

The Climate Change Authority's Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review

December 2013 • Contact: Erwin Jackson, Deputy CEO,

SUMMARY

The Climate Institute (TCI) congratulates the Climate Change Authority (CCA) on its draft report, *Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review*.

Australia's discussion of climate change has a track record of highly politicised approaches to climate policy. This has resulted in significant business and community uncertainty leading to higher costs associated with investments, and emissions reductions that fall well short of the potential. The work of the CCA provides an important cornerstone for ongoing policy formulation.

The CCA's final report will be crucial as the national and international debate evolves to focus not only on how Australia steps up its pre-2020 emission reduction ambitions but increasingly on our post-2020 emission reduction contributions. The CCA's report plays a crucial role in building the understanding that Australia's emission reduction efforts do not end in 2020, but begin an increasingly urgent decarbonisation pathway over the coming decades.

Overall points:

- + **The national interest:** TCI welcomes the CCA focus on recommendations consistent with Australia's national interest in avoiding a 2°C increase in global temperature above pre-industrial levels. Any slippage toward a more narrowly defined national interest dominated by the short-term interests of a small number of extractive and emissions-intensive industries weakens Australia's ability to influence the policies of other nations and the achievement of an ambitious 2015 climate agreement. This would therefore jeopardise Australia's capacity to minimise the long-term climate risks on our communities, prosperity, and security.
- + **Longer-term emission goals:** TCI strongly agrees with the CCA that there is a 'compelling case for increasing the amount of guidance about Australia's post-2020 emissions reduction goals beyond the current, single-year target for 2050.'

Setting an Australian carbon budget to 2050 is central to these deliberations if short- and medium-term emission targets and budgets are to be made more credible. Linking action more directly to the national interest in avoiding 2°C will reduce adjustment costs and increase government accountability and transparency in setting these targets and budgets.

The agreements reached in Warsaw's UNFCCC COP19 reinforce the need to set out 2030 emission pathways. Specifically, Australia agreed with other governments in Warsaw that countries will initiate or intensify domestic preparations for their intended nationally determined contributions towards the 2015 agreement, and that governments will communicate these new offers for the post-2020 period by the first quarter of 2015. The CCA final report should be a critical input into the Government and community's deliberations on these emission goals.

- + **Hedging against risk:** Australia's carbon budgets and emission goals should be based on a 'hedging' strategy that ensures that short-term actions do not rule out the possibility of achieving long-term objectives. This implies stronger not weaker longer-term climate goals.

Comments on specific recommendations:

- + **Global carbon budget:** The CCA sets out a carbon budget consistent with a 67 per cent probability of avoiding a 2°C rise. This presents significant risks to Australian communities and natural systems. A more stringent budget with a 75 per cent probability (or 870 billion tonnes of CO₂-e from 2013–2050) of avoiding 2°C would be more prudent. Given the high risks associated with climate change, erring on the side of caution is a safer choice than hoping the climate dice roll in our favour.
- + **2020 emission target:** The Review examines two targets, 15 per cent and 25 per cent reduction on 2000 levels by 2020. Of these, the 25 per cent target is more credible as it is more closely

aligned with carbon budgets consistent with a high chance of avoiding 2°C, leaves open the possibility of stronger actions at a later date and clearly signals Australia will play its fair part in global efforts. Making a decision today based on the 15 per cent emission reductions and a 67 per cent chance of avoiding 2°C would likely rule out Australia playing its fair part in global action that achieves our national interest.

- + **Trajectory range to 2030:** TCI broadly supports the approach taken in defining Australia's emission trajectory beyond 2020. However, the bottom end of the range should be aligned with a global carbon budget consistent with at least a 75 per cent chance of avoiding a 2°C increase in global temperature. This indicates emissions reductions in the order of 60 per cent are required by 2030.
- + **Australian 2013–2050 carbon budget:** TCI strongly supports the setting of a long-term carbon budget for Australia to guide long-term policy development consistent with our national interest. The precise budget should be set in line with a global budget consistent with at least a 75 per cent chance of avoiding a 2°C increase in global temperature (around 8,400 Mt CO₂-e from 2013–2050 for Australia).
- + **International emission reductions:** TCI agrees that using international emissions reductions to contribute to meeting Australia's goals has benefits and manageable risks. The CCA should make explicit recommendations on robust governance options and policy design to avoid locking in new emissions-intensive capital.

