The New Zealand emissions trading scheme is part of the government's response to climate change. Emissions trading will help reduce emissions, encourage and support global action on climate change, and help put New Zealand on a path to sustainability.

This factsheet explains how the New Zealand emissions trading scheme works.

How the New Zealand emissions trading scheme works

Factsheet 15

September 2008

What is the emissions trading scheme?

'Emissions trading' is a market-based approach for achieving environmental objectives where emission units are traded between participants. In effect, those emitting greenhouse gases have to pay for increases in emissions and are rewarded for decreases. This encourages emissions reductions.

The emissions trading scheme operates within the cap on emissions established by the Kyoto Protocol during its first commitment period (2008–2012). There is no cap on the emissions that occur within New Zealand. However, domestic emissions that exceed New Zealand's allocation under the Kyoto Protocol must be matched by emission units bought internationally from within the Kyoto cap on emissions.

The New Zealand scheme covers emissions of the following six greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF_6). These are the greenhouse gases covered by the Kyoto Protocol.

What sectors does the emissions trading scheme cover?

The emissions trading scheme covers the following sectors of the economy: forestry, liquid fossil fuels (transport), stationary energy, industrial processes, synthetic gases, agriculture and waste.

Who participates in the emissions trading scheme?

Schedule 3 of the Climate Change Response Act 2002 specifies the activities that are automatically included in the emissions trading scheme for each of the sectors above. People carrying out these activities are required to participate in the scheme.

Schedule 4 of the Act specifies the activities that are optional under the emissions trading scheme. People carrying out these activities can choose to participate.

Most participants are required to match their emissions by surrendering an equivalent number of emission units. Surrendering a unit means it is incapable of being used again, for example, it cannot be transferred to another participant. Some participants, such as those with forests planted after 1989, are able to earn emission units for carbon dioxide stored or removed from the atmosphere.

To reduce compliance costs, the participant does not necessarily match the actual point where emissions are produced. For example, a coal producer would be required to surrender units for the coal it sells, even though the actual emissions will occur when the coal is burned.

Alongside those who are required to participate in the scheme and those who can opt in, other people may also hold and trade emission units. These people are commonly referred to as 'secondary market traders'.

What do participants have to do?

Participants are required to:

> monitor, record and report activities that lead to greenhouse gas emissions, some of which will be the indirect result of their activities

> surrender emission units (either Kyoto units or New Zealand-specific units called New Zealand Units or NZUs) equal to the amount of emissions associated with their activities in each compliance period.

Secondary market traders, such as brokers, can hold and trade NZUs, but do not have reporting obligations and are not required to surrender emission units. They can hold and trade emission units to take advantage of market opportunities.

The Ministry of Economic Development administers the emissions trading scheme. It is the main compliance and enforcement agency, responsible for verifying the compliance of participants under the scheme.

How are emission units acquired?

Participants may acquire emission units by receiving a free allocation from the government. In addition, participants and secondary market traders can acquire emission units from the following sources:

> buying them from the government (although the government has no surplus units to auction at present)

> buying them from approved overseas sources

> buying them from another participant or secondary market trader, either by entering into a direct bilateral contract with the other party, or trading through a broker or trading exchange.

Central to the administrative mechanics of the scheme is an electronic registry, which records the holdings of emission units by participants and secondary market traders (this can be likened to a share registry). It is called the New Zealand Emission Unit Registry (NZEUR). It records:

> the holders of emission units and the amount of emission units they hold

> transfers of emission units between holders both within the NZEUR and between recognised international unit registries

> the surrender of emissions units by participants in order to meet their obligations under the emissions trading scheme.

As with a share registry, the NZEUR does not record information about the price or financial value of emission unit trades, nor does it provide a mechanism for the exchange of cash for units traded. The mechanism for the exchange of cash for units traded will depend on the way the units were traded (ie, bilateral contract or through a broker or organised exchange).

The NZEUR is administered by the Ministry for Economic Development.

How does emissions trading work?

The emissions trading scheme can be explained by using a simple example:

> Firm A is an oil company. It needs to buy emission units to cover the greenhouse gas emissions it is responsible for.

> Firm B is a large forestry company that receives emission units for land it is planting in forests. It is also undertaking some deforestation, leading to emissions for which it has to surrender emission units. Initially, Firm B has a shortfall of units but, as the new forest matures over time, it will have an overall surplus of units.

> Firm C is a major industrial user of electricity. Its costs increase with the introduction of the emissions trading scheme. To help Firm C adapt to these higher costs, the government gives Firm C an allocation of emission units, which Firm C can sell to offset its increased electricity costs.

Under the emissions trading scheme, Firm A and Firm B both buy Firm C's units in the short term to cover their emissions. Because it now has to pay higher energy prices, Firm C finds it is cheaper to invest in energy efficiency.

Alternatively, any firm can import or export eligible units from other countries.

Over time, as its forest matures, Firm B has spare units available and sells them to Firm A.

Where to go for more information

For more information on the government's climate change work, including more information about the emissions trading scheme, visit **www.climatechange.govt.nz** or call **0800 CLIMATE (0800 254 628)**.

Published in September 2008 by the Ministry for the Environment, Manatū Mō Te Taiao, PO Box 10362, Wellington, New Zealand.
This factsheet is also available on the Ministry for the Environment's website: **www.mfe.govt.nz**
INFO 317