

Review of the Climate Change Act 2016 – Tasmanian Arboretum submission

Introduction

Parts of Tasmania were affected by a January flooding event in 2011 that exceeded previous flood events in living memory [past 60 years].

In 2015/16 areas of the Mersey River Catchment that had not burnt for thousands of years were affected by summer wildfire along with other areas with more frequent fires badly damaging the natural environment and reducing the services it provides. In June an East Coast low reached down to the catchments of a number of Tasmania Rivers causing extensive flooding, loss of life and widespread damage to property.

Whilst atmospheric CO₂ has reached 400ppmv in the Southern Hemisphere the impacts we are witnessing are those of the CO₂ levels of 3 to 4 decades ago [in 1976 – 335ppmv and in 1986 - 350ppmv].

As the additional CO₂ heats the atmosphere the energy contained in a warmer and wetter atmosphere will increase the risk of flood events whilst the impacts of the traditionally hot and dry summers will also be greater as the rainfall patterns change.

A government that predicated its Strategies on doing as little as they think they can get away with is jeopardizing the liveability of the State for its residents and the economy of Tasmania,

Already agriculture is under financial pressure and the offer of loans, no matter how good the terms are, does not fit with the budget of a farm sector who have had a price cut because of the global market and the decisions of the dairy processors.

The Problem with the Act

It appears to mandate Interim Targets. The objectives are phrased to limit and delay action.

Such thinking is now redundant. We have passed hope of limiting temperature increases to below 1.5dC and will have difficulty in limiting those increases to below the Internationally agreed danger point of 2dC without comprehensive, adequate and timely changes to energy production.

The economy is wholly dependent on the environment and the one we have built our society on has been wholly dependent on a stable climate. The history of human development is littered with the effects of fluxes in local climate parameters.

It is more important to take action than amend an Act, but some form of Statement by Government about the critical nature of the problem, with its impacts on everything humans do and setting the scene for real action should be recommended.

Answers to the Questions posed in Appendix C

1. The critical challenge is the level of greenhouse gas emissions. The Act should aim to go beyond zero emissions of the major gas CO₂ to ensuring positive sequestration above State emission levels. This transition is achievable, taking Tasmania to beyond Zero emissions, joining Bhutan as leaders in the challenge to limit climate instability and thus the costs to the Tasmanian community and economy. The Tasmanian economy should move in a staged transition to zero CO₂ emissions from human activity. CH₄ is a second tier gas whose industrial and agricultural sources should be moved toward zero as well. Well known practices harvesting this gas for energy are used worldwide to address the cost of business.

The impacts of the releases of CO₂ and CH₄ from the disturbed natural systems following global heating will be bad enough.

2. On a scale of 0 to 10 I think 3. State and local government have not led, industry has not recognized the need and lead major changes and the community remains confused on the importance of this issue due to the inability of leaders to clearly and unequivocally and often admit there is a problem.
3. A set of targets leading to zero emissions of CO₂ by 2035 and severely reduced CH₄ emissions by 2050. This will build on the forest carbon sinks the spin doctors discovered ages after they were pointed out to government by a range of scientists and community organizations and are currently used as an excuse for doing as little as government can get away with.
4. By committing to a plan to step beyond zero emissions. It is the real actions based on a plan that measure any narrative. Motherhood word balloons simply do not cut it with physical and chemical changes to the world's atmosphere, oceans, soils and forests, everything the current structures of human activity are entirely dependent on.
5. 100 on a scale of 10. In other words we should go to the necessary targets to limit climate instability and global heating, not be bound by compromises that ignore the science.
6. We will be very lucky if 2dC is the end point of temperature increases. There is a strong possibility that enough CO₂ has entered the atmosphere to trigger a degree of positive feedback and perhaps trigger runaway climate change. The Act has to aim for zero emissions and moving to beyond zero emissions over a longer time frame. As the introduction above points out we have passed beyond the impacts from the CO₂ level of 350ppmv that some in the climate science community see as the safe CO₂ level. It will only get worse because we have another 50ppmv already in the atmosphere. This progression is not expected to be a simple lineal growth in climate instability events.
7. 100% renewable energy, assistance to change practices, retreat from danger zones [the coast, flood plains, fire affected areas]

8. Rules and money. They always work and when it is seen as important it is what Government uses. By using them Government will show its concern. Make the 'bads' expensive or illegal with humungous fines and fund the 'goods'. The failure to recognize the need and take action in the past shows a denial of reality and has incurred additional and unnecessary costs. Rules we all must currently follow are, for example, vehicle emissions.
9. LULUCF is the potentially the beyond zero element. The need for a staged process to move to beyond zero emissions from human activity and to, as a community, plan for and implement same is undeniable. Only the delusional would not recognize. This is a narrowing window as stable vegetation systems storing Carbon are collapsing under the assault of changing fire frequencies and the parameters of the determining climate [environmental] factors changing.
10. 100% from human activity.
11. Yes.
12. There is no simple answer to this. All the tools listed should come out, including mandated targets that ratchet up over a clear 20 year timetable. In the case of cars Tasmania would be 10 years behind Norway and 5 behind Germany increasing the availability of models to purchase were it to adopt their plan to end the sale of fossil fuelled cars within their jurisdictions. Nobody should be exempt.
13. The community organization I work for is fortunate enough to be able to move beyond zero through its offsetting activities even though the capacity of the Solar Power Station was limited by the State Business Enterprise to 10kw. I understand that in Victoria the maximum limit is 10 times greater. Although the members of that community organization may not individually be able to do so, many of them have made changes to their electrical energy supply following on the organizations transition. Anecdotally those changes were driven by saving money by investing in solar including photovoltaics.
14. Simple really, if it increases Greenhouse Gas emissions don't do it. If it reduces emissions then do it. Take into account the costs of losing the climate upon which human activity is dependent when deciding. Everything else is simply fluff given what is coming if we do not change rapidly.

Electrify the car fleet, government first. Electric buses for Metro and for replacement school buses. Both are now proven. Hybrid synergy drive trucks.

Although it may be too late in the decision making process of gifting to the construction industry instead of moving UTas campuses, or other community facilities, to flood and sea level rise threatened areas we should improve public transport to their relatively safe sites from downtown.

Any second power cable to Victoria to **ONLY** carry renewable energy.
Expand renewable energy production by removing the obstacle that is the attitude of the State Business Enterprise, including that for domestic solar PV.

There is an investment in the current power distribution system [the poles and wires] but as solar users leave that system for home battery storage driven by unfair pricing, the poles and wires will become more expensive to maintain, penalizing those who remain on the distributed system, driving further the incentive to leave the power distribution system.

When you go off grid there are no limits to your power production and storage, except the cost of the investment and as the cost of going off grid with storage falls it becomes an investment opportunity for business and a means of improving property values for home owners. It will be increasingly difficult for the SBE to retain small to medium customers as the early adopters follow the lead of the innovators and leave the grid.

It would be better to encourage solar PV through fair pricing and make the distribution system a means for the existing hydro storages to act as battery storage.