

The New Zealand government has decided to use an emissions trading scheme for greenhouse gas emissions as part of its 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 a New Zealand emissions trading scheme will work.

How a New Zealand emissions trading scheme will work



'Emissions trading' is a market-based approach for achieving environmental objectives. A cap-and-trade emissions trading scheme sets an overall limit on the quantity of greenhouse gas emissions that can be emitted. Emissions trading schemes often operate on a 'net' basis (ie, there may be an increase in emissions from one source, or even one country, but this increase is offset by emission reductions elsewhere).

In the New Zealand emissions trading scheme, there will not be an absolute limit of emissions in New Zealand. Participants will be able to buy emission reductions from overseas by using the Kyoto Protocol's flexibility mechanisms.

The New Zealand scheme will cover emissions of the following six greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆). These are the greenhouse gases covered by the Kyoto Protocol.

Activities that cause or contribute directly or indirectly to greenhouse gas emissions will be defined within the scheme. The scheme will involve 'emission units', which people carrying-out these activities will be able to buy and sell. They will ultimately have to surrender a sufficient number of units to cover their emissions.

Once an emission unit is surrendered for compliance purposes, it cannot be further traded or surrendered.

There will be two classes of people who may hold and trade emission units:

- > participants
- > secondary market traders.



Participants are people who carry out activities leading to greenhouse gas emissions in each industry sector. Each participant is required to match their emissions with the surrender of equivalent emission units. Surrendering a unit means it is incapable of being used again eg, transferred.

To reduce compliance costs, the participant will not necessarily align with the actual point of emission. For example, a coal producer could be required to surrender units for the coal it sells, even though the actual emissions will occur when the coal is burned.

Participants will be 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, which are to be called New Zealand Units – NZUs) equal to the amount of emissions associated with their activities in each compliance period.

Secondary market traders (eg, brokers) can hold and trade NZUs, but will not have reporting obligations or be required to surrender NZUs. They will hold and trade NZUs to take advantage of market opportunities.

Participants and secondary market traders can acquire emission units by any of the following means:

- > receiving a free allocation from the government
- > buying them from the government
- > buying them from approved overseas sources
- > buying them from another participant or third parties (eg, brokers or trading exchanges).

Central to the administrative mechanics of the scheme is an electronic registry, which can be likened to online banking. The registry will record:

- > the holders of emission units and the amount of emission units they hold
- > transfers of emission units between holders
- > participants' reported emissions
- > emission units surrendered for compliance purposes.

The Climate Change Response Act 2002 established an electronic registry for the purpose of tracking Kyoto units. It is envisaged that this registry will be adapted to work for the New Zealand emissions trading scheme as well.

There will also be an administering agency for the scheme. The administering agency will be the main compliance and enforcement agency, responsible for verifying the compliance of participants under the scheme. It will have a range of powers necessary to carry out these functions.

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. 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 'The Framework for a New Zealand Emissions Trading Scheme' and a series of emissions trading factsheets, visit www.climatechange.govt.nz