



Australian Government

Department of the Prime Minister and Cabinet

# Setting Australia's post-2020 target for greenhouse gas emissions

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## **Setting Australia's post-2020 target for greenhouse gas emissions**

Climate change is a global problem that requires a global solution. The Australian Government has committed to review Australia's greenhouse gas emissions reduction targets and settings this year. This review is in the context of negotiations for a new global climate agreement to be concluded at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties in Paris in late 2015 (30 November to 11 December).

Countries have agreed to propose a post-2020 emissions reduction target well in advance of the Paris conference. Australia will announce a post-2020 emissions reduction target in mid-2015.

A strong and effective global agreement, that addresses carbon leakage and delivers environmental benefit, is in Australia's national interest. The latest climate information from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Bureau of Meteorology indicates that Australia has warmed by 0.9°C since 1910, with most of the warming since 1950. There has been a rise in sea levels of about 20 centimetres over the past century, increased ocean acidification and a shift in rainfall patterns.<sup>i</sup>

Australia's climate will continue to have high variability. Nevertheless, average temperatures are projected to continue to increase and extreme rain events are projected to become more intense. Average rainfall in southern Australia is projected to decrease.<sup>ii</sup>

Australia is taking strong action on climate change. Between 1990 and 2014 the economy nearly doubled in size and our population grew strongly, while greenhouse gas emissions remained broadly the same. Australia's emissions per capita have reduced by 28 per cent since 1990 and by 20 per cent since 2000 and emissions per unit of gross domestic product have fallen by 52 per cent since 1990 and by 35 per cent since 2000.

The Australian Government is committed to achieving a five per cent reduction on 2000 emissions levels by 2020. This target is equivalent to a reduction of 13 per cent below 2005 emissions levels and a 19 per cent reduction from projected business as usual emissions.<sup>iii</sup>

The Government's focus is on taking direct action, including through the \$2.55 billion Emissions Reduction Fund, which is a market-based scheme. Actions by state and local governments, business, farmers and the broader community are, and will continue to be, critical to Australia's climate efforts.

### **International efforts to address climate change**

Australia plays a constructive role in international climate change efforts. Since its formation in 1992 the UNFCCC has been an important forum for countries to cooperate on climate change. Australia was one of the first countries to join the UNFCCC and it now has almost

universal membership. In 1997 Australia, alongside other countries, adopted the Kyoto Protocol which established binding emissions reduction targets for developed countries.

Australia performed well over the Kyoto Protocol's first commitment period (2008-2012). During that time Australia's emissions were limited to 103 per cent of 1990 levels, which was considerably less than Australia's target of 108 per cent. Australia's target under the second commitment period, which began in 2013 and ends in 2020, is 99.5 per cent of 1990 levels. Australia is on track to meet this target, which is consistent with our UNFCCC target of a five per cent reduction on 2000 emissions levels by 2020.

### **The Paris Agreement**

Australia is working with the international community to conclude a new global climate agreement at the Paris conference. The Paris Agreement will set out how countries will tackle climate change after 2020, when current emissions reduction commitments under the UNFCCC and Kyoto Protocol lapse.

Commitments by all countries to reduce or limit their greenhouse gas emissions are needed to make a genuine impact globally. To do this, the Paris Agreement must encourage full participation and commitments to take serious, coordinated action from all countries. Australia, together with all UNFCCC Parties, has agreed that new commitments should be appropriate to countries' national circumstances so these can work alongside plans for strong economic growth, jobs and development.

### **Australia's national circumstances**

In setting their post-2020 emissions reduction targets, all countries will consider what would represent a fair and appropriate contribution to tackling climate change in light of their particular national circumstances. Compared with other developed countries, Australia has stronger economic and population growth, and our economic structure is different. Our resource and agricultural industries represent a significantly larger share of national economic output. These factors affect the emissions intensity of our exports and economy. This is putting upwards pressure on our greenhouse gas emissions, in particular:

- The economy is projected to grow approximately 17 per cent over the five year period 2014 to 2019 (or at an annual average of about 3.3 per cent)<sup>iv</sup>, compared to around 12 per cent (or an annual average of 2.4 per cent) for other advanced economies.<sup>v</sup>
- Australia's population is growing more quickly than comparable countries, at around 1.6 per cent in 2014.<sup>vi</sup> The average annual rate of population growth in the developed world was around 0.4 per cent over the period 1980-2013 and this is projected to decline further over the coming decades.<sup>vii</sup>
- Coal accounts for nearly 60 per cent of our total primary energy supply, against an average in other developed countries of 20 per cent.<sup>viii</sup>

- 95 per cent of Australia's energy consumption comes from fossil fuel sources<sup>ix</sup>, compared to an OECD average of 81 per cent.<sup>x</sup> This is primarily the result of Australia's abundant energy and mineral resources and limited scope to harness hydroelectricity.
- In 2013, iron ore and concentrates, coal and natural gas made up around 40 per cent of Australia's exports at a value of around \$124 billion.<sup>xi</sup>

For the foreseeable future, Australia will continue to be a major supplier of crucial energy and raw materials to the rest of the world, especially Asian countries. At present, around 80 per cent of the world's primary energy needs are met through carbon-based fuels. By 2040, it is estimated that 74 per cent will still be met by carbon-based sources because of growing demand in emerging economies.<sup>xii</sup>

### **Australia's action on climate change**

Australia will continue to play its part to tackle climate change. A new target will build on current efforts and policy, including direct action through the \$2.55 billion Emissions Reduction Fund.

