

16March 2015

Climate Change Authority  
Review of Australia's future emissions reduction goals

[submissions@climatechangeauthority.gov.au](mailto:submissions@climatechangeauthority.gov.au)

Dear Sir / Madam

**Re: Review of Australia's future emissions reduction goals**

Thank you for the opportunity to provide the Climate Change Authority (CCA) with additional comments on Australia's future emissions reduction goals. Hydro Tasmania made a submission to the CCA's previous Caps and Targets Review Issues Paper on 30 May 2013.

Climate change presents a physical business risk to Hydro Tasmania. As a predominantly hydropower and wind generator, Hydro Tasmania is particularly vulnerable to changes in rainfall, temperature and wind speeds that may occur as a result of climate change. As the largest clean energy producer in Australia, and as a material participant in the National Electricity Market (NEM), Australia's long-term emissions commitments are a key issue for Hydro Tasmania.

The setting of emissions reduction targets will inevitably influence both government policy making and the behaviour of Australian businesses and investors. Investors need to know the direction and rate of change that will be required over time in order to have the confidence to proceed with substantial long-term investments.

Hydro Tasmania recognises the need to reduce Australia's current and future emissions and the significant role that the energy sector must play in this transition. As the Commonwealth Government's Emissions Reduction Fund Green Paper (2013) notes:

“Compared to many other nations, Australia has a relatively emissions-intensive economy and high per-capita emissions, mostly due to the extensive use of black and brown coal in its electricity supply.....In 2011, Australia's emissions were 563 million tonnes of carbon dioxide equivalents.....electricity generation contributed just over one-third of total emissions (199 MtCO<sub>2</sub>e).”

While Australian electricity generation is highly emissions-intensive by world standards it is, at the same time, fundamental to every aspect of a modern economy. Hydro Tasmania supports effective policy and regulatory measures that will reduce Australia's electricity generation emissions below that which would be realised under business as usual conditions.

Hydro Tasmania strongly believes that:

- Australia's long-term energy policy must include a focus on transition of the electricity sector towards low and zero emissions fuels. This is consistent with a long-term objective of progressively decarbonising the electricity generation sector by the middle of the century.
- Australia should aim for greater than 20% renewables beyond 2020 recognising that zero-emissions technologies must constitute a growing share of the generation mix.

In addition Hydro Tasmania would like to make the following comments:

1. Climate change is a global issue and cannot be solved by any one country alone. We recognise that from a climate change perspective, one tonne of emissions in Australia is equal from an environmental and greenhouse gas perspective to one tonne of emissions released anywhere else on the planet. There are therefore compelling arguments why the use of international permits may be appropriate for inclusion in the Australian policy framework.

Nonetheless, Hydro Tasmania strongly believes it is Australia's domestic contribution to global emissions which remains the most important consideration. To that end, long-term emissions reduction targets must be underpinned by a policy framework that will achieve real and material reductions in domestic emissions over time. A strong reliance on international permits is a temporary solution which would not position Australia for longer-term emissions constraints nor protect the international competitiveness of Australian industries. If international permits are to be utilised to meet emissions targets it is vital that Australia balances this with a policy or regulatory framework capable of achieving material and progressive domestic emissions reductions.

Similarly, if the CCA was to recommend moving to more ambitious emissions reduction targets in the future, consideration would need to be given as to whether this would in fact strengthen domestic action or simply lead to a greater reliance on international permits.

2. As the single largest contributor to national annual emissions, the electricity generation sector has a primary role to play in long-term emissions reductions. To this end, Hydro Tasmania considers that it may be appropriate to track progress at a sectoral level as well as at a national level.

Electricity generation assets are long-lived and require considerable planning, approval and construction time. For this reason a transition of the sector towards cleaner fuels cannot happen overnight. Action to reduce emissions in the sector should not be delayed as this may cause the sector to face a more fundamental and abrupt shift in the future. A short-term over-reliance on international permits or on abatement from other sectors would delay action in the electricity sector and will not deliver a smooth transition.

At present, coal generation provides more than 70 per cent of all electricity generated in Australia. However, many of these power stations are reaching the end of their design life and due to their older design are the least efficient and highest-emitting plant. By 2025, 75 per cent of Australia's existing thermal plant will be more than 35 years old.

At some point, this ageing coal generation must exit the market if electricity sector emissions are to be reduced. As this happens there needs to be a clear and long-term policy framework that can guide the sector to invest in replacement generation that is sufficiently robust to ensure security of supply, yet flexible enough to meet the demands of a future energy market. The solution cannot be to lock in high emissions for future generations by replacing old coal fired generation plant with new.

Hydro Tasmania notes that this review is a review of emissions targets and not of emissions reduction policies. To this end, the characteristics of Australian electricity generation (as noted above) highlight the need for specific emissions reduction goals for the electricity generation sector. These will be important to ensure that Australia can track progress towards a cleaner economy over time.

Hydro Tasmania believes that Australia's emissions reduction commitments should continue to be guided by the latest available science and by the progress of comparable international action on climate change. We welcome the opportunity to provide the CCA with further information about the contents of this submission or any other issues. Should you have any queries or require further information, please contact Mr Colin Wain (email: [colin.wain@hydro.com.au](mailto:colin.wain@hydro.com.au) or telephone: 03 6230 5661).

Yours Faithfully

A handwritten signature in black ink, appearing to read 'Colin Wain', with a long horizontal flourish underneath.

Colin Wain  
Policy Development Manager  
Hydro Tasmania