

## **Implications for the rural sector Re: proposed changes to the Emissions Trading Scheme As at the first reading 24th September 2009**

### **Overview:**

This document is based on, and is an interpretation of, the recent announcements by the Government in relation to the Emissions Trading Scheme<sup>1</sup>. Submissions are due on the proposed changes to the Climate Change Response (Moderated Emissions Trading) Amendment Bill by the 13th of October 2009<sup>2</sup>.

### **Summary of changes**

Changes to the Emissions Trading Scheme which apply to all sectors:

- There will be a NZ\$25 price cap on units for all sectors from 1 January 2008 to 31 December 2012 on the domestic market.
- All sectors are allowed to bank their units. Banking credits is for those who have surplus credits or have purchase credits in anticipation of perceived shortages in supply or potential prices increases.
- Allocation of support (assistance from the Government) for all emitting sectors is now calculated using a production or intensity method using an industry average as a base line.
- Aligns phase out of industry allocation to a target of 50% reduction on 1990 levels by 2050. Previously this was 100% by 2030.
- Forestry units can be sold off-shore but units allocated to other sectors can only be traded domestically during the price cap period.

### **Sector specific changes:**

#### **Agriculture**

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<sup>1</sup> MAF ETS Bulletin - <http://www.maf.govt.nz/sustainable-forestry/news/bulletin/issue8.htm>,  
MfE Emissions Trading Bulletin # 11 - <http://www.mfe.govt.nz/publications/climate/emissions-trading-bulletin-11/>, and  
MAF ETS Summary - [http://www.beehive.govt.nz/sites/all/files/1\\_Summary\\_of\\_ETS\\_Changes.pdf](http://www.beehive.govt.nz/sites/all/files/1_Summary_of_ETS_Changes.pdf)

<sup>2</sup> Online submissions can be made at - ([http://www.parliament.nz/en-NZ/PB/SC/MakeSub/a/d/f/49SCFE\\_SCF\\_00DBHOH\\_BILL9597\\_1-Climate-Change-Response-Moderated-Emissions.htm](http://www.parliament.nz/en-NZ/PB/SC/MakeSub/a/d/f/49SCFE_SCF_00DBHOH_BILL9597_1-Climate-Change-Response-Moderated-Emissions.htm))

- The agriculture sector entry date is moved back from 1 Jan 2013 to 1 Jan 2015. This new time frame is in alignment with current policy in Australia.
- Free allocation will be 90 per cent of the emissions at 2015 and will phase out at – 1.3 per cent per annum from 2016. The baseline will be the industry average emissions per unit of output. The baselines will be linked with the emission factors for determining the obligation and are likely to be kg/meat or kg/milk solids.
- Target is; emissions reduction down to 50% of 1990 levels by 2050.
- Point of obligation will initially be at the processor level, not farm level.
- Voluntary reporting commencement to remain at 1 January 2011 and mandatory reporting to commence at 1 January 2012.

## **Forestry**

- The forestry sector entry date of 1 January 2008 is unchanged.
- Forestry units can be exported subject to New Zealand not breaching its commitment period reserve.
- Subject to New Zealand securing offsetting rules internationally, offsetting (harvesting and clearing one site, say for dairy and planting another area not previously forest into trees) will be introduced in the ETS after 2012.
- The level of allocation to pre-1990 forests, to eligible landowners who purchased their forest before 1 November 2002, is fixed at 60 units per ha which remains unchanged from previous policy.
- Those who have undertaken tree weed eradication will now be able to apply for a retrospective exemption for deforestation undertaken since 2008.

## **Industrial processes, liquid fossil fuels and stationery energy**

- The entry date for these sectors is 1 July 2010.
- There will be a “progressive obligation” (the ability to surrender 1 unit for every 2 tonnes of emissions from 1 July 2010 until 31 December 2012). This will apply to stationary energy, liquid fossil fuels and industrial emissions.
- Target is; emissions reduction down to 50% of 1990 levels by 2050.

## On-Farm Implications

Changes to all sectors under the Emissions Trading Scheme will have an impact on the farm, particularly if there is a forest or woodlot on the farm. However to show the impact of the recent ETS changes, a dairy farm with no forestry has been chosen. This example is based on the data in Info Sheet 9 taken from the Carbon Farming Group website – (<http://www.carbonfarming.org.nz/articles.html>).

