



# Submission to the Climate Change Authority

## Targets and Progress Review

### Response to Draft Report

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#### Contact details

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# 1. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

WWF-Australia welcomes the opportunity to make this submission to the Climate Change Authority's Targets and Progress Review.

WWF-Australia is part of the WWF International Network, the world's largest and most experienced independent conservation organisation. We have 80,000 supporters in Australia, five million supporters worldwide and a global network active in more than 100 countries. WWF's mission is to stop the degradation of the planet's natural resources and to build a future in which humans live in harmony with nature. WWF has been an advocate for national and international action to avoid dangerous climate change for more than two decades.

A summary of WWF-Australia's recommendations is provided in Table 1.

**Table 1: Summary of WWF-Australia's recommendations**

<b>Issue</b>	<b>Recommendation</b>
<i>Global carbon budget</i>	<p><i>In addition to its current analysis, the Authority should also assess what global carbon budget would be required to limit global warming to 1.5 degrees.</i></p> <p><i>Given the inherent uncertainties involved in setting the global carbon budget, we recommend adopting a carbon budget consistent with retaining a 75 per cent probability of avoiding 2 degrees of warming. Analysis suggests that this would also be more consistent with a 1.5 degrees goal.</i></p>
<i>Australia's carbon budget</i>	<p><i>The recommended long-term carbon budget for Australia should be amended to be consistent with this more conservative global carbon budget.</i></p>
<i>2020 target</i>	<p><i>We strongly support the Authority's conclusion that reducing emissions by only 5 per cent below 2000 levels this decade cannot be considered a credible contribution from Australia towards the global goal of limiting global warming to no more than 2 degrees.</i></p> <p><i>There is a compelling case for the Authority to recommend that the government adopt a target to reduce emissions by 25 per cent below 2000 levels by 2020. We see no such compelling case for the Authority's second option (a 15 per cent target).</i></p>
<i>2030 target range</i>	<p><i>In its final report, the Authority should include a recommendation for a 2030 target range, as follows:</i></p> <ul style="list-style-type: none"><li><i>• The weaker end of this range should be set in a</i></li></ul>

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	<p><i>manner consistent with the approach used by the Authority to recommend the 2020 target (i.e. consistent with the long-term carbon budget). This requires a minimum 2030 target of 50 per cent below 2000 levels.</i></p> <ul style="list-style-type: none"> <li>• <i>The stronger end of the 2030 target range should be set in line what would be required from Australia as a fair share of the global effort needed to limit global warming to 1.5 °C.</i></li> <li>• <i>If the Authority believes it is appropriate to set one end of the 2030 target range in line with the existing 2050 target, then it should at least ensure this option is consistent with the long-term carbon budget. As indicated by the Authority, this would require a 2030 target of 65 per cent below 2000 levels.</i></li> </ul>
<i>2050 target</i>	<p><i>The Authority should include a clear recommendation to the federal government that it should retain a legislated 2050 target.</i></p> <p><i>We recommend that the Authority should spell out what 2050 targets would be required to stay within the long-term carbon budget.</i></p>
<i>Kyoto carry-over</i>	<p><i>We strongly support the Authority’s recommendation that surplus permits from the Kyoto Protocol’s first commitment period should be used to increase ambition, rather than making it easier for Australia to achieve the 5 per cent target.</i></p>
<i>Use of international permits</i>	<p><i>We support the Authority’s recommendation that the federal government continue to allow access to international permits, but urge the Authority to also outline specific improvements to current governance arrangements.</i></p>

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## **2. GENERAL COMMENTS ON THE ROLE OF THE AUTHORITY**

WWF-Australia welcomes the Climate Change Authority’s draft report as an important contribution to the public debate on Australia’s efforts to tackle climate change. Overall, we believe the Authority has done an excellent job in presenting evidence-based analysis in a clear and logical manner. We hope the final report will be relied upon by Australia’s policy and decision makers as they consider Australia’s pre- and post-2020 efforts to reduce emissions.

