22 July 2019

SUBMISSION: REDUCING VICTORIA’S GREENHOUSE GAS EMISSIONS

Introduction

We are now facing a climate crisis. Record-breaking land and ocean temperatures, bleaching of the Great Barrier Reef, unprecedented bushfires in Tasmania’s world heritage areas, and rapid melting of polar ice caps and glaciers demonstrate that the planet is already too hot.

Tackling the climate crisis will have to be a priority for all levels of government if we're to protect communities and the natural world from what the Intergovernmental Panel on Climate Change say will be “catastrophic” impacts.

Unfortunately Australia's emissions are rising due to the Federal Coalition's failure to act on climate. This failure leaves Victorian communities exposed to intensifying impacts such as heatwaves, droughts, bushfires, extreme weather, and rising sea levels.

Victoria has an opportunity to put the country back on track. Our state has an opportunity to show leadership on climate by setting science-based interim Emissions Reduction Targets that keep warming below 1.5°C.

Bold and ambitious Emissions Reduction Targets from the Andrews government will steer Victoria towards a cleaner, fairer, and more sustainable economy. It will position our state to attract jobs and investment as the global economy decarbonises.

Bold and ambitious emissions cuts will continue Victoria's nation-leading roll out of renewables and set the scene for the country's first offshore wind farm, the Star of the South. Deep emissions cuts will drive growth of the jobs-rich Public Transport sector as well as positive changes to agricultural practices and management of our carbon-dense native forests.

Friends of the Earth is a community-driven environment group with over 68,000 supporters. We thank the Andrews government for the opportunity to have input into Victoria’s interim Emissions Reduction Targets. Our response to the Combet Report and recommendations to the Andrews government follows.
1: Do you support the targets recommended by the Panel? Why/why not?

Victoria must achieve net-zero emissions as soon as possible to have the best chance of keeping global warming below 1.5°C. Friends of the Earth recommend the Andrews government take a greater level of ambition to interim Emissions Reduction Targets than what the Combet Report recommended.

With climate impacts occurring much faster than scientists predicted\(^1\) it is essential to do the hard work now. Victoria cannot afford to kick the can down the road. Friends of the Earth recommend the Andrews government:

- Show leadership by setting Emissions Reduction Targets that meet the 1.5°C challenge.

- The Combet Report identifies a target of at least 43 percent below 2005 levels by 2025 would be required to give us any chance of meeting that goal.

- Commit to a heavier lift up front of a 57 percent reduction by 2025 and 75 percent by 2030 to make sure Victoria stays within the carbon budget needed to meet the 1.5°C challenge by 2050—the legislated deadline for zero-net emissions in the state. We know that initial emissions reductions will be easier to achieve; we should reflect this in targets being set.

![Graph: Combet Report, page 53](image)

2: Are these the key issues influencing what the right targets are for Victoria? Are there other issues that should be considered?

Prioritise Frontline Communities:

The Labor government must prioritise communities on the frontline of climate impacts in its decision on emissions cuts.

Victorian communities are already seeing the impacts of the climate crisis. For example, citizen scientist and Bass Coast resident Aileen Vening has documented 40 metres of coastal erosion from rising sea levels and intensifying storm surges since 2012.

While communities such as Inverloch are among the first to see the impacts of the climate crisis in Victoria, they won’t be the last. Meeting with communities on the frontline of climate impacts would allow the government to make an informed decision about interim Emissions Reduction Targets.

\(^1\) [https://dgrnewsservice.org/civilization/ecocide/climate-change/climate-change-why-is-it-so-often-sooner-than-predicted](https://dgrnewsservice.org/civilization/ecocide/climate-change/climate-change-why-is-it-so-often-sooner-than-predicted)
Global Trend of Increased Ambition:

The Andrews government must also consider the global trend of increasing ambition.

The Combet Report acknowledges that “climate science clearly demonstrates that a 1.5°C world would be much safer, with significantly lower impacts than 2°C of warming.” While the independent panel notes cuts of at least 43 percent below 2005 levels by 2025 and 67 percent by 2030 would be needed to limit global warming to 1.5°C, it does not recommend the cuts needed to meet that challenge on the basis that other countries have not taken commensurate commitments and action. Is the government going to make decisions based on what other countries commit to or on what the science demands?

