection point is moved to gasify the fuel and produce syngas
- Raw syngas is cleaned with by-products recycled through the reactor
- Clean syngas is converted either to power with a gas engine, or hydrogen is separated and purified for use in a microgrid, fuel cell or industry

### Waste to Energy Plant Benefits

- Negative net GHG emissions compared to wastes to landfill
- Produces renewable energy products such as electricity, hydrogen, syngas and biofuels
- Circular economy when integrated with material recovery facilities
- Ideal for remote community microgrid as cost effective and viable at small to medium scale



Regional and Remote Communities Reliability Fund

## Microgrids for Balonne Shire

Collaborative project with Balonne Shire Council that received grant funding from the Australian Government

### More information:

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