

Energy source heating up

Otago and Southland is very well positioned to exploit the emerging global shift into renewable energy sources.

Southern forests are likely to be an important part of future energy resources, as New Zealanders tap into what's termed the new "green industrial revolution."

Bioenergy and biofuel production from wood and harvest residues has been identified as a potential revenue stream for forest growers.

Bioenergy currently provides 40 percent of industrial energy to the lumber and pulp & paper industries in New Zealand. Wood grown in Otago and Southland is already powering the local forestry industry.

Regional wood processors have been quietly harnessing their own wood by-products for some time, fuelling woodchip boilers to power much of their processing energy requirements. Plants such as Blue Mountain Lumber in Tapanui utilise a high proportion of mill residues, or wood waste which is a bi-product from transforming logs into sawn timber.

The potential to further exploit this bio-energy outside the forest industry is large, given the 215,000 hectares of trees in the region, and the growing interest in industrial woodchip and pellet boilers.

Southern Wood Council chairman Grant Dodson believes Otago and Southland is in a great position to sustainably produce and use a lot more of its own bio-fuel.

"The bio-fuel is already growing in the region, some currently being used by timber processing plants but there is much more available from the region's forests simply by utilising what is currently being left behind from harvesting. By exploiting this opportunity forestry can increase its contribution to the regional economy of the southern South Island"

The recently installed wood-fuelled plant at Dunstan High School in Alexandra is potentially just the beginning of a new trend in regional self-sufficiency. Dunstan High School has just commissioned a boiler that uses wood chip byproduct sourced from nearby Naseby Forest for its heating as a clean-burning alternative to coal.

There is considerable further opportunity as medium and high energy consumers locally seek to sustainably lower energy costs while meeting increasingly strict clean air compliance. Hospitals, schools, prisons and the dairy industry are all organisations that could convert easily and are now thinking about switching to woodchip energy as a cheaper and more sustainable alternative.

The advantages of wood are becoming more noticeable; clean burning, local sourcing and its renewable qualities, and the fact that it is also carbon neutral. Every tone of wood burnt can displace a ton of fossil fuels (coal) therefore reducing fossil fuel emissions.

"If more New Zealand energy users can be encouraged to use wood as a fuel source, the benefits to our local forestry industry and the environment will be considerable. Domestically bio-energy can also be used simply by heating the home with a new generation clean burning log or pallet fire. The environmental benefits of displacing fossil fuel intensive, coal or gas heating are obvious."

Mr Dodson would like to see more business and homes switch to renewable bio-energy that is available from the regions forests.

Renewable energy is already catching the attention of global leaders. Overseas,US\$2 billion has been set aside for energy efficiency and renewable energy research, development, demonstration and deployment activities, to accelerate the development of technologies, US President Barrack Obama signalling the importance of biomass, while UK Prime Minister Tony Blair has said publicly he wants Britain to be a leading player in this coming green industrial revolution.