We believe the Climate Change Authority has a crucial role to play in the ongoing development of a sensible and effective response to climate change by the Australian Government. As such, we are deeply concerned that the government is proposing to abolish the Authority. This move is completely at odds with the government's desire to adopt a methodical, step-by-step, approach to public policy issues.

We will continue to urge the government to reconsider its decision to abolish the Authority.

### **3. CARBON BUDGET**

WWF-Australia strongly supports the use of a carbon budget approach to determine Australia's fair share of the global effort required to avoid dangerous climate change. As the Authority correctly points out, this inevitably requires a series of assumptions and judgement calls, many of which are open to debate. With this in mind, the Authority should be commended for the transparent approach it has taken. This should provide the basis for an informed public debate about Australia's fair share of the global effort required to avoid dangerous climate change.

Our comments on the carbon budget analysis presented in the Authority's draft report are provided below. If taken on board, our comments would require amendments to the Authority's approach to the carbon budget. However, as discussed in Section 4 of this submission, our primary concern is that Australia's pre- and post-2020 emission reduction targets do not rule-out the adoption of a more stringent carbon budget in the future. In other words, while we would support some changes to the Authority's carbon budget analysis, we believe our concerns can be addressed by ensuring Australia's targets allow some flexibility in the future.

#### ***Feasibility of staying below 2 degrees and 1.5 degrees of warming***

We share the Authority's view that it is still feasible to limit global warming to no more than 2 degrees above pre-industrial levels. We also agree that this will require urgent and immediate action from the international community, including Australia. Our view is that there is no fundamental technological or scientific reason why this goal cannot be achieved. The real barriers are political.

We note that the Authority has also given some consideration to the feasibility of limiting global warming to no more than 1.5 degrees above pre-industrial levels. This is important because the international community has made a commitment to review the adequacy of the 2 degrees goal and to consider strengthening this goal to 1.5 degrees.<sup>1</sup> Strengthening the global goal to 1.5 degrees is supported by many of the world's developing nations, including Australia's Pacific island neighbours.

#### ***Selecting the appropriate global carbon budget***

The Authority has relied upon the global carbon budget developed by Meinshausen et al., which from our initial assessment is broadly consistent with the global carbon budget proposed by the IPCC in its Fifth Assessment Report. However, it is important to note that other studies have arrived at different estimates for the global carbon budget. We are not

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<sup>1</sup> See: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>

suggesting that any one of these studies is necessarily right or wrong, but the fact that there are differences in the results suggests that there are some inherent uncertainties in accurately defining a global carbon budget.

To account for the uncertainties, we suggest that the Authority should be using a more conservative global carbon budget, by adopting a higher probability of limiting global warming to 2 degrees. Specifically, we recommend using a carbon budget consistent with at least a 75 per cent probability of keeping global warming below 2 degrees. Using the Meinshausen et al. analysis, this equates to 1520 Gt CO<sub>2</sub>-e over the period 2000-2050.

Given that the international community remains open to adopting a global goal of limiting global warming to 1.5 degrees, the Authority should also consider how this would impact on the global carbon budget. With this in mind, we note that a more conservative budget for the 2 degrees scenario (i.e. a budget with a 75 per cent probability) will also ensure the 1.5 degree target is not ruled out. Analysis by Raupach et al. has found that the global carbon budget consistent with a 50 per cent probability of limiting global warming to 1.5 degrees is broadly consistent with a budget that would be required to provide somewhere between a 67 and 80 per cent probability of staying below 2 degrees. (Note: Raupach et al did not include results for a 75 per cent probability of staying below 2 degrees, but they did include results for 67 per cent and 80 per cent probabilities, hence our reference to a range).

### ***Approach to determining Australia's share of the global carbon budget***

We support the Authority's view that per capita emissions is an appropriate basis for sharing the global carbon budget between countries. We also share the Authority's view that using cost equalisation (as advocated by some business groups) does not make sense. In our view, concerns about cost are best addressed through the design of sensible policies for reducing emissions, rather than via the strength of the target. As the Authority points out, differences in costs between countries can largely be overcome if Australia retains an emissions trading scheme linked to the global market.

