

Veterinarians for Climate Action
Ben Cox, CEO

<https://www.vfca.org.au/>

Submission prepared by
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Jacobs Group (Australia) Pty Limited

28 April 2021

Dear Sir or Madam

The Climate Change Act & State Government response to climate change

Thank you for the opportunity to contribute to the review of the Tasmanian Climate Change Act.

Veterinarians for Climate Action [1] is a national, not-for-profit, registered charity that aims to advocate for and achieve climate action within and beyond our profession. Our patron is Professor Peter Doherty, veterinary surgeon, Nobel Laureate and Australian of the Year in 1997. Twenty-three former Chief Veterinary Officers also publicly work alongside us.

We deliver our submission by replying to the thirteen questions in your Discussion Paper.

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?

Veterinarians are scientists. Our work is evidence-based and relies on published scientific findings. The Australian Veterinary Association *Code of Professional Conduct* includes the following statement: ‘Continuing veterinary education and the advancement of knowledge are fundamental to the role of the professional. Failure to keep informed about relevant advances in veterinary science is a dereliction of this responsibility.’

We expect politicians to also operate professionally.

The United Nations Intergovernmental Panel on Climate Change provides the world with up-to-date reports on scientific findings relating to climate change, the cause, impacts and possible response options [2].

Here, in Australia, our own research organisations publish comprehensive information. The CSIRO State of the Climate 2020 report [3] states that Australia’s climate has warmed on average by 1.44°C since national records began in 1910. The Paris Agreement [4] is

attempting to limit the world temperature increase to 1.5°C above pre-industrial levels. Australia is already about there!

At the north-west tip of Tasmania, the Cape Grim Baseline Air Pollution Station (a joint responsibility of the Bureau of Meteorology and CSIRO) is a **key world site** for measuring greenhouse gases in the atmosphere. Since the station first began measurements in 1976, carbon dioxide levels have increased by almost 25 per cent [5].

Australia's climate is projected to continue to change over the coming decades with more extremely hot days, longer bush fire seasons, more heavy rainfall events and rising sea levels impacting some coastal areas [6].

Veterinarians for Climate Action expect the Tasmanian government to act professionally in keeping informed and updated on published scientific information concerning climate change. **All** State legislation, policies, decisions and actions must now be delivered with full recognition of the science and predicted consequences of global warming.

2. How important is it to you that the Tasmanian government systematically assess and disclose the main risks associated with projected climate change?

The mass of published evidence (referred to in our answer to question 1) indicates that the risks to people, animals, the environment and economy from climate change are expected to be significant and to increase over time.

The amended Tasmanian Climate Change Act must require a comprehensive risk assessment to be conducted and published prior to each planning cycle. It will provide the focus for mitigation and adaptation measures developed by the Government and all sectors of the community.

The risk assessment must determine the risk to:

- a. economic, employment, cultural and social stability of the community,
- b. production of food,
- c. marketing of Tasmanian produce at home and overseas,
- d. tourism,
- e. environment and ecological habitats of Tasmania, and
- f. Australia's obligations under international climate action agreements.

EXAMPLE: To escape the heatwaves, people will move to Tasmania from other parts of Australia, resulting in the need for more housing, food and services. Is the State prepared for such an influx?

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?

The Australia Institute's *Climate of the Nation Report 2020* [7] found that 80 per cent of people think we are already experiencing problems caused by climate change and 71 per cent of Australians now think Australia should be a world leader on climate action.

The amended Tasmanian Climate Change Act and the State's ongoing commitment to renewable energy will send a clear signal to people that this State is resolved to act to reduce emissions. This will provide certainty and confidence for industry, business and the community, help drive low-carbon innovation and investment and reveal opportunities and gains that will result from climate action.

The addition of clear accountability mechanisms, targets and reports to the Climate Change Act will ensure Tasmania proactively responds to climate change risk and reduces its greenhouse gas emissions across all sectors. It will be legislation that future governments will continue to depend upon.

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)?

The fundamental objective of the Act must be to reduce carbon emissions as fast as possible. The government cannot be expected to achieve this without commitment and contribution from all sectors of the State's community and economy.

