



SOME OBSERVATIONS ON AUSTRALIA'S POST-2020 EMISSIONS REDUCTION TARGET

Statement by the Chair, Mr Bernie Fraser
14 August 2015

In the past 18 months the Climate Change Authority—an independent, statutory advisory body on climate policy matters—has produced three reports on Australia's future emissions reduction targets, the most recent of which was submitted to the Minister for the Environment on 2 July 2015 (and released publicly at that time).

The advice which the Authority has provided through these reports has not been adopted, which is the government's prerogative. The context in which that advice was formulated—and the government's decision on targets itself—do, however, have important ongoing implications for several of the Authority's current projects which are expected to be discussed with interested parties over coming months. Arising out of that earlier work—and the work in train which is related to it—the Authority is offering the following observations on the government's recently announced 2030 emissions reduction target.

1. Government target compared with Authority recommendation

The government's target is to reduce Australia's greenhouse gas emissions to 26-28 per cent below 2005 levels by 2030 (19 to 22 per cent below 2000 levels).

In its most recent report the Authority recommended a target reduction of 30 per cent below 2000 levels by 2025. The Authority did not recommend a specific 2030 target believing that, because factors relevant to the determination of such a target could change significantly over the next 15 years, the decision might better be made closer to the time. Instead the Authority recommended, based on current information, that Australia should be aiming to reduce emissions by 40 to 60 per cent by 2030.

Some commentators have wrongly interpreted this target range as an Authority recommendation for a 50 per cent target for 2030. Others have wrongly claimed that the Authority's own modelling shows that the 40-60 per cent target range by 2030 would impose very high costs—in the order of \$600 billion—on the Australian economy. This is not correct: the Treasury modelling conducted for the Authority in 2013 did not project the costs to Australia of pursuing a 40 to 60 per cent emissions reduction target by 2030 (or any other 2030 target for that matter).

Targets can be framed by reference to different base years. All the Authority's recommendations were based on the year 2000, for consistency with Australia's previous commitments; the government's 2030 target is based on 2005. Because Australia's emissions in 2005 were higher than they were in 2000, any given target based on 2005 will show a larger reduction than it would if based on 2000, even though the effort required to achieve the target would be the same. If the Authority's recommendations were

converted to a 2005 base they would imply a 2025 target reduction of 36 per cent, and a 2030 range of 45 to 63 per cent.

However it is viewed, the reduction in emissions embodied in the government's target is substantially weaker than that recommended by the Authority.

2. Drivers of targets

Setting national targets for emissions reductions is an important part of the international process for avoiding the dangerous social, economic and environmental consequences of ongoing global warming. That part works best when national targets collectively constitute an effective response to climate science and, individually, are widely regarded as representing a fair sharing of the adjustment burdens involved. Reflecting this view the Authority has argued that Australia's targets should be determined primarily by what the scientific evidence is telling us we need to do, and by what other comparable countries are doing.

Along with other countries, Australia has agreed to work towards reducing emissions to levels consistent with limiting global warming to less than 2 degrees Celsius above pre-industrial levels. This remains a challenging task. Given the post-2020 targets announced to date, and assuming they are realised, the world would move a little closer towards a sustainable path to the 2 degree goal, but would still need to do more to get onto that path.

Individually, the government's target of a 26-28 per cent reduction in total emissions (which is what counts most when it comes to containing global warming) would put Australia at or near the bottom of the group of countries we generally compare ourselves with (Table 1).

