## AAUs going overseas

Records from the NZ Emission Unit Register show that as of the end of 2010, nearly 2.3 million AAUs had been sold overseas, including to three European countries (Denmark, Norway and the Netherlands). Around 1 million of these (generated under the Projects to Reduce Emissions) were converted to ERUs before sale, with a small number of ERUs also bought overseas and then sold back overseas. The number of AAUs going overseas can be summarized as follows:

### Table 1 Movement of AAUs and ERUs overseas

	2009	2010	Total
AAUs sold directly overseas	570,451	718,409	1,288,860
AAUs purchased overseas and sold overseas	1,000	1	1,001
AAUs converted to ERUs and sold overseas	568,469 <sup>1</sup>	427,650 <sup>2</sup>	996,119
ERUs purchased overseas and sold overseas	-	20,000	20,000

<sup>1</sup> Includes 71,902 ERUs previously converted from AAUs in 2008. <sup>2</sup> Includes 27,770 ERUs previously converted from AAUs in 2008.

The Ministry of Agriculture and Forestry, which is responsible for managing forestry under the NZETS, as of 28 February 2011 had issued 11.8 million NZUs to forestry participants - 8.2 million to owners of forests planted after 1989 (who join the ETS voluntarily) and 3.6 million to pre-1990 forest owners, who can choose whether to apply for an exemption for their land or claim an allocation and have a one-off chance to claim NZUs.

Applications for a further 15 million NZUs from pre-1990 forest owners are being processed at present. Another 2.5 million units are about a month away from approval, which could make for a total allocation to forestry of 29.3 million NZUs by the end of this year.

MAF expects a rush of applications as the Kyoto Protocol 2008-2012 commitment period draws to a close. Applications for an allocation of NZUs for pre-1990 forests close on 30 November 2011.

## **The Greenhouse Policy Coalition** represents New Zealand's energy-intensive businesses from a range of sectors.

• Rio Tinto (Alcan) New Zealand Ltd • Methanex New Zealand Ltd • Carter Holt Harvey Ltd

- Fonterra Cooperative Group Ltd
- Solid Energy New Zealand Ltd

• New Zealand Steel Ltd • Coal Association of New Zealand • Business New Zealand

email greenhousepolicy@greenhousepolicy.org.nz

What happens to carbon units under the **New Zealand Emissions** Trading Scheme



This pamphlet is designed to help the general reader understand what carbon units are and what happens to them under the New Zealand Emissions Trading Scheme (the NZETS). The diagram opposite charts the lifecycle of the units, known as New Zealand Units (NZUs). The other kinds of carbon units involved in the process are Assigned Amount Units (AAUs) issued to New Zealand under the Kyoto Protocol for the 2008-2012 period, Emission Removal Units (ERUs) issued by the UN where organisations undertake projects in developed countries that remove emissions, and Certified Emission Reductions (CERs), issued by the UN to developing countries for emission reduction projects, purchased by developed countries to meet their obligations.

## Why we have an ETS

As a signatory to the Kyoto Protocol, New Zealand has undertaken to reduce its net emissions of greenhouse gases to 1990 levels over the period 2008-2012. Net emissions means that our emissions must match 1990 levels once carbon absorbed by forests is subtracted from the raw figure for our total emissions. The Government's main tool for achieving this goal is the NZETS, which requires those who emit greenhouse gases or supply energy to pay for their emissions. Consumers also pay when they purchase fuel and electricity.

Emissions trading works by valuing each tonne of carbon dioxide, or the equivalent amount of certain other greenhouse gases, as worth one unit. Companies emitting gases have to pay for their emissions by purchasing and surrendering units, known as New Zealand Units (NZUs). Others can earn units by planting forests, with the units having to be surrendered if the trees are felled.

## How NZU allocation works

The Government has acknowledged that the NZETS places some energy-intensive, trade-exposed companies at risk because their overseas competitors do not have to pay for their emissions. These companies will receive a free allocation of NZUs covering 60% or 90% of their emissions, depending on their activities and on whether they meet the thresholds for assistance. The thresholds are defined in terms of tonnes of emissions per \$1 million of revenue. The fishing sector has also received a one-off allocation of 700,000 NZUs to cover fuel price rises.

Not all companies receive NZUs, e.g. electricity generators which are able to pass on their increased costs to customers. The world's largest dairy exporter, Fonterra, gets only a very small allocation (covering 2-3% of emissions) as most of its operations do not meet the

threshold for free NZUs. In all cases, the free allocation of NZUs is temporary, with assistance phasing out at 1.3% per year from 2013. The price of NZUs is also fixed at \$25 until the end of 2012, with non-forestry participants also facing a temporary reduced requirement to surrender one NZU for every two tonnes of emissions.

## New Zealand's Kyoto liability

Under the Kyoto Protocol the Government received 310 million Assigned Amount Units (or AAUs) to cover the period 2008-2012, i.e. five times the country's 1990 emissions of 61.9 million tonnes of CO<sub>2</sub>-equivalent gases. It will also receive Removal Units (RMUs) for any net increase in carbon sinks after 1989, i.e. forests. At the end of the five-year period, New Zealand has an obligation to surrender sufficient units to cover its emissions for 2008-2012.

New Zealand's liability under Kyoto is calculated as gross emissions plus deforestation. If this figure is less than the number of Kyoto units the Government holds, the Government will be in credit. If the emissions liability figure is greater than the number of Kyoto units held, the Government will have a deficit. The Government will then have to buy additional overseas units, with taxpayers footing the bill.

In the NZETS, AAUs back the NZUs issued by the Government. The Government, however, faces a liability risk if units are sold offshore. At present, in the NZETS only foresters can sell overseas, and some are doing this. When overseas trading takes place, NZUs are converted into AAUs, which reduces the number of AAUs available to the Government, increasing the potential cost to the taxpayer.

# The lifecycle of carbon units under the NZ Emissions Trading Scheme



Projects to Reduce Emissions (PRE, receive 8 million AAUs) Permanent Forest Sink Initiative (PFSI, c1 million AAUs) Negotiated Greenhouse Gas Agreements (NGAs, 5000 AAUs)

## Non-ETS policy

## **Overseas**

PRE, PFSI and NGA holders can sell AAUs in NZ or overseas

PRE holders can convert AAUs to ERUs and sell overseas

Foresters can convert NZUs to AAUs for sale overseas

Overseas sales of AAUs, along with post 1989 forest owners choosing to claim credits for tree growth during 2008-2012, raise risk of Govt being in deficit on its emissions

Those with surrender obligations buy units at this point, either domestically (NZUs, AAUs)

Owners of forests

supply of NZUs

planted before 1990

can receive a one-off

**CERs/ERUs** purchased overseas by NZ companies to cover emissions

Coal and gas industries pay for emissions

Geothermal sector pays for emissions

Industrial processes sector pays for emissions

Foresters pay for emissions when they fell trees

Owners of forests

planted after 1989 can

opt in to NZETS and

receive NZUs