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 emissions trading will affect the waste sector.

Waste in the emissions trading scheme

Factsheet 22

September 2008

Greenhouse gas emissions from waste

The greenhouse gases carbon dioxide, methane and nitrous oxide are emitted into the atmosphere from waste treatment and disposal. These emissions come from solid waste disposed in landfills, commercial and domestic wastewater treatment, and waste incineration. A distinction is drawn for sources of carbon dioxide in the waste sector; where the emissions come from disposing or treating organic matter, these emissions are considered part of the natural organic cycle and are not counted. Only carbon dioxide emissions from burning fossil fuel origin materials such as plastic are included in the emissions trading scheme.

The waste sector was responsible for 2.4 percent of New Zealand's greenhouse gas emissions in 2006. It is the only sector that has reduced its greenhouse gas emissions below 1990 levels, in its case by 26 percent. This reduction has come from improved landfill management systems, the installation and operation of landfill gas recovery technologies, as well as by reducing organic waste disposed at landfills through recycling and composting.

What waste activities does the emissions trading scheme cover?

The emissions trading scheme will include methane emissions from landfills that deposit solid waste. Such waste must be partially household waste. Methane emissions occur as a result of the biodegradation of organic matter contained in landfills.

The emissions trading scheme will also include carbon dioxide, methane and nitrous oxide emissions from any future solid waste incineration plant that combusts household waste. There is no such plant operating in New Zealand at present, but they are common overseas. If electricity is generated from waste incineration, then any emissions are counted in the industrial processes sector, which has a different entry date to the waste sector. See Factsheet 20 for more information.

The emissions associated with treating domestic, commercial and residential wastewater (including septic tanks) will not be covered by the emissions trading scheme. Emissions of these gases are extremely difficult to measure accurately at individual sites.

When does the waste sector enter the emissions trading scheme?

Emissions from the waste sector activities described above will be included in the emissions trading scheme from 1 January 2011, although full obligations for the surrender of emission units will not start until 2013. Voluntary reporting will be enabled from January 2011 and mandatory reporting is required from January 2012.

How does the waste sector participate in the emissions trading scheme?

Landfill operators will surrender emission units based on a calculation of emissions over a 12-month period. The method to calculate emissions will be set in regulations and is expected to be resolved in partnership with the waste sector over 2009 and 2010. It will build on the discussions and reporting mechanisms developed as a result of the Waste Minimisation Act.

Potential impacts of the emissions trading scheme on the waste sector

The cost of emission units is expected to be passed on to customers of landfills (the people and organisations depositing waste) through increased prices for waste disposal. There is no exact way of generalising a cost increase to all users of landfills, as emissions from individual landfills are noticeably affected by landfill gas collection systems and the incentives and infrastructure for recycling and organic materials diversion. Users of landfills have markedly different items in their waste, which all have different potentials for landfill gas generation. Any price increases will also be affected by competition from other landfills and the management policies and priorities of the landfill owner – usually a local authority.

Will the waste sector receive a free allocation of emission units?

No, the government will not give waste sector participants free emission units. This is because they can pass on the costs of the scheme to their customers, which means the impact of the scheme on the profits of waste sector participants will be limited.

Other government climate change initiatives relevant to the waste sector

The national environmental standard to control greenhouse gas emissions from landfills directly addresses methane emissions from solid waste disposal. This standard required opened landfills with capacities greater than one million tonnes to install and operate landfill gas collection systems from October 2007.

The national waste levy on the disposal of waste and other policies imposed by the Waste Minimisation Act 2008 will indirectly influence greenhouse gas emissions by affecting the quantity and type of waste being finally deposited at landfills.

Also, the New Zealand Waste Strategy contains a range of targets and measures, some of which are directed at organic waste and general waste disposal. Initiatives introduced in response to these targets are likely to influence greenhouse gas emissions from the waste sector.

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)**.

Visit the Ministry for the Environment website at **www.mfe.govt.nz** for further information on the government's programmes on solid waste, wastewater treatment, and national environmental standards.

Your local council will be able to give you information on waste treatment services and policies in your area.

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This factsheet is also available on the Ministry for the Environment's website: **www.mfe.govt.nz**
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