



Australia's Abatement Task

Explanation of the emissions projections underpinning the Climate Change Authority's *Targets and Progress Review Draft Report (October 2013)* and *Australia's Emissions Projections 2012*

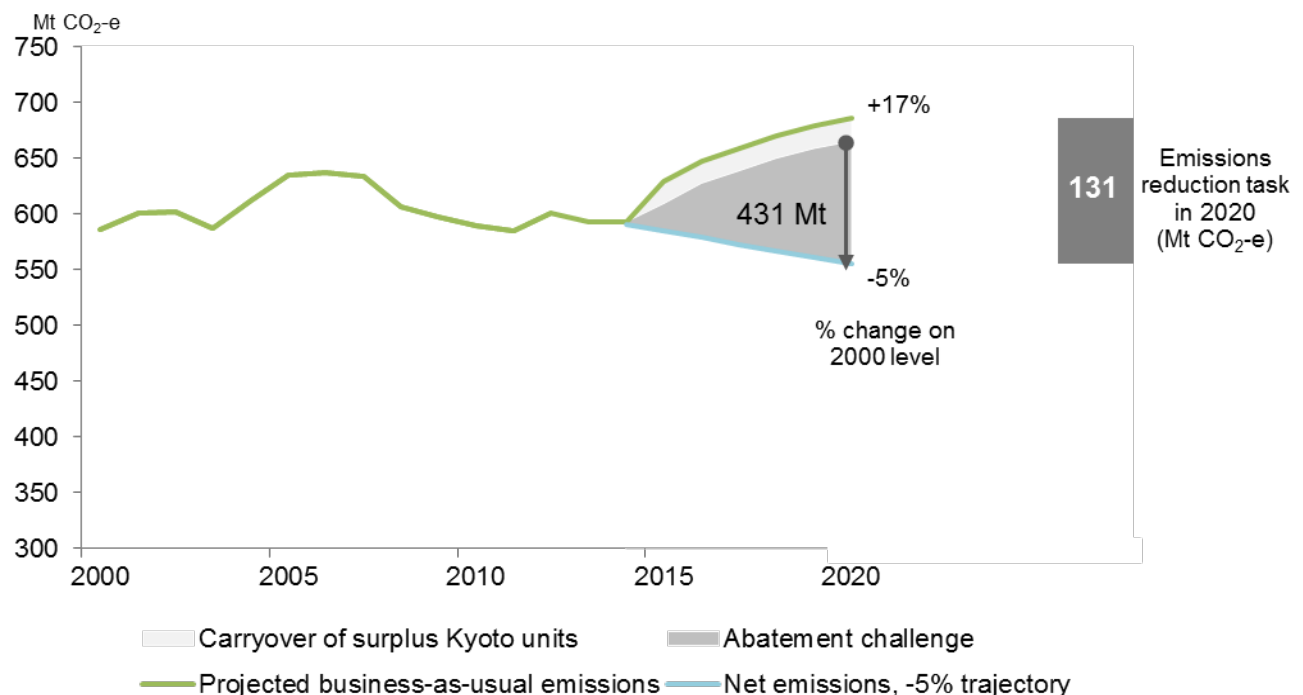
Recent modelling conducted by the Treasury and the former Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (now the Department of the Environment) indicates the amount of emissions reductions required to achieve Australia's 2020 target of 5 per cent below 2000 levels is less than previous estimates.¹ This fact sheet explains how Australia's abatement task has changed since *Australia's Emissions Projections 2012*.

Australia's abatement task is 431 Mt CO₂-e

Australia's abatement task from 2013 to 2020 has fallen from 755 million tonnes carbon dioxide equivalent (Mt CO₂-e) in *Australia's Emissions Projections 2012*, to 591 Mt CO₂-e in modelling undertaken for the Climate Change Authority's (CCA's) *Targets and Progress Review Draft Report*. For further information, refer to *Australia's Abatement Task and 2013 Emissions Projections*. This reduction is mainly attributable to a revised outlook for activity in emissions-intensive sectors of the economy.

When other factors such as abatement from two years of the carbon tax and the ability to use surplus reductions achieved in the first commitment period of the Kyoto Protocol are taken into account, Australia's abatement task falls from 591 to 431 Mt CO₂-e.

