

22 July 2016

Tasmanian Climate Change Office
GPO Box 123
HOBART TAS 7001
By email: climatechange@dpac.tas.gov.au

Dear Sir/Madam,

Re: Review of the Climate Change Act

Thank you for the opportunity to provide comment on the *Review of the Climate Change (State Action) Act 2008*. Hydro Tasmania made a submission to the previous 2012 review of the Act as well as to the Tasmanian Climate Change Office's recent Draft Climate Change Action Plan. We note that submissions to the Draft Action Plan are also being considered in this review. Given the significant similarities between the issues, Hydro Tasmania supports this approach and is happy for our submission to be considered further.

As the discussion paper notes, the context in which the Act operates has evolved significantly since the last review in 2012. Hydro Tasmania agrees that the Paris Agreement provides an important framework under which to consider both national and sub-national approaches. It is particularly relevant to Tasmania's major export industries whose future economic conditions will be influenced by international action to reduce emissions.

Domestic climate policy has been turbulent since 2012, however, all major federal political parties support the goal of keeping global temperature rises to no more than two degrees. Both the Federal Government and Opposition share a bipartisan commitment to an emissions target of at least five per cent below 2000 levels by 2020 and to deeper emissions cuts by 2030. Within this context, it is clear that additional policy approaches will be needed if Australia is to meet its 2030 emissions reduction target.

Hydro Tasmania and our Victorian based retailer Momentum Energy operate in the National Electricity Market (NEM). Taking into consideration the cross-jurisdictional operation of the NEM, there is a natural preference for climate and energy policy to be enacted at the national level. It is widely recognised that this will be the most efficient approach to meeting national goals and will allow investment in clean energy and technologies to occur where it has the most value. In addition, having multiple approaches across multiple states can increase compliance and administration costs for

energy businesses. One example of this is compliance with state energy efficiency schemes which differ across state boundaries even while sharing similar aims and approaches.

The Climate Change Act can support the Tasmanian Parliament in contributing to national action to reduce Australia's emissions. Hydro Tasmania recommends that the Act focusses on ensuring Tasmania can appropriately track its contribution to national goals at both a State and sectoral level. The Tasmanian Government could also look to provide additional information or coordinate action where departments or businesses will be best served by acting together to reduce emissions. Should the Act trigger additional mandatory requirements on businesses/households there must be a material and identifiable benefit that can be realised. Any direct costs imposed on businesses or subsequent compliance requirements should be appropriately minimised.

Objects of the Climate Change (State Action) Act 2008

Hydro Tasmania supports the objects of the Act. The discussion paper provides a useful grouping of these objects. This grouping of the Act's objects could be incorporated into the Act itself as it provides a clear and concise framework:

- *Targets and reporting*
- *Action to reduce greenhouse gas emissions*
- *Adaptation to projected climate change*
- *Complementarity with national and international climate change initiatives*

Climate change and Tasmania

The discussion paper provides useful analysis of Tasmania's unique emissions profile and in particular the role of the Land Use, Land Use Change and Forestry (LULUCF) sector.

As Tasmania's latest greenhouse gas accounts show, Tasmania's greenhouse gas emissions have decreased significantly from 18.5 megatonnes CO₂-e in 1989-90 to 1.6 megatonnes of CO₂-e in 2013-14¹. 2013-14 emissions were already well below the 60 per cent by 2050 target outlined in the State Climate Change Act. The decrease in emissions is largely due to the LULUCF sector becoming a net carbon sink. The LULUCF sector's contribution to Tasmania's emissions profile demonstrates the important role that this sector can have in the national greenhouse accounts.

While the decrease in Tasmania's recorded emissions is a positive outcome, the energy, industrial processes, agriculture and waste sectors continue to contribute emissions to the State's greenhouse gas footprint. Reported emissions within non-LULUCF sectors have remained broadly stable since 1989-1990². This suggests that Tasmania should continue to track emissions from these sectors and to target longer-term reductions irrespective of changes in LULUCF.

¹ In 1989-90 Tasmania's baseline greenhouse gas emissions were 18.5 mega-tonnes of carbon dioxide equivalent (Mt CO₂-e) and in 2013-14 the State's total greenhouse gas emissions were 1.6 Mt CO₂-e. http://www.dpac.tas.gov.au/divisions/climatechange/climate_change_in_tasmanias_emissions

² From: http://www.dpac.tas.gov.au/_data/assets/pdf_file/0004/265207/Tasmanian_Greenhouse_Gas_Accounts_Final_Report_2012-13.pdf Table 1 and Figure 3. Excluding LULUCF: 1989-90 emissions were: 8.1Mt; 2012-2013 emissions were 8.6Mt.

National energy and climate policy developments will impact on Tasmanian energy sector emissions. The scheduled 2017 Federal Government review of emissions reduction policies must deliver a set of policies that can effectively and progressively decarbonise Australia's economy - consistent with our 2030 international emissions commitments. The Tasmanian Government can make a strong contribution to this Federal Policy review. Positioning Tasmania to benefit from further investment in low and zero emissions activities can promote the State's natural advantages.

