

**Senate Select Committee on Fuel and Energy**  
**Issues relating to the Fuel and Energy Industry**  
Climate Change and Energy Efficiency Portfolio  
Department of Climate Change and Energy Efficiency

Answers to questions on notice  
April 2010

**Question No:** 1  
**Topic:** Energy Efficiency  
**Hansard Page ECA:** 26

**Senator Cormann asked:**

**CHAIR**—So there is a process underway. I think that is great. And there are two ministers who have got responsibility for different bits. That is great. But there is no overall target at this stage. Have we quantified how much can be saved overall through energy efficiency measures in terms of reducing the growth of energy use moving forward? Have we quantified by how much we can reduce emissions as a result of energy efficiencies across the board moving forward? Is that a piece of work that has been done?

**Ms Wiley-Smith**—I would have to take that on notice because that would need to be referred to an area that actually deals with abatement and emissions within our portfolio, and they are not here at the moment.

**CHAIR**—I am not meaning to be difficult, but it is a question that we have been asking for some time. I would be very grateful if we could get some information in relation to that.

**Mr Morling**—Just to follow up on that, we did provide some information about our industrial energy efficiency program in response to your questions last time.

**CHAIR**—You did, yes.

**Mr Morling**—That covers the 200 largest energy users, so that does give you some quantification of the types of savings that are possible.

**Answer:**

Under the Administrative Arrangements Order, the Department of Climate Change and Energy Efficiency (the Department) is responsible for estimating emissions abatement attributable to Commonwealth measures. As such, the Department's abatement estimates are used to inform reports provided under Australia's international obligations to organisations such as the United Nations and the Organisation for Economic Cooperation and Development.

The Department does not produce an aggregate estimate of energy efficiency's potential to mitigate emissions as a stand-alone initiative. Rather, the Department produces estimates of emissions abatement for individual programs which would make a material impact on Australia's national carbon profile and for which program parameters are established.

The most recent economy-wide emissions abatement estimates attributable to existing programs, prepared for incorporation in Australia's National Communication Number 5 under the United Nations Framework Convention on Climate Change, are contained in Table 1.

**Table 1 Policies and measures aimed at limiting and reducing greenhouse gas emissions in Australia**

Name of policy or measure	Objective and/or activity affected	Greenhouse gas/es affected	Type of instrument	Date commenced	Status	Date concluded	Implementing entity or entities	Estimated contribution to mitigation impact in 2020 (Mt CO <sub>2</sub> -e) <sup>1</sup>
National Strategy on Energy Efficiency	<p>A comprehensive suite of measures that will assist households and business transition to a low-carbon future, reduce impediments to the uptake of cost-effective energy efficiency, make buildings more energy efficient and foster government leadership in energy efficiency.</p> <p>Measures under NSEE include:</p> <ul style="list-style-type: none"> <li>• the National Energy Efficiency Skills Initiative</li> <li>• the Equipment Energy Efficiency (E3) Program</li> <li>• energy efficiency requirements for residential buildings</li> <li>• energy performance for residential buildings—mandatory disclosure</li> <li>• commercial buildings energy efficiency—mandatory disclosure</li> <li>• energy efficiency requirements for commercial buildings</li> <li>• Commercial Building Rating tools</li> <li>• Heating, Ventilation and Air Conditioning High Efficiency Systems Strategy</li> <li>• phase-out of inefficient incandescent lights</li> <li>• phase-out of greenhouse intensive water heaters</li> <li>• Minimum Energy Performance Standards (MEPS): air conditioners</li> </ul>	CO <sub>2</sub> / CH <sub>4</sub> / N <sub>2</sub> O	Various: regulatory, voluntary, economic, informational	July 2009— many elements previously initiated under other programs	Implemented	June 2020, or earlier if agreed by all parties	All jurisdictions	38

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Expanded national Renewable Energy Target	The expanded national Renewable Energy Target (RET) scheme is designed to ensure that 20 per cent of Australia's electricity supply comes from renewable energy sources by 2020.	N/A (the RET reduces emissions in the electricity sector—electricity generated from renewable energy sources reduces emissions that would have been created from non-renewable electricity generation)	Regulatory	The increased annual targets under the expanded RET scheme commence from 1 January 2010.  Solar Credits under the RET scheme applied from 9 June 2009.	Planned; legislation to implement the RET scheme was passed by the Commonwealth Parliament on 20 August 2009. Some subordinate regulations are pending.	The RET scheme will conclude in 2030.	Administered by the Renewable Energy Regulator	35
Energy Efficiency Opportunities	Encourages large energy-using businesses to improve their energy efficiency by requiring businesses to identify, evaluate and report publicly on cost-effective energy savings opportunities.	CO <sub>2</sub>	Regulatory	2006	Implemented	N/A	Australian Government	6
Greenhouse Challenge Plus	Greenhouse Challenge Plus assisted companies in reducing their greenhouse gas emissions by improving greenhouse gas management, improving emissions measurement and monitoring, and strengthening government/industry information sharing.	CO <sub>2</sub> / CH <sub>4</sub> / N <sub>2</sub> O, HFCs	Voluntary	1995	Completed	1 July 2009	Australian Government and industry	4