Figure 1: Australia's abatement task to 2020



Note: The historical time series in Figure 1 is consistent with historical data presented in projections for the CCA, including the March 2013 Quarterly Update to the National Greenhouse Gas Inventory.

¹ Year references are to financial years ending with the year specified. For example, 2013 refers to 2012-13.

Changes in Australia's abatement task

The change in Australia's abatement task can be attributed to:

- a shift in the outlook for certain emissions-intensive industries and lower technology cost estimates especially for wind and solar technologies;
- changes from the Kyoto Protocol's second commitment period including the adoption of revised global warming potentials from the Intergovernmental Panel on Climate Change's Fourth Assessment Report and broadened coverage of the land sector to include emissions from forest management and selected Article 3.4 activities;
- changes to the 2020 target associated with an updated inventory value for the 2000 base year;
- an adjustment for voluntary action, which was not estimated in previous projections;
- the assumed use of surplus units from the Kyoto Protocol first commitment period in the period to 2020; and
- abatement from the carbon tax and Carbon Farming Initiative in 2012-13 and 2013-14.

Australia's abatement task – Differences in assumptions between 'Australia's Emissions Projections 2012' and the CCA's 'Targets and Progress Review Draft Report'

The cumulative abatement task of 755 Mt CO₂-e estimated in *Australia's Emissions Projections 2012* did not reflect accounting changes for the Kyoto Protocol's second commitment period, including revised global warming potentials and broadened coverage of the land sector.² If the Kyoto Protocol changes and a voluntary action adjustment³ are applied to the abatement task in *Australia's Emissions Projections 2012*, as assumed in the projections for the CCA, Australia's abatement task falls to 742 Mt CO₂-e.

The projections estimate of 591 Mt CO₂-e differs slightly from the cumulative abatement task of 593 Mt CO₂-e published by the CCA in its *Targets and Progress Review Draft Report*. The CCA's estimate was based on the same 'no carbon price' scenario projection as the underpinning modelling, but incorporated slightly different assumptions concerning Australia's national trajectory. Specifically, the CCA's voluntary action projection included abatement from the voluntary cancellation of Renewable Energy Certificates and GreenPower purchases while the modelling projected abatement from GreenPower only. The CCA also used a different edition of inventory data for the 2000 target base year.

The following table outlines the key components of Australia's abatement task:

Emissions reductions required to meet Australia's 2020 target: 5 per cent below 2000 levels	
<i>Projections for the Climate Change Authority's Targets and Progress Draft Report</i>	
<i>Cumulative abatement task 2013 – 2020 (Mt CO₂-e)</i>	
Initial cumulative abatement task 2013 – 2020	591
Less two years of abatement from the carbon tax and Carbon Farming Initiative (2013 and 2014)	552
Less estimated carry-over (121 Mt CO ₂ -e) ⁴	431

² See the former Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education's fact sheet on *The impact of Kyoto accounting changes on the QELRO and targets* for more information.

³ Projections for the CCA assumed that abatement from voluntary action would be additional to national targets, and so applied an adjustment to the national trajectory based on projected GreenPower purchases.

⁴ *Australian National Greenhouse Accounts: Quarterly Update of Australia's National Greenhouse Gas Inventory June Quarter 2013*. This figure has not been adjusted for voluntary cancellation of first commitment period units.

<i>Abatement task in 2020</i>	
Task in 2020	131

Abatement from the carbon tax and Carbon Farming Initiative has been estimated from the modelling results provided to the CCA for the 'central' and 'no carbon price' scenarios in 2013 and 2014 and is calculated by taking the cumulative difference between the scenarios in those two years.

References

Climate Change Authority, *Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review Draft Report*, 2013, Commonwealth of Australia, Melbourne, Victoria.

Department of Climate Change and Energy Efficiency, *Australia's Emissions Projections 2012*, Commonwealth of Australia, Canberra, Australian Capital Territory.

Department of the Environment, *Australian National Greenhouse Accounts: Quarterly Update of Australia's National Greenhouse Gas Inventory June Quarter 2013*, Commonwealth of Australia, Canberra, Australian Capital Territory.

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The Treasury and the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, *Climate Change Mitigation Scenarios: Modelling report provided to the Climate Change Authority in support of its Caps and Targets Review*, 2013, Commonwealth of Australia, Canberra, Australian Capital Territory.