Table 1: 2030 Targets - implied reductions in total emissions, 2005-2030

| Change from 2005 | |
|-------------------|-------------|
| UK | -61% |
| Switzerland | -51% |
| Germany | -45% |
| Norway | -44.5% |
| US | -35 to -39% |
| EU | -34% |
| Canada | -30% |
| New Zealand | -30% |
| Australia | -26 to 28% |
| Japan | -25% |
| China | +72 to 96% |
| Republic of Korea | +1 to -5% |

Notes: Japan's efforts to reduce emissions were dealt a blow by the Fukushima disaster—closure of all its nuclear power plants increased its reliance on fossil fuels. Change, except for Norway, is CCA calculation. China committed to peak its emissions around 2030, and to reduce emissions intensity by 60-65 per cent on 2005 levels by 2030; the range shown is an indicative estimate based on projected growth in China's real GDP. Korea has committed to reduce its emissions by 37 per cent from business as usual levels by 2030; the range shown is an estimate based on its 2005 emissions including and excluding the land sector. The US figure is a linear extrapolation from its 2020 target through its 2025 target; the UK figure is a linear extrapolation from its 2020 target through the mid-point of its 2023-27 budget.

Sources: Royal Norwegian Embassy; Historical emissions: Australia 2014-15 Projections (DoE 2015); China and Korea: (WRI 2014); Remaining countries: (UNFCCC Secretariat 2014a); includes land sector. China GDP: OECD (2014).

Measured against the reductions in emissions required to deliver a reasonable chance of limiting global warming to 2 degrees, all countries have a lot more work to do over the decades ahead—and not least Australia which, on the basis of current targets, would slip further behind the efforts being made by comparable countries and likely face large catch up adjustments down the track.

3. Meeting Australia's targets

While arguing that Australia's target should be based primarily on the climate science and its national and global implications—and not be diluted by lobbying of sectoral interests or special pleading on dubious grounds—the Authority has always acknowledged that responding to climate change involves costs. These costs have to be met in one way or another, and by one group or another. In broad terms such costs can be at least partially offset by avoiding some of the damaging consequences of dangerous climate change and capitalizing on some of the opportunities accompanying the shift to a lower carbon world.

The Authority has also acknowledged that this transition is likely to hit some industries and regions more severely than others, and policy makers need to be cognizant of these impacts in pursuing their targets.

The government has indicated that it will pursue its target through a suite of Direct Action policies (including the Emissions Reduction Fund), complemented by a range of other existing and envisaged policies.

For its part the Authority believes the costs (and their distributional impacts) of implementing any particular target will depend very much on the policies adopted. With the "right" policies the Authority believes more ambitious targets than those adopted by the government can be achieved at modest costs, and the Authority currently has a remit to recommend such a suite of policies.

As part of the arrangements reached between the government and the Palmer United Party to abolish the price on carbon, it was agreed that the Authority should continue in place until the next election and that it undertake a Special Review. The terms of reference for that Review, issued by the Minister for the Environment in December last year, requests a three-part response by the Authority comprising reports on Australia's post-2020 targets (submitted); on the case for an Emissions Trading Scheme (ETS) (due end-November 2015); and on a suite of cost-effective policy measures to achieve Australia's post-2020 emissions reduction target emerging from the forthcoming Paris Conference (report due mid-2016).

The Authority's current work on the case for a market-based ETS for Australia is obviously occurring in a difficult environment. While part of the Minister's terms of reference to the Authority, the very idea of an ETS (and those raising the idea) are criticised by government members every time it surfaces, asserting it is a "tax" (which it is not in substantial respects), which will have major economic and social consequences (which is not the experience of those countries where ETSs are prominent components of their climate policy tool kits).

Major decisions are looming as to how the inevitable costs of achieving large reductions in emissions are best funded—through, for example, expansion of the government's Emissions Reduction Fund activities, which are financed directly from the budget, and/or through market-based mechanisms like an ETS. However this conundrum is eventually resolved, substantial shifts in much of the current thinking and rhetoric around these issues can be expected.

4. Post-script on earlier targets

The government has announced that “Australia outperformed its Kyoto Protocol first commitment period target (2008-2012) and is on track to meet and beat its 2020 target”. Suggestions have also been made to the effect that Australia takes its target obligations more seriously than other countries, and has a better record in meeting its targets. This observation provides a little context around these various comments.

Table 2 compares the targets and actual outcomes of selected countries under the first commitment period of the Kyoto Protocol. Of these countries, all except Canada (which withdrew) and the United States (which did not ratify) met their targets. Except for Australia, for the countries in Table 2, these targets involved reductions in emissions compared with 1990 levels; Australia's target allowed for an 8 per cent increase. Looking more broadly, of the 38 countries with Kyoto targets, all of them other than Canada and the US met their targets.

