

## Garnaut Final Report calls for local action and global agreement on climate change

### Key points

- Today the Garnaut Climate Change Review released its Final Report. This Report has advisory status only.
- The Garnaut Review recommends larger emissions cuts than the long-range target already set by Government: 80% of 2000 emissions levels by 2050 compared to the Government's stated target of a 60% cut.
- In the medium term, Garnaut recommends a cut of only 10% of 2000 levels by 2020, but if international agreement can be reached, then a cut of 25% from 2000 levels by 2020 would be preferable.
- Garnaut recommends an emissions trading scheme that is wide in coverage, has no free permits and no price limits after the initial transition period (to 2012). At least half the proceeds from the sale of permits should go to low income households to assist their adjustment.
- Garnaut calls for more national research on climate change and greater adoption of currently available technologies, goods and services that can reduce emissions from transport and households. Low-emissions technologies are already available and should be better utilised.
- As the Australian climate changes, strong, flexible, well-informed markets will become even more essential in insurance, water and food.
- For rural and regional Australia, Garnaut recommends large-scale 'biosequestration' (i.e. re-vegetation) and up to \$1bn to assist coal-based power generation through the structural adjustment phase.
- Treasury research detailing the costs and benefits to the economy of Emissions Trading will be released sometime in October.
- The Government's White Paper and draft legislation setting out the Carbon Pollution Reduction Scheme will be released at the end of 2008.

### ETS development timetable

When ?	What ?	Who ?
30 Sept 2008	Garnaut Climate Change Review Final Report released to public	Garnaut Review
Oct 2008	Economic modelling results released	Treasury
Dec 2008	White Paper and draft legislation	Fed Government
Early 2009	Consultations on the White Paper	Fed Government
Mid 2009	Bill debated & passed by Parliament	Fed Government
1 July 2009	Second stage of GHG mandatory reporting commences	Approx. 500 large GHG emitters
Mid 2009	Consultation and drafting of ETS technical regulations to support Act	Dept of Climate Change
Late 2009	ETS Act, regulations and statutory regulatory body commence	Fed Government
March 2010	First auction of emissions permits. Market commences trading.	Approx. 1,000 large GHG emitters
1 July 2010	Third stage of GHG mandatory reporting commences	Approx. 700 large GHG emitters

Sources: Dept of Climate Change; Garnaut Review; Office of Senator Penny Wong.

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## Status of the Garnaut Review

The Garnaut Review is advisory only.

Several crucial Government policy decisions have already been made. The rest will be finalised in December 2008.

Garnaut recommends Australia's total CO<sub>2</sub>-e emissions be cut by:

- 10% of 2000 levels by 2020 and

- 80% of 2000 levels by 2050.

... but a cut of 25% of 2000 levels by 2020 would be even better.

Garnaut recommends an emissions trading scheme that has wide coverage, no free permits and no price controls beyond 2012.

Half the revenue raised should be redistributed to low income households

\$1bn should be spent assisting the structural adjustment of coal-based power generation.

The Garnaut Climate Change Review released a draft report on 4 July. The draft report included recommended options for emissions trading in Australia and some preliminary economic modelling results by Treasury. On 5 September the Garnaut Review released its Supplementary Report, detailing its recommendations on national emissions targets and trajectories. Today the Garnaut Review released its Final Report.

The Garnaut Review has advisory status only. The Government will announce its policy on emissions trading and trajectories in its White Paper, due in late 2008. Significantly, the Government has already made several crucial policy decisions that are contrary to Garnaut's recommendations, including its long-range target of cutting emissions by 60% of 2000 levels by 2050 and its commitment to allocate up to 20% of emissions trading permits to emissions-intensive trade-exposed industries at no cost (as detailed in the Green Paper in July 2008).

## Key recommendations on emissions targets

The Garnaut Review recommends Australia aims for total CO<sub>2</sub>-e emissions cuts of 80% of 2000 emissions levels by 2050 — larger than the Government's commitment of a 60% cut by 2050, but smaller than the cuts advocated by many scientists and green groups.