We welcome the Authority's conclusion that the issue of international equity extends beyond the question of emission reduction targets, to also cover financial support to developing countries. As the Authority correctly notes, one important option available to the Australian Government to help provide an equitable international response to climate change is to provide further support to poor and vulnerable countries.

### ***Australia's carbon budget***

We note that the long-term carbon budget proposed by the Authority is significantly higher than the budget estimated by other studies.<sup>2</sup> However, this appears to be driven primarily by the global carbon budget used and the Authority's use of a 67 per cent probability of staying below 2 degrees. Indeed, analysis by Ecofys for WWF-Australia found that Australia should be allocated approximately 1-1.2 per cent of the global budget, which is broadly consistent with the Authority's analysis.

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<sup>2</sup> For example: WWF-Australia (2013), *Avoiding Dangerous Climate Change - Defining Australia's Carbon Budget*, <http://www.wwf.org.au/?8180/Australia-has-nearly-blown-its-carbon-budget-already>; and The Climate Institute (2013) *Operating Within Limits – Defining an Australian Carbon Budget*, [http://www.climateinstitute.org.au/verve/\\_resources/TCL\\_OperatingInLimits\\_PolicyBrief.pdf](http://www.climateinstitute.org.au/verve/_resources/TCL_OperatingInLimits_PolicyBrief.pdf)

As discussed above, our preference is for the Authority to use a global carbon budget consistent with providing a 75 per cent chance of limiting global warming to 2 degrees. All else being equal this would mean Australia's long-term carbon budget would be approximately 8,454 million tonnes, as opposed to the 10,100 million tonnes proposed by the Authority. This is still significantly larger than implied by the Ecofys analysis.

### **WWF-Australia's recommendations**

*In addition to its current analysis, the Authority should also assess what global carbon budget would be required to limit global warming to 1.5 degrees.*

*Given the inherent uncertainties involved in setting the global carbon budget, we recommend adopting a carbon budget consistent with retaining a 75 per cent probability of avoiding 2 degrees of warming. Analysis suggests that this would also be more consistent with a 1.5 degrees goal.*

*The recommended long-term carbon budget for Australia should be amended to be consistent with this more conservative global carbon budget.*

## **4. EMISSION REDUCTION TARGETS**

WWF-Australia has a number of comments relating to the Authority's draft conclusions on emission reduction targets, which are outlined below.

### ***Inadequacy of a 5% target***

We strongly concur with the Authority's view that Australia's existing unconditional commitment to reduce emissions by 5 per cent below 2000 levels by 2020 is no longer an appropriate target. As the Authority points out:

A 2020 reduction target of 5 per cent is not a fair or responsible next step to meeting the 2050 emissions budget. If Australia adopted it and still wished to meet its fair share of the 2 degree budget, it would need to reduce emissions by a further 45 percentage points in the decade to 2030, and then would have only 14 per cent of its budget left for the next two decades... In summary, a 5 per cent target for 2020 cannot credibly be described as a 'gradual start' to meeting Australia's 2 degree budget. A 5 per cent target would leave such large reductions for later that future Australians would either face a very large emissions reduction task or have to abandon the long term national emissions budget. This is inequitable in the first case and against Australia's national interest in the second.<sup>3</sup>

This is the same conclusion WWF-Australia reached based on the analysis we commissioned by independent consulting firm, Ecofys.<sup>4</sup> Research by others also supports this view.<sup>5</sup>

<sup>3</sup> Climate Change Authority (2013), *Targets and Progress Review – Draft Report*, p.105

<sup>4</sup> WWF-Australia (2013), *Avoiding Dangerous Climate Change - Defining Australia's Carbon Budget*, <http://www.wwf.org.au/?8180/Australia-has-nearly-blown-its-carbon-budget-already>

<sup>5</sup> For example: Jotzo, F. (2010), "Copenhagen targets and Australia's climate commitment", Polity Brief, Centre for Climate Economics & Policy; The Climate Institute (2010), "Summary of Freedom of Information Request from The Climate Institute to the Department of Climate Change and Energy Efficiency: Documents regarding the influence of foreign emission reduction targets on Australia's emission reduction targets", [bit.ly/1aTou13](http://bit.ly/1aTou13); and Ross Garnaut (2013), Comments made during Grattan Institute event, <http://bit.ly/1bcUdto>.