INTRODUCTION

Established in late 2005, The Climate Institute (TCI) is a non-partisan, independent research organisation that works with community, business, and government to catalyse and drive the change and innovation needed for a low-pollution economy and culture. Our vision is of a resilient Australia prospering in a zero-carbon global economy; participating fully and fairly in international climate-change solutions.

TCI congratulates the Climate Change Authority (CCA) on its draft report, *Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review*. We welcome the opportunity to make this submission on its draft recommendations and conclusions.

Australia's discussion of climate change has a track record of highly politicised approaches to climate policy. This has often produced inefficient policies subject to continual revision. This, in turn, has resulted in significant business and community uncertainty leading to higher

costs associated with investments, and emissions reductions that fall well short of the potential.

The work of the CCA provides an important cornerstone for ongoing policy formulation. The statutory independence of the Authority, its role as a rigorous reviewer of existing policies, along with the government's legislated requirement to respond publicly to its recommendations, injects much-needed impartiality and transparency into Australian climate policymaking.

The CCA's final report will be crucial as the national and international debate evolves to focus not only on how Australia steps up its pre-2020 emission reduction ambitions but increasingly on our post-2020 emission reduction contributions. After the Warsaw climate talks Australia has around 12 months to resolve targets for both timeframes, including defining our 2025/30 emission reduction offer. The CCA report is crucial in building the understanding that Australia's emission-reduction efforts do not end in 2020, but begin an increasingly urgent decarbonisation pathway over the coming decades.

The submission is structured in two parts: the initial discussion is a general commentary on the rationale of the CCA's draft report; the subsequent section comprises comments on the CCA's draft recommendations.

OVERALL COMMENTS

Australia's national interest

TCI welcomes the CCA focus on recommendations consistent with Australia's national interest (Figure 1). We strongly agree that:

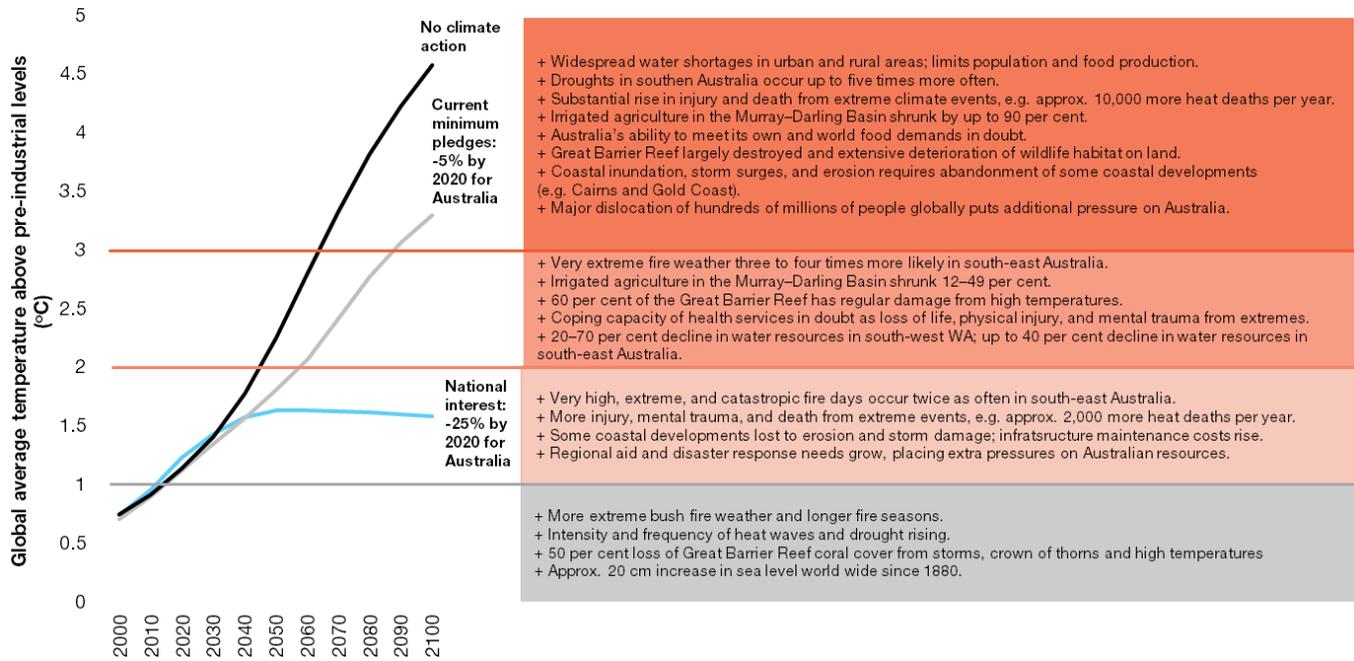
Australia has a clear national interest in limiting global warming to no more than 2 degrees.

