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Dear Sir/Madam,

**Re: Hydro Tasmania's response to the Independent Review of Tasmania's Climate Change Act and Developing a New Climate Change Action Plan for Tasmania**

Hydro Tasmania welcomes the opportunity to provide comment on both the Independent Review of Tasmania's Climate Change Act (*Climate Change (State Action) Act 2008*) (Review) and the 'Developing a New Climate Change Action Plan for Tasmania – Opportunities Paper 2021' (Climate Action Plan). Hydro Tasmania has made submissions to the previous Review of Tasmania Climate Change Act in 2018 and 2012, the previous independent review in 2016 and the Draft Climate Change Action Plan. Hydro Tasmania has provided a single submission on both topics as many of the comments on the Review may lead to actions that could be included in the updated Climate Change Action Plan.

The Review discussion paper poses 13 questions. Hydro Tasmania's responses to these questions are contained in Attachment A. There are six questions posed in the Opportunities Paper for the Climate Action Plan, Hydro Tasmania has addressed these in Attachment B.

Hydro Tasmania's recommendations include:

- **Building strategically** on Tasmania's renewable electricity base – including the progression and building of Marinus Link and Battery of the Nation
- Consider the potential to explore more ambitious options to achieve **net zero emissions before 2050**
- The merit in considering **non-binding sectoral emissions** reduction targets
- Inclusion of **principles** to guide consideration of climate change in Government decision making and including **internationally recognised risk based metrics**
- **Information provision** by Tasmanian Government (including climate projections) to guide **decision making**

- Progressing a **Guarantee of Origin** scheme for renewable certification of Tasmanian production (e.g. Green Hydrogen)

As Australia's largest generator of renewable energy, Hydro Tasmania is exposed to the potential long-term impacts of climate change. Hydro Tasmania has always supported substantial emissions reductions targets, with interim targets for measuring and monitoring. Tasmania should continue to adopt an approach that sees the State maintain a leading national position in emissions reduction, and that can be recognised globally. Given Tasmania already has a low emissions footprint due to its existing renewable energy infrastructure, it makes sense to leverage this advantage into whole of economy strategies.

The recently legislated Tasmanian Renewable Energy Target (TRET), complemented by the Tasmanian Renewable Energy Action Plan, offers a significant opportunity for Tasmania to continue to play a leading role in emissions reduction and renewable energy, nationally and internationally.

Along with Marinus Link and associated additional renewable energy production, the Battery of the Nation initiative is about developing a pathway of future development opportunities in hydropower system expansion, including the potential redevelopment of the Tarraleah hydropower scheme and a pumped hydro project at Lake Cethana.

Battery of the Nation and increases in renewable energy generation through the TRET will underpin further electrification of economic activities supporting national emissions reductions efforts. The benefits and opportunities of low carbon fuel switching and electrification are well articulated by global authorities (and including among others by former Chief Scientist Alan Finkel) - such activities should include transportation (e.g. through encouraging uptake of electric vehicles); green manufacturing such as green steel production, supporting an upcoming green hydrogen industry; and achieving liquid fossil fuel replacement objectives.

The paper rightly points out the economic and community benefits from undertaking material actions to address climate change risks, lowering State emissions and increasing climate change resilience. Fuel switching is a common theme, and an area Hydro Tasmania is interested in working together with other parties to get the most out of renewable electrification strategies.

We welcome the opportunity to further discuss and engage on the independent review and the climate change action plan. Should you have any queries or require further information, please contact Carolyn Maxwell.

Yours sincerely,



Caroline Wykamp  
Executive General Manager Commercial

**ATTACHMENT A – Response to Discussion Paper on Tasmania’s Climate Change Act**

1.	To what extent should climate change considerations (e.g. greenhouse gas emissions, climate change impacts, climate resilience) influence policies and decisions by State government agencies and government business enterprises?
2.	How important is it to you that the Tasmanian government systematically assess and disclose the main risks associated with projected climate change?
3.	How might the Act provide you with confidence that successive State governments will continue to act to contain/reduce Tasmania’s emissions and build climate resilience?
5.	If the Act were to espouse principles that would guide consideration of climate change by government, its agencies and business enterprises, what might they be?

