18 March 2009

Review of Emission Trading Scheme and Related Matters

Key Points in support of the BANZ Submission

The Bioenergy Association of New Zealand (BANZ) represents the wood energy, biogas and liquid biofuels industries in New Zealand.

BANZ's submission addresses primarily four points in the Terms of Reference:

- Benefits and costs of policy action to increase bioenergy production and usage
- Impact on the economy of policies
- Increased resources for the development of technologies for the conversion of woody biomass to 2nd generation liquid fuels
- The impact on the New Zealand economy

We are seeking a package of complementary mechanisms based primarily on support via a pricing mechanism (being a carbon charge or carbon tax) plus increased but modest further specific initiatives. We believe that moving immediately in these areas will have significant early benefits for the wider New Zealand economy, and that climate change policies will be positive New Zealand overall.

We submit:

- 1. Bioenergy has two functions in support of carbon dioxide emission reduction:
 - a. Its use as a fuel (i.e. chip or pellets or transport fuels) displacing fossil fuel use/emissions
 - b. It sequesters carbon dioxide in the ground, and in the biomass produced
- 2. The growing of biofuel crops is very effective in terms of removing carbon dioxide from the atmosphere:

Crop CO_2 absorbtion over 28 years, per ha		
-	Miscanthus	1232 tonnes
-	Pinus Radiata	725 tonnes
-	Salix	448 tonnes

- 3. The current and potential resource is very large:
 - a. NZ has around 1.7m hectares of planted production forests (producing wood)
 - b. Scion has estimated that 8.7m hectares of marginal and medium to low quality grazing land are available. If 37% of this (3.2m ha) were planted over time in (for example) 75% forest and 25% miscanthus:
 - i. A further 100m tonnes of \mbox{CO}_2 would be absorbed per year, and
 - ii. Several million tonnes pa of biomass would be produced: for use as a fuel displacing (say) equivalent volumes of coal, or gas.
- 4. This would provide, in addition to the carbon reduction benefits:
 - a. Thousands of jobs at regional level in both forestry and agriculture (studies have shown that wood energy creates more jobs per unit of energy than any other energy form (renewable or fossil)

- b. Large volumes of fuel to replace the burning of coal and gas (which would be in large part rendered economic with the measures proposed) for heat and power generation
- c. A basis (secure fuel supply) for significant investment in heat, power and cogeneration facilities
- d. A raw material on which to base the development of second generation liquid fuel and chemical industries
- 5. That the following is required to get investment in these areas moving and for New Zealand to begin to realise the benefits:
 - a. A cost applied to carbon emissions to lift the relative value of carbon-emission free biomass fuels
 - b. Policy certainty, as a basis for long-term investment decisions
 - c. Some modest incentives such as R&D credits and accelerated depreciation for the development of the technologies and processes and to incentivise investment in R & D and pilot programmes; in particular covering second-generation liquid biofuel production
 - a. Increased support for pilot programmes such as the very successful "renewable heating for schools programme" run by EECA
 - b. Removal of the current provision whereby replacement of forests by fuel crops such as miscanthus which are less than 5m in height incurs a deforestation carbon penalty.

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