Linking policy decisions with the national interest also has broader applications beyond setting emission targets and budgets: it sends a signal about Australia's disposition via the country's diplomatic efforts in international negotiations'. As international efforts towards a new 2015 global agreement with broad coverage gather strength, each nation will need a clear view of its national interest to shape what it sees as a credible outcome.

Australia's apparent slippage back toward a narrowly defined national interest dominated by the short-term interests of a small number of extractive and emissions-intensive industries, weakens our interest and ability to influence an ambitious 2015 outcome. It follows that the Commonwealth's capacity to minimise the long-term climate risks on our communities, prosperity, and security is therefore jeopardised.

Figure 1. Global action and Australia's national climate interest. This figure illustrates current mid-range projections of global warming based on scenarios in which: no action is taken, the minimum emission pledges countries have already made are achieved, and strong emissions-reduction actions are taken consistent with avoiding a 2°C increase in global temperature. Examples of climate change risks to Australia are given.

Source: CSIRO, Climate Commission, Bureau of Meteorology, Garnaut Review.



Australia's influence

Broadly speaking, TCI agrees with the discussion and conclusion of Australia's influence in Section 5.4 of the draft report. This is reinforced by:

- + **Opportunistic reactions to Australia's attempts to repeal the carbon laws.** Since the government has begun efforts to repeal the carbon laws, policymakers and sectoral interests in a number of key countries have sought to undermine efforts to implement similar policies. These include, but are not limited to, Canada and South Africa.ⁱⁱ
- + **Confusion on international undertakings.** Australia remains committed to reduce emissions by up to 25 per cent on 2000 levels by 2020, and to participate in international financing arrangements to support climate change adaptation and mitigation in the world's poorest nations.

Recent statements by the Government have cast doubt on Australia's intentions to act in good faith in respect of these agreements. For example, the Prime Minister appears to have indicated that Australia is to step back from previously bipartisan-supported conditions for stronger targets that have been provided to other nations in various work programs under the UNFCCC.ⁱⁱⁱ

The Government is yet to formally clarify its position on these matters internationally or domestically. This confusion, combined with attempts to repeal domestic climate-change legislation and the lack of Australian ministerial representation at the UNFCCC's COP19, undermined Australia's influence at the meeting at best and weakened broader progress at worst.^{iv} Australia drew direct and indirect criticism from countries as diverse as Tuvalu and China. For example, in the High Level Segment of the meeting, South Africa's environment minister stated:

We are deeply concerned about recent announcements by Japan and Australia to significantly reduce their commitments. Taken together with uncertainties around finance, this sends a very negative signal about the sincerity and commitment of these Parties.^v

Looking beyond 2020

TCI strongly agrees with the CCA that:

There is a compelling case for increasing the amount of guidance about Australia's post-2020 emissions reduction goals beyond the current, single-year target for 2050.

Setting an Australian carbon budget to 2050 is central in making short- and medium-term emission targets and budgets more credible. This would:

- + link Australia's action more directly to the national interest in avoiding 2°C in global warming
- + lower costs by providing greater policy certainty and an early indication of future goals
- + increase government accountability and transparency in setting short-term and medium-term emission targets and carbon budgets.

The agreements reached in Warsaw's UNFCCC COP19 reinforce these conclusions.^{vi} Specifically, Australia agreed with other governments in Warsaw that countries will initiate or intensify domestic preparations for their intended nationally determined contributions towards the 2015 agreement, and that governments will communicate these new offers for the period post-2020 by the first quarter of 2015.^{vii} The CCA's final report should be a critical input into the Government's and community's deliberations on these emission goals.

