

Climate Change Authority's second draft report of the Special Review: Australia's climate policy options

March 2016 • Contact: Erwin Jackson, Deputy CEO • ejackson@climateinstitute.org.au • 02 8239 6299

KEY POINTS

This submission focuses on the implications for future policy of the Paris Agreement and Australia's commitment to it. The terms of reference for the Authority's review explicitly require the objectives of this Agreement to be considered. The Climate Institute makes the following key points:

1. The Paris Agreement includes a regular ratchet mechanism for national emissions reductions targets, the setting of 2050 emissions goals, and justification and assessment of national and collective actions against the commitment to pursue efforts to avoid 1.5-2°C global warming above pre-industrial levels. The agreement recognises that this will require rebalancing greenhouse gas sources and sinks and the achievement of net zero emissions.
2. Achieving the objectives of the Paris Agreement requires the stabilisation of greenhouse gases. This requires total emissions to be limited. Therefore, consideration must be given to the impact that the country's policy suite will have on an overall carbon budget, and Australia's contribution to it. When making decisions that in any way involve greenhouse gas emissions, governments and policy makers can no longer avoid the consideration of carbon budgets and the goal of achieving net zero emissions. For example, achieving these goals requires the decarbonisation of the electricity sector well before 2050. Unless this process starts soon – specifically, the sustained replacement of the existing coal generation fleet by around 2035 – disruptive and costly interventions will be required to limit total emissions in line with the objectives of the Paris Agreement.
3. The Authority has noted that the scalability of a policy framework is important. However, policy mixes appropriate for short-term national targets may not be suitable for the achievement of net zero emissions. Given that achieving net zero emissions before 2050 and shorter term national targets are both important, this points to a policy 'toolkit' that can work towards both objectives.
4. In terms of sending a broad signal throughout the economy of the need to undertake emissions reduction activities, carbon pricing remains an important policy. However, it is currently unlikely that a carbon pricing mechanism, for example through a baseline and credit or traditional cap and trade scheme, would be consistent with achieving both these objectives (net zero emissions and short term national targets) at this time. To set Australia on a credible path to net zero emissions, existing high emissions generation needs to be replaced with zero emissions power generation. A domestic carbon price of >\$70-\$120/tonne would be needed during the 2020s to begin an orderly transition. Yet, signalling a domestic carbon price of this magnitude seems to be politically infeasible over the next couple of years. Unless backed by other measures, such as a coal closure regulatory measure, weak carbon signals would defer the necessary transformation to a later date.
5. Overall, failure to deliver a policy framework that is aligned with achieving net zero emissions before 2050 risks further prolonging investment uncertainty, and a much more rapid – and more disruptive – change at a later date. Ultimately the only policy consistent with the Paris Agreement is one that sets a clear and credible pathway towards a net zero economy before 2050.

INTRODUCTION

The Climate Institute welcomes this opportunity to make a submission to the Climate Change Authority’s second draft report of the Special Review: Australia’s climate policy options. This submission focuses on Australia’s international undertakings under the United Nation’s Framework on Climate Change (UNFCCC) and the implications for future policy. The terms of reference for the Authority’s review explicitly require these elements be considered. The letter from the Minister of the Environment to the Chair of the Authority states that the Special Review must consider:

- + “Australia’s international commitments and undertakings under the United Nation’s Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol to which Australia is a party”
- + “What future emissions reduction targets Australia should commit to as part of effective and equitable global effort to achieve the objective of the UNFCCC (Article 2) or subsequent agreement to which Australia is a party”

THE ADOPTION OF THE PARIS AGREEMENT

At the twenty-first Conference of Parties in Paris, over 190 governments decided to adopt the Paris Agreement under the UNFCCC. This occurred after the release of the Authority’s draft report on climate policy options. A number of elements of the Paris Agreement are relevant to the Authority’s terms of reference and how domestic policy should be implemented:

Long-term objectives

- + Article 2.1 (a): “Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels ...”
- + Article 4.1: “In order to achieve the long-term temperature goal set out in Article 2, Parties aim to ... to undertake rapid reductions ... in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.” Table 1 outlines when total greenhouse gases and energy-related carbon dioxide should reach zero to achieve the objectives of the Paris Agreement. Simply, global emissions from fossil fuel use should reach net zero around 2050. Developed countries, like Australia, have agreed to continue to take the lead in global actions and will need to achieve net zero emissions well before these global outcomes.