Potential goal of net zero carbon

As Hydro Tasmania's submission to the draft climate action plan noted, Tasmania could consider a 2050 target of 'net zero carbon'. This is consistent with the text of the Paris Agreement which refers to achieving: "a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century" (Article 4.1). It should be noted that if global action is to eventually reach a position of net zero carbon, then there will be regions which are net carbon sinks and regions that are net producers of greenhouse gas emissions.

Hydro Tasmania responses to the Discussion Paper questions

Question 1: The Act aims to help Tasmania respond to the challenges posed by climate change. What do you consider are the critical challenges to which this legislation and Government action should respond?

One of the Tasmanian Government's roles should be to provide information to the Tasmanian public and businesses on the potential effects of climate change, particularly businesses and communities with greater exposure to the impacts of climate change. This could include coordinating further climate modelling and adaptation approaches to inform businesses and communities. This is particularly relevant where businesses or communities may not have the resources to carry out this research and modelling themselves.

The Tasmanian Government can assist and support stakeholders seeking to access Federal Government programs. An example of this is the Emissions Reduction Fund (ERF) which could provide funding for Tasmanian abatement projects.

As the discussion paper canvasses, major infrastructure investments and key Tasmanian Government initiatives should be consistent with the Tasmanian Climate Change Act and the long-term emissions goals of the State. It is appropriate for climate change considerations to be embedded in some form in planning, development and Government decision making.

Question 2: How successful do you think the Act has been in influencing action on climate change within Tasmania?

Arguably it is too early to tell whether the Act has been effective. Tasmania's emissions have been most strongly influenced by national policy changes and by changes to the LULUCF sector. The Act can

demonstrate success going forward by monitoring and reporting progress in non-LULUCF sectors and by embedding climate change considerations in key decision making processes. In addition, the Act should support the Tasmanian Parliament in its engagements with the Federal Government and allow the Tasmanian Parliament to support effective climate policy.

Question 3: What amendments may the Act require to further drive action on climate change?

The use of a single Tasmanian emissions figure has been shown to be an impractical way of tracking progress to the State's 2050 target. The strong effect that LULUCF emissions have on Tasmania's emissions outcomes suggest that tracking at a sectoral level or excluding LULUCF from the headline reported figure could provide greater insights.

Question 4: The Act creates a narrative on how the state regards the challenges posed by climate change. How do you think the Act can provide a narrative which helps to project Tasmania's clean-green-liveable brand?

Tasmania has unique characteristics that should allow the State to benefit from its 'clean-green-liveable brand'. Tasmania's predominantly renewable electricity generation can provide opportunities to attract businesses aligned with this brand. The use of renewable energy could underpin further electrification of activities such as transportation (e.g. encourage uptake of electric vehicles) without increasing Tasmania's greenhouse gas emissions.

Question 5: With Tasmania providing just 0.3% of national emissions, how important is it that the Act supports the achievement of national and international targets for climate change?

As the discussion paper points out, Tasmania is responsible for only a small proportion of national emissions. This is in part because of its small share of the national population as well as Tasmania's renewable energy and land resources. This however, does not mean that Tasmania does not have a role in contributing to and supporting national action. Climate change is a global challenge. As the Paris Agreement illustrates, reducing national emissions will require contributions from all emitters and levels of economic development

Tasmania's position as a low emissions state should allow Tasmania to support the development of effective national policy approaches, such as through the 2017 Federal emissions policy review.

Question 6: Should the Act recognise the possibility of 2°C of warming as a means of driving action on climate resilience?

The recent Paris Agreement aims to hold *"the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"*. The Paris Agreement provides a framework under which to consider national and state actions to reduce emissions. The inclusion of a 2°C reference suggests that this is an appropriate level at which to consider the climate change adaptation approaches. It should be noted that to date, the

announced Intended National Determined Contributions (INDCs) are unlikely to be sufficient to limit warming to 2°C, however the Agreement includes a process for reviewing and strengthening commitments over time.

Question 7: What should the Act include to help Tasmania build resilience to climate change?

To build resilience to climate change, businesses and communities must first understand the risks and impacts that are likely at 2°C warming. The Act can provide a catalyst for further research into likely effects (potentially with the Federal Government) and can allow the State to coordinate wider studies and responses.

The discussion paper mentions the King Island Renewable Energy Integration Project (KIREIP) as one of the achievements since the 2012 review of the Act. Hydro Tasmania's work on off-grid renewable integration has also progressed on Flinders Island, and in other Australian locations, and is an example of positive outcomes from addressing emissions and climate change issues. KIREIP was the product of coordination between Hydro Tasmania, the Tasmanian Government and the Federal Australian Renewable Energy Agency. The application of this technology is an example of what can be achieved to reduce emissions, through coordination between business, State and Federal Governments.