It should also be noted that a number of Ministerial dialogues on pre- and post-2020 ambition will occur in 2014; the Government will need to decide whether it accepts the UN Secretary General's invitation to the Prime Minister to attend the world leader's summit on climate ambition with a 'bold' new offer in September that year. As the CCA indicates, the Government will also need to decide whether it signals its intentions, in April 2014, to increase its 2013–2020 emissions ambitions under the Kyoto Protocol.

Collectively, these international processes will focus attention on the credibility of Australia's pre- and post-2020 goals. This scrutiny will be heightened by Australia's attempts to remove the current carbon legislation. The credibility of Australia's emissions goals will play a role in shaping the ambitions of the 2015 agreement. If they are transparent and consistent with avoiding 2°C, Australia's pre- and post-2020 emission goals can weight the 2015 outcome towards more ambition and our national interest.

HEDGING AGAINST CLIMATE RISKS

Australia’s carbon budgets and emission goals should be based on a ‘hedging’ strategy to ensure that short-term actions do not rule out the possibility of achieving long-term objectives.^{viii} This implies stronger not weaker longer-term climate goals. Establishing weaker climate goals could:

- + lead to higher economic costs as investments in long-term infrastructure may be forced into early retirement to meet a new and more stringent policy regime set at a later date
- + limit options for future policy makers and generations who currently do not sit at the decision-making table. There is no guarantee that these decision makers will feel bound by the decisions we make today. Less stringent goals today leave future generations with the choice of accepting more severe climate impacts or undertaking more costly economic adjustments
- + increase reliance on uncertain technology options. For example, avoiding a 2°C increase in global temperature would rely in part on technologies that have yet to be deployed at large scale, such as carbon capture and storage (CCS). The longer the delay in setting more stringent climate goals, the more reliance on these technologies increases.

These points are particularly pertinent for the setting of 2020 targets in line with 2013–2050 carbon budgets.

Figure 2 illustrates four emission trajectories to 2030 based on the CCA’s suggested 15/25 per cent 2020 targets. The solid lines from today to 2030 are consistent with a carbon budget with a 75 per cent chance of avoiding a 2°C increase in global temperature (see comments on draft recommendations and conclusions below). As the CCA indicates, emission reductions in the order of 60 per cent by 2030 are required to be consistent with this carbon budget. The dashed lines are the CCA’s 2030 emission trajectories based on its recommended budget that gives only a 67 per cent chance of achieving the national interest.

Table 1 compares the change in emissions from 2020 to 2030 in all these scenarios based on the ‘traffic light’ framework outlined in the CCA’s Table 11.1 and 11.2 (p.122-124). As in the CCA table, red shading suggests this option is undesirable or not feasible, amber indicates an option that creates tensions or may be challenging to achieve, and green indicates a feasible option. The five percent reduction target is also included as per the CCA’s report.

The table illustrates that making a decision today based on a 2020 target of 15 per cent and a 67 per cent chance of achieving the national interest would likely rule out Australia playing its fair part in global action that has a good chance of avoiding 2°C. Only the 25 per cent reduction target leaves open the option to adjust our policy settings in the future to a carbon budget more consistent with avoiding 2°C.

Figure 2. National emissions from 1990-2030. Lower risk 2°C carbon budget trajectories are consistent with a 75 per cent chance of achieving the national interest. Dashed lines are consistent with the CCA’s proposed approach.