Table 1: Characteristics of global emissions pathways consistent with Paris Agreement objectives.¹

| Temperature objective | When do emissions reach net zero? | |
|--|---|----------------------|
| | Global energy CO ₂ emissions | Global GHG emissions |
| 1.5°C (>50% chance, >75% chance of avoiding 2°C) | 2045-2055 | 2060-2080 |
| 2°C (>66% chance) | 2060-2075 | 2080-2100 |

Emissions reductions

- + Article 3: All countries are to undertake and communicate progressively stronger nationally determined contributions (NDCs) with a view to limiting global average temperature to below 1.5-2°C above pre-industrial levels.
- + Article 4.2: Countries shall pursue domestic mitigation measures, with the aim of achieving the objectives of NDCs.
- + Article 4.3: Each country's successive NDC will represent a progression beyond the country the then current NDC and reflect its highest possible ambition.
- + Article 4.8: In communicating their NDCs countries are expected to provide the information how it contributes towards achieving the objective of the UNFCCC.²
- + Article 4.9: NDCs will be updated every five years and be informed by the outcomes of the global stocktakes. This process will begin in 2019-2020 following the first stock take in 2018.³
- + Article 4.19: Countries should formulate and communicate long-term low greenhouse gas emission development strategies taking into account limiting warming to below 1.5-2°C. Expectations are that these 2050 emissions goals will be communicated by 2020.⁴
- + Article 14: Every five years, starting in 2018,⁵ countries will take stock of collective efforts towards limiting warming to less than 1.5-2°C and net zero emissions. This will inform the updating of NDCs.

IMPLICATIONS OF THE PARIS AGREEMENT FOR DOMESTIC POLICY

Under the Paris Agreement, Australia is legally bound to implement domestic policies to pursue the objectives of its NDCs. Australia's first NDC will be communicated when it ratifies the Paris Agreement. These NDCs will be strengthened through time and updated every five years starting in 2020. The updating of NDCs will be informed by an assessment of global action towards limiting warming to 1.5-2°C and achieving net zero emissions.

The agreement in Paris to continually ratchet action through time sends a strong political signal to business and investors that reinforce strengthening global trends and action to reduce emissions. These trends are outlined in The Climate Institute's policy brief on the Paris meeting.⁶ It also puts the onus on national governments to formulate national policies that are scalable through time towards long-term goals.

The formulation of 2050 emissions targets over the next few years will reinforce this outlook. The Australian government has committed to examine a longer-term target in 2017.⁷ Both major parties already agree on the need to achieve net zero emissions. The government is yet to specify when Australia will achieve this goal⁸ and the ALP has committed to achieve this outcome by 2050.⁹ These statements are consistent with the emerging global and domestic narrative from groups and organisations such as the Group of Seven nations (G7) and the World Bank. The Australian Climate Roundtable, and other global and Australian businesses and investors also recognise that net zero emissions or below is the ultimate objective of climate policy.¹⁰

The Paris Agreement also creates regular political moments when collective and individual actions will be assessed against the objectives of the treaty. This is linked both to the collective stock takes of action which begin in 2018, and in the information provided when individual NDCs are communicated to the international community.

A test run of this process can be seen before Paris:

- + In Copenhagen countries agreed to work towards limiting global warming to less than 2°C above pre-industrial levels.
- + Ahead of the Paris meeting, over 150 countries have put forward initial emissions reductions targets, covering more than 90 per cent of global emissions. These targets vary in their degree of strength and credibility, but they show how

international political moments can increase action. Without the looming climate negotiations, many countries, including Australia, would not have felt pressure to put forward new targets and implement new domestic policies to achieve them. As a result, we're closer to avoiding 2°C than we would otherwise be.

- + How countries justified their targets before Paris was mixed.¹¹ For example, the USA, EU, Switzerland, Norway, South Korea, and Mexico provided specific information on why they see their initial targets as being consistent with a fair contribution to limiting warming to less than 2°C. A number of developed countries, notably Australia, Canada and New Zealand, do not justify their target against the less than 2°C goal in their submissions. These countries also have the weakest overall targets among the developed economies.¹²

The overall combination of the regular ratcheting of national emissions reductions targets, setting of 2050 emissions targets, and justification and assessment of national and collective actions against the less than 1.5-2°C objective mean governments and policy makers can no longer credibly avoid achieving at least net zero emissions as a core objective in all relevant considerations.

Critically, achieving the objectives of the Paris Agreement requires the stabilisation of greenhouse gases, which in turn requires total emissions to be limited. Consideration of a policies suite impact on an overall carbon budget, and Australia's contribution to it, are therefore required.

POLICY EVALUATION WITH A NET ZERO EMISSIONS AND BELOW OBJECTIVE

Post Paris, the core issue for national policy development is whether policies are credible and robust in a world heading towards net zero emissions and carbon budgets consistent with the objectives of the Paris Agreement. Investors and some leading businesses are beginning to stress test their portfolios and business models against these requirements.

The assessment of a required national policy mix depends on the scale and timeline of key objectives.

