

Renewable Energy



Bioenergy Factsheet | Renewable Gas

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Bioenergy is energy produced from organic matter. It can be produced from organic waste and residues of agricultural, industrial, municipal and forestry origin.

For example, crop wastes and remains, manures and sludges, rendered animal fats, used oils, food and garden waste, timber harvesting and processing residues, construction and demolition woody waste and residual municipal solid waste.

ReCFIT (Renewable energy, climate and future industries Tasmania) is responsible for advising the government on the state's strategic direction on climate change, renewable energy growth and emissions reduction to help shape Tasmania's future while maintaining a secure, sustainable, and affordable energy system.

Renewable Gas

Biogas is a methane-rich gas produced when organic matter is broken down by bacteria in the absence of oxygen. Biogas is made from organic materials such as agricultural and food processing waste, sewage and green waste such as food and garden organics.

Anaerobic digestors are enclosed structures where anaerobic break-down of organic matter takes place. They receive the organic waste and produce biogas. Biogas can be cleaned to meet natural gas standards, replacing natural gas in pipelines, vehicle engines or used behind the meter to produce heat, cooling, electricity for industrial processes, space heating and cooking using gas appliances.



CASE STUDY

About Cascade Brewery

Brewing since 1832, the Cascade Brewery is Australia's oldest continually operating manufacturing plant.



Quick facts

- In 2014 Cascade Brewery displaced natural gas with biogas generated from an anaerobic digester installed on site and fuelled by brewery organic waste.
- Annually 85,000 m³ of biogas is produced and burned in a modified natural gas boiler to provide steam used throughout the brewing process.
- This has resulted in once off greenhouse gas emissions reduction of 115 tonnes of CO₂ equivalent and an associated energy cost saving of \$70,000.
- Extensive trade waste charges were avoided by treating organic wastes on site.
- The anaerobic digester generated an additional full-time role onsite and secondary employment with truck drivers and service providers.
- The plant is an integral part of Cascade's drive for environmental sustainability.

How can we help?

If you would like more information on bioenergy, including being linked to relevant expertise to explore a bioenergy opportunity, please contact ReCFIT Manager Bioenergy on renewableenergy@recfit.tas.gov.au

More information is also available from:

https://www.stategrowth.tas.gov.au/recfit/future_industries/bioenergy