

# Tasmanian Transport Emissions Reduction Plan Submission

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Sarah Russell  
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Dear Sarah

The Carbon Zero Initiative (CZI) is a new organisation dedicated to achieving a carbon-neutral Australia by 2040. Our commitment to decarbonization involves supporting the development of up to 5GW of clean energy in Tasmania and upgrading transmission infrastructure. New renewable energy infrastructure will play a pivotal role in expediting the transition to clean energy, while simultaneously lowering prices within the National Electricity Market (NEM).

In our pursuit of a sustainable, clean energy future, CZI views effective and genuine community engagement as the cornerstone of success. We believe that genuine community involvement is essential not only to address legitimate concerns but also to highlight the multitude of benefits that can arise from decarbonisation of all sectors. To this end, we have prepared a submission to the Transport Emissions Reduction Plan:

Tasmania projects an image of net-zero emissions, and 100% renewable energy. In reality, only 42% of the total primary energy we use in Tasmania comes from clean sources, the rest come from fossil fuels.

According to the state government, Tasmania emits around 8.5 million tons of carbon dioxide and equivalents per year, or 15.4 tonnes per Tasmanian per year. The Australian average CO<sub>2</sub> per person is 15.4 tonnes per year. Despite our hydropower, Tasmania is no better than the rest of Australia in terms of emissions per person.

Of the 1.75 million tonnes per annum of transport emissions, road transportation (cars, buses, trucks, motorcycles) accounts for over 90 per cent of Tasmania's transport emissions. The other 10% are made up of domestic aviation, rail, shipping, marine navigation, and off road vehicle use.

Transport emissions have increased by 9% since 1990, driven by an increase in emissions from road transport, this is likely the result of a growing economy and population.

In Tasmania, freight rail emissions are just under one quarter of road freight emissions on a per net tonne kilometre basis. However, the majority of freight in Tasmania is short trips to dispersed locations.

Emission reduction solutions in the transport sector will vary across communities, business and industry. While battery electric vehicles (BEVs) will usually be the best solution for passenger and light vehicles, they are not currently suitable for long distance under heavy load, and other commercial vehicle operations.

Hydrogen fuel cell EVs (FCEVs) are lighter than BEVs and are quick to refuel, making them an alternative solution to replace internal combustion engines in ferries, freight transport and possibly planes.

In addition to the electrification of Tasmania's vehicles we can reduce our dependence on private vehicles, and increase the use of alternate low emissions fuels to reduce emissions from the sector as fast as possible. Bi-directional charging will unlock BEVs as a household batteries, giving consumers greater control over their electricity demand and cost profile.

### **Learning Rates and Adoption Curves:**

Tasmania's gross emissions need to fall as rapidly as is realistically achievable to do our fair share and mitigate global heating. The government has a number of adoption curves specified via its emission review "best fit" opportunities - for example 0.55 million tonnes per annum reduction in CO<sub>2</sub>-e by 2050, facilitated by uptake of passenger EVs.

This is a status quo adoption rate (AEMO - "Progressive Change", accounting for a standard exponential learning curve in battery technology, and likely does not require significant government involvement. Equally Tasmania may miss out on many of the economic benefits associated with decarbonising transport if we are slower than the rest of the nation.

For example, CZI calculated that Tasmanians spent one billion dollars on fuel for passenger vehicles in 2021 and 2022, and that by driving a similar number of kilometres in EV and charging on the flat rate tariff, Tasmanians would save \$500 million per year.

One of Carbon Zero's key recommendations to the plan is that it should include the following "step change" and "clean energy exports" adoption rates, themselves adapted from the Australian Energy Market Operator's extensive work in this area, for example:

- 0.88mtpa CO<sub>2</sub>-e abatement by 2040 (passenger EVs, public and active transit).
- 0.80mtpa CO<sub>2</sub>-e abatement by 2040 (heavy, light and commercial vehicles).

These adoption rates are consistent with the "clean energy exports" adoption rate. The federal government's recently announced bolstering of the Capacity Investment Mechanism and its soon to be announced vehicle emissions standards, likely bump the nation from our current "step change" adoption rate towards the "clean energy exports" adoption rate.

## Key Recommendations:

As per the CSIROs 2022 Research into EV Uptake set 2030 targets, the Tasmanian Transport Emissions Reduction Plan should allow for a range of adoption rate scenarios and provide guidance on the likely state government policy settings to reap the employment and economic benefits associated with that adoption scenario. For example, these may include three to five adoption rates between 20-80% (per CSIRO) of new passenger vehicle sales, vehicles in services, etc.

State subsidies will have the greatest impact during the early adoption phase (between now and 2030). Tasmania needs to continue and enhance a set of generous incentives for households and businesses to transition to EVs, and when available, hydrogen fuel cell vehicles. These may include:

- Continuing and enhancing the discounts and exemptions on state government duties and charges EVs via exemptions or the current subsidy (although we prefer means tested subsidies), hydrogen vehicles and associated infrastructure, including new incentives for commercial operators seeking to connect new charging or refuelling infrastructure. Examples include:
- Continuation of the subsidy for households and businesses to buy EVs, or setting of an additional means tested subsidy.
- Grants and no interest loans to businesses to upskill workers to build, maintain and sell zero emission transport solutions, including charging and hydrogen refuelling infrastructure.
- Grants and no interest loans to promote new and existing incentives, such as novated leasing, fringe benefit tax exemption, etc.
- State government to extend its 100% fleet target to all Government Business Enterprise passenger vehicles, and bring forward the transition date to 2030.

We look forward to seeing the outcomes of the plan and hope that our insights prove valuable in shaping the decarbonisation of Tasmania's Transport sector..

Sincerely

Jack Redpath  
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