

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, and help put New Zealand on a path to sustainability.

This factsheet explains how the emissions trading scheme will affect the stationary energy sector.

## Energy in the emissions trading scheme

Factsheet 19



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### Greenhouse gas emissions from energy

New Zealand is in a unique situation because almost 70 percent of our electricity is generated from renewable sources (mainly from hydro power). This is the third highest level of renewable electricity generation in the developed world, making us well placed to move toward a low-emissions energy system.

New Zealand's stationary energy emissions come mainly from energy sourced from non-renewable fuels, such as coal (20%) and gas (23.3%). Geothermal fields also contribute a small amount of emissions (0.01%).



Between 1990 and 2007, greenhouse gas emissions from electricity generation rose by approximately 91 percent, and greenhouse gas emissions from energy use by manufacturing industries rose by approximately eight percent.

If we continue with business as usual, it is projected that greenhouse gas emissions from stationary energy will increase by another seven percent between 2005 and 2015.

### What are stationary energy activities as defined under the emissions trading scheme?

'Stationary energy' includes all fuels used in electricity generation and in the direct production of heat in the industrial, commercial, and residential sectors. It does not include energy used for transport or emissions from industrial processes.

The specific stationary energy activities that are included in the emissions trading scheme are:

- > importing coal
- > mining coal over 2,000 tonnes in a year (excluding coal mined for export)
- > importing more than 10,000 litres of natural gas in a year
- > mining natural gas (excluding natural gas mined for export)
- > using geothermal fluid for the purpose of generating electricity or industrial heat
- > combusting used oil, waste oil, used tyres and waste for the purposes of generating electricity or industrial heat
- > refining petroleum where the refining involves the use of intermediate crude oil products.

### When does stationary energy enter the emissions trading scheme?

The stationary energy sector enters the emissions trading scheme on 1 January 2010. This means that stationary energy participants must begin reporting and accounting for their emissions from this date. Stationary energy participants will need to submit an emissions return by 31 March 2011, and to surrender any units by 30 April 2011, thereafter on these dates annually.

## How does stationary energy participate in the emissions trading scheme?

The government will apply the emissions trading scheme in a way that minimises compliance and administration costs, but covers the most emissions.

Stationary energy participants will have to calculate their emissions based on methodologies set out in the *Climate Change (Stationary Energy and Industrial Processes) Regulations*. These regulations (still in development) will set out which inputs and outputs must be measured for each activity and will provide default emission factors for each input or output. The methodologies will clearly set out how a stationary energy participant must calculate their emissions. The commentary that accompanies the regulations will explain the regulations and provide greater detail where needed.

## Potential impacts of the emissions trading scheme on the stationary energy sector

Stationary energy is included under the emissions trading scheme. This is likely to result in small increases in electricity and other energy prices for consumers, which may encourage greater energy efficiency and conservation. Over time, the government expects emissions from stationary energy to decrease relative to business as usual, as a result of emissions trading and other policies.

As an illustration, the average household electricity use is 8000 kilowatts per annum. If retail electricity prices increase by two to four cents per kilowatt hour as a result of emissions trading, the average household electricity bill will increase by about five percent from 2010.

The government will provide financial assistance for households, with an accelerated adjustment for low-income households through a targeted income supplement to families who receive benefits, superannuation and Working for Families tax credits. There will also be a one-off rebate for all households for price increases associated with electricity.

The government has also created a billion dollar Household Fund under the emissions trading scheme to promote household energy efficiency and renewable technologies in households. The programme could include household

insulation and clean heating such as pellet burners, energy efficient appliances, and light, space and water-heating efficiency improvements. Improving the energy efficiency of our homes and switching to clean heating devices will reduce our energy emissions and also provide significant health and air quality benefits. The fund will start in 2009 and is in addition to initiatives under the New Zealand Energy Efficiency and Conservation Strategy.

## Will the stationary energy sector receive a free allocation of emission units?

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

The government will provide some free emission units to those in the industrial sector who are significant users of stationary energy and who are restricted in their ability to pass on any cost increases to their customers.

## Other government climate change initiatives relevant to stationary energy

The government also has in place a wider package of policies and programmes to help consumers and businesses tackle energy emissions, reduce their energy use and reduce the amount of money they spend on energy. For example, installing solar water-heating can reduce a household's electricity bill while taking advantage of a renewable energy source. The government has committed \$15.5 million over the next three years for a solar water-heating programme. For more information, visit [www.eeca.govt.nz](http://www.eeca.govt.nz)

This package includes helping businesses and consumers to develop the skills, knowledge, funds, technology, and management techniques to reduce their greenhouse gas emissions. It also includes providing incentives to encourage emission reductions outside the emissions trading scheme. For example, the New Zealand Energy Strategy responds to the challenges of providing a secure and reliable energy supply and reducing greenhouse gas emissions. The New Zealand Energy Efficiency and Conservation Strategy implements measures to promote energy efficiency, energy conservation and the use of renewable sources of energy.

## 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](http://www.climatechange.govt.nz) or call 0800 CLIMATE (0800 254 628).

For more information about other government initiatives in the stationary energy sector, refer to the New Zealand Energy Strategy at [www.med.govt.nz](http://www.med.govt.nz) and the New Zealand Energy Efficiency and Conservation Strategy at [www.eeca.govt.nz](http://www.eeca.govt.nz)

For information about energy sector emissions, refer to New Zealand's energy greenhouse gas emissions inventory at [www.med.govt.nz](http://www.med.govt.nz)