The different sectors of the community are unique in their activities, organisation and contribution to global warming. Each sector is best equipped to design and manage its own strategy to reduce emissions. We expand on this in our answer to question 9.

Targets must not be based on what is considered politically feasible or achievable. They must be based on the scale and speed of change that climate science tells us is necessary if we are to minimise climate disruption and avoid climate breakdown and if our children and grandchildren are going to live in a world that is safe.

Setting specific targets may work for some sectors. But in other situations, considerable education, change management and leadership will be necessary.

EXAMPLE: In the year to March 2020, agriculture accounted for 12.9 per cent of Australia's national greenhouse gas emissions [8]. Research is underway into feeds and supplements that reduce methane emissions by livestock. Soil regeneration practices, low-tillage, increased biodiversity and natural composting will encourage more carbon-dioxide sequestration. Tasmania Department of Primary Industries Parks, Water and Environment already have case studies on their website to educate and engage more producers [9].

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?

Comprehensive principles for climate legislation are detailed in the Climate Change (National Framework for Adaptation and Mitigation) Bill 2020 introduced to the Federal Government by the Independent MP, Zali Steggall on 9 November 2020 [10]. They provide a good example of the guiding principles needed to ensure integrity, relevance and equity in the exercise of power. Principles such as these must be included in the amended Tasmanian Climate Change Act.

Global Climate Action & Tasmania

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?

In March 2021, the United Nations Secretary-General urged all countries, companies and financial institutions to commit to net zero or carbon neutrality, with ‘clear and credible’ plans to achieve the target, starting immediately [11].

Tasmania has shown leadership by having a Climate Change Act, a plan and reports. It already claims net zero emissions with its advantage of considerable production of renewable energy and carbon retention in forested wilderness areas.

However, the current Tasmanian Climate Act is minimal and must be amended with the inclusion of risk assessments, guiding principles, targets and community and business sector commitment as we have detailed in answers to previous questions.

Of great concern is the absence of leadership from the Federal Government, which has no Climate Act, no dedicated Minister for Climate, and no net zero emissions target. Until the whole country works as one to reduce emissions, the world will not recognise the achievements of individual States and Territories.

The National Cabinet has demonstrated good collaboration between Commonwealth, States and Territories in managing the COVID-19 pandemic. The National Cabinet must remain in place to combat the even greater crisis facing Australia and the world, global warming and climate change.

The amended Tasmanian Climate Change Act must require the Tasmanian Premier to work with leaders of other States and Territories and the Prime Minister to bring about a coordinated national response to climate change that lifts Australia to world leadership level once again.

7. What would Tasmania be like in 10 years’ time if it was a national or international leader in climate change responses?

By 2031 it is imperative that the world has controlled the rise in temperature due to human caused emission of greenhouse gases.

Within 10 years, Australia must become an acknowledged leader in climate action.

Tasmania, with a first-class Climate Change Act, engagement of the whole community, and substantial growth in renewable energy, will be recognised for driving change in Australia.

Here in Tasmania, in 2031, there will be:

- a. no coal mines;
- b. State net zero emissions sustained on an annual basis;
- c. greenhouse gas emission reductions demonstrated by all sectors of the community;

- d. increased renewable energy systems and contribution to the national electricity grid;
- e. electric vehicles supported by a network of charging stations;
- f. improved farming practices across Tasmania to increase depth and quality of the soil and enhance carbon dioxide sequestration;
- g. new buildings, business and household, constructed from carbon smart materials and incorporating super-efficient energy conservation;
- h. a demonstrated improvement in the environment and wildlife habitats with reduced risk of extinction for certain species;
- i. climate change information, climate predictions and measures to reduce gas emissions delivered in all educational settings in Tasmania; and
- j. marketing of Tasmania's climate change success to enhance the tourism industry and food exports.

EXAMPLE: In the future, we will charge our electric vehicle (EV) at home and on the farm from solar photovoltaic panels (or any other means), and if the EV is not used, the stored energy could be pushed back into the grid, especially during hours of peak demand for electricity when market prices are high.

Emissions 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)?

