BOTANICAL RESOURCES AUSTRALIA

CASE STUDY

TASMANIAN CLIMATE CHANGE OFFICE

THE PROJECT

Establish a value chain for pelletised bio-fuel and apply continuous improvement and quality assurance on the briquette line to meet customer requirements.

BACKGROUND

The company has very nearly 'closed the loop'; output waste from manufacturing is minimal, mainly due to the recyclability of component materials.

Pelletising equipment used in the production of pyrethrum oil is under-utilised and could be repurposed to convert timber wastes from external sources into bio-fuel.

OBJECTIVES

Establish a value chain for pelletised bio-fuel.

Reduce defects and customer rejects on the briquette line.

Achieve established sales targets for pellets and briquettes.

The company already produces bio-fuel briquettes from production wastes for use in industrial boilers as an alternative to coal.

TARGETS

Produce 1000 tonnes of non-py pellets per annum.

Increase briquette sales from 4,500 to 6,500 tonnes per annum.

Tasmanian Climate Change Office
Department of Premier and Cabinet

Tasmanian Government

OUTCOMES

WHAT WAS IMPLEMENTED?

We increased our understanding of the opportunities and barriers for the production of bio-fuels, from waste wood in Tasmania, and the value chain from raw material stockpiles through to retail markets.

We undertook small-scale trials with an innovative dryer design.

We developed a fully engineered and costed business case, which demonstrated feasibility.

KEY ISSUES

The sales market is there and although there is plenty of stockpiled waste wood fines, they are (a) wet/green and (b) expensive to transport.

A lack of funding to subsidise capital investment in specialised equipment to support circular economy initiatives.

PERFORMANCE AGAINST TARGETS

We didn't achieve our targets in the timeframe of the program but we have demonstrated that it is feasible and that the business case is sound.

We intend to continue pursuing the opportunity and implement as planned in the future.

"Your company must be fully on board, right to the top, before you look at funding options."

Warren Maney
Manufacturing Logistics and Procurement Officer

Ray Howe
Production Manager and Plant Engineer

Bio-fuel pellets made from forestry residues and timber processing waste can be used as an alternative to fossil fuels.

LESSONS LEARNT

There are tensions between pursuing sustainable goals and working within budgets.

Working with other companies brought to light new markets for complementary products.

There is a real consciousness of waste, and its associated costs, in the business community.

There are opportunities for world-firsts, right here in Tasmania.

The Business Resource Efficiency Program (BREP) is delivered by Business Action Learning Tasmania (BALT) in partnership with the Tasmanian government.

For more information about BREP
Visit www.businessactionlearningtas.com.au/brep

For more information about this case study
Email BALT at admin@businessactionlearningtas.com.au

BREP participants included:

Nichols Poultry
Botanical Resources Australia
Direct Edge Manufacturing
Penguin Composites
Bridestowe Lavender
Red Brick Road Ciderworks
Jinglers Creek Vineyard
pitt&sherry
Drysdale Training Restaurant
CPT Engineering
ThinkBig Printing

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