Submission on the Actions on Agricultural emissions paper.

Submitted by the New Zealand Farm forestry Association

The New Zealand Farm Forestry association (NZFFA) represents the interests of very broad membership ranging from sheep/beef, dairy, arable farmers and horticulturalists who incorporate plantation and amenity forestry and trees into their business operations at one end of the scale through to dedicated small scale foresters and the professionals who service that sector at the other. Our current paid up membership is 1400 members. We also represent and engage on behalf of a further 14000 small scale unaffiliated forest growers who are involved in plantation forestry but not actively engaged in the day to day activities of the forest sector. Many of our “farmer members” have been leaders in the field of the integration of trees with livestock or crops and thus many of these members will have achieved the status of being carbon neutral or possibly even carbon negative with respect to their on-farm emissions status that is the goal for many in this transition to a less carbon intensive form of agriculture.

The NZFFA considers that the proposals presented in the sector-government agreement has considerable value and should be progressed. The Climate Change Commission will be in a position to determine prior to 2021 whether the progress under this agreement should have a bearing on the price points set in 2021. We also recommend further investigating the options for the agriculture sector to gain recognition from carbon sequestration. We consider this should include pre-1990 forestry, harvested wood products sequestration, biochar made from harvest residues such as wood waste, on farm crop residues, and any other form of biologically sequestered carbon that could be added to agricultural soils, despite the fact that the ICCC has dismissed this. We also consider that the argument for landowners to be recognised for carbon sequestration is more compelling than for allowing industrial emitters the same option, when the latter includes a risk that the afforestation is used as a substitute for taking action on reducing emissions. Afforestation is clearly needed as a transitional measure to help the New Zealand economy, however when the half-lives of Co2 and methane CH4 are considered, methane better matches the rotation length of our major commercial forest species and the period of climate adjustment 2020-2050. Reductions in methane emission or increases in sequestration have an almost immediate effect on global warming, whereas the effect of CO2 emissions will be with us for at least the next thousand years.

Lastly as part of our willingness to help solve both New Zealand’s climate change emissions issues and to help our sister organisations in their journey along this path we would like to offer up the use of our members, their farms and knowledge with their agreement to help the greater national benefit. This could be for case studies on the actual emissions vs the offsets available or for the sites needed for on farm field-days and public demonstration days. As an organisation we are willing and able to help.
Question 1.

The best way to incentivise farmers to reduce agricultural emissions.

The best way to achieve a reduction of emissions is at farm level, where the actions of a farmer or his/her farm system can be matched to a corresponding emission of Methane (CH4), Nitrous oxide (NO) or CO2. This will require a considerable investment in time, money and knowledge, but without farmer buy-in and knowledge about cause and effect, little will change in terms of emissions reduction will eventuate. There will need to be an investment in systems analysis with specific investigations into the down-stream effects of change to insure that unintended consequences of changes do not lead to worse environmental and climate outcomes. There is considerable expertise in the agriculture sector already and so climate change emissions should just become another thing to consider and act upon in an already complex business environment.

Question 2.

Emissions generated on farm are farm specific in terms of the volume and source and are governed by the complex interaction of genetics, feeds, soils types, system type and seasonal variation to name a few. Whilst choosing a processor level of pricing is administratively easy it will do nothing to the intricate level of knowledge of the cause and effect on emissions on-farm that will be required to be generated in order to combat the issues of methane (CH4) and Nitrous oxide (NO).

Question 4 & 5

The Key consideration that the government needs to take into account is the level of political buy-in the various sector organisations have agreed to. It is better to work with a coalition of the willing than to try and force a decision from above. Also in keeping with the “option 2 “proposal there will be no requirement for a “free allocation” of credits, instead the focus is purely and simply the reduction of emissions below the required target levels.

Pricing emissions at processor level may well be an effective income generation tool for government to recycle, but the various industry bodies involved in the proposed government sector agreement have already indicated a willingness to raise additional funds through their levy processes. Ultimately it will be actions on farm and within sector, and not the income generation mechanism that will lower the level of GHG emissions.

Question 7.

When it comes to barriers and opportunities this is where there can be some real change to current behaviour.

Currently the ETS works well for a gas such as CO2 that is emitted in a controlled and predictable process such as the burning of a fossil fuel in a controlled environment, and the sequestration using large areas of relatively uniform plantation forest where species and genetic diversity is narrow and the performance of those species is quite predictable. This is needed as the ETS can be used as an income generation mechanism for those who wish to “farm carbon”.

However for those who just wish to offset their emissions and not enter into a carbon farming scenario and who do not have sufficient scale, the ETS can be a cumbersome and costly exercise with the fixed costs of belonging sometimes outweighing any potential economic benefit derived,
and her in lies the problem. The climate system doesn’t care about the accounting systems used, it only recognises volumes of each gas and reacts accordingly by heating or cooling. Currently there are few viable technologies to stop the CH4 production in the rumen of a sheep or cow, but there are plenty of options available to “offset” on farm. The key will be coming up with a mechanism that equates emissions to areas of offsets and the offsetting tools allowed and their performance. There will have to be some form of legally binding contract, but it could and should be done in such a way that the administrative compliance costs are minimised. There also needs to be a mechanism to add “tools” to the range of offset mechanisms if they prove viable. For instance growing trees in lines “shelter belts” may not currently trigger the minimum threshold in the ETS due to minimum width rules, this should be changed in an “offset” scenario. The storing of carbon in an inert form (charcoal or biochar) needs to be actively considered as many of the current allowed tools in the ETS are inherently bio-degradable and short term at best.

Question 8.

We see that the impacts of the governments decisions on this proposal is the key to the agricultural sector changing in a positive way both in terms of emissions and economically. We would urge the government and the ICCC to be open minded in its considerations and work with the ‘coalition of the willing”. If you do not then a large amount of cross sector momentum will be lost.

“Steeling defeat out of the jaws of victory” is not an option when it comes to climate change and working with the agriculture sector on our emissions responses.

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