There is a strong case to be made for Victoria to set targets inline with a 1.5°C trajectory. Jurisdictions with a comparable population to Victoria, such as Finland, Denmark, and Norway have set targets of zero-net emissions by 2030 to 2035. Countries are expected to increase targets at the United Nation’s Climate Action Summit in September this year.

Youth Movement for Climate Action:

There is a growing movement of young people who support ambitious action on climate change in Australia.

Inspired by the award-winning Swedish activist Greta Thunberg, thousands of primary and secondary students across Victoria have joined the School Strike for Climate movement. An estimated 5,000 students participated in a mass demonstration in Melbourne on 30 November 2018 with a massive 20,000 taking to the streets on 15 March 2019.

Given that the climate crisis disproportionately affects young people and that students are below the voting age, Friends of the Earth encourage the Andrews government to engage with the School Strike for Climate movement to inform its decision on the state’s interim Emissions Reduction Targets.

Meeting Policy Commitments:

By adopting science-based targets the Andrews government can meet its commitment to the Climate Leadership Declaration2 to limit warming to 1.5°C. It will also help the Victorian Labor party to deliver its commitment to create 100,000 new climate and renewable energy jobs by 2030.

Community Members and Key Stakeholders:

We encourage the Andrews government to note the strong support for ambitious emissions cuts in submissions from community members, community groups, unions, businesses involved in renewable energy and clean-tech, and other forward-looking stakeholders.

3: Do you agree with the Panel’s indicative trajectories to 2050?

With climate impacts occurring much faster than scientists predicted3 it is essential to do the hard work now. Governments cannot afford to kick the can down the road.

The Combet Report stated that Victoria has an emissions budget of 1250Mt CO₂eq between 2017 and 2050 for a 50 percent chance of keeping warming below 1.5°C. Assuming Victoria uses (on average) 100Mt p.a. between 2017 and 2020, this gives just 950Mt left for the period 2020 out to 2050. The report states unequivocally that, on a straight-line basis, Victoria needs to reduce emissions by 67

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percent by 2030 to achieve this.

Figure 5.2 from the Combet Report\(^4\) with some Friends of the Earth additions: the purple plot of straight-line reductions necessary to keep within the 1.5°C limit (which exhausts our budget by 2037), and an orange curved plot which makes deeper cuts earlier to provide time to address the more difficult emissions reductions later and still remain within budget (by the legislated deadline). As documented in the report (Table 7.1), a heavy lift between now and 2025 will make it cheaper and easier for Victoria in the long term.

If we are to have any chance of limiting warming to a maximum of 1.5°C above pre-industrial levels then, by the panel’s own admission, a 45-60 percent reduction by 2030 just won’t get us there. A 45 percent reduction by 2030 would require zero emissions (more likely negative emissions) thereafter for 1.5°C. A 60 percent reduction would require a steeper curve and a reduction to zero by 2034. Since we are on track for an 18 percent reduction by 2020, this would mean a further 42 percent reduction over the next 10 years, then the final 40 percent over the four years after that. These scenarios raise questions about the fairness and equity of the task of cutting emissions.

Finally, the expert analysis found that ALL pathways with earlier emissions reduction (i.e. reaching 55 percent and 65 percent reductions below 2005 levels in 2030) resulted in lower aggregate economic costs in reaching net-zero emissions in 2050 than pathways with fewer emissions reduction to 2030 (i.e. reaching 28 percent below 2005 levels in 2030). In other words, the analysis found delaying emissions reduction imposed greater costs on the state. The report also suggested there were benefits to be had from reducing emissions beyond those specifically to do with climate change. Reducing emissions earlier allows these benefits to be accrued earlier as well.

4: Are there other key greenhouse gas emissions reduction opportunities beyond those the Panel identified?

Help Victorian homes go gas free:

The Victorian government has the opportunity to set new building standards so that all new developments are electric and not connected to gas, and therefore reduce the state’s dependence on gas. This would serve the benefit of assisting with the state’s transition away from gas, as well as avoiding the need of later retrofitting connected houses to electricity in order for the state to achieve zero emissions. Such policies have been successfully implemented in other countries in response to the climate crisis and the global need to reduce emissions.¹

Promote Regenerative Agriculture, Afforestation, and Reforestation:

The Victorian government can achieve rein in emissions and enhance resiliency to climate impacts by supporting regenerative agriculture practices as well as afforestation and reforestation on a major scale (including marine options such as regenerating mangroves and kelp forests).

