

The New Zealand government is considering using 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, and help put New Zealand on a path to sustainability. This fact sheet is an introduction to how emissions trading is likely to affect the stationary energy sector.

## Emissions trading and energy

Factsheet 7



September 2007

### Stationary energy emissions

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.

New Zealand is in a unique situation because almost 70 per cent of our electricity is generated from renewable sources (mainly hydro). 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 the provision of energy sourced from non-renewable fuels (such as coal and gas). Geothermal fields also contribute a small amount of emissions.

Between 1990 and 2006, greenhouse gas emissions from electricity generation rose by approximately 138 per cent, and greenhouse gas emissions from energy use by manufacturing industries rose by approximately 10 per cent.

If we continue with business as usual, it is projected that greenhouse gas emissions from stationary energy will increase by another 7 per cent between 2005 and 2015.

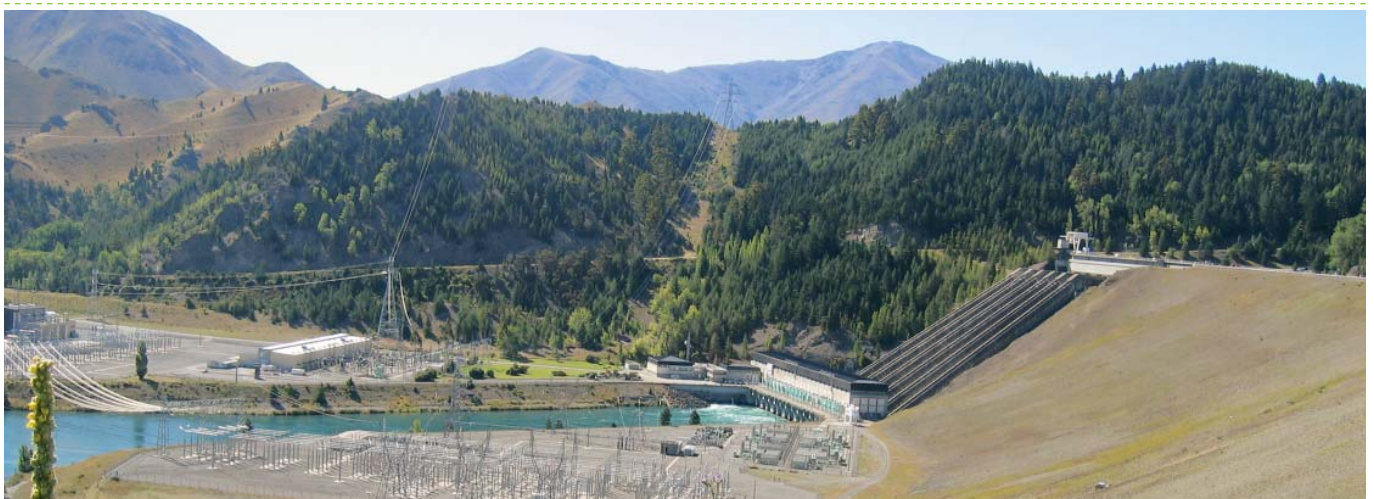
### What are the priority issues for discussion?

The government proposes that the stationary energy sector enter the emissions trading scheme on 1 January 2010.

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

The government wishes to engage with stakeholders on whether to apply the scheme directly to the firms that import or extract the coal, gas, or geothermal resources, or whether to consider a range of other options, such as including the firms that actually produce energy and emissions from the fuel.

The government also wishes to discuss operational details, such as the emissions monitoring and reporting methods for the stationary energy sector.



### Potential impacts

Emissions trading within the stationary energy sector will most likely increase electricity and other energy prices for consumers, which will in turn encourage 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 8,000 kilowatts per annum. If retail electricity prices increase by one cent per kilowatt hour as a result of emissions trading, the average household electricity bill will increase by about \$7 a month.

The government will put in place additional measures to reduce the financial impacts of higher electricity prices so that low and modest income households are not disadvantaged, while still ensuring that incentives for efficient energy use remain. Policy options are being considered.



For example, the installation of 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 and a half years for a solar water heating programme. For more information visit [www.eeca.govt.nz](http://www.eeca.govt.nz)

### Other government initiatives relevant to stationary energy

The government has a wider package of policies to tackle energy emissions and climate change. 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 proposes ways to promote energy efficiency, energy conservation and the use of renewable sources of energy.



The government also proposes to provide some assistance 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.

The government has in place a range of energy efficiency and conservation programmes to help consumers and businesses reduce their energy use and the amount of money they spend on energy.

### 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](http://www.climatechange.govt.nz)

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)