

Research Brief



Global Climate Action – May Update: State governments step up, while Japan puts low carbon future at risk

May 2015

As Australia continues to mull over its post-2020 emissions reductions target, a number of countries and now state governments have started to ramp up their action to limit pollution. The Climate Institute's recommendations on what Australia's target should be are laid out in its [submission](#) to the Prime Minister's Taskforce on post-2020 targets.

Many major countries announced their initial targets [earlier](#), but April saw important announcements from the governments of California and Ontario, as well as Japan.

California has [announced](#) it will aim to reduce emissions by 40 per cent below 1990 levels by 2030 as part of its contribution to avoiding a 2°C increase in global temperature. If Australia were to match California's target it would need to aim for pollution reductions of around 30 per cent below 2000 levels by 2025 (see more below).

Ontario in Canada [announced](#) that it will implement an economy-wide cap and trade system, which will link with the similar systems in Quebec and California.

Among the less rosy announcements was Japan's draft post-2020 target of 26 per cent reduction below 2013 levels by 2030 (or 25.4 per cent below 2005 levels). This target would leave Japan on the sidelines of serious international action and clean technology investment.

California's ambitious climate goals

If it was a country, California would be the world's 8th largest economy. Under the leadership of the previous Republican Governor, Arnold Schwarzenegger, the state implemented an [emissions trading scheme](#), and other policies to return emissions to 1990 levels by 2020, and achieve a 33 per cent transition to [renewable energy](#) by 2020. The new Democratic Governor, Jerry Brown, has announced California will now aim for a 40 per cent reduction on 1990 levels by 2030.

To put California's target in context, below is a comparison of it against the targets of the USA and Australia (Figure 1). While California's emissions are lower than Australia's (Figure 2), its population is significantly larger. California's per capita emissions are less than half that of Australia's and its economy is much less emissions intensive.

Overall, in terms of reductions in emissions on a range of base years, California's new target is roughly comparable to the USA's 2025 targets (Figure 2). For Australia to match this target, it would have to reduce emissions by about 30 per cent by 2025 (on 2000 or 2005 base years). However, California's target requires a very significant acceleration of ambition after 2020 to around 4-5 per cent annual pollution reductions (Figure 3). If Australia matched this rate of reduction after 2020, it would achieve more reductions than the proposed Climate Change Authority target of 30 per cent below 2000 levels by 2025.

Figure 1: California's targets on different base years. Shown below for comparison are the current targets of the USA and Australia, and the Climate Change Authority's recommended targets for Australia.

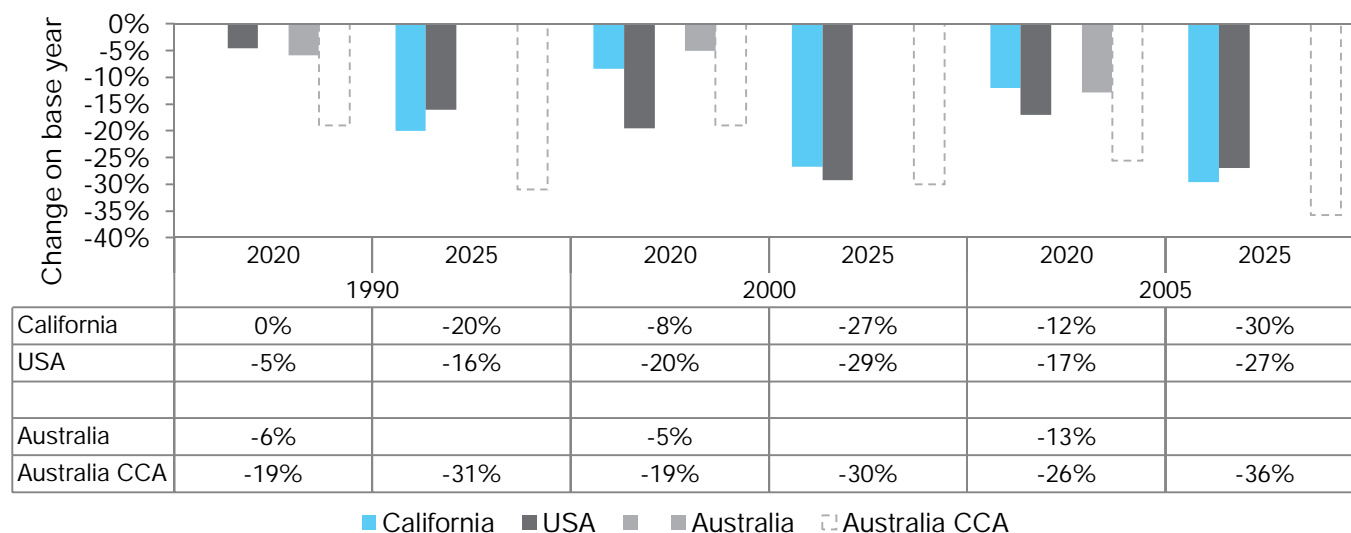


Figure 2: California's emissions and targets. Australia is shown for comparison.

