

A Simple Guide to Australia's Emissions Reduction Targets.

The international community will converge in Paris in December to hammer out a new climate agreement to tackle climate change. In the lead up, countries are submitting their emissions reduction targets to the United Nations Framework Convention on Climate Change.

Our major trading partners and allies (e.g. the USA, China and the EU) have already submitted their targets. And the Australian government will shortly announce ours, which will establish the credibility, or otherwise, of Australia's efforts to tackle climate change. There are a range of factors in assessing the strength of a target and whether a country is doing its fair share. For more details see the Climate Council's latest report '[Halfway to Paris: How the world is tracking on climate change](#)'.

WHAT IS THE BASELINE YEAR?

A baseline year is a reference point in time against which emissions reductions in the future are measured. Emission targets are very sensitive to the baseline year chosen.

For example, Australia currently has an emissions reduction target of 5% by 2020 compared to 2000 levels. As 2005 was an unusually high year for Australia's emissions, if 2005 is used as a baseline the same emission reduction target becomes a 13% reduction. If 2010 is used, the equivalent would be an 8% reduction target. You can see that the baseline year is important as it creates the impression of more (or less) effort, when in fact the actual amount of emissions reduced is exactly the same.

IS THE TARGET IN LINE WITH THE SCIENCE?

Protecting the world from very substantial changes in the world's climate requires keeping global temperature rise to no more than 2°C above pre-industrial levels. While this may not sound like much, a 2°C rise in global temperature will have serious impacts on the lives of people world-wide, and could trigger major changes in the Earth System. For instance, the threshold to melting the Greenland ice-sheet, which would eventually raise sea level by about seven metres, inundating major cities world-wide, lies between 1 and 4°C, with the risk increasing through the temperature range.

On this basis, Australia's current 2020 target of a 5% reduction on 2000 levels is much too weak. If the world copied Australia's level of effort, we'd have little chance of staying below a 2°C rise in temperature. To have a good chance (75%) of staying below a 2°C rise in global temperature Australia would need to reduce emissions by 60% by 2030 on 2000 levels (65% below 2005 levels).

IS AUSTRALIA DOING ITS FAIR SHARE?

Climate change is a world-wide challenge and requires all countries to participate in solving the problem. Most Australians would be surprised to realise that Australia is the 13th largest emitter in the world – bigger than 182 other countries and we are also one of the highest polluters per person. We are an important global player and we have a responsibility to set a strong emissions reduction target.

IS THE PLAN TO MEET THE TARGET CREDIBLE?

An emissions reduction target can only be met with a credible plan. This must involve rapidly reducing fossil fuel emissions, particularly from domestic coal use. Wealthy countries can pay for reductions in carbon emissions elsewhere if it is cheaper than achieving the same level of emissions reduction in their own country. This "buys time" and does help reduce global emissions but ultimately is not a substitute for domestic emissions reductions, which will ultimately be required everywhere to stabilise the climate system.