Research, development and deployment of new technologies will underpin global emissions reductions. Australia has long supported the development of alternative energy sources as part of Australia's energy mix and has invested heavily in the development of both renewable energy supply and low-carbon technologies. The Australian Government is providing \$588 million for low emissions fossil fuels programmes. Collectively these are designed to support a range of low emissions technologies, including carbon capture and storage (CCS) demonstration projects. Other important initiatives include the Government's investment of over \$1 billion in 200 projects across a range of renewable energy technologies. The Australian Government will continue working with industry to promote research and development of new technologies to reduce emissions from carbon-based energy production.

Across Australia all levels of government, business, farmers and the broader community are continuing to take action in ways that make critical contributions to Australia's emissions reduction efforts.

Australia also continues to support other countries to take climate action and build resilience and capacity to adapt to a changing climate through our aid programme. Most recently, this included a contribution of \$200 million to the Green Climate Fund which will be targeted to assist Indo-Pacific neighbours meet their climate goals.

Australia's strong advocacy and implementation of the Montreal Protocol is another way Australia can play a key role in global efforts to reduce greenhouse gas emissions. The Montreal Protocol is the logical forum to take action on synthetic greenhouse gas emissions.

It has worked with industry to reduce emissions of ozone depleting substances, and has the expertise to phase down hydro-fluorocarbon gases.

### **Setting Australia's post-2020 emissions reduction target**

The Australian Government will set its post-2020 emissions reduction target within the framework of the UNFCCC and its objectives. At the UNFCCC's Lima conference in December 2014, all Parties confirmed they would bring forward intended nationally determined contributions setting out the targets they will adopt from 2020 onwards. The expectations for intended nationally determined contributions include that they be a progression beyond the country's current undertaking and be transparent, easy to understand and announced well in advance of the Paris conference.<sup>xiii</sup>

Countries are expected to describe the key parameters of their target, including a reference point (e.g. base year) and coverage of greenhouse gases and sectors. They are also expected to explain how the target is fair and ambitious in light of their national circumstances, and how it contributes to achieving the UNFCCC's objective of stabilising emissions at a level that would avoid dangerous climate change.

Australia's current undertakings are a five per cent reduction on 2000 emissions levels by 2020 under the UNFCCC, and our target under the second commitment period of the Kyoto Protocol to reduce emissions to 99.5 per cent of 1990 levels from 2013-2020. These undertakings cover all sectors of the economy and all seven Kyoto Protocol greenhouse gases, and are expressed as an absolute reduction from an historical base year.

The Australian Government will announce Australia's post-2020 emissions reduction target in mid-2015, well ahead of the Paris conference at the end of the year.

Australia's target must provide certainty to business and the Australian community to facilitate decision making and investment.

The target will represent Australia's fair share of the global effort needed to respond to climate change.

The Australian Government will consider a range of factors in determining Australia's post-2020 target, including:

- Australia's national circumstances – our economic structure, projected economic growth, resource endowments, geography and demography – will have implications for Australia's emissions reduction opportunities. Different targets have different costs and benefits for Australia.

- The scope and nature of other countries' targets – so that our target represents Australia's fair share and does not put Australia at a competitive disadvantage to our key trading partners and the major economies.

Australia's post-2020 target will be consistent with continued strong economic growth, jobs growth and development in Australia.

Identifying the policies that will help achieve a post-2020 target is also important. The Australian Government's preference is for direct action and it recognises there is a range of effective and cost-efficient options for actions supplementary to the Emissions Reduction Fund and its safeguard mechanism. These could include fuel efficiency standards for light and heavy vehicles, building and appliance energy efficiency standards and measures to reduce synthetic greenhouse gas emissions. Before taking decisions on such policy measures, the Australian Government will consult with business and the community.

The Australian Government values your views. You are invited to make a submission on Australia's post-2020 emissions reduction target, and in particular on the following issues:

- What should Australia's post-2020 target be and how should it be expressed? In responding to this question you could consider the base year (e.g. 1990/2000/2005), the end year (e.g. 2025/2030), the type of target and why the suggested target is preferred.
- What would the impact of that target be on Australia? In responding to this question you could, for example, consider the impact on our economy, jobs, business and on the environment.
- Which further policies complementary to the Australian Government's direct action approach should be considered to achieve Australia's post-2020 target and why?

You can make a submission at <https://www.dpmc.gov.au/taskforces/unfccc/>

Submissions close 3pm AEST on Friday 24 April 2015.

<sup>i</sup> CSIRO and the Bureau of Meteorology, State of the Climate Report 2014.

<sup>ii</sup> CSIRO and the Bureau of Meteorology, State of the Climate Report 2014.

<sup>iii</sup> Department of the Environment, Australia's Emissions Projections 2014-15.

<sup>iv</sup> The Treasury, 2015 Intergenerational Report.

<sup>v</sup> International Monetary Fund, World Economic Outlook, January 2015.

<sup>vi</sup> Australian Bureau of Statistics, 3101.0, December 2014.

<sup>vii</sup> United Nations, World Populations Prospects, 2012 Revision, Table I.3.

<sup>viii</sup> Climate Change Authority, Reducing Australia's Greenhouse Gas Emissions: Targets and Progress Review Final Report, February 2014.

<sup>ix</sup> Australian Bureau of Resources and Energy Economics, Australian Energy Statistics 2014, Table O.

<sup>x</sup> World Bank, World Development Indicators, Fossil fuel energy consumption 2014.

<sup>xi</sup> Department of Foreign Affairs and Trade, Trade at a Glance, 2014.

<sup>xii</sup> Based on the new policies scenario. World Energy Outlook 2014, International Energy Agency.

<sup>xiii</sup> United Nations Framework Convention on Climate Change, Decision –/CP.20.