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Statement

Fonterra reducing reliance on coal will provide the stimulus for increased biomass fuel supply

"The announcement that Fonterra will immediately stop installing any new coal boilers or increasing capacity to burn coal is the signal that the biomass fuel supply industry welcomes" said Brian Cox, Executive Officer of the Bioenergy Association.

"The increased demand for renewable fuels for Fonterra plant, adds to the demand for biomass fuel already announced by the Otago and Christchurch hospitals and DB breweries. This will now encourage biomass fuel suppliers to increase their capacity for sourcing and delivering biomass fuel. There are adequate quantities of wood chip and wood pellets that can be delivered at short notice and potential for other short rotation fuels such as from miscanthus. There is also the potential to source pellet fuel from agricultural crop residues such as straw, and from paper and cardboard."

"Transitioning from use of coal and gas for process heat needs to be done in an orderly manner so that fuel suppliers have time to grow their capacity. These signals from Fonterra will encourage forest owners to see the opportunity for collection and sale of forest harvest residues now that they are having difficulties in selling logs to China."

"Fonterra also has the option of transitioning from coal by co-firing biomass fuel in its existing coal boilers. Pellet fuel is particularly good. This means that they can continue to use equipment which still has many years of servicable life without large capital investment."

"The Fonterra announcement dovetails with the proposal from Government to recognise in the Emissions Trading Scheme the greenhouse emission reduction opportunities that farmers have from their operations. Farmers have opportunities through producing biomass fuel from shelterbelts, woodlots and use of low producive land to be fuel suppliers to Fonterra. Farmers move from being only food producers to being food plus fuel producers. Fonterra is well placed to partner with their farmer shareholders for the production of biomass fuel."

The BioenergyAssociation has identified that 1.8Mt CO_2-e of greenhouse gases could be reduced if coal and gas was replaced by biomass fuel for process heat.

Ends

Additional information

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Bioenergy and biofuels sector

www.bioenergy.org.nz

1. Bioenergy has a unique point of difference from other forms of renewable energy as it is the most flexible and versitile form of renewable energy and contributes widely to the New Zealand economy. The use of biomass for energy (bioenergy) provides a fundamentatlly different least cost approach to achieving a *low carbon economy* compared to all other renewable energy forms. Biomass use and bioenergy can:
    - substitute for all fossil fuel uses for any energy application and is carbon neutral,
    - contribute to carbon storage (remove GHG from the atmosphere)
    - provides significant opportunities to address environmental issues arising from optimisation of land use (eg pastoral intensification and landfilling)
    - Provide many opportunities for regional economic growth and employment based on our under-utilsed land resource.
2. Focusing on use of biomass as a valuable resource leads to new business opportunities, improved business resilience of landowners, and extraction of value from waste. Energy is often the co-product of higher value products such as regional employment, bio-based materials and more resilient land use.
3. Bioenergy is from a fully renewable resource, using proven technologies and has extreme flexibility. The processing of biomass can produce a wide range of revenue streams from application of heat; generation of electricty; use as transport fuel; extraction of chemicals and manufacture of bio-based materials; use as bio-fertiliser; and purification of water.
4. Communities and business adopting a circular economy approach by matching local wood and waste residues as feedstock as an input to creation of products, optimises the financial viability of the business, offsets costs of waste disposaland being used to generate employment and new business that supports the local economy.
5. Bioenergy could achieve greenhouse gas reductions of:
    - 1.8 Mt CO_2 -e pa from reduced use of coal and gas for process heat
    - 1.8 Mt CO_2 -e pa from reduction of methane from waste
    - 5.0 Mt CO_2 -e pa from use of biofuels in transport

    These levels of greenhouse gas reduction are comparable but less cost than many of the other initiatives currently being pursued by Government. https://www.bioenergy.org.nz/greenhouse-gas-reduction

6. Bioenergy initiatives are generally highly integrated with other sectors and other activities so cross sector and all-of-government approaches are necessary.For example integrated agriculture land use for animal health management with shelter can produce revenue creating wood fuel.
7. The vision for bioenergy - Economic growth and employment built on New Zealand's capability and expertise in forestry, wood processing and bioenergy production from waste - leading to new business opportunities which by 2050 could more than double biomass energy supply up to 27% of the country's energy needs, with a consequential 15% reduction in greenhouse gas emissions*.[* compared to 2017]

Combustion of biomass for process heat

www.usewoodfuel.org.nz

1. The use of biomass fuels for process heat are proven and widely used by those with immediate access to biomass which can be used as a fuel.
2. The market for buying and selling biomass fuel by those without immediate access to their own sources of biomass builds on strong foundations.
3. The biomass fuel supply chain has a number of players but like any evolving market the New Zealand biomass fuel supply market now has cornerstone players who are expanding their supply capabilities at a fast but orderly rate so that boom/bust scenarios will be avoided.
4. Unlike fossil fuels whose quantity is finate there is potentially no reason why biomass fuel supply will be a future problem. There are many avenues for sourcing biomass such as plantation and farm forestry. The 1 billion trees programme will produce additional biomass fuel plus be a new carbon sink every 30 years by planting commercial forests. Biomass processing could be intergrated at least cost (or vica-versa) with waste to energy bio-processing.