Table 2: Kyoto Protocol targets for the first commitment period, selected countries

| Country | Target | Met target? |
|-------------------|--------|-------------------------------------|
| Australia | 108 | Yes |
| Canada | 94 | Withdrew; did not meet target |
| EU (15 countries) | 92 | Yes |
| Japan | 94 | Yes |
| US | 93 | Did not ratify; did not meet target |
| Switzerland | 92 | Yes |

Notes: Kyoto Protocol targets are a limit on average annual emissions over the commitment period (2008-12), expressed as a percentage of 1990 levels.

Sources: CCA using (EEA 2014), (Morel & Shishlov 2014) and (Government of Japan 2013).

Table 3 shows, for the same countries, their unconditional targets for 2020. Australia's target is at the weaker end of this list.

Table 3: 2020 targets for selected countries

| Country | 2020 Target (unconditional) |
|-------------------|-----------------------------------|
| Australia | 5 per cent below 2000 |
| Canada | 17 per cent below 2005 |
| EU (28 countries) | 20 per cent below 1990 |
| Japan | 3.8 per cent below 2005 (revised) |
| US | 17 per cent below 2005 |
| Switzerland | 20 per cent below 1990 |

Sources: UNFCCC Secretariat (2014b).

It is difficult to assess how Australia is currently travelling relative to its -5 per cent target. For one thing the government has not released official projections of emissions out to 2020 that take account of current policies, including the Emissions Reduction Fund. Another complication is that Australia has surplus emissions units under the Kyoto Protocol because its emissions during the first commitment period were lower than its target. Countries which bettered their targets under the Kyoto Protocol can carry over the surplus emissions units to help meet their 2020 target commitments. Some countries, such as the UK,

have chosen to cancel their surplus units. It is not known at this time whether Australia will cancel its surplus units, or carry them over to help meet (or better) its -5 per cent 2020 target (Australia's carryover is equivalent to 4 percentage points on its 2020 target).

With the year 2020 more than 4 years off it would seem possible to implement some additional measures with a view to reducing emissions by more than the minimum 5 per cent; any success on this front would help to make the attainment of 2030 and subsequent targets more manageable.

References

Department of the Environment (DoE) 2015, *Australia's emissions projections 2014-15*, Canberra.

European Environment Agency (EEA) 2014, *Trends and projections in Europe 2014 — Tracking progress towards Europe's climate and energy targets for 2020*, viewed 30 Mar. 2015, Luxembourg.

Government of Japan 2013, *Statement by the Minister of the Environment to the United Nations Framework Convention on Climate Change COP 19*.

Morel R, Shishlov I 2014. Ex-post evaluation of the Kyoto Protocol: Four key lessons for the 2015 Paris Agreement, *Climate Report 44*.

Organisation for Economic Cooperation and Development (OECD) 2014, *Economic outlook database*, viewed 31 Dec. 2014, <http://stats.oecd.org>.

Royal Norwegian Embassy 2015, 'Norway's climate targets grossly misrepresented', viewed 14 August 2015, http://www.norway.org.au/Norway_and_Oceania/Latest-News/Norways-climate-targets-grossly-misrepresented/#.Vc15IREw-UI.

United Nations Framework Convention on Climate Change Secretariat (UNFCCC Secretariat) 2014a, *Greenhouse Gas Inventory Data*, viewed 08 Dec. 2014, http://unfccc.int/ghg_data/ghg_data_unfccc/items/4146.php.

UNFCCC Secretariat 2014b, *Compilation of economy wide emissions reduction targets to be implemented by Parties included in Annex I to the Convention: FCCC/SBSTA/2014/INF.6*.

World Resources Institute (WRI) 2014, *CAIT 2.0: Climate Analysis Indicators Tool*, WRI's Climate Data Explorer, viewed 10 Apr. 2015, <http://cait.wri.org>.