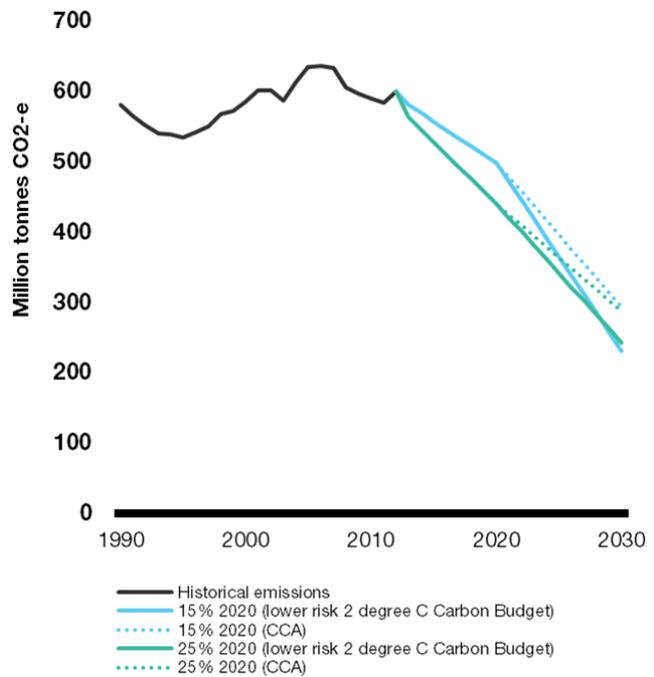


Table 1. Percentage point change in emissions from 2020 to 2030.

2020 target (percentage change on 2000 levels)	CCA trajectories (50 percent reduction by 2030)			Change trajectory in 2020 to 75 % probability of avoiding dangerous climate change	
	5	15	25	15	25
Approximate change in emissions from 2020 to 2030 (percentage point difference between 2020 and 2030 targets)	45 percentage points	35 percentage points	25 percentage points	45 -50 percentage points	35 percentage points

COMMENTS ON SPECIFIC DRAFT RECOMMENDATIONS AND CONCLUSIONS

Table 2 summarises TCI's comments on the CCA's draft.

Table 2. The Climate Institute's comments on the Climate Change Authority's draft recommendations and conclusions.

CCA draft recommendation	TCI comment	Notes
Draft recommendations		
<p>2020 emissions reduction target:</p> <ul style="list-style-type: none"> + Option 1: 15 per cent below 2000 levels + Option 2: 25 per cent below 2000 levels 	TCI supports Option 2	<p>The 25 per cent reduction is more credible and prudent as:</p> <ul style="list-style-type: none"> + It is more strongly aligned with carbon budgets consistent with a high chance of avoiding 2°C and leaves open the possibility of stronger actions at a later date. (See comments hedging against uncertainty above and on global budgets in draft conclusions section below.) + It clearly signals Australia will play its fair part in global efforts consistent with our national interest. It is only through the self-selection of national contributions consistent with 2°C can Australia's interests be met. + It sets Australia's emission trajectory on a more credible path as it avoids the need for the rapid acceleration of effects after 2020 to achieve Australia's national interest.
<p>Trajectory range to 2030</p> <ul style="list-style-type: none"> + Option 1: Beyond 2020, reduce emissions within a trajectory range bounded by the paths to a 35 and 50 per cent reduction below 2000 levels in 2030. + Option 2: Beyond 2020, reduce emissions within a trajectory range bounded by the paths to a 40 and 50 per cent reduction below 2000 levels in 2030. 	TCI broadly supports the approach taken in defining Australia emission trajectory post 2020.	<p>TCI remains of the view that the bottom end of the range should be aligned with a global carbon budget consistent with at least a 75 per cent chance of avoiding a 2°C increase in global temperature. This indicates emissions reductions in the order of 60 per cent are required by 2030.</p> <p>The less ambitious top end of the proposed 2030 target range is defined by the currently legislated 80 per cent reduction target by 2050. As the CCA notes, '...tracking along this top trajectory could see Australia meeting a 2050 national emissions budget consistent with a less than 50 per cent chance of limiting warming to below 2 degrees.'</p> <p>An alternative approach would be to define the top (less ambitious) 2030 goal consistent with a carbon budget that gives a 67 per cent chance of avoiding 2°C. The bottom end of the range would be defined by the more stringent carbon budget outlined below.</p> <p>See comments on global budgets in <i>Draft conclusions</i> section below.</p>
A national carbon budget for the period 2013–2050 of 10,100 Mt CO ₂ -e, to be reviewed regularly, having regard to developments in climate science, international action, and economic factors.	TCI strongly supports the setting of a long-term carbon budget for Australia to guide long-term policy development consistent with our national interest.	<p>TCI notes that the precise budget should be set in line with a global budget consistent with at least a 75 per cent chance of avoiding a 2°C increase in global temperature (around 8,400 Mt CO₂-e from 2013–2050).¹</p> <p>See comments on global budgets in <i>Draft conclusions</i> section below.</p>

¹Based on the global 2000-2050 outlined in Chapter 3 of the CCA draft report and adjusted as per Appendix section C6.2.