Shipping and Aviation:

The Victorian government should explore options to reduce emissions associated with shipping and aviation.

5a: Across the Victorian economy, which activities do you think the Victorian government should prioritise in reducing Victoria’s greenhouse gas emissions?

Time is running out to rein in emissions. State governments will have to drive emissions reductions across the whole economy.

Friends of the Earth encourage the government to capture low-hanging fruit wherever it can be found. The best options for this include decarbonising the electricity sector, encouraging modal shifting from cars to public transport, and the protection of the state’s native forests (which are among the world’s most carbon dense).

5b: What policies or programs are needed to drive these emissions reductions?

Friends of the Earth outline a suite of policies to deliver emissions reductions in the report, Transforming Vic: Creating Jobs while Cutting Emissions.² The report calls for the state government to:

• Ensure good, secure union jobs are created in the transition away from oil, coal, gas and native forest logging;
• Ensure sustained investment in the Latrobe Valley, including support for economic diversification, renewable energy and storage, and high tech manufacturing;
• Ensure better energy efficiency standards for new homes and buildings and continued retrofitting of existing housing stock;
• Help householders and businesses shift from relying on gas to 100 percent renewable energy
• Shift funding away from mega road projects like the North East Link and into major public transport infrastructure like the Metro 2 tunnel;
• Greatly expand the public transport network;
• Continue to build trams, buses and trains locally;

² https://www.melbournefoe.org.au/transforming_victoria_creating_jobs_while_cutting_emissions
• Electrify the bus network – electric buses make good economic sense even now;
• Support a rapid transition away from coal and gas to 100 percent renewable energy (e.g.: ratchet up the Victorian Renewable Energy Target);
• Support public ownership of energy production and the electricity grid;
• Support a not for profit, community owned electricity retailer;
• Support ‘game changing’ renewable energy projects like the Star of the South offshore wind farm proposed for South Gippsland;
• Rule out further development of fossil fuel reserves; and,
• Protect native forests and redeploying affected workers.

Friends of the Earth urge the Andrews government to prioritize:

• The establishment of a Victorian Just Transition Authority and dedicated Minister for Transition to support efforts to cut emissions. This new position within government will ensure that no Victorians are left behind as our state moves from polluting and extractive industries towards a clean economy.
• The adoption of a ‘Climate Budget’ framework to bring greater transparency to the budget process and ensure the government invests in initiatives that cut emissions, not increase them. The government cannot afford to fly blind when it comes to the climate impact of public spending.

6: Are there any emissions reduction opportunities identified by the Panel that you would not support Victorian government action on? Why not?

Carbon Capture and Storage/Waste Carbon Injection:

The state government can guarantee emissions cuts by ruling out experimental and unproven carbon capture and storage/waste carbon injection technologies. As noted on page 24 of the Combet report, “the IPCC special report notes that carbon dioxide removal technologies deployed at scale are unproven, and that relying on these to achieve 1.5°C is a major risk.” The reliance on these technologies poses two primary threats to the achievement of emissions reduction.

Firstly, as evidenced by the failure of these technologies becoming commercially viable in Australia despite heavy investment, there is a strong likelihood that they simply will not work. Because of this, emissions reductions factored in that are reliant on storage technologies will likely not occur, exposing the state to the risk of not achieving its legislated targets. See the Australia Institute report ‘Money for Nothing’ for a breakdown of the high investment from the Australian government that has failed to result in any large scale, viable projects.7

Secondly, the endorsement of waste carbon injection and storage technologies can drive up emissions, with the continued risk of projects being developed that are reliant on these technologies to be carbon neutral but then the technology proving unviable once the project is running, exposing the state to previously unaccounted emissions. This is demonstrated by the Gorgon Gas Plant in Western Australia, which was built on the agreement that it would sequester emissions but has failed to do so. The Gorgon Gas Plant has produced emissions for three years that were calculated as being stored prior to the project. The Australia Institute found that the Gorgon Gas Plants excessive emissions were a major driver of Australia’s emissions increase in 2018 and responsible for as much as half of this increase.8

7 http://www.tai.org.au/content/money-nothing
8 https://www.theguardian.com/environment/2018/nov/14/half-of-australias-emissions-increase-linked-to-was-gorgon-lng-plant
Relying on the myth that gas can be a ‘transition’ or ‘bridge’ fuel:

The state government can show leadership by ruling out new gas development.