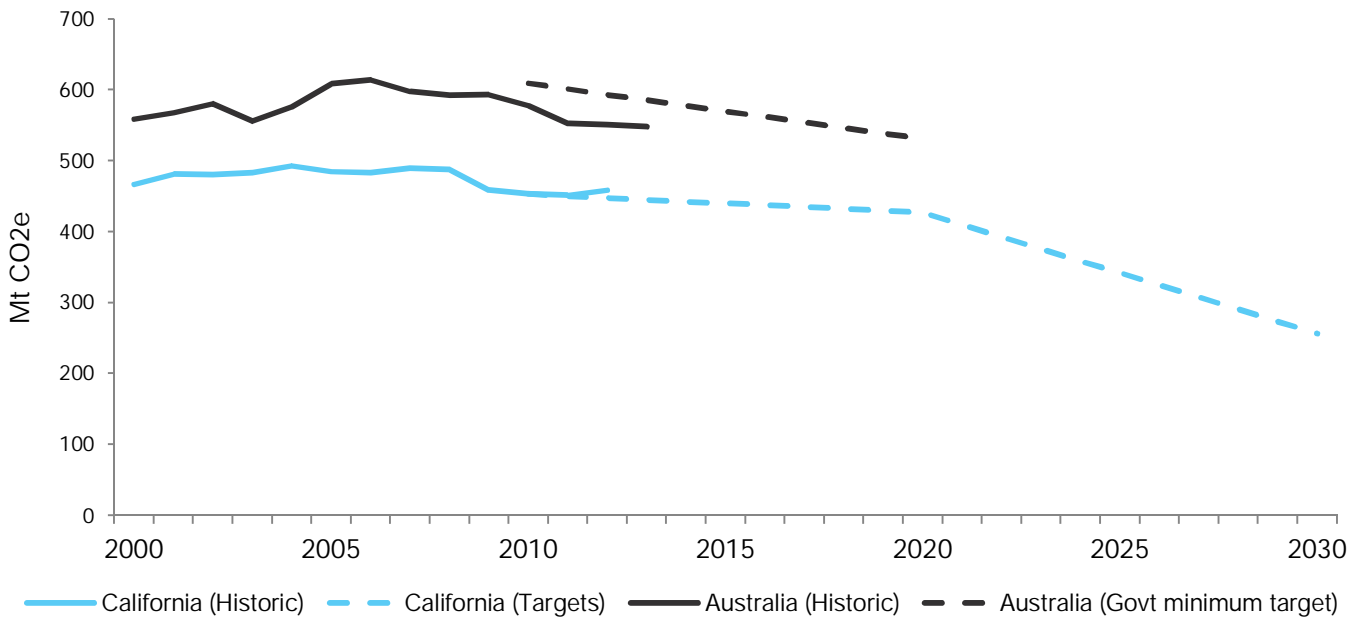
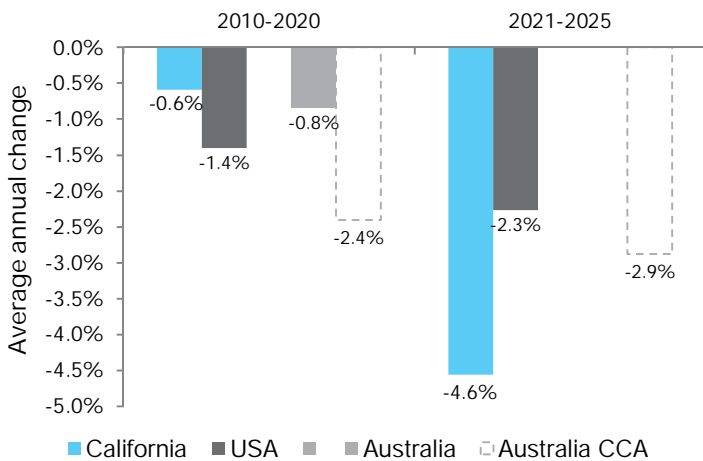


