


Family Fresh Farms

Justsen Bio-Energy Boiler Case Study

Delivering heat generation at the Family Fresh Farms glasshouse operations at Peats Ridge, NSW

Project Summary

- **Boiler Size:** A 5MW, 110°C hot water boiler attached to a 1,000,000 litre buffer tank delivering atmospheric heat to 5 hectares of glasshouse.
 - **Fuel Type:** Plantation woodchips, sourced from one of three organised options within an economical distance of the site, all of them consistent with the NSW EPA's Waste to Energy Policy Statement.
 - **Fuel Handling:** 800m³ of storage, fully automated and integrated to the boiler system, requiring no human operation.
 - **Emissions Control:** The Austrian-made Scheuch Electro-Static Precipitator is delivering worlds-best emissions controls, easily exceeding the requirements stipulated by the NSW EPA.
 - **Economical Heat Delivery:** The FFF site had only LPG or biomass as their fuel options for generating heat. A bio-energy boiler system can deliver heat at 80% below the cost of LPG.
- 
- **Proven Technology:** Danish-made boilers have been proven as dependable through supplying heat for the district heating systems of Danish communities that rely on these boilers to keep their houses warm in winter.
 - **Remote Monitoring & Operation:** The boiler system is wi-fi enabled, allowing alerts to be posted to all pertinent staff and the operational system can be accessed through your smartphone, tablet or computer whenever you'd like.
 - **21st Century Design:** The boilers are internet-enabled and are remotely operated & monitored in real time via a smartphone or computer.
 - **Flexible fuel options:** The boilers can take a range of organic fuels, allowing flexibility to change fuel source based on costs or availability.
 - **Multiple Layers of Support:** We want to provide you with reliable bio-fuel power 24 hours a day, 365 days a year. We will train your technicians as trouble-shooters for the boiler, and there will be a dedicated boiler engineer on call 24/7 with a direct line to the factory in Denmark in the unlikely event of a major issue.

Summary

The 5MW bio-energy boiler installed at the Family Fresh Farms facility at Peats Ridge is delivering the heat that their crops need at a fraction of the cost of LPG (or natural gas), and doing so whilst being carbon-neutral as an energy source at the same time. Justsen installed the system on schedule and on budget, and has arranged for both the fuel supply for the boiler and the EPA and local council approvals that the operation requires.

The state-of-the-art emissions control system installed with the boiler means that the emission from the system are well below what is required, and the remote monitoring/activation of the system means that Justsen engineers are able to check in with the operation of the boiler 24/7 to make sure it's performing at optimum.

The Economical, Carbon Neutral Heat Source

Ease of Integration

The bio-power boiler is either integrated into your planned facility design, or connected to your existing system with a minimum of new piping and is a direct replacement or any existing natural gas or LPG boiler.

Continuity of Heat Supply

The bio-power boilers are designed for high-uptime, with 24/7 use being ideal for them.

Any existing natural gas or LPG boilers can be kept online as a 100% back-up.

Economy of Use

A transition to a bio-power boiler system can save a large gas user millions of dollars over the succeeding 10 years.

Tested, Proven Hardware and Dedicated Support

The Danish made Justsen bio-power boilers have a 40+-year reputation for reliability. Justsen are dedicated to executing a flawless project for you, and then supporting it whenever and however you require it.

The Justsen Pacific Package

We will design the ideal bio-power system for the requirements specific to your particular facility.

Justsen Pacific will assist in the attainment of all regulatory permissions for the installation of the boiler at your site.

We will manage every element of the installation and commissioning of the bio-energy system.

Justsen Pacific can secure (and, if you like, manage) a long-term biofuel supply agreement on your behalf with one of our network of biofuel suppliers.

Justsen Pacific can facilitate financing of the project through the Clean Energy Finance Corporation, with no Capex required from you.

The Justsen Pacific warranty can be extended for up to 10 years from the time of purchase, guaranteeing 95%+ uptime.

Next Steps

In order for us to provide an assessment of the ideal bio-power system for your facility, the first step is to arrange a time to talk about the project on the phone. Based on the outcomes of that conversation, we will arrange a time to come your site to meet with you, answer any more of your questions or concerns, and obtain additional information.

For further information on the opportunity, please contact:

Thomas Strang

Managing Director – Justsen Pacific

phone: (+61) 0407 648 968

e-mail: thomas@justsenpacific.com

web: www.justsenpacific.com



**JUSTSEN
PACIFIC**