In order to achieve the necessary emissions cuts to mitigate catastrophic climate change, which poses a significant threat to all Victorian communities, the state needs to commit to no new fossil fuel projects. When there are a range of alternatives to gas, endorsing further development and use of this fossil fuel does not help ‘bridge’ to a zero emissions, but instead locks in emissions with new fossil fuel infrastructure.9

Offsetting:

Friends of the Earth encourage the government to rule out ‘offsets’. There are known human rights abuses and negative environmental impacts associated with some international offsetting schemes. Offsets prevent Victoria from capturing the full economic and employment benefits associated with cutting emissions.

Automated Public Transport:

Victoria’s bus, train, and tram networks provide good jobs. Expanding the public transport network and increasing services is an excellent opportunity to create employment as Victoria moves towards a zero-carbon economy. Friends of the Earth recommend the government rule out the use of automated (driverless) public transport vehicles when decarbonising the transport sector.

7. Key benefits of reducing greenhouse gas emissions

The benefits of ambitious Emissions Reduction Targets are manifold. It will require, among other things, accelerating the rollout of renewable energy and efficiency technology (and practices) that will create jobs, put downward pressure on power prices, and give Victorian entrepreneurs a foothold in new industries.

For example, modelling by E&Y estimates the Victorian Renewable Energy Target will create 10,000 jobs while cutting emissions in the electricity sector by 16 percent. The scheme is expected to save households $30 on their power bill each year. Small-medium businesses will save $2,500 a year and big business will save up to $140,000.10

Decarbonising the electricity sector will create jobs in engineering, construction, warehousing, logistics, training, operation and maintenance. Major beneficiaries include:

- Keppel Prince in Portland where wind turbine tower manufacturing occurs;
- Vestas in Geelong where the assembly of wind turbine hubs will soon commence;
- Vestas’ wind turbine technician training facility and warehouse in Lyndhurst;
- Senvion’s wind turbine technician team based in Portland;
- Transformer manufacturers Wilsons in Glen Waverley and Schneider in Benalla;
- Electrical cable manufacturing by Nexans in Tottenham and Lilydale;
- IXL Solar in Geelong which is fabricating frames for solar farms;
- Federation University in Ballarat’s wind turbine technician training course; and,
- Solar installers across the state.

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9 http://priceofoil.org/2019/05/30/gas-is-not-a-bridge-fuel/
Decarbonising the transport sector also create jobs in engineering, manufacturing, training, operation and maintenance. Major beneficiaries include:

- Newport Railway Workshops;
- Downer;
- Alstrom;
- Bombardier;
- SEA Electric’s electric vehicle production in Dandenong and Morwell;
- Electric vehicle training at TAFE Gippsland’s Morwell Campus;
- Charge Fox, Australia’s largest EV charging network provider, based in Melbourne; and,
- Tesla based in Cremorne.

Protecting forests to preserve their vast carbon stores create new opportunities for the tourism sector, open space for Melbourne (a city with a booming population), as well as provides ecosystems and the species that depend on them a chance to adapt to the changing climate.

8: Of all the benefits of reducing emissions, which are the most important and why?

Victoria can contribute towards the goal of keeping global warming to less than 1.5°C. If these efforts are successful then Victorian communities and the natural world will be spared from dangerous climate impacts whilst building a more resilient, connected community.

9: From your experience, are there any barriers to reducing Victoria’s greenhouse gas emissions that the Independent Expert Panel didn’t identify?

There are few technical barriers to Victoria achieving deep emissions cuts. The effectiveness of renewable energy, energy efficiency, business models, public transport, forest protection, and smart urban planning for cutting emissions is well documented.

The main barriers to reduction emissions are political. Blockages from vested interests who benefit from polluting activities stand in the way of the ambitious actions needed to tackle climate change.

Friends of the Earth have written to Prime Minister Scott Morrison and Minister for Emissions Reduction Angus Taylor urging them to support Victoria’s efforts to reduce emissions. We have also hand delivered letters to the biggest polluters in the state and industry associations representing polluting and extractive industries. Copies of these letters are attached.