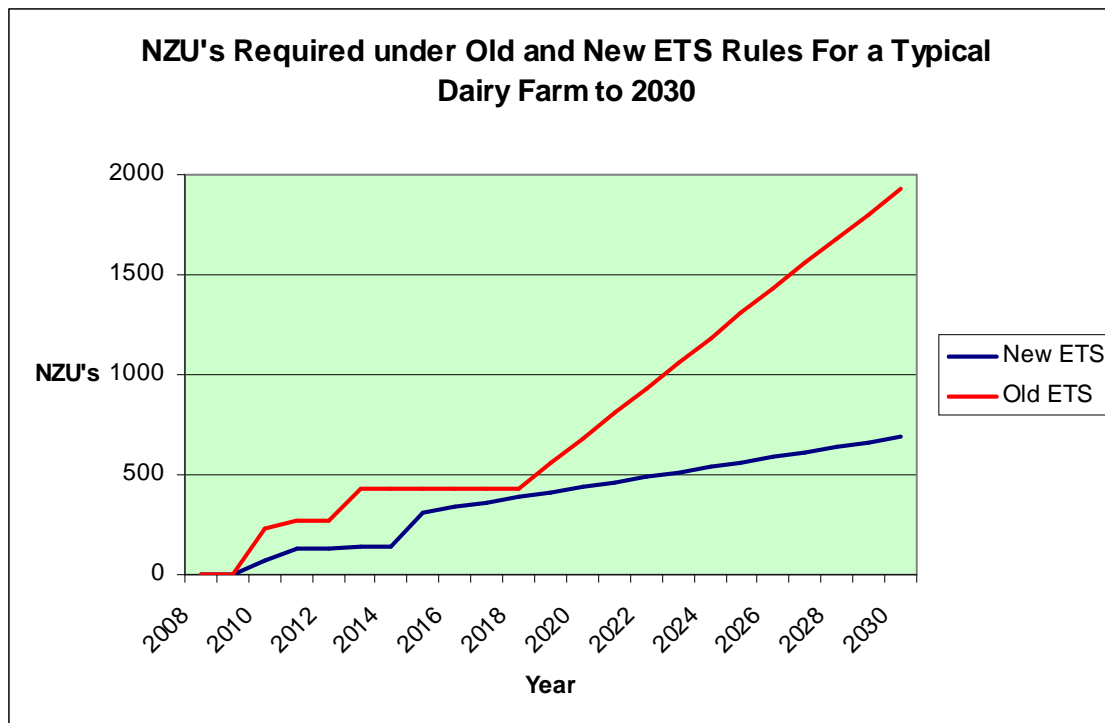
This analysis is done using the following inputs.

| Source      | Quantity      | Emissions (NZU <sup>3</sup> ) |
|-------------|---------------|-------------------------------|
| Petrol      | 1,500 litres  | 4                             |
| Diesel      | 11,000 litres | 29                            |
| Electricity | 62,240 kWh    | 14                            |
| Nitrogen    | 39 tonnes     | 221                           |
| Cows        | 535           | 1321                          |
| Heifers     | 260           | 340                           |
|             | <b>Total</b>  | <b>1,929</b>                  |

## Assumptions

- For the purposes of free allocation this data is industry average data.
- All costs associated with meeting emissions requirements for fuel, electricity and fertiliser have been passed onto the farm. This also applies to the on-farm emissions from the processor.

Table showing the application of the new ETS rules:



<sup>3</sup> An NZU is the unit used under the Emissions Trading Scheme which is based on the emissions equivalent of 1 tonne of carbon dioxide.

## **Cost implications**

Using the data in the above example the total cost to the farm under the old ETS rules at 2030, 1929 units at a price of \$25 per NZU would be \$48,225 per annum. This compares with the new ETS rules of around 676 units at \$25 as at 2030 would cost \$17,168 per annum. This 65% reduction in costs reflects the change in emission reduction targets from 100% by 2030 to 50% by 2050.

The Ministry for the Environment has estimated at 2015 costs, at a carbon price of \$25/tonne CO<sub>2</sub>-e, dairy farmers will face costs of around 2.5 cents per kilogram of milk solids. Sheep and beef farmers 6 cents and 3 cents per kg of sheep meat and beef respectively, and deer farmers around 6 cents per kilogram of venison on average<sup>4</sup>.

## **Forestry Offsetting**

The amount of forestry required to offset the emissions from a farming operation have also reduced in accordance with the reduction in targets. Using the example above, under the old ETS rules 88 hectares of pine forest would be required to offset emission liabilities as at 2030. Under the new rules, it would only take around 31 hectares to offset the liabilities as at 2030.

## **Point of obligation**

It has been decided that the point of obligation for the agriculture sector will initially be at the processor level. This will mean that the processor will account for all emissions and the cost is likely to come directly off the price paid for the product. The intent is then to revert to an on farm point of obligation, once tools and techniques enable this to be a simple process.

The implications of the point of obligation being at the processor level mean the farmer won't have to bother with extra paper work. However, those farmers who are proactive in investing in emission reduction technologies and techniques may not have this recognised in their carbon balance.

## **Banking credits**

Farms with a post 1989 woodlot or forest on them, should still consider registering as a participant and uplifting NZU's from these forests. Any NZU's uplifted in the first commitment period of (2008 to 2012) can be banked until they may be needed from 2015. Any units not claimed by the end of 2012 will be unavailable in the next commitment period. These units will be used by the Government to meet its Kyoto Protocol commitments.

## **Overview provided by:**

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<sup>4</sup> Ministry for the Environment Emissions Trading Bulletin # 11 - <http://www.mfe.govt.nz/publications/climate/emissions-trading-bulletin-11/>