As the Authority points out, a 5 per cent target is also out of step with the commitments and actions of other countries. The Authority's draft report provides a comprehensive picture of what is happening in key countries, with a particular focus on the US and China. We note that since the publication of the draft report, China has confirmed that four more regional emissions trading schemes will be launched before the end of this year.

While we understand the Authority's decision to focus primarily on the US and China, we believe it is important to highlight what is happening in other key countries as well. In summary:

- **India** has committed to reducing the emissions intensity of its economy by 20 – 25 per cent below 2005 levels by 2020 and in recent years has launched a series of ambitious policies to deploy renewable energy.
- The **UK** was the first country to set legally-binding emissions reduction targets (34 per cent below 1990 levels by 2020 and 80 per cent below 1990 levels by 2050). The UK has also adopted a series of legally-binding five year carbon budgets stretching out to 2027. To stimulate investment in its own low carbon sectors, in 2013 the UK Government introduced a carbon price floor, which equates to approximately \$26 per tonne.
- **Germany** has set a target to reduce emissions by 40 per cent below 1990 levels by 2020 and up to 95 per cent by 2050.
- **Japan** – Australia's second largest trading partner – is facing serious challenges to its energy security in the aftermath of the Tsunami, but has remained committed to renewable energy, introducing a world leading feed-in tariff, which is expected to deliver a six-fold increase in solar capacity by 2020.<sup>6</sup>
- **South Korea**, Australia's third largest export market, has committed to reducing emissions by 30 per cent below the expected business as usual growth levels. To put this into perspective, South Korea's emissions are about the same as Australia's, but they plan to be saving 50 per cent more carbon pollution by the end of this decade than would be saved by Australia's minimum 5 per cent target. South Korea has also passed legislation to begin an emissions trading scheme from 2015.
- **South Africa** – the world's fifth largest coal exporter – has committed to reducing its emissions by 34 per cent below projected business as usual levels. Importantly, South Africa is also in the process of implementing a national carbon tax as a central tool for reducing emissions.
- **Indonesia** has committed to reduce its emissions by 26 – 41 per cent below projected business as usual levels.
- In April 2012, **Mexico's** parliament unanimously passed a national climate change law, including a legally binding target to reduce Mexico's emissions by 50 per cent by 2050.

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<sup>6</sup> Giles Parkinson, "IEA says renewables growth to accelerate", *Reneweconomy*, 6 July 2012, <http://reneweconomy.com.au/2012/iea-says-renewable-energy-growth-to-accelerate-76483>

### ***Recommended 2020 target***

In its draft report the Authority has outlined two options for Australia's 2020 emissions reduction target – a 15 per cent cut below 2000 levels or a 25 per cent cut below 2000 levels. Our view is that the Authority should recommend a 25 per cent target as the bare minimum required from Australia this decade.