10: Of all the barriers, which are the most important to address and why?

There are three key barriers to achieving bold and ambitious emissions reductions in Victoria:

1. Communities where the economy is dependent on fossil fuels and extractive industries.
2. Low ‘buy in’ from the public and key stakeholders.
11: How can the key barriers you identified in Question 10 be overcome?

**Scaling Up Transition Support:**

Scaling up the Latrobe Valley Authority into a statewide Just Transition Authority and the establishment of a dedicated Minister for Transition can ensure communities have the support they need to prosper as Victoria moves towards a zero-carbon economy.

**Public Education and Leadership from the Government:**

Leadership from the Victorian Premier and Cabinet Ministers can emphasise the importance of climate action for the general public and key stakeholders. In the 2000s, Premier Steve Bracks and the Labor government demonstrated leadership and built consensus for tackling excessive water use during the Millennium drought. Victorians rose to the challenge and achieved dramatic water savings. The Andrews Labor government can draw inspiration from the Bracks government and embark on a public education campaign that elevates climate action as a priority issue.

**Making Climate Action a Budget Priority:**

Each year the government demonstrates its values and priorities in the budget. A state budget with a strong focus on investing in climate action will help build consensus among key stakeholders towards meeting Emission Reduction Targets; achieving the objectives of the *Climate Change Act 2017*; and implementing the state’s forthcoming Climate Strategy and Climate Adaptation Plans.

12: In addition to those identified by the Independent Expert Panel (see Chapter 7 of the Panel’s report), are there other impacts of reducing greenhouse gas emissions?

It is essential for the government to keep young Victorians and future generations front of mind when making a decision on interim Emissions Reduction Targets. Climate impacts are already affecting communities around the state (such as Inverloch). These impacts will get worse without deep emissions cuts. Leadership from the government today and over the next decade will minimise and hopefully ameliorate the impacts for those on the frontline of climate change.

13: Of all the impacts, which are the most important to address and why?

Friends of the Earth are committed to climate justice. The onus for cutting emissions should be on those most responsible for producing them. It would be unjust to place burden for cutting emissions onto those who have contributed least to the problem and future generations.

14: How can these impacts be addressed?

Friends of the Earth encourage the government to consider the intergenerational equity of its Emissions Reduction Targets. It can adopt an analytical framework to assess the intergenerational equity of emissions reduction options.

We believe the government can show a commitment to climate justice by:

- Adopting science-based targets that keep global warming below 1.5°C.
- Providing material support for communities in transition (please refer to response to question 10).
• Adopting a ‘Climate Budget’ that invests in initiatives to cut emissions and protect communities from climate impacts, in addition to bringing transparency to budget allocations (i.e: government expenditure towards mitigation, adaptation, and emergency response). (Please refer to our response to question 10).

• Ensuring the onus for emissions cuts is placed on those most responsible for the problem.

15: Do you have other comments about action on climate change in Victoria?

Urgent Action on Climate is Needed:

Australia has wasted decades and failed to take steps to decarbonise the economy. As a result, time is now of the essence. Governments cannot afford to waste any more time and must make climate action a priority issue. All portfolios need to have climate change front of mind when making decisions.

Setting Clear and Specific Targets:

Questions remain about the preference of the community and other stakeholders on whether targets are expressed as a clear percentage figure (i.e: 43 percent below 2005 levels by 2025) or a range (between 43 percent and 57 percent below 2005 levels by 2025). Friends of the Earth will be asking our supporters about their preference in 2019.

Review of 2030 Targets:

Friends of the Earth would only support the panel’s recommendation of a 2023 review of the 2030 interim target with a commitment from government and opposition of no “back-sliding.” In other words, any review of the 2030 target must only consider increases to the level of ambition and a narrowing of the target range.

CONCLUSION

Friends of the Earth commend the submissions of Environmental Justice Australia, Environment Victoria, and thousands of community members who are concerned about climate impacts and want to see Victoria act as a role model for cutting emissions. We also commend the Victorian Trades Hall Council’s submission as well as those of other unions that underscore the need for governments to support workers as Victoria transitions to a zero-carbon economy.

Friends of the Earth Melbourne look forward to seeing the government’s response.

Kind regards,

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