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Ministry for the Environment Wellington

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Submission from the Bioenergy Association

Action on agriculture emissions

The Bioenergy Association supports in principle the proposals to bring agriculture into the ETS as if done wisely there are a number of mitigation initiatives which farmers can undertake to offset any liabilities.

The Bioenergy Association represents a significant portion of owners of biomass fueled heat plant, biomass fuel producers and suppliers, waste-to-biogas consultants, researchers and equipment/ appliance suppliers across New Zealand.

1. What is the best way to incentivise farmers to reduce on-farm emissions?

The proposals are confused as to where it is a gross or a net emissions scheme. It appears to be a net scheme but most discussion is as though it is a gross emissions scheme. Presented as a net emissions scheme would improve farmer acceptability as then it is not just perceived to be a tax on farming. It can then also be presented as part of normal farm management and Integrated Farm Plans.

Net, not gross, farm emissions should be what counts for a farms reporting. Farmers have a number of opportunities to offset any farm emissions. If these were recognized with credits which can offset liabilities the farmers would be incentivised to take wise actions most appropriate to their farming situation.

Offset opportunities include:

- a) Plant absorption of CO₂ should be recognized regardless of whether grasses or wood, and include all species. Some plants are better absorbers of CO₂ and farmers should be incentivized to plant species which maximise CO₂ absorption. The current very limited rules for ETS credits provide limited incentive to farmers to consider greenhouse gas emissions in their farm operations. Eg shelterbelts under 30m wide are not recognized yet there is 44,917,545m of shelterbelts which is around 68,000 ha of forestry most of which does not gain carbon credits for farmers. Some species such as miscanthus is currently not recognized as a CO₂ absorber because it is under 5m height.
- b) Erosion and riparian planting could provide a revenue stream for farmers if recognised for carbon credits.
- c) The harvest residue from biomass grown on a farm for sale of logs etc can be a potential fuel to replace coal and gas used for process heat. Including the growing of all biomass within the ETS and recognition as a carbon credit can provide an incentive as well as improve the economics of using biomass for energy. Analysis shows that in shelter belts and other small woodlots on farms that there is a proven 1.3PJ pa of energy for process heat available (1.7PJ pa probable and 2.2PJ pa possible) which has



an energy value of \$17-22million per annum. This is in addition of the 12-16PJ pa from plantation forestry.

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- d) Agricultural crops have significant amounts of residue left after cropping which can be used as a fuel for process heat eg straw and stover can be pelletised for use as a fuel.
- e) Dairy farmers have the opportunities to collect dairy effluent and through use of anaerobic digestion technologies produce biogas and bio-fertiliser, thus reducing emissions of methane which would otherwise occur. Collecting and treating the effluent can also reduce discharges of nutrients to waterways.
- f) The bio-fertiliser that can be produced and used on farm should be encouraged so use of bio-fertiliser should gain carbon credits compared to artificial fertilisers which should be a liability.

The proposal to recycle funds raised back to the sector to incentivise emissions reduction and support implementation of the action plan is highly supported. Because many of the opportunities for offsetting emissions are not common practice there will be a need for assistance and demonstration to farmers considering options. All the opportunities use proven technologies and integrate with farm operations but recycling the funds will speed up adoption.

2. Do the pros of pricing emissions at farm level outweigh the cons, compared with processor level, for (a) livestock and (b) fertiliser? Why or why not?

Pricing of emissions should occur at farm level because the decisions for reducing or offsetting emissions should be directly in front of the farmer making farm management decisions. Because farmers have a wide range of opportunities for reducing or offsetting emissions they must know and understand what are the specific drivers for the emissions. Then they can take appropriate actions.

Decisions on the use of bio-fertiliser produced from organic waste from an anaerobic digestion plant instead of artificial fertiliser should be made by the farmer having a good understanding of overall fertilizer options.

Processor pricing results simply in there being a tax on artificial fertilizer and does not incentivise farmers decision making that they would have if there were farm pricing.

3. What are the key building blocks for a workable and effective scheme that prices emissions at farm level?

That net emissions and not gross emissions are adopted. Use of gross emissions means that the ETS is just a tax on farming whereas net emissions provides incentives for farmers to reduce net emissions over all.

4. What should the Government be taking into consideration when choosing between Option 1: pricing emissions at the processor level through the NZ ETS and Option 2: a formal sectorgovernment agreement?

If Government wants to simply tax farmers then go for option 2 but if they want to engage farmers in actively seeking out opportunities for reducing emissions the go for option 1.

5. As an interim measure, which would be best: Option 1: pricing emissions at the processor level through the NZ ETS with recycling of funds raised back to the sector to incentivise emissions reduction or Option 2: a formal sector-government agreement? Why?

Neither. Take the time to properly design a system around net emissions which incentivizes farmers and is not just a tax on their operations.

6. What additional steps should we be taking to protect relevant iwi/Māori interests, in line with the Treaty of Waitangi?

Recognition of the opportunities for offsetting biological emissions such as through planting manuka for bee keeping would allow Maori to pursue opportunities that are currently outside the very limited ETS criteria. The offsetting credits should also be tradable so that Maori landowners who do not incur liabilities from biological emissions are able to gain from selling credits.

7. What barriers or opportunities are there across the broader agriculture sector for reducing agricultural emissions? What could the Government investigate further?

The biggest barrier is the current government policies of gross emissions and not recognising all the opportunities farmers can do if only they gained credits for offsetting emissions.

8. What impacts do you foresee as a result of the Government's proposals in the short and the long term?

Adopting a net emissions regime for farmers can allow a scheme to proceed quickly and because it recognises the good emissions reduction which farmers often already do then they are most likely to quickly agree. Keep persevering with gross emissions and ignoring what farmers can do means that implementation will take a number of years.

9. Do you have any other comments on the Government's proposals for addressing agricultural emissions?

Methane should be separated as a net emitter from the other gasses as there are specific bioenergy emission reduction tools which farmers can use. Keeping methane separate can improve the nexus between emissions and methane reduction opportunities.

The entry into the NZETS with recycling of funds will provide opportunities to support farmers to diversify their farm business by producing new biobased products and for processing / extraction of value from wastes which would otherwise be disposed of, with resulting methane emissions. This will assist farmers to be at the forefront of building a bio-economy.

Regards

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