Emissions trading across the ditch

Guy Trafford

The Australian Farm Institute held a conference in early May to discuss the effect of the Carbon Pollution Reduction Scheme (CPRS) on agriculture. The Australian government had just announced changes to the proposed scheme so the conference was well timed. This is an edited summary of what the author said at the conference.

If there is to be cross-Tasman trading of credits in a common market then both Australia and New Zealand will need consistent schemes. As it now stands, the Australian CPRS will begin on 1 July 2011. In the first year the permit price will be fixed at $10 per tonne of carbon dioxide equivalent, with the transition to full market trading occurring on 1 July 2012. The term carbon dioxide equivalent refers to carbon dioxide along with the carbon dioxide equivalent of methane and nitrous oxide emissions.

The aim is to reduce Australia’s carbon emissions by five per cent of 2000 levels by 2020. But if the world agrees, and this includes developing countries, to stabilise levels of carbon dioxide equivalent in the atmosphere at 450 parts per million or less by 2050, then Australia will lift the level of reduction to 25 per cent of 2000 levels by 2020.

Effects from 2011

The effect on agriculture will be immediate from 2011, with farmers being exposed to the upstream effects of higher power, transport and input costs as the energy sector and industry pass on their charges. For livestock farmers, at this early stage costs have been assessed at six dollars per cattle carcass from added processor costs and the additional on-farm costs. Forestry has been treated in a similar fashion to New Zealand with reforestation able to participate from day one.

The charging of direct emissions from agriculture will have a delayed start and the level of free permits that will be allocated to the sector has yet to be decided. However, the delayed start time has given the agriculture sector time to assess what they do and do not know and work to fill in the gaps.

The areas that were seen as offering the most potential for mitigation and reduction were forestry plantings and the incorporation of biochar into the soils. However, Australia’s climate is not as benign to trees as New Zealand is. A widely quoted figure was that 47 per cent of the area of livestock farms would need to be converted to forestry although there is a lot of uncertainty around this figure.

Biochar is currently not recognised by the Intergovernmental Panel on Climate Change and still requires considerable research before being able to be used as a measurable reduction technique. This is also the situation with the use of de-nitrifiers. In any case, in much of Australia the current evidence is that de-nitrifiers will have little positive effect.

The dairy processor Murray Goulburn Co-op believes that the income reductions they would be required to pass on to their suppliers would range from A$5,000 to A$10,000 per dairy farm. This would be from the upstream costs being passed on, with additional costs for metering and auditing so they can monitor their systems to assess the costs and returns of the various products being produced. Under the current proposals, Murray Goulburn Co-op would, according to their understanding of the situation, receive no assistance from the government. However, according to their calculations Fonterra, their major competitor in international markets, would receive 90 per cent free credits in New Zealand.

The whole concept of which industries would receive free credits was believed to be flawed, with many major non-agricultural emitters potentially receiving assistance while many of the agricultural processors, which were competing with offshore processors, receiving little help. The issue of not operating on a level playing field has been raised many times.

Financial Liabilities

Another issue that concerned conference participants was the potential lack of clear market signals as to what the financial liabilities are likely to be. The recent volatility seen with the EU emission trading scheme, with the price of carbon dioxide equivalent dropping from $30 to $10 within a twelve month period, meant that costing the economic benefits of any mitigation and reduction schemes would be difficult. Accordingly, an emissions tax at source rather than trading credits was discussed.

There was also concern about the lack of research and advice about what farmers could do to reduce their emissions and the downstream effects of these mitigation techniques. For example, if tree planting was the answer then what was the likely effect on water availability? The government’s commitment to greenhouse gas emissions reduction was also questioned when there were shiploads of coal being sent offshore but agricultural research funding was being reduced.

In the USA

In the USA agriculture has been included in their proposed carbon emissions scheme with the exception of livestock emissions. The effect of this upon Australian and New Zealand ruminant livestock farmers would be to reduce the competitiveness of both countries’ beef, dairy and lamb products relative to USA domestic production. While the USA may impose border tariffs on imported goods which are competing against domestic goods which are emission taxed, this is not likely to occur with beef, sheep meat or dairy when USA domestic producers are not liable to an emission tax.

The reasons why the USA is proposing to not tax livestock are in part due to the complexities and cost of measurement, and in part due to a strongly held belief that livestock emissions are highly prone to leakage. If there is any reduction in beef production in the USA it is likely to be taken up by a non-liable country. This external uptake gets worse as there is a possibility that the extra cattle carried within these non-liable countries will be at the expense of rainforest leading to an increase in the total global emissions to obtain this beef.

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