Figure 3: Californian rates of emissions reductions to achieve targets. Shown below for comparison are the current targets of the USA and Australia, and the Climate Change Authority's recommended targets for Australia.



levels). If it sticks to this target much more rapid reductions will be required for it to contribute fairly to avoiding 2°C. The target is also inadequate when compared with the targets of Japan's international peers. For example, by 2025, Japan would have cut its emissions by less than other advanced economies, regardless of the base year used (Figure 4 - to allow comparison all targets in the figures below have been converted to 2025 levels).

- + The target is a progression of effort: Japan's [climate and energy policy](#) was thrown into chaos by the 2011 tsunami and its impact on the nation's nuclear industry. This saw Japan weaken its 2020 emissions reductions target, which will now allow Japan to increase its emissions to 2020. However, the new 2025 target would be a significant acceleration of emissions reduction effort after 2020. To meet its 2025 target, Japan will need to accelerate its rate of emission reductions and practically match the USA's accelerated rate of reductions (Figure 5).
- + Japan risks its competitive position in a zero carbon world: Japan will still be a low emitter per person by global standards and its economy will have relatively low emissions intensity (For example, Figure 6). However, the trends in these indicators would remain fairly flat. Japan risks losing its [competitive position](#) as a relatively low emissions economy as countries like the US make greater efforts to decarbonise.

Japan's draft target - a risky bet on the future

In late April, a draft Japanese post-2020 target was presented to the joint advisory committee under the government's Ministry of Environment and the Ministry of Economy, Trade and Industry. The draft target is 26 per cent reduction below 2013 levels by 2030 (25.4 per cent below 2005 levels by 2030). Overall, The Climate Institute's initial analysis suggests that this target:

- + Is not a fair and ambitious contribution to avoiding 2°C of global warming: Japan's target is not a credible contribution to avoiding a 2°C increase in global temperature above pre-industrial levels. To avoid 2°C, the [global benchmark](#) for advanced countries like Japan is a reduction of about 50 per cent by 2030 (on 2010

Figure 4: Japan's target, in 2025, compared to other nations and on different base years.¹

