TCA Forum – 7 March 2012

Domestic pellet heating

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Agenda



- Past 10 years
- Where are we today
- Future opportunities

Past 10 years



- Pellet Fires Tasmania (PFTAS) has developed a small domestic heating market supplying 900 Tasmanian customers with 900 tonnes PA.
- PFTAS provides heating appliances, fuel and customer service.
- To survive, PFTAS had to become a major heating retailer suppling other types of heating and not just pellet heating. (Electric, Wood, Gas, Solar and Pellet).
- PFTAS also developed and manufactures the WarmNdry condensation control system which "Stops Crying Windows".

Past 10 years



- Government support for electricity based heating has made Tasmania dependant on electricity generation.
- 50% of household electricity consumption is used for heating, 25% for hot water. (rebate for solar hot water in TAS?)
- High price of pellet fuel and availability issues has limited the take up of biomass heating in Tasmania as a viable alternative.
- There has been limited marketing and community discussion on alternatives to electricity for heating. Even gas only reaches 30% of the population and has very poor take up.
- The result is that Tasmania has not embraced alternatives to electric heating like other countries have.
- Currently there is not a viable biomass market in TAS.

Current Fuel Supply Situation



• Supply from the Scottsdale Mill (TAS) is very limited

- Unable to meet current demand due to limited suitable feedstock supply.
- Ouality issues. Mill does not have a dryer, mixer or a die to handle hardwood or green sawdust.
- o Priced 50% above the target value.

Supply from NSW Mill

• Ceased in 2010 due to the litter market being more lucrative.

Supply from new Eden Mill

o Priced 60% above target value mainly due to Bass Straight.

Supply from New Zealand Mills

- High importation costs
- Negative Perception from importing someone else's waste instead of value adding our own.
- o Priced 60% above target value

Supply from Canada

o Priced 50% above target value

Goals and Objectives



Financial Perspective

- Based on overseas experience the target retail price for pellet fuel should be <\$500 per tonne + GST + Freight
- Retail margins should be small as pellets are a volume product <20%.
- To encourage take up of Biomass technology the costs need to be competitive with alternate energy sources.
 - At \$792 per tonne = 18 cents per kwh.
 - At \$600 per tonne = 14 cents per kilowatt hour (same as hydroheat tariff)
 - O At \$500 per tonne = 12 cents per kwh.
 - At \$400 per tonne = 10 cents per kwh.
 - At \$200 per tonne = 5 cents per kwh.

Customer Perspective

- Availability needs to be assured.
- Quality of the product needs to be consistent.
- o Market must be competitive.

Options



- 1. Doing nothing will see the end of the fledgling Biomass heating market in Tasmania.
- 2. Continue to import pellets from NZ.
- 3. Develop a pellet mill in Tasmania which is designed to supply this and expand into other markets.

Opportunities



- Grow the Tasmanian domestic heating market
- Export interstate
- Export overseas
- Develop other markets
 - O Biomass power generation for farms.
 - Animal litter products.
 - Absorption products
 - ${\color{blue} \circ}$ Commercial heating and hot water.
 - o Charcoal for BBQ's
 - ${\color{red}\circ}{}$ Briquette's for wood heaters.

The Only Answer

The only viable option is to develop a new pellet mill dedicated to meet the current needs of the Tasmanian market with the ability to scale up to realize future opportunities.

Island Bio-Energy Pty Ltd



- Joint Venture with PFTAS, Trans Trade and Forestry Tasmania.
- Building a pilot mill at the FT Huon Wood Centre which can meet the domestic heating market needs for the next 5 years.
- R&D Centre to develop Biomass technology skills based on local timber species.
- Information and Education Centre promoting Biomass technologies. Create social awareness.
- Establish a State wide product distribution network.