Press Release

North Island Schools in Renewable Energy First

Monday 16th February 2009

Living Energy, one of New Zealand's leading suppliers of bioenergy heating systems, is about to install the first boilers in the country to heat schools with sustainably sourced wood chips. A 300 kilowatt boiler from the internationally renowned manufacturer, Binder, will be unpacked and delivered to Thames High School this week, with a 150 kilowatt system delivered at the same time to Henderson Valley School in Waitakere.

The new wood-chip boilers are replacing ageing coal boilers, which were removed from the schools over the summer period. Outdated, dirty, difficult to operate and sometimes the source of considerable local air pollution, the schools are delighted to see their old coal boilers heading for the scrapyard. Equipped with the latest features, the new wood-chip boilers have self-cleaning boiler tubes, ultra-low emissions and performance efficiencies in excess of 90%.

With the coal boilers on their last legs, the schools were interested in securing a green solution for their heating; Living Energy was able to demonstrate their Binder boilers could substantially reduce their carbon footprint, at the same time as providing considerable running cost savings against the available alternatives. Biomass heating is a near zero-carbon resource and offers impressive cost benefits for a wide range of customers, as well as immunity from future carbon taxes.

Living Energy's work with the two North Island schools is as a result of their success in formulating quality and fit-for-purpose solutions to meet the objectives of the Government's *Renewable Heating in Schools Programme*. Through this EECA-run initiative, which focuses on providing wood-based energy solution to schools across New Zealand, Living Energy were delighted to secure contracts for the installation of 6 wood-chip boilers funded under the programme.

Rob Mallinson, MD of Living Energy and Chairman of the Bioenergy Association of New Zealand, the industry representative body known as BANZ, said :

"We're delighted to be helping so many schools make a contribution to a cleaner, greener future, and of course reduce the strain on Government finances by providing lower operating costs. I think our established track record of providing wood-fired energy systems to New Zealand sawmills, coupled with Binder's reputation as one of the world's best biomass boiler manufacturers and our ability to supply the wood chip from local source, have been key to our success".

The other schools which will benefit from a state-of-the-art wood chip boiler courtesy of Living Energy are: Golden Bay High in Takaka; Westland High in Hokitika; and Dunstan High in Alexandra. Dunstan High School will not only have two boilers on site, one for the school and one for their student hostel, but they'll also have the largest system – a 650kW Binder boiler, capable of keeping the pupils warm through the cold Alexandra winter.

Even though the majority of the school boilers will only be operating for less than 800 hours per year, the low-cost energy provided by wood chip means that the capital cost of the system will be paid back in 10 years or less in every case when compared to heat provided by the fossil alternatives : diesel, LPG or heat pumps. Not bad numbers when you consider the new boilers have expected operational lives in excess of twice that. Where a wood chip boiler is installed at a site with more normal operating hours (typically 4,000 to 8,500 hours) paybacks of less than 3 years can be achieved.

The highly-automated Binder boilers will provide the vast majority of the heat energy to the schools, and will consume wood-chips from a variety of sources, including local sawmill waste, shavings from wood processing activities, chipped forestry residues and low quality logs. The Thames High School installation will source its fuel from the nearby Thames Timber – a journey of less than 5km.

Uniquely with wood fuel boilers there is a knock-on benefit for the local suppliers of wood-chip, which increases the sustainability of businesses and can lead to the creation of new jobs. Recognition of this simple fact is now driving investment in wood-fired boilers and other forms of bioenergy around the world.

Neil Harrison, Sector Development Manager for Living Energy comments, *"The uptake by schools of this technology clearly demonstrate that biomass boilers are finally on the radar when it comes to heating projects. It is still early days, but with the uncertainty surrounding future energy prices and the targets that organisations are being set to reduce carbon emissions, biomass heating will continue to grow in popularity in New Zealand as it has elsewhere in the world."*

Rob Mallinson added, *"We have witnessed a huge increase in interest for biomass boilers from the public and private sectors; they are often the most cost effective way to provide energy, and to meet CO_2 and renewable targets. In addition to these school installations, we have undertaken feasibility projects which include food processors, offices, leisure centres and industrial users, either as part of a new build installation or*

to work in conjunction with existing heating solutions. It's only a matter of time before biomass boilers become the backbone of sustainable heating in New Zealand".

Mark Wiseman, Engineering Manager for Living Energy and a former pupil at Thames High School, summed up by saying, *"The Government should be applauded for running this pilot programme, which is a great start down the road to providing low-cost and low-carbon energy for New Zealand. However, it's important that the momentum is maintained and that the Government continue to lead by example – a roll out of this programme to hospitals, prisons and other public buildings would help New Zealand realise the huge potential of wood fuel. This would greatly assist our economy to emulate the huge strides being made in Europe and the US with this technology, delivering the much-needed transition to a low-cost, low carbon and locally sourced fuel. This would fit perfectly, as in the US and Europe, as part of the Government's fiscal stimulus package."*

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Photographs: High resolution images are available of the outgoing coal boilers.

Photograph opportunities are available during the unloading and positioning of the boilers, and at the time of commissioning.

Please contact Neil Harrison in the first instance.

Notes to Editors:

Living Energy is a leading provider and installer of energy efficient, high quality biomass solutions in New Zealand. They are the experts in biomass heating solutions for commercial and industrial applications in the public and private sector.

EECA is the Energy Efficiency and Conservation Authority, the main agency responsible for helping to deliver the Government's extensive energy efficiency agenda. Its function is to encourage, promote and support energy efficiency, energy conservation and the use of renewable energy sources.

The Bioenergy Association of New Zealand (BANZ) was established to promote and coordinate the development of a bioenergy industry in New Zealand. BANZ provides a central focus point for liaison with Government agencies, the dissemination of information amongst the industry and long-term positioning of bioenergy into New Zealand's energy system. Members include anyone with a commercial interest in bioenergy - sawmillers, wood processors, energy suppliers, energy researchers, consultants, manufacturers and investors.