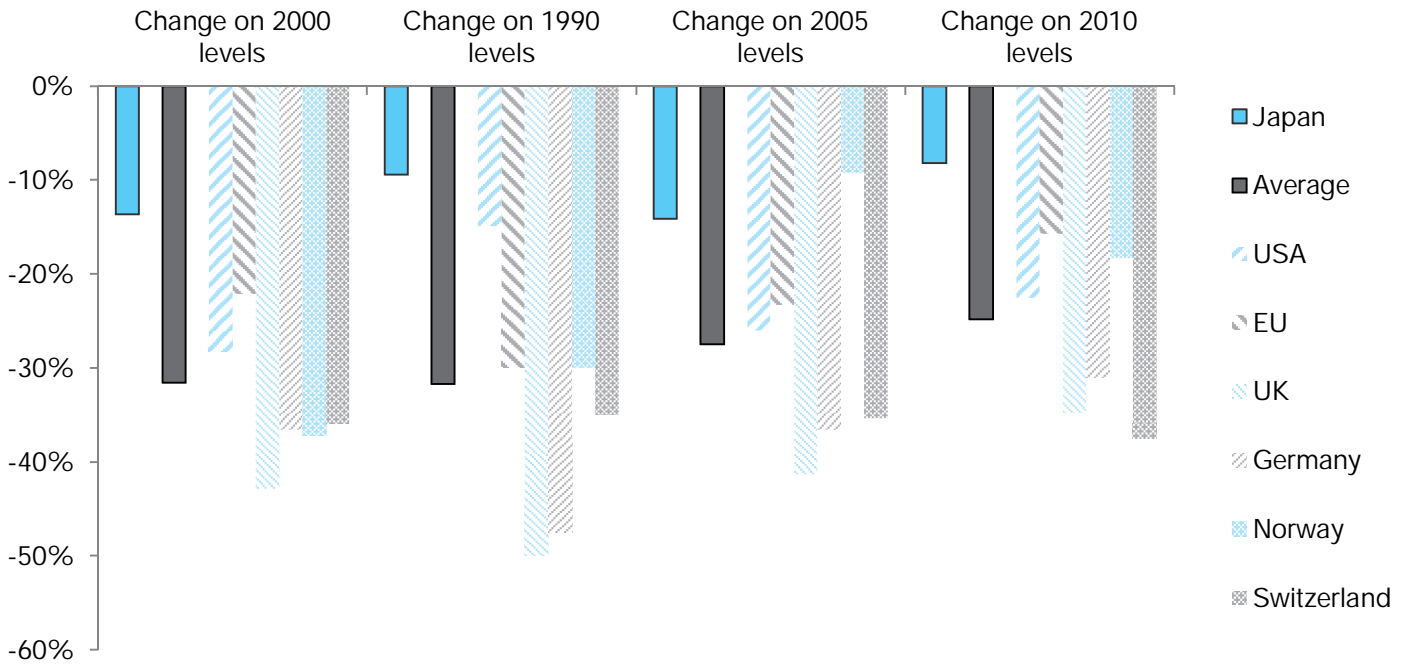


Figure 5: Annual rate of emissions reductions of targets announced so far.

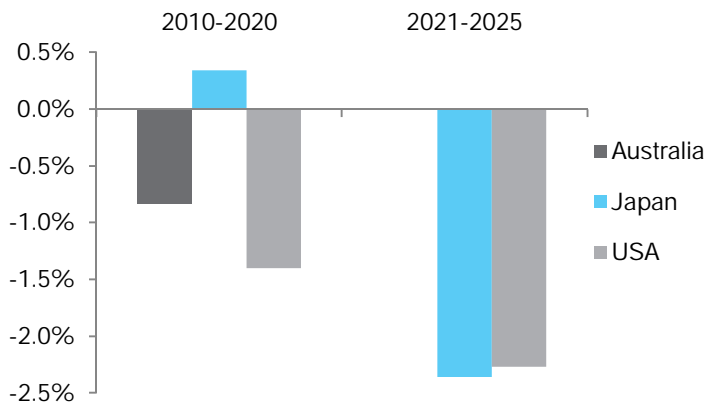
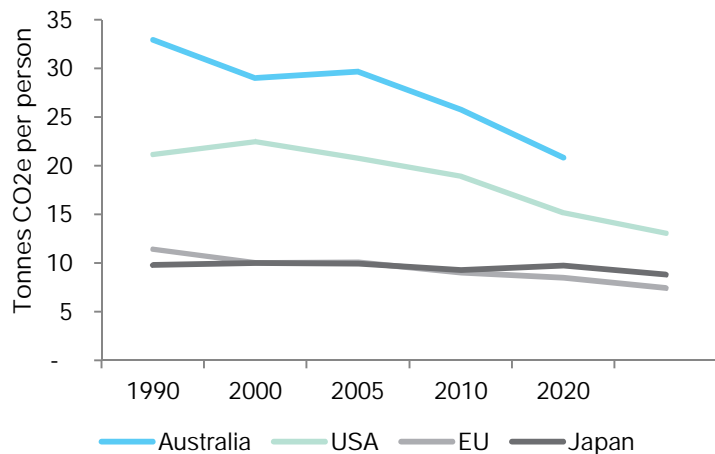


Figure 6: Change in per capita emissions to 2025 (based on announced targets).



BOX 1: April domestic policy announcements

- + The governor of California passes an executive order to raise the ambition of the state's emissions reduction target, calling for a 40 percent reduction on 1990 levels by 2030.
- + Japan announces a draft emissions reduction target of 26 per cent reduction below 2013 levels by 2030 (or 25.4 per cent below 2005 levels by 2030). It has been suggested that renewables account for 22-24 per cent of electricity generation by 2030, nuclear energy for 20-22 per cent, coal for 26 per cent (down from 30 per cent), and gas 27 per cent.
- + The USA releases its first ever Quadrennial Energy Review. Requested by President Obama, the review focuses on creating energy security and economic competitiveness for energy infrastructure, whilst taking into account environmental responsibility.
- + India submits an amendment to the Montreal Protocol to allow it to curb the use of super greenhouse gases hydrofluorocarbons (HCFs).
- + The government of Ontario in Canada announces it will implement an economy-wide cap and trade system, which will link with the similar systems in Quebec and California.

ENDNOTES

¹ Emissions data includes LULUCF and is based on data submitted to the UNFCCC. Population data is based on UN forecasts. Economic data is based on the IMF's World Economic Outlook.