In the medium term, Garnaut recommends a cut of only 10% of 2000 levels by 2020, or 25% if meaningful international agreement can be achieved beyond 2012. A cut of 25% of 2000 CO<sub>2</sub>-e levels by 2020 would be required to bring global atmospheric carbon down to Garnaut's preferred range of 450ppm. A 10% cut would be aimed at a global atmospheric CO<sub>2</sub> target of 550ppm — a level viewed by the Review as more realistic if less desirable.

Taking into account Australia's future population growth, Garnaut's 80% emissions target would mean Australia needs to reduce per capita CO<sub>2</sub>-e emissions by 30% of 2000 levels by 2020 and 90% of 2000 levels by 2050.

The Garnaut Review also recommends a 'second-best' emissions target in the event that global agreement is not reached or is very limited. This would follow a linear path to a 60% emissions cut from 2000 levels by 2050, including a 5% cut by 2020. This 60% target is the same as the Government's current policy.

## Recommendations on emissions trading

The main mechanism for achieving these cuts is the introduction of a national carbon emissions (CO<sub>2</sub>-e) trading scheme. The Review's key recommendations for an emissions trading scheme are:

- commence emissions trading as early as possible in 2010,
- establishment of an independent carbon bank with all the necessary powers to oversee the long-term stability of the scheme,
- implementation of a transition period from 2010 to the conclusion of the Kyoto period (end 2012) involving fixed price permits,
- credits to trade-exposed, emissions-intensive industries to address the failure of our trading partners to adopt similar policies (but not to compensate for the cost of introducing the emissions trading scheme itself),
- no permits to be freely allocated,
- no ceilings or floors on the price of permits (beyond the transition period),
- inter-temporal use of permits with 'hoarding' and 'lending' from 2013,
- a judicious and calibrated approach to linking with international schemes,
- scheme coverage that is as broad as possible, within practical constraints,
- at least half the proceeds from the sale of all permits should be allocated to households, focusing on the bottom half of the income distribution,

- up to \$1 billion in total should be made available for matched funding for investment in reducing emissions in coal power generation, as a form of pre-emptive structural adjustment assistance,
- once emissions trading is fully operational, the current system of Mandatory Renewable Energy Targets will not be required and should be phased out.

In the initial implementation phase (2010 to 2012), the Garnaut Review recommends a starting price of \$20 per tonne in 2010, rising by 4% plus CPI per year until 2012. The Review expects the price is then likely to settle at \$23/t by 2013 and \$34.50/t by 2020 (in 2005 Australian dollars). Beyond 2012, the price should be set by the market alone, with no price constraints.

The Garnaut Review reiterated that a compromised trading scheme would be less efficient or effective than a simple carbon tax. Importantly, Garnaut notes that “seemingly small compromises will quickly erode the benefits that a well-designed emissions trading scheme can provide.” That is, the detail is crucial.

## Other recommendations – mitigate and adapt

The Garnaut Review notes that Australia’s high emissions per capita (the highest in the OECD and among the highest in the world) are mainly due to the very high emissions intensity of our energy sector, which relies heavily on coal. Our per capita agriculture emissions are also among the highest in the world due to large numbers of sheep and cattle. Our transport emissions are similar to other developed countries. Energy and agriculture are therefore the logical focus of emissions reductions programmes.

