

## Laminex NZ's bricks get ticks from renewable energy industry

Laminex New Zealand have taken a loss and made it into a profit by turning wood waste at their Taupo site into energy bricks – an innovation that has been given the thumbs up by industry experts for saving the planet thousands of tonnes of landfill waste and greenhouse gas emissions every year.

The business has been awarded a 'Commended' in two categories at the recent Energy Efficiency Conservation Authority (EECA) Awards – the Trustpower Renewable Energy Award and the University of Waikato Innovation Award.



*Laminex NZ's Taupo Plant Manager Rhesa Goldsbury, Sustainability Advisor Rebecca Page with EECA Chief Executive Mike Underhill*

Both acknowledgements are for the 'briquette machine' installed at its Taupo site which compresses sander dust (from making particleboard) into a renewable energy source – briquettes.

Previously, the site was producing enough sander dust to fill 72 wheelie bins a day – that's about a 1,000 tonnes a year, and Laminex New Zealand were footing the bill for transport and disposal. Now, a significant amount is saved each year as a result of the briquette machine and since 2014, the only non-renewable energy used on site is the limited amount of fuel used to run the company's fleet.

Around a thousand tonnes of briquettes can generate more than 6,000 megawatt-hours of energy as the biomass has a high calorific value. The site itself doesn't use the briquettes, burning the dust in its raw form, so the surplus is picked up by other companies and used to fuel their industries.

The process has gained national and international attention and Laminex New Zealand is fielding calls from as far away as Cyprus with queries on how they might replicate this New Zealand initiative. The briquettes can replace both wood and coal in furnaces and so, for little effort, a big reduction in greenhouse gas emissions could be achieved for New Zealand industry and solve wider environmental and economic problems.



*Laminex NZ's Taupo briquette machine has been given the nod by EECA (Top – Mechanical Engineering Contractor, John Flight; Bottom Left – Finisher, Duncan Murdoch; Bottom right – Electrician Luke Keehan).*

The initiative was led by Taupo Plant Reliability Engineer Michael Manden, who was responsible for the investigation and analysis required to get the project underway. The Electrical & Mechanical team implemented the infrastructure and set up the briquette machine when it arrived from China (the instructions of which also came in Chinese just to add a challenge).

"This is fantastic for the team and the project to be recognised amongst so many champions in the energy efficiency and sustainability arena," says Laminex NZ Sustainability Advisor Rebecca Page. "It was so heartening during the awards evening hearing the common aim, of making successes such as ours, business as usual – what a great space to operate in!"

The judges said the initiative was 'a great way of turning a waste disposal problem into a heat energy solution' and it was 'a practical and innovative switch that makes the company an exemplar in sustainability'.

The annual EECA awards celebrate businesses, organisations and individuals who have demonstrated excellence and innovation in energy efficiency or renewable energy. This year, more than 100 entries were received from which the judges selected finalists for ten categories. As well as large and small companies and businesses, the list of finalists includes local councils, community and charitable trusts, high schools, sports clubs and university students. They come from all around New Zealand, with one even from Antarctica.

The award winners and finalists were celebrated at the EECA Awards dinner in Auckland, 18 May.