The Australian Academy of Science reported in March 2021 [12] that the total emission reductions currently pledged by the Australian and international governments through the United Nations Framework Convention on Climate Change Paris Agreement (UNFCCC), even if implemented on time, will translate as average global surface temperatures of 3°C or more above the pre-industrial period by 2100.

In the amended Tasmanian Climate Change Act appropriate targets would be:

- a. annual net zero greenhouse gas emissions;
- b. to reduce greenhouse gas emissions by at least 60% by 2040. With interim targets set to reach this target;
- c. expansion in the production of renewable energy for supply to the mainland including geothermal, hydrogen and wave power development; and
- d. further development of pumped hydro energy storage.

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?

In our answer to question 4 we explained why the government must engage the whole community, all business sectors and all levels of government in the battle against climate change. This includes:

- a. householders
- b. local councils
- c. agriculture, horticulture and fisheries

- d. forestry
- e. the health sector
- f. the building industry
- g. the tourism industry
- h. the retail sector
- i. the transport sector
- j. emergency services
- k. mining.

The fundamental task of all the sectors is to contribute to the State targets for emissions detailed in our answer to question 8.

Since the knowledge of each sector resides within the sector, they should be required to manage their own emission reductions, and develop their own plan and targets. Since this requirement will be novel for most sectors, setting specific greenhouse gas reduction targets initially is probably not advisable. It may create resentment and slow progress. It would be a better start to require each sector to present a comprehensive and workable plan to the government within a six-month deadline.

In the first instance, the Minister for the specific sector must have the responsibility for establishing a working group to develop the plan. The working group needs to include all those with a good working knowledge and involvement in the sector.

These plans must detail how the sector proposes to reduce greenhouse gas emissions by 60% by 2040 in line with the State target. Individual risk assessments, interim targets and opportunities must be included.

The requirement for individual sectors to develop plans should be written into a Regulation.

EXAMPLE: There is already considerable research and support for the agricultural sector in reducing emissions. The sector plan can draw on the *Carbon Neutral by 2030 Roadmap* developed by Meat and Livestock Australia [13]. The plan will include methods to enhance carbon sequestration in the soil, animal genetic improvements and renewable energy to power animal housing, processing plants and marketing. To assist in reaching their target, the agricultural working group will no doubt demand speedy availability of electric vehicles, utes and tractors!

10. What key factors should influence Government decisions to set State, sectoral and/or interim targets?

Up-to-date scientific information, current risk assessments and professional guiding principles, all referred to in answers to other questions in the submission, will influence the State Government and sectors in setting targets and developing plans.

Low Carbon & Economy & Society

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?

There are major risks to Tasmania if the global temperature continues to rise. The recent report from the Australian Academy of Science [12] documents the consequences which include more heatwaves, extreme weather events and rising sea levels.

EXAMPLE: Further damaging bush fires can be expected, like those in early 2019 that burnt large areas of the Tasmanian Wilderness World Heritage Area with its unique flora.

The transition to renewable electricity has risks, for example the possibility of the national grid being overwhelmed with energy from household solar panels. At the present time there is a shortfall in battery storage capability. We have confidence that technological innovation in this country can solve these matters. The risk of job losses in the fossil fuel industry will affect few in Tasmania and can be addressed.

The opportunities for Tasmania in transitioning to a low carbon economy are many:

- a. the temperature will cease rising if gas emissions are controlled world-wide;
- b. Tasmania will sell more renewable electricity to the national grid;
- c. optimal health for people, animals and the environment;
- d. technological developments arising from the transition to renewable energy;
- e. this State will attract businesses that seek a stable carbon neutral environment;
- f. new jobs will become available in the green economy; and
- g. Tasmanian food products, everything manufactured in this State, everything marketed internationally, even the tourism industry that draws people to this food rich island, can be stamped Certified Renewable Tasmania.

EXAMPLE: Europe is preparing to levy carbon penalties on imports from countries without legitimate climate action. Countries that do not have a worthwhile strategy to reduce greenhouse gas emissions face the prospect of paying additional tariffs under the new Carbon Border Adjustment Mechanism (CBAM), which is expected to come into force in 2023. Tasmania, with an amended Climate Change Act, emissions targets, interim targets and significant production of renewable energy, has the opportunity to avoid such tariffs.