Question 8: How can the Act facilitate action on climate change at state and local levels and among businesses and the broader Tasmanian community?

As mentioned above, coordinating research and providing information sessions may be an appropriate role for the Tasmanian Government. Assisting Tasmanian businesses and communities to access Federal programs can also allow Tasmania to reduce emissions and increase investment.

Question 9: To what extent should Tasmania rely on the Land Use-Land Use Change Forestry emissions sector to achieve its emissions reduction target?

As Hydro Tasmania suggested in our submission to the draft action plan, under a net zero emission future there will be some regions which will inevitably need to achieve the status of carbon sinks. Tasmania should aim to progressively reduce its emissions from non-LULUCF sectors and must continue to ensure that LULUCF emissions are minimised where possible. If LULUCF emissions can be economically sustained at below-zero levels, as is currently the case, then Tasmania would have the opportunity to be a net carbon sink in the future.

Question 10: What 2050 emissions reduction target would you consider is consistent with Tasmania seeking to be an international leader on climate change?

Given that Tasmania has already surpassed its 2050 target of a 60% emissions reduction on 1990 levels, Tasmania could consider a 2050 target of 'net zero carbon'. This is consistent with the text of the Paris Agreement.

Question 11: Should Tasmania’s targets account for emissions and abatement associated with its importation and export of electricity?

Tasmania operates as a region of the National Electricity Market (NEM). Electricity flows between states depending on climatic and market conditions. Investment in new generation will primarily be determined by NEM market conditions and by national policy approaches.

Hydro Tasmania continues to reinvest more than \$70 million per annum in our existing hydropower asset base and is working with the Tasmanian Government to investigate the potential to generate an additional 10 per cent from existing hydropower resources. At the same time, Hydro Tasmania continues to examine options for future Tasmanian energy supply. The development of the Woolnorth and Musselroe wind farms demonstrates the benefits of additional on-island renewable energy supply, and these assets have provided a particularly important contribution through the recent low inflow period. Tasmania is fortunate to have access to world-class renewable energy resources. The national Renewable Energy Target (RET) will continue to be the primary driver of additional large-scale renewable energy in Australia and Tasmania.

Due to considerable annual variation in hydro inflows and generation, and hence variability in imports/exports year on year, setting an annual target would be problematic. If a rolling target was to be used, Hydro Tasmania suggests that the hydro generation component of any target use at least a five year rolling average (and possibly longer) to account for inflow variation.

For further comment, please see our responses to the draft climate action plan.

Question 12: What other types of emissions reduction target should be considered (e.g. interim, sectoral, energy efficiency, mandatory/voluntary)?

Sectoral tracking will provide the Tasmanian Parliament with an informed view of Tasmania’s major emissions trends and challenges. A 2050 target is necessary to inform the long-term goal and provide the appropriate level of confidence to underpin investments. In addition, the Tasmanian Government could consider setting non-binding interim targets for some sectors. The legislated Act review process can allow consideration of progress towards these interim and sectoral targets.

Question 13: How willing would your business, community group, local government or region be to commit to pledges to reduce emissions?

With respect to energy efficiency targets, the discussion paper states that: *“such measures generally have limited effect in driving emissions reductions in Tasmania due to the dominance of renewable energy.”* While this may appear correct for Tasmania, it may not be true when national emissions are considered. Any increase or decrease in electricity demand in Tasmania will ultimately result in changes to the amount of energy imported or exported over Basslink. As a result, Tasmanian energy efficiency (or conversely, any increases in demand) will affect the amount of mainland electricity generation which is still predominantly from traditional coal or gas generators.

Question 14: What do you consider might be appropriate principles to guide government decision-making which influences climate risks and greenhouse gas emissions?

In addition to the objects of the Act, a broader set of principles could be developed which describe the types of climate change considerations which should be expected of decision-makers. The discussion paper cites the 2015 review of Victoria's Climate Change Act. The set of principles listed could be considered to guide Tasmanian Government decision making:

"having regard to best available science; consideration of cost-effectiveness or proportionality; consultation; equity within and between generations; consistency with national policy; and risk-based decision-making."

As the discussion paper also notes:

"Several submissions addressed the role of government in supporting research into climate change impacts and adaptation and in disseminating information and guidance to support climate change adaptation. Some considered that there was an important role for the State Government in supporting local government in developing its capacity to respond to or manage natural hazards. The emerging Tasmanian Planning Scheme was considered to be an opportunity to embed adaptation and mitigation actions in land use planning and urban development."

Hydro Tasmania broadly agrees with this suggestion.

We would welcome the opportunity to provide the Tasmanian Government 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, Policy Development Manager (email: colin.wain@hydro.com.au or telephone: 03 8612 6443).

Yours faithfully

Colin Wain
Policy Development Manager
Hydro Tasmania