

# Renewable Energy



## Bioenergy Factsheet | Renewable heat

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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 heat

Some business requires more heat energy than electrical energy while other businesses require heat that is difficult to supply from electricity. Fossil fuels are often used to generate heat. Renewable heat can be derived from the combustion of bioenergy feedstocks such as agricultural and forestry residues and residual municipal organic waste.

Renewable thermal technologies offer clean, efficient, and cost competitive alternatives to fossil fuels. Biomass can replace fossil fuels to provide heat needed for industrial processes or to heat buildings spaces and water, reducing greenhouse gas emissions and air pollutants.



## CASE STUDY

### About Timberlink

Timberlink's Bell Bay mill, commissioned in 2008, is the only large scale, forest integrated plantation softwood sawmilling company located in Tasmania. The mill produces a wide range of products with a mix of structural framing, outdoor structural framing, fencing, landscaping, decorative and industrial products.

Timberlink directly employs 200 people at Bell Bay as well as using local contractors and businesses wherever possible. In 2020 Timberlink estimated the indirect economic impact of the Bell Bay mill on the local economy to be \$150 million.



### Quick facts

- Sawdust from the timber milling process that would otherwise need to be disposed of or sold is burned in a 20MW capacity boiler to produce heat to dry sawn wood.
- Biomass produces energy at 1/20 the cost of the renewable alternative, electricity, or 1/15 the cost of LNG, the likely alternative fossil fuel energy source.
- Alternative markets for the sawdust do not price compete for energy.
- Using wood waste for energy production instead of LNG prevents roughly 17,000 tonnes of CO2 equivalents per year from being emitted.
- Using sawdust employs an additional three full time equivalent roles managing the sawdust feedstock and heat plant.

### 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 [bioenergy@recfit.tas.gov.au](mailto:bioenergy@recfit.tas.gov.au)

More information is also available from:

[https://www.stategrowth.tas.gov.au/recfit/future\\_industries/bioenergy](https://www.stategrowth.tas.gov.au/recfit/future_industries/bioenergy)