Climate change risks are recognised internationally and nationally as a key driver of business activities and longer-term planning. As a result, it is appropriate and necessary that these considerations influence policies and decisions by State government agencies and government business enterprises.

The Task Force for Climate-related Financial Disclosures (TCFD) framework provides an internationally recognised framework to identify and disclose climate-related risks and opportunities. This information is increasingly required by other corporate entities (e.g. insurers) and customers who undertake screening on climate and/or sustainability criteria. **Hydro Tasmania supports climate related risk disclosure and would encourage the Tasmanian government to complete periodic risk and opportunity assessments across the State economy using a globally recognised framework such as TCFD.**

To enable comparisons to be made across industries, there needs to be a common set of assumptions and data that different organisations can use to complete their assessments. Collating this information at a state level would also enable an overview across key sectors of the State economy of the potential adverse impacts or opportunities of climate change. The Tasmanian government has a key role to play in recommending and providing base data to assist businesses to complete their climate-related business risk assessments.

Completing a climate risk assessment could provide a basis for decision making and longer-term policy development and implementation. Ideally, a risk assessment would be completed and updated regularly (for example, every five years to align with the review of the Act) and followed up with consultation or roundtables sessions that could allow stakeholders and businesses to assist the Tasmanian Government to understand, refine and respond to future risks.

While it should be noted that successive State governments will always retain the right to implement or amend legislated targets, the process of setting long term and interim targets and stakeholder consultation such as this can help build consensus concerning how and at what pace Tasmania should address these issues. The Act itself should provide a transparent and forward looking framework that can guide successive governments.

As has been stated by Hydro Tasmania in past submissions to reviews of the Act, a set of principles inserted into the Act could provide an appropriate and transparent framework for decision makers in Government (including agencies and government businesses) with respect to considering climate change in Tasmania, and Tasmania’s low emissions advantage.

4.	How might the Act drive further decarbonisation of the Tasmanian economy (e.g. via setting/legislating targets for sectors of the economy, potentially including interim targets)?
8.	What would you consider to be an appropriate long-term greenhouse gas emissions or emissions reduction target for Tasmania (in terms of date and level of emissions or emissions reduction)?
9.	What (if any) value do you think targets for specific sectors of the economy would offer, including for the sector itself? If you agree with the concept of sectoral emissions targets, which sectors should have emissions targets? Why?
10.	What key factors should influence Government decisions to set State, sectoral and/or interim targets?

Given Tasmania surpassed its 2050 target of a 60% emissions reduction on 1990 levels some time ago and has maintained net zero emissions since 2015, Hydro Tasmania considers a more substantial target to be achievable and relevant. As is raised in the discussion paper, it is important to consider economic growth or inactivity and population growth or decline, which will impact the ability to achieve ambitious targets. It is also important to consider whether or not having targets could impact Tasmania's low emissions advantage.

A target that sees Tasmania maintain a leading position in emissions reduction throughout Australia, and is ambitious at a global level, should be considered going forward. **Hydro Tasmania sees merit in considering the potential benefits of setting a target to maintain a per capita greenhouse emissions rate of less than zero; this could potentially result in moving the target from 2050 to 2035. This could also include interim targets to enable measuring and monitoring of progress towards an emissions reduction target (as has been set with the Tasmanian Renewable Energy Target).**

Alignment with the Tasmanian Renewable Energy Target is important in driving further decarbonisation of the Tasmanian economy.

In addition, **it is timely to consider the appropriateness of setting non-binding targets for some sectors; this could include non-binding interim targets.** Sectoral tracking provides an informed view of Tasmania's major emissions trends and challenges. These targets could also be updated on a five year rolling basis (i.e. in line with the review of the Act).