12. What do you consider to be the main roles for State government in supporting Tasmania's low/zero carbon transition?

The main roles for the Tasmanian Government and Premier are:

- a. leadership, both here in Tasmania and at a national level;
- b. to amend the Climate Change Act;
- c. ensuring that education and awareness of climate change and mitigation and adaptation measures reach the whole community;
- d. to support further development of renewable energy systems;
- e. to support all community and business sectors, ensure they are aware of their responsibilities under the amended Climate Change Act, and develop and publish their greenhouse gas emission reduction plans; and

- f. to maximise all opportunities that arise from the transition to a green economy, jobs, trade and tourism.

EXAMPLE: The change to low carbon economy will not be easy and will encounter resistance to change. **Tasmanian Climate Achievement Awards**, similar to the Tasmanian Community Achievement Awards, could be highly effective in encouraging others. ‘Climate Champions’, those who have achieved climate action in their own home, business or organisation, should receive their awards at a high-profile State presentation ceremony.

Climate Resilience & Adaptation

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?

As the temperature continues to rise, severe weather events become more likely. Tasmania may experience more heatwaves, droughts, floods⁰ and coastal erosion. A consequence of this will be deteriorating health of people, animals and the environment.

As the world has not reacted rapidly enough to the risks and threats of climate change, adaptation measures must now be developed.

We suggest that the planning required of all community and business sectors in Tasmania to reduce greenhouse gas emissions, should also include the identification of measures needed to develop resilience to climate change. The individual sector must accept responsibility for change.

EXAMPLE: The Tasmanian emergency services need to update risk management standards, community preparedness and response plans to be ready for increased bush fire risks, floods and heatwaves. They will need electric vehicles!

Further information:

- 1 Veterinarians for Climate Action, <https://www.vfca.org.au/>
- 2 The Intergovernmental Panel on Climate Change, <https://www.ipcc.ch/>
- 3 Commonwealth Scientific and Industrial Research Organisation, *State of the Climate* <https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate>
- 4 United Nations Framework Convention on Climate Change, *The Paris Agreement* <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- 5 Commonwealth Scientific and Industrial Research Organisation, *Latest Cape Grim Greenhouse Gas Data* <https://www.csiro.au/greenhouse-gases/>
- 6 Climate Change in Australia <https://www.climatechangeinaustralia.gov.au/en/>
- 7 The Australia Institute, *Climate of the Nation Report 2020* <https://australiainstitute.org.au/wp-content/uploads/2020/12/Climate-of-the-Nation-2020-cover-WEB.pdf>

- 8 Australian Government, Department of Agriculture, Water and the Environment
Livestock Emissions [https://www.agriculture.gov.au/ag-farm-
food/climatechange/australias-farming-future/livestock-emissions](https://www.agriculture.gov.au/ag-farm-food/climatechange/australias-farming-future/livestock-emissions)
- 9 Tasmania Department of Primary Industries Parks, Water and Environment, *Climate
Change and Agriculture* [https://dpiuwe.tas.gov.au/agriculture/climate-change-and-
agriculture](https://dpiuwe.tas.gov.au/agriculture/climate-change-and-agriculture)
- 10 Climate Change (National Framework for Adaptation and Mitigation) Bill 2020
[https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Resu
Its/Result?bId=r6617](https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_ResuIts/Result?bId=r6617)
- 11 UN News, *UN chief urges 'clear and credible' plans to achieve net zero*
<https://news.un.org/en/story/2021/03/1088142>
- 12 Australian Academy of Science, *The risks to Australia of a 3° warmer world*
[https://www.science.org.au/supporting-science/science-policy-and-analysis/reports-
and-publications/risks-australia-three-degrees-c-warmer-world](https://www.science.org.au/supporting-science/science-policy-and-analysis/reports-and-publications/risks-australia-three-degrees-c-warmer-world)
- 13 Meat and Livestock Australia, *CN30* [https://www.mla.com.au/research-and-
development/Environment-sustainability/carbon-neutral-2030-rd/cn30/](https://www.mla.com.au/research-and-development/Environment-sustainability/carbon-neutral-2030-rd/cn30/)