Our main reason for advocating a 25 per cent target is to ensure Australia retains the flexibility to take more ambitious action if required. Indeed, as the Authority notes, it is possible that a more stringent long-term carbon budget could be warranted in the future. This could occur in response to deeper action at the international level (e.g. a shift to a 1.5 degrees goal), or as a result of a revised global carbon budget. If this were to happen it would require much deeper cuts from Australia, both up to and beyond 2020. Committing to a 25 per cent target now would make it easier for Australia to shift to a stronger target if required, whereas a 15 per cent target could make such a change more difficult or disruptive. Indeed, as the Authority itself notes, “[i]f Australia adopted a 2020 target of 25 per cent it would keep open the possibility of pursuing a stronger 2050 budget or a lower warming limit in the future.”<sup>7</sup>

We also fail to see a compelling reason why Australia should opt for a target lower than 25 per cent. As the Authority points out, the economic costs of moving from a 5 per cent target to a 25 per cent target are very small and perfectly manageable. Modelling for the Authority found that if a 25 per cent target is adopted on average Australians would need to wait just an extra five months in 2020 to be as rich as they would have been under a 5 per cent target. This assumes the current policy is retained, including an internationally linked emissions trading scheme.

The case for adopting a target stronger than 15 per cent is further enhanced by the Authority's analysis showing that Australia's expected abatement task out to 2020 is now smaller than previously thought. This provides a great opportunity for the government to deliver a larger percentage reduction this decade. According to the Authority's analysis, if the government commits to saving the same quantum of emissions as expected prior to the election, this would reduce emissions by 11 per cent below 2000 levels by 2020. This could be increased to 14 per cent by using the Kyoto carry over to top-up ambition. This is exactly the kind of approach to the targets question that we need to see from the Australian Government, because it is focussed on finding ways to increase ambition, rather than finding ways to make it easier to achieve the 5 per cent target.

### ***Recommended 2030 target***

We support the Authority's view that it is in Australia's interest to set targets beyond 2020. Indeed, as the Authority notes, post-2020 targets will be the focus of international climate change negotiations in the coming two years. The following timeline was confirmed at the recent Warsaw climate summit:

- **April 2014:** Parties to the Kyoto Protocol, including Australia, are required to formally review their minimum 2020 target. Australia inscribed a target under the Kyoto Protocol that is consistent with a 5 per cent cut below 2000 levels by 2020,

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<sup>7</sup> Climate Change Authority (2013), *Targets and Progress Review – Draft Report*, p.105

but also included a formal indication that it is willing to move to a stronger target if certain conditions are met.

- **June 2014:** The UNFCCC will hold a “ministerial dialogue” to discuss post-2020 targets. While Australia may not have to put a number on the table at this meeting, it will be expected to confirm its willingness to set a post-2020 target and to agree to a process for finalising this target in consultation with other countries.
- **September 2014:** The UN Secretary General, Ban Ki Moon, will hold a “Leaders’ Summit” aimed at securing strong post-2020 commitments from all major economies. This summit will ensure world leaders, including Australia’s Prime Minister, are engaged in the target setting process.
- **December 2014:** The 2014 UN Climate Summit will be held in Peru. The aim will be to further progress the negotiations on pre- and post-2020 targets and commitments.
- **March 2015:** In Warsaw countries committed to ensuring post-2020 targets and commitments are tabled no later than the end of March 2015, to allow sufficient time to finalise the new global agreement to be adopted in Paris in December 2015.

We note that the Authority has outlined a possible 2030 target range for each of the two 2020 target options. In each case the weaker end of the target range is consistent with Australia’s existing 2050 target (80 per cent off 200 levels), while the stronger end of the target range is consistent with what the Authority views as Australia’s fair share of the long-term global carbon budget.

We share the Authority’s view that the 2030 target could be expressed as a range. However, our view is that the weaker end of this range should be set in a manner consistent with the approach used by the Authority to recommend the 2020 target. In other words, the Authority should recommend a minimum 2030 target that is consistent with Australia remaining within its fair share of the long-term global carbon budget. To suggest a minimum target for 2030 that is inconsistent with the long-term carbon budget would completely undermine the Authority’s arguments in favour of a minimum 2020 target that is consistent with the budget.

The stronger end of the target range should be set in line what would be required from Australia as a fair share of the global effort needed to limit global warming to 1.5°C. As discussed above, the international community remains open to adopting the 1.5°C goal and Australia should too.

