Submission to Senate Environment and Communications Committee inquiry into Climate Change Bills

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1. What greenhouse gas emissions target should Australia have?

Whether climate change exists and its likely impact is a matter for science. What should be done to mitigate it is a matter of ethics and economics.[2]

The available scientific literature on climate change is summarised by the Intergovernmental Panel on Climate Change (2021). By the time of this latest report, uncertainties had been resolved. The report concluded 'it is unequivocal that human influence has warmed the atmosphere, ocean and land'.[3]

Most thinkers on ethics would agree that the current generation has an obligation to future generations (and other living beings with whom we share the planet) to provide stewardship of the environment which does not degrade it. The Reverend Tim Costello spoke movingly about this to a former Senate committee.[4]

The first major study of the *economics* of climate change was the Stern Review of 2006. It concluded that the costs of inaction on climate change would be 5 to 20 times higher than the costs of action.[5]

An Australian version of Stern's Review was the Garnaut Reports of 2008 and 2011. It concluded 'it was in Australia's national interest to do its fair share in a strong global effort to mitigate climate change'.[6]

The most efficient approach to reduce greenhouse gas emissions, and so limit global heating, would be a global emissions trading scheme. This does not appear politically possible any time soon. The second best approach is to allocate the amount of greenhouse gas emissions consistent with restraining global warming among countries (or groups of countries) and allow them to each determine their preferred method of achieving these targets.

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[2] Senate Select Committee on Climate Policy (2009, p 3).
[3] Intergovernmental Panel on Climate Change (2021, p 4). Simple accounts of the science are given in Garnaut (2008, chapter 2), Senate Select Committee on Climate Policy (2009, pp 3-10) and Royal Society (n.d.).
[4] Senate Select Committee on Climate Policy (2009, pp 11-12).
[5] Stern (2007, p xv).
[6] Garnaut (2011, p ix).

Globally 410 gigatonnes of CO_2 was emitted between 2010 and 2019. To have even a 50-50 chance of limiting global warming to 1.5 degrees, no more than 500 gigatonnes can be emitted from 2020 onwards.[7] This is the tight 'carbon budget' which needs to be allocated between the countries of the world.

A simple way of calculating Australia's 'fair share' of this carbon budget is to apply Australia's population (26 million) as a proportion of the global population (8 billion). This gives 0.33% of 500,000 million tonnes or around 1,625 million tonnes of CO_2 as the fair carbon budget for Australia.

This could be considered an upper bound. Other considerations of fairness would suggest Australia should make a larger than average contribution to reducing greenhouse gas emissions. Australia is one of the world's most wealthy countries. It has benefitted more than the average country from past emissions of greenhouse gases. It benefits from selling fossil fuels which give rise to emissions in other countries. And it is likely to suffer more than average from climate change.

As Australia currently emits around 400 million tonnes of CO_2 a year, there is probably no realistic way that Australia can limit itself to this fair share. There are alternative trajectories of how we could use this national carbon budget. But the smaller our reductions up to 2030, the larger they will need to be beyond that. Assuming a constant annual percentage reduction each year to reach near zero by 2050 would imply a reduction of 95 per cent between 2020 and 2030. This would represent a similar percentage reduction from 2005 to 2030.[8] Making a slower start could allow, for example, a 90 per cent reduction from 2020 to 2030 but this would then require more than doubling the pace of reduction over the subsequent two decades to limit ourselves to the fair carbon budget.

Knowing that we will be taking up more than our fair share of global emissions makes it even more morally imperative that we try to reduce emissions as fast as we can.

The Climate Council (nd, p 1) has called for a 75 per cent reduction in Australia's greenhouse gas emissions from 2005 levels by 2030. The Business Council of Australia (2021, p 6) has called for 46-50 per cent. The Australian Industry Group (2022) has called for Australian emissions to be halved by 2030.

The new Australian government's pledge to reduce overall greenhouse gas emissions[9] by 43 per cent from 2005 levels by 2030 is therefore less than what Australia should be doing. But it is a great improvement on the previous government's 26-28 per cent (which had no substantive explanation of how it could be achieved).

By comparison, the world as a whole will achieve a 28 per cent reduction from its emissions in 2005 by 2030 if all countries adhere to their 'Paris agreement' commitments.[10]

But the percentage reduction by Australia needs to be considerably larger than the global average because Australia is currently among the highest per capita emitters of greenhouse gases. Were Australia to only match the global percentage reduction, we would be saying that we are entitled to remain one of the highest per capita emitters of greenhouse gases. We would in effect be asking poorer countries to continue subsidising our affluent lifestyles.

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[7] Intergovernmental Panel on Climate Change (2022, p 10).

[8] Australian targets are often expressed relative to 2005 as this was near the peak of emissions, making the percentage changes look more impressive.

[9] This incorporates all greenhouse gases (CO_2, methane and others), expressed in CO_2-equivalents.

[10] United Nations Framework Convention on Climate Change (2021, p 27).

2. The bills

The *Climate Change Bill* obliges the Minister to table annual statements informed by publicly available advice from a revitalised Climate Change Authority (CCA). This is a commendable improvement in accountability.

The CCA is to advise on future greenhouse gas emissions reduction targets. The bill requires a response to the CCA's advice be tabled within six months. This seems unduly leisurely. I would suggest that three months would be more appropriate.

The composition of the CCA will need to be addressed. In the past it had a distinguished board including respected figures such as former Treasury secretary and Reserve Bank governor Bernie Fraser and climate scientist David Karoly. The previous government attempted to abolish it but were prevented by the Senate. Its board now has a heavy representation of former mining executives.

The Bill (section 10) states the current 43% target but allows for the executive government to alter this 'in accordance with paragraph 11 of Article 4 of the Paris Agreement'. It states that any revision 'must represent a progression' and be 'an enhancement of Australia's level of ambition'. The bill therefore appears to meet the reasonable demand that the target reduction be a 'floor' rather than a 'ceiling'.[11]

The explanatory memorandum (page 9, paragraph 15) states that Australia will no longer attempt to carry over any so-called 'overachievement' on earlier targets in calculating its emission reductions. Ruling out such cynical manipulation is a commendable move towards restoring Australia's tattered reputation in international climate negotiations.

The Government has already communicated its improved reduction target to the United Nations. But underpinning this with legislation is a useful statement of sincerity and should reduce uncertainty for business and investors. It is highly regrettable that the opposition parties have not taken the opportunity to increase business certainty about Australia's intentions by supporting this bill.

The *Climate Change (Consequential Amendments) Bill* amends legislation pertaining to the operations of various authorities to be consistent with the new target and arrangements.

3. Recommendations

I would have liked the bill to have included a somewhat more ambitious target. But I can see why the Government may believe it wants for now to stick to the target it took to the election. But as further evidence accumulates of the need for more rapid action, which should be reflected in the reports prepared for it by the CCA, it should take the chance to increase the targets.

It should also consider setting more ambitious targets for 2035, which would not be constrained by what it took to the election.

And it should prepare and argue for more ambitious 2030 targets to take to the 2025 election.

There is much more that needs to be done to ensure Australia achieves its goals. There is scope for amendments to improve these bills and other legislation to improve Australia's prospects of meeting the targets. But I do not believe it would be in the national, or indeed global, interest for these bills to be rejected.

[11] This common terminology is potentially confusing as a 'floor' on the percentage reduction corresponds to a 'ceiling' on the quantity of emissions.

References

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