

# Climate change targets 2021-2030

## Emissions Reduction Targets and Trajectories

The Panel is required to recommend one or more interim emissions reduction targets for 2021-2025 and for 2026-2030, and to provide advice on emissions trajectories for Victoria to achieve net zero emissions by 2050. Section 7 of the issues paper provides more information on targets and trajectories.

1a. Should Victoria's interim emissions reduction targets relate to a national target?

Yes

1b. If yes, what is the most relevant reference point?

Australia's current national emissions reduction target of 26-28% below 2005 levels by 2030?

The Climate Change Authority's recommendation of 45-65% below 2005 levels by 2030?

Other (please specify)

Australia's current national emissions reduction target of 26-28% below 2005 levels by 2030 and the Climate Change Authority's recommendation of 45-65% below 2005 levels by 2030 are both too weak to address the threat we face. Victoria's interim emissions reduction targets should relate to the 'role model' emissions reduction targets calculated by Carbon Action Tracker. These are more stringent emission reduction targets than the ones recommended by Carbon Action Tracker as consistent with the Paris Agreement's 1.5°C temperature goal. These 'role model' targets should also be adopted as national targets.

The planet is already too hot and 1.5°C of warming is not safe\*. There is no carbon budget remaining for the +1.5°C temperature limit and all IPCC scenarios assume 'overshoot' followed by drawdown of the excess greenhouse gases in the atmosphere. It is vital that we minimise overshoot by adopting the most stringent emission scenarios possible as the basis for policy making.

This emissions reduction trajectory requires Victoria and Australia to adopt an emergency transition programme to zero emissions plus a rapid scaling up of drawdown and sequestration measures.

\* See attached document for references and further details on this and subsequent questions.

1c. If yes, how should Victorian interim targets relate to this national reference point?

Direct application of the national figure to Victoria's 2005 emissions.

Recalculated to take into account differences between Victoria and Australia as a whole.

Other (please specify).

Victoria's effort's should not relate to the current national emissions reduction targets because they are manifestly inadequate. Both national and Victorian targets should relate directly to the 'role model' emissions reduction targets calculated by Carbon Action Tracker, aiming for an emergency speed transition to zero emissions plus a rapid scaling up of drawdown and sequestration measures.

No state-to-state variations are proposed as all states must move at the fastest possible speed .

The Victorian government must adopt the very strongest emissions reductions targets - and interim emissions reduction targets - as a sensible approach to risk management, given the serious danger posed to billions of people and indeed to human civilisation.

2. What would you recommend Victoria's emissions reduction targets be for 2021-25 and 2026-30 , and why?

Climate Action Tracker (CAT) <http://climateactiontracker.org/countries/australia/> calculates Australia's 'Paris compatible' 1.5°C temperature limit targets as:

- 46-67% reduction on 2005 emissions by 2025
- 51-85% reduction on 2005 by 2030

However, IPCC models understate the risks, so we recommend an emergency transition to zero emissions which would be close to CAT's 'role model' emissions reduction targets:

- 46-100+% on 2005 by 2025
- 85-100+% on 2005 by 2030

**Given that these ranges are large, for practical purposes they could be simplified to 50% by 2025 and 100% by 2030.**

**We should also establish Victorian carbon drawdown budgets and targets, aiming to move to negative net emissions around 2030.**

There is no remaining emissions budget for the +1.5°C temperature limit and, at just over +1.0°C of warming, it is clear that the earth is already too hot. We must draw down and sequester the excess greenhouse gases currently in the atmosphere, *plus* any that we emit from now on.

3a. Do you think a Victorian emissions budget should be used as a tool in the Panel's analysis?

Yes.

3b. If yes, what global temperature outcome should a Victorian emissions budget be consistent with?

e.g. 2°C above pre-industrial levels

We should honour our Paris commitment to limit warming to 1.5°C. However, we must also do our share to restore a safe climate by setting a Victorian drawdown target to assist in eventually cooling the earth back to pre-industrial temperatures.

3c. If yes, how should Victoria's share of a global or Australian emissions budget be calculated?

e.g. based on population, emissions, GDP, other

There is no emissions budget to allocate. All countries and states must achieve negative emissions at emergency speed. Victoria, as part of a wealthy country with a capacity for innovation, should be leading the emergency transition to negative emissions

4. What do you see as the relative advantages and disadvantages of early versus late action to reduce Victoria's emissions to reach net zero by 2050?

Late action may result in the passing of additional significant tipping points. The large ice sheets are melting well ahead of predictions, contributing to multi-metre sea-level rise, and permafrost and tropical forests are beginning to contribute to carbon feedback loops. The Gulf Stream (AMOC) has weakened by 15% since 1950. Conflicts and mass migrations are increasing, exacerbated by warming-related food and water shortages. Early action can delay and possibly avert the most serious impacts.

5. What lessons can be learned from other state and local governments about how to set emissions reduction targets?

Darebin Council has committed to zero emissions at emergency speed plus drawdown, written a climate emergency plan and made consideration of the emergency a priority across all policy areas. Similar action is planned in several US cities and the county of Montgomery.

<https://theclimatemobilization.org/cities>

The key lessons from these initiatives are:

- clearly communicate that we face an emergency
- take action
- pressure other levels of government to act

ACT has a target of 100% renewable electricity by 2020.