If the Authority believes it is appropriate to set one end of the 2030 target range in line with the existing 80 per cent target, then it should at least ensure this option is consistent with the long-term carbon budget. As indicated by the Authority, this would require a 2030 target of 65 per cent below 2000 levels.<sup>8</sup>

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<sup>8</sup> Climate Change Authority (2013), *Targets and Progress Review – Draft Report*, p.123

## ***Implication for the 2050 target***

As indicated above, WWF-Australia supports the Authority's view that it is in Australia's interests to adopt a long-term carbon budget out to 2050. However, it is not clear to us why the Authority has not indicated what this long-term carbon budget may mean for Australia's 2050 target, beyond observing that "[i]f this long term national emissions budget remains the right one for Australia over the coming decades, the 2050 target may need to be strengthened."<sup>9</sup>

It is plainly clear from the Authority's analysis that the existing 80 per cent target for 2050 is not consistent with the budget advocated or the proposed targets for 2020 and 2030. Indeed, as the Authority indicates, if the 80 per cent target is to be retained and the budget not exceeded, this would require a 2030 target of 65 per cent below 2000 levels.

We recommend that the Authority should spell out what 2050 targets would be required to stay within the long-term carbon budget.

## **WWF-Australia's Recommendations**

### ***2020 Target***

*We strongly support the Authority's conclusion that reducing emissions by only 5 per cent below 2000 levels this decade cannot be considered a credible contribution from Australia towards the global goal of limiting global warming to no more than 2 degrees.*

*There is a compelling case for the Authority to recommend that the government adopt a target to reduce emissions by 25 per cent below 2000 levels by 2020. We see no such compelling case for the Authority's second option (a 15 per cent target).*

### ***2030 target range***

*In its final report, the Authority should include a recommendation for a 2030 target range, as follows:*

- The weaker end of this range should be set in a manner consistent with the approach used by the Authority to recommend the 2020 target (i.e. consistent with the long-term carbon budget). This requires a minimum 2030 target of 50 per cent below 2000 levels.*
- The stronger end of the 2030 target range should be set in line what would be required from Australia as a fair share of the global effort needed to limit global warming to 1.5 °C.*
- If the Authority believes it is appropriate to set one end of the 2030 target range in line with the existing 2050 target, then it should at least ensure this option is consistent with the long-term carbon budget. As indicated by the Authority, this would require a 2030 target of 65 per cent below 2000 levels.*

### ***2050 target***

*The Authority should include a clear recommendation to the federal government that it should retain a legislated 2050 target.*

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<sup>9</sup> Climate Change Authority (2013), *Targets and Progress Review – Draft Report*, p.123

*We recommend that the Authority should spell out what 2050 targets would be required to stay within the long-term carbon budget.*

## 5. OTHER FACTORS

WWF-Australia's views on other factors raised by the Authority in its draft report are outlined below.

### ***Use of Kyoto “carry-over”***

WWF-Australia supports the Authority's recommendation that the Australian Government should put surplus permits from the Kyoto Protocol's first commitment period towards a more ambitious 2020 emissions reduction target. Given the urgent need to reduce greenhouse gas emissions, this approach is far more appropriate than using the surplus to make it easier to achieve the minimum 5 per cent target.

### ***Use of international permits***

WWF-Australia supports to limited use of international permits to achieve ambitious emission reduction targets and welcomes the Authority's assessment of the potential benefits and risks associated with using international permits. We concur with the Authority that the risks can be managed through robust governance arrangements and ongoing review of the environmental integrity of different types of international permits.

While we support the Authority's draft recommendation that the government should keep access to international permits, the Authority should also include recommendation relating to the governance arrangements for international permits. In particular, the Authority should outline specific improvements to current governance arrangements.

### **WWF-Australia's Recommendations**

*We support the Authority's recommendation that surplus permits from the Kyoto Protocol's first commitment period should be used to increase ambition, rather than making it easier for Australia to achieve the 5 per cent target.*

*We support the Authority's recommendation on the international permits, but urge the Authority to also outline specific improvements to current governance arrangements.*