Key practical measures recommended by the Garnaut Review include:

- strengthen our national climate change research, with an Australian Climate Change Science Program, a new research council and a new climate change policy institute. Matched funding to private enterprises should support technology commercialisation. Total research funding should be boosted to \$3bn p.a. by 2013,
- improve the flexibility and strength of Australian markets for insurance, water and food, based on “the best available information”, so as to enable better, faster economic adaptation to Australian climate change,
- ensure government provides appropriate emergency management services, preservation of ecosystems and biodiversity,
- introduce a new system of ‘green credits’ to help fund household energy efficiency,
- encourage large-scale biosequestration in rural Australia (i.e. forestry and revegetation), especially in marginal agricultural regions,
- better utilisation and adoption of existing energy-efficiency technologies, goods and services in transport, household appliances, building materials and vehicles, through “information, regulation and restructuring contractual relationships” that address market failures that block technology adoption,
- extend the Building Australia Fund to cover energy infrastructure investment,
- re-examination of feed-in tariffs for household (solar) electricity generation,
- lead international research and deployment of ‘cleaner’ coal-based energy,
- encourage more compact urban environments and public transport.

## Research findings

As in the draft report, the Garnaut Review has again emphasised the costs to Australia’s economy and environment of doing nothing about climate change. This report estimates the cost to the economy would be a 0.9% cut to GDP per year and a 1.2% cut to consumption by 2020, and rising each year over time.

The temperature increases expected by the Garnaut Review in the event of unmitigated climate change are large, at 5.6-7.1° by 2100. If CO<sub>2</sub>-e can be kept to 550ppm or below, then temperatures would rise by only 2.5 to 3.2°, which is

**Small compromises will significantly affect the efficacy and efficiency of emissions trading.**

**Aside from the emissions trading scheme, Garnaut’s recommendations focus on encouraging and supporting:**

- research and technology adoption,
- flexible, strong markets,
- low-emissions energy generation,
- carbon sequestration through re-vegetation
- emissions reduction in households and transport.

**Garnaut's preferred policy response will cost Australia 1.1% of GDP and 1.8% of consumption p.a. by 2020.**

still a large increase in temperatures, but less catastrophic. If CO<sub>2</sub>-e could be lowered to 450ppm, then temperature increases might be limited to 2.0-2.6°.

The Garnaut Review estimates that the total cost to the Australian economy of attempting to mitigate climate change would be 1.1% of GDP p.a. by 2020 if we aimed for 550ppm by 2050, or 1.6% of GDP p.a. if we aimed for 450ppm by 2050. Interestingly, the cost of doing nothing is not much lower, at 0.9% of GDP and 1.2% of consumption. The marginal cost of acting is therefore not so large, in aggregate, as the initial numbers would imply.

Internationally, the Garnaut Review notes that China has recently overtaken the US as the world's largest emitter of CO<sub>2</sub>-e and is expected to be producing 35% of global emissions by 2030. If there is no mitigation, 90% of emissions growth is expected to come from the developing world over the next two decades. This underscores the need for Australia to help develop mitigation technologies that are suitable for applications in developing countries, most notably in relation to cleaner coal-fired power generation and alternatives to fossil fuels. It also underscores the need to reach global agreement on practical action for change.

## Next moves

Treasury will release its final modelling results in October (date TBA).

Government will release a White Paper (final version of July's Green Paper) and draft legislation by the end of 2008. These documents will set out the detail of the proposed Carbon Emissions Reduction Scheme.

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For further information on this topic, see our other publications on our website:

*ANZ Industry Update: Emissions Trading*, September 2008.

*ANZ Industry Update: Emissions Trading*, August 2008.

*Business and the Carbon Pollution Reduction Scheme: 10 things you need to know*, July 2008.

*ANZ Industry Update: Emissions Trading*, July 2008.

*ANZ Industry Update: Emissions Trading*, April 2008.

"Update on Australian Climate Change Policy", *ANZ Economic Outlook*, March 2008, pp. 21-24.

"The Road to an Emissions Trading System", *ANZ Australian Economics Weekly*, 8 June 2007.

*ANZ Industry Report: Emissions Trading*, June 2007.

"Sources of Carbon" *ANZ Australian Economics Weekly*, 23 March 2007.

"Carbon Trading", *ANZ Economic Outlook*, March 2007, pp. 21-24.

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