For example, implementation of a carbon pricing mechanism consistent with achieving a short-term (e.g. 2030) emissions reduction objective could involve an internationally linked mechanism that covers most major emitting sectors. Assuming this system included

an absolute cap on emissions and was designed to be consistent with international accounting rules, policy makers could have a reasonable level of confidence that the national target can be achieved. It would also send an important signal to the broader economy to undertake emissions reductions activities.

While achieving the national target is very important, such a system would be unlikely to initiate the transformation of the electricity sector as carbon prices would likely be insufficient, and future regulatory and price uncertainty would deter investment in research, development, deployment and diffusion of clean technologies. This would not position key emitting sectors for achieving net zero emissions and increases in economic costs as, in the longer-term, more drastic action is required.

The design of a carbon pricing mechanism in the context of achieving net zero emissions would need to be different from the example given above. A clear, long-term and credible domestic price would need to be established to provide the confidence to business and the financial sector to invest on the scale required. As an example, during the 2020s, clear domestic carbon prices of >\$70-\$120/tonne would likely be needed to begin retiring existing high emissions generation and the necessary replacement of zero emissions power sources. Signalling domestic carbon prices of this magnitude over the next couple of years seems unlikely to be politically feasible.

Given the achievement of net zero emissions and shorter term national targets are both important, this points to a policy 'toolkit', as the Authority describes it, that can work towards both objectives. Note that this does not mean all policies need both objectives. It is perfectly reasonable to have the objective of a carbon-pricing scheme focused on achieving shorter-term international obligations, while at the same time having a separate policy with an objective of modernising the power sector so Australia can remain prosperous in a net zero world.

CONCLUSION

Australia currently lacks a clear strategy to manage the risks and opportunities of a net zero emissions world. Discussion around Australia's domestic policy setting, post the adoption of Paris Agreement, is an opportunity to look beyond the short-term and examine the ultimate objectives of national climate change policy. This conversation needs to start from Australia's long-term national interest in becoming a climate-resilient society, and an economy able to prosper in a decarbonising world. From this point, it becomes clear that stable and effective policy needs to be relevant - not just for the next ten years, but for the next 50 years. Failure to deliver this risks institutionalising investment uncertainty, and a much more rapid - more disruptive - change at a later date.

ENDNOTES

¹ Rogelj et al., Feasibility of limiting warming to 1.5 and 2°C, Climate Analytics, 2015:

<http://climateanalytics.org/publications/2015/feasibility-of-limiting-warming-to-1-5-and-2c>

² Further clarity on upfront information will be developed before the Paris Agreement enters into force. The current basis is UNFCCC 1/CP.21 para 27: “Agrees that the information to be provided by Parties communicating their nationally determined contributions, in order to facilitate clarity, transparency and understanding, may include, as appropriate, inter alia, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its nationally determined contribution is fair and ambitious, in the light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2”

³ UNFCCC 1/CP.21 para 23-25.

⁴ UNFCCC 1/CP.21 para 35: “Invites Parties to communicate, by 2020, to the secretariat mid-century, long-term low greenhouse gas emission development strategies in accordance with Article 4, paragraph 19, of the Agreement”

⁵ UNFCCC 1/CP.21 para 20: “Decides to convene a facilitative dialogue among Parties in 2018 to take stock of the collective efforts of Parties in relation to progress towards the long-term goal referred to in Article 4, paragraph 1, of the Agreement and to inform the preparation of nationally determined contributions pursuant to Article 4, paragraph 8, of the Agreement”

⁶ The Climate Institute, Paris Climate Summit: Catalyst for further action? Policy Brief, 2015:

http://www.climateinstitute.org.au/verve/resources/Paris_Policy_Brief_Final.pdf

⁷ Australia’s Intended Nationally Determined Contribution to a new Climate Change Agreement:

<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Australia/1/Australias%20Intended%20Nationally%20Determined%20Contribution%20to%20a%20new%20Climate%20Change%20Agreement%20-%20August%202015.pdf>

⁸ Prime Minister of Australia, 2015 United Nations Climate Change Conference speech:

<http://www.malcolmturnbull.com.au/media/2015-united-nations-climate-change-conference-speech>

⁹ Leader of the Opposition, Labor’s climate change action plan: <http://billshorten.com.au/speech-to-the-lowy-institute-labors-climate-change-action-plan>

¹⁰ The Climate Institute, op cit.

¹¹ The Climate Institute, Global climate action – August update: Climate action momentum continues to build and country targets and the < 2°C goal, Research Brief: http://climateinstitute.org.au/verve/resources/TCI_Global_action_update_August_04082015.pdf

¹² China’s submission also does not explicitly state how they see their targets as a fair contribution to the less than 2°C goal. Rather, China’s lead economic agency published a paper on how the target contributes to this collective goal when their draft target was released. China’s submission discusses its national circumstances, but instead of using its national circumstances as an excuse, as do Australia, Canada and New Zealand, China uses its national circumstances to justify taking significant action.