

ENERGY EFFICIENCY CERTIFICATES TRADING SCHEME IN NEW SOUTH WALES, AUSTRALIA

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See also an April 2005 PowerPoint presentation on the trading scheme at:
www.efa.com.au/Library/NSWWhiteCertificatesScheme.pdf

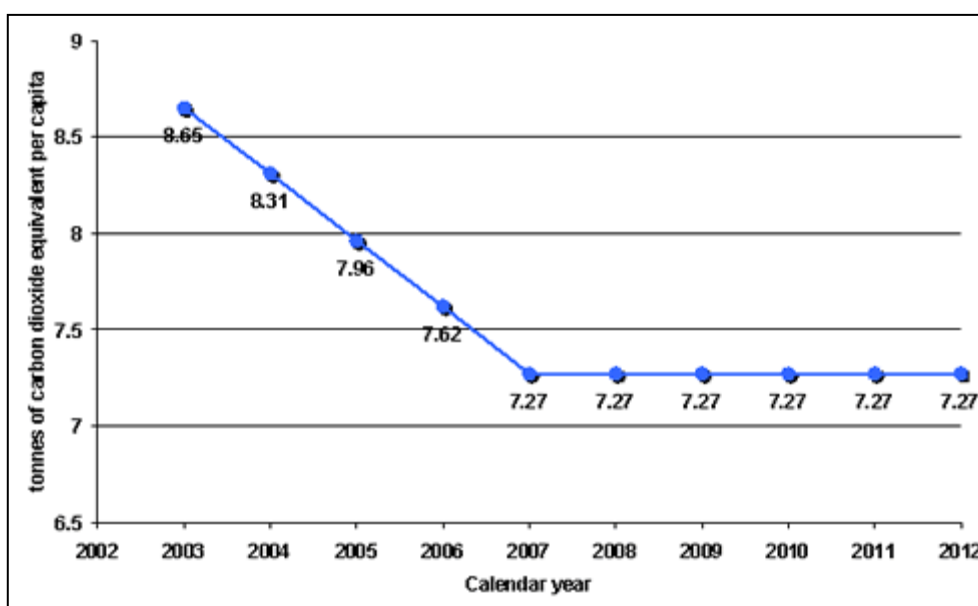
Introduction

The first energy efficiency certificates ('white certificates') trading scheme in the world has been implemented in New South Wales, Australia. These certificates are part of a larger Greenhouse Gas Abatement Scheme introduced by the State Government of New South Wales, the most populated state in Australia.

Under the New South Wales Greenhouse Gas Abatement Scheme, from 1 January 2003 electricity retailers and other parties are required by legislation to meet mandatory targets for reducing the emission of greenhouse gases resulting from the electricity they supply or consume. To achieve the required reduction in emissions, eligible parties purchase and surrender tradeable certificates called New South Wales Greenhouse Abatement Certificates (NGACs). NGACs can be created in several ways, one of which is by undertaking 'demand side abatement' which includes energy efficiency projects.

Greenhouse Benchmark

The New South Wales Government has set a state-wide benchmark of reducing greenhouse gas emissions to 7.27 tonnes of carbon dioxide equivalent per capita by 2007. This is five per cent below the per capita emissions in the Kyoto Protocol baseline year of 1989/90. To ensure continual progress towards this end target, progressively tighter targets have been set year-on-year, commencing with a target of 8.65 tonnes per capita in 2003 and leading to the final benchmark level of 7.27 tonnes per capita in 2007. The level of 7.27 tonnes per capita will then be maintained until at least 2012.



Benchmark Participants

Under the New South Wales Greenhouse Gas Abatement Scheme, parties who are required to meet targets for greenhouse gas emissions are called ***benchmark participants***. Each year, the Scheme sets individual benchmark reductions of greenhouse gas emissions for each benchmark participant based on their contribution to the supply of electricity in New South Wales. Each benchmark participant then has to reduce the average emissions of greenhouse gases from the electricity they supply or consume to the pre-set individual benchmark level.

Benchmark participants comprise:

- electricity retailers;
- electricity customers taking supply directly from the Australian National Electricity Market;
- electricity generators with contracts to supply electricity directly to customers;
- certain other parties who consume large volumes of electricity in New South Wales and who elect to participate directly in the Scheme, rather than have their electricity retailer manage the emission reduction obligation in relation to the electricity they consume.

Penalty

If a benchmark participant does not reduce the average emissions of greenhouse gases from electricity they supply or consume to their pre-set individual benchmark level, they pay a penalty of AUD10.50 per tonne of carbon dioxide equivalent above their benchmark.

Creation of NGACs

To achieve the required reduction in greenhouse gas emissions, benchmark participants purchase and surrender certificates called New South Wales Greenhouse Abatement Certificates (NGACs). NGACs are transferable certificates that may be freely traded between any parties. One NGAC represents one tonne of carbon dioxide equivalent that would otherwise have been released into the atmosphere in generating electricity.

The activities which allow persons to create NGACs include:

- reduction in the greenhouse intensity of electricity generation;
- activities that result in reduced consumption of electricity;
- the capture of carbon from the atmosphere in forests, referred to as carbon sequestration; and
- activities carried out by elective participants that reduce on-site greenhouse gas emissions not directly related to electricity consumption.

Demand Side Abatement

In the New South Wales Greenhouse Gas Abatement Scheme, activities that result in reduced consumption of electricity are termed '***demand side abatement***'. Demand side abatement (DSA) refers to actions to reduce electricity consumption that occur on the 'demand side' of the electricity meter, ie at the point where electricity is consumed.

Energy Efficiency Certificates Trading Scheme in New South Wales, Australia

Under the Scheme, a demand side abatement project comprises the alteration of an installation that results in reduced greenhouse gas emissions compared with the emissions without that project.

The Scheme identifies five types of demand side abatement project.

- modifying an installation, or the usage of an installation, resulting in a reduction in the consumption of electricity;
- replacing an installation with another installation that consumes less electricity;
- implementing a new installation that consumes less electricity than other installations of the same type;
- fuel switching - substituting another energy source for electricity, or vice versa, where the substitution results in reduced greenhouse gas emissions;
- substituting electricity generated on-site for electricity supplied from the grid, where the substitution results in reduced greenhouse gas emissions.

Boost to the Energy Services Industry

The right to create and sell NGACs rests with the person who is liable to pay for the energy consumed at the site where a demand side abatement project is implemented. That person may transfer the right to create and trade NGACs to other parties including, but not limited to, electricity retailers and other benchmark participants.

The ability to assign the right to create NGACs to third parties creates an opportunity for firms providing energy management services to offer the creation of DSA NGACs as an additional value-adding service.

For example, an energy management firm which specialises in undertaking energy efficiency projects can offer a discounted price to carry out an energy efficiency upgrade at a site if the site owner agrees to assign the creation of NGACs from the project to the energy management firm.

Therefore, one result of the introduction of the New South Wales Greenhouse Gas Abatement Scheme may well be an increase in activity in the energy services industry in the State.

FURTHER INFORMATION

For further information, see the web site of the New South Wales Greenhouse Gas Abatement Scheme at:

www.greenhousegas.nsw.gov.au

Dr David Crossley advised the Scheme Administrator on the implementation of the demand side abatement component of the Scheme during the trial period in mid-2003. Dr Crossley's email address is: crossley@efa.com.au and the web site for his consultancy company, Energy Futures Australia, is at: <http://www.efa.com.au>.