

Woodchip could be the answer to heating the south and providing clean air burning.

Humble woodchips, traditionally produced for gardeners, is also a growing source of energy and potentially jobs.

So much so, local forestry business Ernslaw Bio-Energy has imported two purpose-built woodchip machines from Germany to turn its non-export grade logs into a woodchip fuel.

Conventional firewood is still part of Ernslaw Bio-energy's fuel operations. But wood is an even more efficient energy when chipped or manufactured into pellets, and this is increasingly going into woodchip boilers and pellet burners for industrial and commercial energy.

Ernslaw Bio-energy Project Manager Murray Cowan said clean air demands and a desire to be environmentally conscious, coupled with cost-effectiveness, are driving the changes. This upsurge is already apparent in the northern hemisphere, the significant growth in efficient wood-based energy in Europe, for example, driven by government policies and incentives.

The company has therefore invested in this latest technology both to produce woodchip for its own fuel, and to cater for the expected growth in wood-based energy.

The advantage of woodchip is that wood can be stored and automatically loaded on a large-scale into industrial size boilers, making wood more efficient. But it's the cleaner burning qualities compared to fossil fuels, reducing the carbon footprint, that is creating the buzz.

This move towards bioenergy is supported by the Southern Wood Council, which considers that the Otago and Southland's considerable forest resource is well able to supply the expected growth in woodchip demand.

Mr Cowan has been talking to a lot of groups interested in the efficiencies of woodchip burners in preventing the air pollution their current coal-fired boilers produce.

"We're excited about the potential for large volumes of woodchip for commercial or industrial facilities like schools, hospitals and rest-homes that have big heating or energy requirements," he said.

Ernslaw Bio-Energy is supplying around 300 tonnes a year of woodchip to Alexandra to fuel Dunstan High School's new woodchip boiler.

When the chipper isn't busy in the South Island, it is producing around 750-1000 tonnes a month of fuel chip to supply a 12 megawatt boiler for sister company WPI-International in the North Island.

Ernslaw Bio-Energy's large-scale portable 10-tonne chipper processes non-export grade Douglas Fir or pine logs and even tree tops and branches into woodchips,. It can process logs up to half a metre in diameter, producing between 15 and 18 tonnes of chip an hour usually at its yard, or it can be towed by a tractor on-site to the forest.

It also imported a smaller hand-fed machine for processing smaller material.

The material for chipping is left to dry over the summer, then chipped in the autumn when the moisture content is below 30 percent. The woodchips are stored under cover to keep them

dry and clean. Much of the wood is sourced from Ernslaw's Naseby Forest in Central Otago, its dry environment proving excellent in producing dry wood.