Sectoral targets make sense where there is a clear opportunity to switch to electrification (i.e. having less reliance on imported fossil fuels), where the change to electrification wouldn't increase emissions profiles. There is also opportunity in sectors where there is clear alignment to Tasmania's low emissions advantage. A transport sector target is a practical target, and possibly a liquid hydrocarbon fuel replacement target. On a national and global level, Hydro Tasmania has always supported addressing the low hanging fruit in the energy sector as a priority. To this end, there is further opportunity for research and development into alternative low emissions fuel sources for different sectors in Tasmania.

The recent proposal to impose a carbon border tariff by the European Union should also be considered when determining state-wide or industry sector targets. Other major economies such the United States are also considering introducing carbon border adjustment mechanisms which would increase the value of a low carbon economy.

6.	Within the context of global agreements to action to reduce greenhouse gas emissions, what do you consider to be the main roles of the Tasmanian government and how effective do you believe the government has been?
12.	What do you consider to be the main roles for State government in supporting Tasmania's low/zero carbon transition?
13.	What do you consider to be the main roles for State government in supporting Tasmanian communities, infrastructure, economic activities and environments in becoming more resilient to projected climate change?

Climate change is an international issue. Nonetheless, Tasmania has significant upside opportunities and is well placed to benefit in a low emissions future. The Tasmanian Government should seek to ensure that:

- Tasmanian targets are consistent with Australia's international commitments;
- There is transparency concerning Tasmania's role in meeting national commitments; and
- Ensure national policy discussions provide opportunities for Tasmania to build on and leverage its low-emissions and renewable energy status.

The Tasmanian Government can continue to assist and support stakeholders seeking to access Federal Government programs (such as the Emissions Reduction Fund) which could provide funding for Tasmanian abatement projects.

**There is also value in developing instruments that turn Tasmania's green credentials into market value for existing industry/businesses and to also help attract new industry. Such an example includes the Guarantee of Origin/certification scheme for green hydrogen.**

**An important area is the new generation of the downscaled climate projections as part of national approach leveraging the AR6 models, to deliver nationally consistent downscaled projections.** One of the Tasmanian Government's main roles should be to provide information to the Tasmanian community and businesses on the potential impacts of climate change and the benefits of reducing greenhouse gas emissions. This is particularly so for those communities and businesses with greater exposure to the impacts of climate change. Climate impacts will be felt differently across the state and it's important that the Tasmanian Government communicate this and work with regions and local councils, and industry bodies to identify and implement adaption pathways.

7.	What would Tasmania be like in 10 years' time if it was a national or international leader in climate change responses?
11.	What do you consider to be the main risks and opportunities for Tasmania as it continues to transition towards a low/zero carbon economy and society? What risks and opportunities may arise if Tasmania transitions more slowly/more rapidly?

**As Stated earlier in this submission, it is appropriate that Tasmania build on its established strengths. In particular, further growing and modernising Tasmania's renewable energy is an obvious area that Tasmania can continue to be a national and international leader.**

In 10 years, the realisation of Project Marinus and Battery of the Nation will see further interconnection with the mainland and increased renewable energy generation in line with the Tasmanian Renewable Energy Target. Tasmania risks missing opportunities under a slow transition

because renewable energy and energy storage will instead be developed on the mainland and at a higher overall cost for Australia. Maintaining rapid progress of Project Marinus and Battery of the Nation is important otherwise Tasmania risks missed opportunity. The same is also true for Tasmania's opportunity to develop a hydrogen industry.

Tasmania has a history of significant manufacturing and value-adding industrial production. Renewable energy backed minerals processing, production as well as the creation and growth of a hydrogen industry are key opportunities that can provide benefits for Tasmania.

An integrated, low-emissions economy can also attract skills and expertise as well as innovation and academia. Recent examples include the world-leading technology at our power stations on King and Flinders islands.

The State of Tasmania has done well to achieve net zero emissions for the past four years. The State needs to ensure it takes full advantage of the marketing opportunity behind this achievement and leverage Tasmania's already low emissions status.