Table 3. (continued)

CCA draft recommendation	TCI comment	Notes
Draft recommendations (continued)		
Australia to keep under consideration the use of genuine international emissions reductions where this is a cost-effective way of helping to meet its emissions-reduction goals.	TCI agrees.	See comments on governance and locking in new emissions-intensive capital in the Draft Conclusions section below.
Draft conclusions		
The CCA considers that the global emissions budget adopted as a reference point for consideration of Australia's national emissions budget in this Review should provide a likely chance (defined here as a 67 per cent probability) of limiting warming to 2 degrees or less.	TCI agrees in part.	<p>A carbon budget consistent with a 67 per cent probability of avoiding a 2°C presents significant risks to Australian communities and natural systems. A budget with a 75 per cent change (or 870 billion tonnes of CO₂-e from 2013–2050) of avoiding 2°C would be more prudent. This would help to avoid more dramatic and costly emissions reductions at a later date and avoid dangerous climatic impacts.</p> <p>Given the high risks associated with climate change, erring on the side of caution is a safer choice than hoping the climate dice roll in our favour.</p> <p>We also note that carbon budgets consistent with a high probability of avoiding 2°C also leave open the possibility of keeping temperatures below the 1.5°C goal currently under discussion internationally.²</p>
Although the current level of global action is not yet on track to meet the below 2 degree global goal, there is a significant and accelerating trend to global action to reduce greenhouse gas emissions.	TCI agrees	For details of recent policy developments see The Climate Institute, 2013b. ³
The Government's target conditions show that the conditions for moving beyond 5 per cent have been met. Whether the conditions for 15 per cent have been met is unclear – some elements have been met, others are marginal. The conditions for a 25 per cent target have not been met.	TCI broadly agrees.	<p>For details see TCI's analysis of conditions in The Climate Institute, 2013c.⁴</p> <p>We note that the decisions of UNFCCC COP 19 in Warsaw urged developed country to periodically evaluate the continuing application of any conditions associated with its 2020 targets or 2013–2020 emissions budgets, with a view to adjusting, resolving or removing such conditions.⁵</p>
Considering a range of measures, an Australian 5 per cent target is low compared with the targets of other key countries. A stronger 2020 target of 15 or 25 per cent is broadly comparable with other countries' targets, including that of the United States. This is especially the case given Australia's high level of development, relative wealth and governance capacity.	TCI agrees but analysis can be expanded to explicitly consider the fairness of emission pledges.	<p>The range of indicators that the CCA has used could be expanded to include an explicit assessment of a country's fair contribution to achieving a global carbon budget with at least 75 per cent chance of avoiding 2°C.</p> <p>To illustrate, the CCA's Figure 5.5 (p.66) does not capture whether the contributions countries are fair efforts to avoiding dangerous climate change or not. By some metrics, for example, South Korea's and South Africa's targets are less ambitious than those of Australia. This is despite the fact that a number of assessments have shown the targets that these countries are implementing are in fact more consistent with a 2°C carbon budget than Australia's minimum commitments.⁶ This assessment can be undertaken using the CCA's proposed modified contraction and convergence allocation method.</p>

²J. Rogelj, 2013, *Scenario Note: Pathways towards Returning Warming to below 1.5°C by 2100*, Briefing Note to the Climate Institute, Climate Analytics, Berlin.

³The Climate Institute, 2013b, *Warsaw Climate Summit: First International Climate Test for the New Government*, TCI, Sydney.

⁴The Climate Institute, 2013c, *Submission to the Climate Change Authority Caps and Targets Review Issues Paper*, TCI, Sydney.

⁵UNFCCC, 2013, *ibid*.

⁶See for example, H. Fekete, et al., 2013, *Emerging economies – potentials, pledges and fair shares of greenhouse gas reduction*, German Federal Environment Agency (UBA), Germany; and Ecofys, Climate Analytics, PIK, 2013, *Climate Action Tracker*, Climate Action Trackers Partners, Germany.