Energy Efficient Homes Package, including the Home Insulation Program and the Solar Hot Water Rebate Program	<ul style="list-style-type: none"> <li>• Install ceiling insulation worth up to \$1,200 for Australian householders, including owner-occupiers, landlords, and tenants of currently uninsulated homes or homes with very little ceiling insulation.</li> <li>• Reduce the cost of installing energy-saving hot water units in Australian households.</li> </ul>	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	Economic	September 2007 (Insulation) September 2006 (Solar Hot Water)	Implemented	30 June 2012 or when allocated funds are fully committed, whichever occurs first.	Australian Government	5
Environmental strategy for the motor industry	Aims to improve motor vehicles' efficiency to deliver a range of environmental benefits, including reducing greenhouse gas emissions from the transport subsector. This comprises the Green Vehicle Guide, Fuel Consumption Label, the Australian Government Fleet Target and the former National Average Fuel Consumption Target.	CO <sub>2</sub>	Regulatory and voluntary	2005	Implemented	N/A	Australian Government	2
Greenhouse Friendly™	Greenhouse Friendly™ was designed to help meet the challenge of climate change by certifying carbon-neutral products and services and approving abatement credits for sale on the voluntary market.	CO <sub>2</sub> , N <sub>2</sub> O, CH <sub>4</sub> , SF <sub>6</sub> , HFCs, PFCs	Voluntary	2001	Implemented	1 July 2010	An Australian Government program with private industry participants	1
Solar Flagships	The program is intended to support construction and demonstration of large-scale solar power stations in Australia.	CO <sub>2</sub>	Fiscal	2009 announced	Implemented	N/A	Australian Government	1

National Low Emissions Coal Initiative	The initiative accelerates the development and deployment of technologies that will reduce emissions from coal use.	CO <sub>2</sub>	Fiscal	2008	Implemented	N/A	Australian Government/industry and researchers	1
National GreenPower Accreditation Program	The National GreenPower Accreditation Program is offered through joint collaboration by participating state and territory government agencies in New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory. It aims to facilitate the installation of new renewable energy generators across Australia, beyond mandatory renewable requirements.	N/A (GreenPower reduces emissions in the electricity sector—electricity generated from renewable energy sources reduces emissions that would have been created from non-renewable electricity generation)	Voluntary	1997—no abatement included until 2005	Implemented	N/A	New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory	3
Greenhouse Gas Abatement Program (GGAP)	The Greenhouse Gas Abatement Program (GGAP) was a competitive grants program designed to reduce Australia's net greenhouse gas emissions by supporting activities that 1) are likely to result in substantial emissions reductions, or 2) offset greenhouse emissions.	CO <sub>2</sub> / CH <sub>4</sub> / N <sub>2</sub> O, HFCs	Fiscal	2003	Completed	2009	Australian Government	1
Renewable Remote Power Generation Program	The program increases the uptake of renewable energy technology in remote areas of Australia that currently rely on fossil fuel for electricity generation.	CO <sub>2</sub>	Voluntary	2000	Implemented	2011	Householders, utilities and communities	0

Solar Cities	<ul style="list-style-type: none"> <li>• Demonstrate the environmental and economic effects of combining cost-reflective pricing with the widespread use of solar technology, energy efficiency and smart meters.</li> <li>• Identify barriers to energy efficiency, electricity demand management and the use of solar technology, among businesses and householders in different parts of Australia.</li> <li>• Test ways to deal with these barriers.</li> </ul>	CO <sub>2</sub>	Voluntary, economic and regulatory	2004	Implemented	30 June 2013	Australian Government in partnership with Origin Energy, Alice Springs Town Council, BP Solar, Zero Net Emissions Company, Moreland Energy Foundation, Western Power and Ergon Energy	0
Green Loans Program	Encourage wide-scale improvement of energy and water efficiency in the existing housing stock while providing sound advice to households on the most appropriate action that can be taken to improve energy efficiency.	CO <sub>2</sub>	Voluntary and economic	1 July 2009	Implemented	N/A	Commonwealth	0
State and territory policies and measures with significant mitigation impacts								
Greenhouse Gas Reduction Scheme (GGAS)	Requires liable parties (electricity retailers and large electricity users who choose to participate) to meet mandatory annual targets for reducing or offsetting greenhouse gas emissions from the production of electricity that they supply or use.	CO <sub>2</sub>	Regulatory	1 January 2003	Implemented	Upon commencement of the CPRS	New South Wales Government	8
Queensland Gas Scheme	Requirement for electricity retailers to source a minimum percentage of their electricity from eligible gas-fired electricity provided above a baseline production amount: the percentage to increase from 13% in 2008 and 2009, to 15% in 2010 and not more than 18% for any year after 2010.	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O	Regulatory	2000	Implemented	N/A	Queensland Government	7

State and territory waste measures	State and territory measures aimed at waste diversion, recycling and methane capture at landfill sites.	CH <sub>4</sub>	Regulatory, voluntary	1990	Implemented	N/A	State and territory governments	19
NSW and Queensland land-use change legislation	Reduce land-use change emissions from clearing of native vegetation in New South Wales and Queensland.	CO <sub>2</sub>	Regulatory	1997	Implemented	N/A	New South Wales and Queensland governments	18 <sup>2</sup>
<b>TOTAL</b>								<b>147</b>

#### Notes

- Policies and measures included in this table are those that are currently included in Australia's emissions projections modelling.
  - Projected abatement from some measures in this table include mitigation overlap with abatement projected to arise from other measures included in this table. Where possible this overlap has been identified and removed from the total abatement estimate.
  - Unless shown otherwise, estimated mitigation figures for individual policies and measures have been rounded to the nearest whole number.
  - Additional measures for which abatement estimates are not listed separately also contribute to the total.
- 1 With the introduction of the CPRS, abatement from specific policies and measures that operate in covered sectors will no longer be separately identifiable. Under the CPRS, these programs will not produce additional abatement to that of the cap in the scheme. They will, however, assist in lowering the cost of achieving the same abatement.
  - 2 Preliminary estimate: this estimate includes only one year of deforestation data since implementation of the NSW Native Vegetation Regulation 2005; this is insufficient information from which to draw conclusions about the effectiveness of the NSW native vegetation reforms. Nor does this estimate reflect the full effect of the phase-out of broad-scale clearing in Queensland.