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Climate Change Office
Renewables, Climate and Future Industries Tasmania
Department of State Growth
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Submission - *Tasmania's Climate Change Act Review*

From the Tasmanian Independent Science Council: http://tassciencecouncil.org

Composed of eminent scientists and other professionals, the Tasmanian Independent Science Council (TISC) has since 2019 been dedicated to science-based policy reform to ensure the long-term health of Tasmania's environment. We welcome this opportunity to make a submission to review and strengthen Tasmanian law to address climate change. The TISC believes climate mitigation and adaptation issues are both vitally important to Tasmania's future. Climate change poses major public health, social and economic costs for Tasmanians, as well as adversely compromises many environmental policy goals including conservation of marine and terrestrial biodiversity, water conservation and forests management.

As an independent, impartial organisation, TISC advocates for legal and policy frameworks to ensure that climate change is addressed by governments and other key stakeholders in a timely and effective manner. We seek laws and policies to address climate change that reflect the best scientific evidence. Furthermore, we believe it is vital to establish public accountability for those responsible for climate action, with regular reviews of progress.

Previous evaluations of Tasmania's Climate Change (State Action) Act 2008 have underscored the necessity for clearer targets, enhanced governance mechanisms, and improved integration of climate considerations within government programs. We

support several of the commitments made by the government, including a revised target of achieving net-zero emissions by 2030, the implementation of five-yearly climate action plans and risk assessments, as well as the issuance of annual reports on greenhouse gas emissions and climate change activities.

Since the last statutory review of Tasmania's climate action law, the urgency and ambition required for action have increased. In July 2025, the International Court of Justice gave a landmark Advisory Opinion on states' climate obligations. The Court characterised climate change as an "urgent and existential threat" to humanity, asserting that states have a duty to ensure private entities are regulated to prevent and address climate-related damages. The Court ruled that any state's failure to control greenhouse gas emissions is a breach of international law. Additional significant international developments that highlight the pressing need for government climate action include the widely supported *Maastricht Principles on the Human Rights of Future Generations* (2023) and the *United Nations' Pact for the Future* (2024).

The review of Tasmania's Climate Change Act should be guided by these international benchmarks and directives aimed at enhancing climate action. The government's public discussion document presents a range of topics, but the most critical issue to address is Tasmania's excessive dependence on Land Use, Land Use Change, and Forestry (LULUCF).

Tasmania has sustained net-zero greenhouse gas emissions since 2015, primarily due to the large carbon sinks provided by LULUCF. Yet, modelling indicates LULUCF net removals are likely to decline in the coming decade, and *the 2024-25 Independent Review of the Climate Change Act* reported (p.15) that Tasmania's 'net zero status may not be maintained, particularly if there are major changes to carbon sequestration and storage in the LULUCF sector.' Thus, it is vital for Tasmania to reduce emissions in other sectors more determinedly,

There are several major risks—economic, ecological, technical and policy-driven—that could jeopardise Tasmania's continued reliance on LULUCF. These risks encompass:

- **Increased forest harvesting**: increased logging, as favoured by tis industry, could diminish the LULUCF sink by generating higher emissions from forest disturbance and degradation.
- **Plantations' emissions:** depending on plantation forestry might exaggerate net sequestration if the carbon is rapidly re-released elsewhere. Fast-rotation plantation forestry (e.g., for export pulpwood) only temporarily stores carbon.
- **Increased forest wildfires:** large wildfires of increasing frequency and intensity in Tasmania are predicted by forest fire ecologists.

- **Impact of rising temperatures on tree physiology:** there is evidence that rising temperatures may alter the physiology of tall eucalypts, reducing their ability to sequester carbon. This would be detrimental to our carbon accounting bottom line.
- **Agricultural and urban expansion**: land clearing for cropping and expanded irrigated farming, along with urban sprawl in Tasmania's major towns, is poorly regulated, thereby incrementally diminishing carbon sinks.
- **Poor land management**: agricultural practices such overgrazing, cropping, and drainage of wetlands disturb and degrade soil, diminishing its capacity to act as a carbon sink.

There may also be changes in policy or legal frameworks at both national and international levels that could pose additional risks for Tasmania. For instance, the accounting standards for carbon sequestration might be altered in a way that negatively impacts the assumptions upon which Tasmania depends. Consequently, Tasmania might struggle to uphold its net-zero status unless there are emissions reductions in other sectors or the establishment of significant new carbon sinks.

Therefore, we suggest implementing sector-specific emission reduction **targets** across all non-LULUCF sectors—such as transport, direct combustion, industrial processes, waste, and electricity generation. These targets should be grounded in achievable emissions reduction potential and adjusted to offset the anticipated decrease in the LULUCF sink. The government's current five-year emissions reduction strategies for six sectors are outlined as lists of preferred actions, yet they lack measurable performance indicators and outcomes, which are essential for ensuring coordination, progress, and public accountability.

The TISC recommends a new framework be established by legislation for "sectoral emission pathways" (SEPs) featuring flexible, range-based targets (e.g. 20–35% reduction by 2030), integrated into Tasmania's Emissions Reduction and Resilience Plans (ERRPs). An independent advisory panel should oversee progress, adjust targets as necessary, and report annually to Parliament.

Furthermore, Tasmania ought to strive for a greater diversification of its clean energy production. Relying heavily on hydroelectric power is not advisable due to the impacts of climate change on its effectiveness. The State is seeking to grow in certain sectors, such as wind turbines [which should be promoted in suitable locations!], and this initiative deserves general praise. There is potential for further development in utilizing surplus rooftop solar energy through community batteries – initiating some demonstration or prototype systems would be a beneficial first step. Being an island

state, Tasmania has many opportunities to harness marine energy. CSIRO has reported previously that marine (or 'renewable ocean energy') could satisfy 11% of Australia's requirements: see https://www.csiro.au/en/research/natural-environment/oceans/ocean-energy. It is also diverse in its mechanisms: wave, tidal, ocean thermal and current-based (the first is well favoured for Tasmania, but the others are also applicable in some locations). Despite being at the forefront with a wave generation prototype trial for King Island (see https://www.waveswell.com/king-island-project-2/), no follow-up projects have materialised.

Tasmania must also steer clear of being sidetracked or distracted by increasingly stranded assets that are being presented as means for 'energy transition' or 'renewable gases', which, given the ongoing Greenhouse Gas emissions, offer questionable benefits. The Tasmanian Gas Pipeline (Pty Ltd) and the Tasmania Future Gas Strategy serve as prime examples. The former is attempting to attract more customers—particularly residential ones—while the preferred approach is electrification and a reduction in gas usage. The latter depicts certain so-called renewable gases (such as bio-methane) as a viable solution, despite the uncertainty surrounding their climate-friendly emissions and the potential for their production to cause other environmental harm.

In conclusion, with the aforementioned changes, Tasmania will be more capable of upholding its net-zero status with integrity, enhancing accountability, and aligning with best practices observed in other regions. Additionally, it fosters investment and innovation in low-carbon sectors, aiding in economic diversification and long-term resilience. Embracing this model would establish Tasmania as a proactive and credible leader in climate action amidst evolving LULUCF dynamics.

Yours sincerely

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On behalf of the Tasmanian Independent Science Council