Submission on *Process Heat in New Zealand: Opportunities and barriers to lowering emissions.*

General comments:

- New Zealand companies, and the New Zealand government, must stop any new investment in plants that run on coal or gas. There must be legislative change to ensure that any new plants built are fuelled solely by renewable energy.
- We need a non-negotiable carbon price of at least \$50/ton, rising to \$100/ton within a couple of years, to encourage process plant-owners to drastically reduce their emissions.
- Measures should be put in place to ensure that existing fossil-fuel-powered process plants are not allowed to continue running indefinitely there must be a cut-off date by which they have to be closed down if they are not able to switch to renewable energy sources.
- If hydrogen is used as an energy source, it must be generated from renewable resources.
- So-called "transition fuels" such as natural gas are not an acceptable option. Fossil fuels must be replaced by renewables, as time is running out to turn this ship around!

Qu 21: Barriers to the use of biomass

There are several important points here -

- Companies are not currently paying the full price for their greenhouse gas emissions, so of course very few are seriously considering the use of biomass. If they were paying the full price, many of the barriers listed would appear far less of an issue.
- It will be important that sources of biomass are sustainable, and don't involve (for example) crops grown for this use in NZ or overseas on land which would otherwise be used for food crops or to grow trees. Wood waste in a country like ours is an under-used resource, and it is sustainable.
- EECA should provide leadership in this area, listing and possibly subsiding access to consultants who are familiar with the use of biomass for energy production, and can advise businesses who are designing new processing plants. Here in Nelson our council employs a consultant who goes to people's homes and businesses and advises them on creating warm, dry homes and businesses, and reducing energy costs. The service is free, and in my opinion it's a model that EECA could follow to promote biomass use.

Qu 27:Geothermal energy

Although geothermal energy isn't a fossil fuel, using it does result in CO2 emissions. So although it is preferable to coal and gas, renewable resources are still a better choice.

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