Table 4. (continued)

CCA draft recommendation	TCI comment	Notes
Draft conclusions (continued)		
<p>The Authority proposes a set of emissions reduction goals for the long, medium and short term. This will provide a more predictable environment for businesses and others to act, with a degree of certainty in the short term, while maintaining greater flexibility in the longer term. The Authority's recommended set of goals for Australia comprises:</p> <ul style="list-style-type: none"> + A long-term national emissions budget to 2050, connected to Australia's national interest and subject to regular review, which will provide guidance for longer term planning. + A medium-term trajectory range for emissions reduction to 2030, subject to extension and revision over time, which will offer guidance within bounds, increasing predictability for investment. + A short-term emissions budget and trajectory to 2020 and associated 2020 target that will provide a degree of certainty for near-term action. <p>Post-2020 goals require periodic review in order to fulfil their role in providing both clarity and flexibility to respond to new information.</p>	<p>TCI strongly agrees with the proposed approach.</p>	<p>The proposed approach aligns with TCI's proposals for setting credible emission goals. For details see The Climate Institute, 2013a⁷ and The Climate Institute, 2013c.⁸</p>
<p>Australia's carryover from the first Kyoto Protocol commitment period would be best used as a 3 percentage point contribution to a more ambitious 2020 emissions reduction target to be recommended by the Authority in its Final Report.</p>	<p>TCI strongly agrees with the proposed approach.</p>	<p>The CCA should also examine the different possible interpretations of the Kyoto Protocol's <i>Article 3.7 ter</i> in its final recommendations on emissions budgets and targets.</p>
<p>Stronger targets can be achieved with relatively small impacts on national income and economic growth. Under the current legislation, moving to a stronger target would slow annual growth in GNI per person to 2020 from 0.80 per cent (5 per cent) to 0.78 (15 per cent) or 0.76 (25 per cent).</p>	<p>TCI agrees in part.</p>	<p>This conclusion, in part, relies on linkages to international carbon markets remaining central to Australia central mitigation policy platform. The CCA should examine the costs and benefits of achieving Australia full target range in the absence of these linkages including expanding the scope of international linkages to include the broader use of credible Kyoto Protocol compliant emissions units (e.g. greater use of CERs).</p>
<p>Using international emissions reductions to contribute to meeting Australia's goals has substantial potential benefits and manageable risks:</p> <ul style="list-style-type: none"> + International emissions reductions can reduce the cost of meeting emissions reduction goals, helping Australia take on stronger targets at a critical time for international action on climate change. + Governance risks are real; however, robust governance arrangements and ongoing review of the environmental integrity of emissions reductions provides effective risk mitigation for Australia. + Policy design can mitigate sector-specific risks such as locking in new emissions intensive capital. 	<p>TCI agrees.</p>	<p>The CCA should make explicit recommendations on how robust governance arrangements can be implemented and what policy design elements are required to avoid locking in new emissions-intensive capital.</p>

⁸The Climate Institute, 2013c, *ibid.*

ENDNOTES

ⁱ See for example discussion of historical applications of the national interest internationally. E. Jackson, 2009. Australia's climate policy Achilles' heel, *Crikey*, 16 June.

<http://www.crikey.com.au/2009/06/16/australia%E2%80%99s-climate-policy-achilles-heel/>

ⁱⁱ See for example, 'Canadian praise for Tony Abbott a game changer on carbon,' *The Australian*, 14 November 2013 and 'Carbon tax proposal draws fire', *Business Day*, 10 September 2013.

ⁱⁱⁱ For example, UNFCCC, 2012. *Doha Amendments to the Kyoto Protocol*. http://unfccc.int/kyoto_protocol/doha_amendment/items/7362.php; and UNFCCC, 2010. *Cancun Agreements*. <http://cancun.unfccc.int/>

^{iv} This was compounded by Japan's backsliding on its emission commitment of a 25 per cent reduction on 1990 levels by 2020.

^v H.E. Bomo Edna Molewa, 2013. *South African National Statement made in the High Level Segment of the UNFCCC COP19 and Kyoto Protocol CMP9*, 21 November..

^{vi} UNFCCC, 2013. *Further advancing the Durban Platform*. Advance unedited version, Draft decision -/CP.19,

http://unfccc.int/files/meetings/warsaw_nov_2013/decisions/application/pdf/cop19_adp.pdf

^{vii} The text states "by those Parties ready to do so". This is squarely aimed at Least Developed Countries who do not have the technical expertise or resources to achieve this deadline.

^{viii} The Climate Institute, 2013a, *Operating in Limits: Defining an Australian Carbon Budget*, TCI, Sydney.