I commend the independent reviewer's initial report and the depth of its understanding of the current situation. And, to a certain extent, the Tasmanian Government's Response to the review.

I have the following comments to make on the Independent Review and the Tasmanian Government Response to it.

The "ambition" to maintain Net Zero after 2030 just reflects the current situation. Tasmania has been in this happy position since 2015 according to its own documentation. The situation as it stands, and this is acknowledged in the reviewer's report, is only possible by a series of serendipitous market, political and activism prompted events which have allowed our forest estate to grow and maintain a carbon sink. As both documents acknowledge, this carbon sink is vulnerable to many kinds of negative problems, including the increasing risk of global overheating and subsequent fires.

Internationally, offsetting is increasingly becoming viewed as an ethically suspect mechanism which allows countries, organisations and businesses to continue to produce emissions despite those emissions continuing to heat the earth. Offsets should be used only if there is no alternative to any other action, and this is not the case for most carbon emissions in Tasmania. In effect, this is a greenwash. However, because we have hydro electricity as an energy source we do have the capacity to electrify Tasmania and rid ourselves of fossil fuels, a goal the rest of Australia, except for the ACT, is finding difficult to meet. Generally the Tasmanian government is not focussed on reducing emissions. We cannot, and ethically should not, rely on offsetting when we are still producing over 8Mt of CO2-e emissions each year, which may increase. If we had ambition we would be aiming for **real zero** emissions by 2030, and then aiming to maintain this afterwards.

I do not agree with clauses in Recommendation 2 and 3 in the Independent Review to seek complementarity with national and international climate change developments, except when they are in agreement with the science. It is absolutely clear that the present Australian Government among other recalcitrant governments, has no such aim in its policies. We should be leading them by example. I agree with Recommendations 4 and 5, but not with Recommendation 6. Recommendation 6 should be altered to have annual assessments on specified emission reduction targets because climate change is pushing the boundaries of change.

The heading of Recommendation 7 has been changed in the Government Response. The original heading was **Decarbonisation and Resilience Plans.** The text acknowledges that decarbonisation is needed – leave it in the heading. We need to do this as soon as possible. Some quick and simple ways -

- Tasmania has oil, coal and gas leases still extant. Even the IEA says there is no time left to continue exploration. **Void** these leases
- We are continuing to clear land. Vegetation is precious and must be preserved on private and public land. **Stop land clearing**.
- We actively produce fairly dirty coal and use it to make cement. Cement manufacture is one of the most difficult to decarbonise and now other materials are being used for the building industry. **Stop producing cement unless becomes emissions free.**
- Trucks are not only trashing Tasmania's roads but also use diesel. There are now battery powered trucks, mine machinery, farm machinery, cars and vans. Trains can be converted to electric. Use trains for freight. Importing oil costs us over a billion dollars a year. **Stop using fossil fuels for transport.**

- Aviation is one of the biggest drivers of climate change and aviation emissions must be taken into account in climate accounting. **Stop flying** unless for emergencies.
- Perhaps we could introduce carbon rationing for personal use as they did in the UK, Europe and the US during WWII.

I have another criticism of Recommendation 7 - it is the same as Recommendation 6. This is a crisis. We cannot keep delaying action because the physics of the earth's climate dictates action now to reduce emissions. Plans must be in place by the end of 2022 and then implemented. We need to focus on the available solutions for emission reduction, some of which are shown in Figure 12 of the Independent Review. These include: 100% renewables, storage including batteries, demand management, electric vehicles for road transport, energy efficiency, circular economy, proven electrification, sustainable agricultural practices, and fertiliser management.

The role of government is critical in providing targets and standards, taxes and incentives, infrastructure investment, information and access, providing leadership, and educating the public to understand the problem of climate change to assist them to change their behaviours. The role of business is to work out how to change, adapt and implement the changes.

We have only 8 years, that's 96 months, in which to act. Reputable climate scientists are agreed on that. We have to have a two pronged approach – **decarbonisation and renewables implementation.** We already have enough tools in our renewables kit. Bio fuels, bio energy, industrial CCS, synfuels, ammonia, hydrogen, solar thermal, pharmaceutical agriculture, are all proposals that will take too much time to implement or take up scarce resources that we need for other purposes. Those who are not involved in providing or implementing the solutions can continue to research but the government should resist investing in technologies which we can only afford after we get emissions down.

We cannot go back to business as usual. That is why we are in this dire situation. We do not need to be thinking of creating profits or expansion at this time. If we create an Electric Isle here, people will come. This cartoon illustrates just where the safe zones will be for the near future (Acknowledgment to Glen Le Lievre – Sydney Morning Herald Nov 14th).

Thank you for this opportunity to comment.

Dr Helen Hutchinson (PhD)