**Tasmania is one of very few jurisdictions in the world to have already achieved net zero emissions. There is the potential for the State Government to work with Hydro Tasmania and Tasmanian businesses to promote this achievement. Effective commercial arrangements can facilitate the marketing of zero or low emissions Tasmanian products across national and international export sectors (e.g. minerals, timber, agriculture, aquaculture, education, tourism).**

There is also opportunity for Tasmania to maintain its high calibre of climate research and expertise. This also delivers benefits back to Tasmania, with high-quality locally-focussed research capability available to help inform business as they adapt to climate change.

**ATTACHMENT B – Response to Developing a New Climate Change Action Plan for Tasmania, Opportunities Paper 2021**

***Reducing Tasmania’s greenhouse gas emissions***

1.	What do you think are the key opportunities to reduce Tasmania’s emissions? Please choose your top three.
2.	What do you think are the key gaps in Tasmania’s current efforts to reduce emissions?
3.	What do you think are the main opportunities for Tasmania to transition to a low carbon economy?

As is noted in the Opportunities Paper there is opportunity to reduce emissions from the transport sector and the direct combustion of fossil fuels. These opportunities include electrification and fuel switching. The Battery of the Nation initiative coupled with increased electricity interconnection with the mainland National Electricity Market states will see an increase in renewable energy generation and can underpin further electrification activities for Tasmania. **Due to the abundance of renewable energy opportunity in Tasmania, an increase in the electrification of different sectors can occur without increasing Tasmania’s greenhouse gas emissions.**

Hydro Tasmania suggests that the updated Climate Action Plan includes an action to consult with selected industries with the aim of developing sectoral emission reduction targets, and associated interim targets, by 2024. Setting sectoral emissions reductions targets can maintain Tasmania’s leading position and can seek to protect Tasmanian industries against the risk of future international carbon tariffs.

As noted in Attachment A, the European Union is consider imposing a carbon border tariff. The United States is also considering a carbon border adjustment mechanism which would increase the relative value of a low carbon economy such as Tasmania. Continuing to achieve net zero emission from the State may assist Tasmanian businesses and industry to avoid carbon tariffs being imposed on the products they export.

***Helping Tasmania adapt to a changing climate***

1.	What aspects of Tasmania’s projected future climate most concern you and why?
2.	Which parts of Tasmania (for example locations, industries, communities) do you think are most vulnerable to a changing climate?
3.	What do you think are the key opportunities to help Tasmania adapt to a changing climate? Please choose your top three.

Naturally, as a hydropower generator, aspects that concern Hydro Tasmania relate to variability of rainfall. Hydro Tasmania’s climate research program focuses on improving our understanding of how the climate is changing and improving our understanding of how we may be able to utilise seasonal outlooks and forecasts for decision making. Significant changes to yield are projected over the long term (beyond 2040) under high emissions scenarios<sup>1</sup>. Managing this requires significant infrastructure investment, such as that proposed under the Battery of the Nation project.

Climate change risks are not uniform across the state. Some areas will be affected more severely and in different ways.

Bushfire risk is an increasing concern for Tasmania, particularly to certain locations, industries and communities in vicinities of high bushfire risk. Electricity is an essential service for Tasmanians. In recent times, summers have seen significant fire activity near key electricity assets in Tasmania and on the mainland.

The Tasmanian Government response to the Bushfire Royal Commission largely supported or supported in principal the recommendations. Recommendation 3.5 (Establishing a standing resilience and recovery entity) is particularly relevant to the vulnerabilities experienced with a changing climate.

**Hydro Tasmania would like to suggest that the updated Climate Action Plan include a requirement that an assessment of climate risks and opportunities across the Tasmanian economy be completed by 2025.** This would be one way to help ensure Tasmania adapts to a changing climate.

As noted in Attachment A, Hydro Tasmania believes one of the main roles of the Tasmanian Government is to provide information to the Tasmanian community on the potential impacts of climate change and reducing greenhouse gas emissions, particularly for those with greater exposure to the impacts of climate change. Recommendation 4.5 (National climate projections) of the Bushfire Royal Commission is relevant in this respect also.

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<sup>1</sup> Climate Change in Australia (CSIRO 2015) and Climate Futures Tasmania (2010)