## Emissions Reduction Opportunities

There are many potential ways that Victoria's emissions could be reduced. These include the use of renewable energy (for example solar and wind energy), carbon capture and storage, switching to low carbon or electric vehicles, increasing use of public transport, and improving the energy efficiency of our buildings, businesses and industry. Section 8 of the issues paper provides more information on emissions reduction opportunities.

6. What are the most significant opportunities and technologies for reducing emissions in Victoria during the period 2021-2030, and to reach net zero emissions by 2050?

There are many ways of reducing emissions - see the 'Drawdown' project, 'The Climate Mobilization: Victory Plan' by Ezra Silk and the work of Beyond Zero Emissions.

These include:

- transition to 100 percent renewable energy by 2030, preferably community-owned
- ban on all new or expanded fossil fuel projects
- mandatory closures of coal and gas facilities
- regulation to increase energy efficiency
- banning dangerous refrigerants
- preserving and regenerating native vegetation
- reducing meat consumption
- regenerative farming and agroforestry
- investing in public transport and active transport
- tightening building regulations to require new buildings and renovations to be zero net emissions
- providing assistance to retrofit existing buildings for greater energy efficiency
- mandatory energy efficiency standards for rental properties
- re-localising food production and reducing waste
- 'cradle to cradle' manufacturing, and increasing recycling

7. What are the key barriers to reducing Victoria's emissions by 2025 and 2030?

These can be related to the opportunities and technologies identified in question 6, or others.

The key barriers to implementing an emergency-speed transition include scientific reticence and the reluctance of community leaders to spell out clearly the seriousness of the risks we face. Talking about two degrees as a 'guardrail', or about dividing up a remaining carbon budget 'we can safely burn,' produces the illusion that the problem is in the future and that gradual changes will be sufficient. The risk that billions of people die and that human civilisation collapses are not spelt out, nor the speed and scale of changes required.

Other major issues are the excessive and corrupting influence of the fossil fuel lobby on our political system, and the revolving door between industry and government. We need a ban on large political donations, tighter restrictions on how fast members of parliament can move into lobbying or industry positions and a strengthening of the state anti-corruption body.

8. What further steps can the Victorian Government take to support emissions reduction opportunities and the uptake of low carbon technologies?

The Victorian Government can display leadership and educate the public about the climate emergency. It can set in place a comprehensive regulatory framework.

Farmers need support to move to regenerative agriculture. These practices address our soil depletion problems (UN "60 harvests left") and increase soil carbon and water in the soil. According to some

estimates the carbon that can be sequestered in this way may be sufficient to make a considerable contribution to the task of drawdown.

9. What lessons can be learned about reducing emissions in Victoria from actions taken in other states and countries to reduce emissions?

Actions in other countries show we can raise our ambition:

- New Zealand has banned offshore oil and gas exploration.
- In Ireland a Climate Emergency bill banning new fossil fuel exploration has passed the lower house.
- Scotland, with a similar population to Victoria, will cut emissions 66% below 1990 levels by 2032 (and has a target of 100% renewable electricity by 2032).
- The United Kingdom has set a legally binding target to cut emissions 57% below 1990 levels by 2032.

10. What additional infrastructure will be required to support low carbon transformation within each sector? e.g. electricity generation, transport, the built environment, industry, agriculture, other land-based activities

Investment in the electricity grid, and in public transport and active transport infrastructure, is required. Also infrastructure to support rapid transition to electric transport fuelled by renewable energy.

11. What steps could the Victorian Government take to accelerate turnover of capital assets with significant emissions to deliver emissions reductions?  
e.g. old road vehicles, industrial equipment

The Victorian Government could legislate for the mandatory closure of coal and gas generators, and high emissions industries and a just transition for affected communities and workers.

12. What are the price and non-price factors influencing business and industry decisions to switch to less emissions-intensive fuels?

-

13a. Should international and/or interstate carbon offsets be used to meet Victoria's interim targets?

Carbon offsets (also known as carbon credits) are generated from projects that prevent or reduce greenhouse gas emissions, or remove them from the atmosphere.

No

Other (please specify)

13b. Why?

There are known human rights abuses and negative environmental impacts associated with some international offsetting schemes. In any case all states and countries must reach negative emissions - we cannot pass on our share of this urgent task to others.

## Impacts and Benefits

Reducing emissions may have a range of benefits and costs for different sectors of the economy, regions and communities. The potential effects of reducing emissions to meet interim targets are discussed in Section 9 of issues paper.

14. What potential impacts and benefits of interim emissions reduction targets should the Panel consider?

Any costs associated with the implementation of a society-wide climate emergency mobilisation must be weighed against the incalculable costs of inaction. Scientists have said that we risk the collapse of human civilisation and that at around 4 to 6 degrees C of warming only half to one billion people would survive. We are in the midst of the sixth mass extinction. It is difficult to be sure exactly what temperature increases will trigger irreversible tipping points, and these are not risks we can afford to take.

<https://insideclimatenews.org/news/20090715/james-hansen-climate-tipping-points-and-political-leadership>

15. What specific regional or local issues should the Panel consider

Governments must ensure a just transition for people in fossil-fuel dependent communities. A just transition is essential to ensure that no workers are left on the scrapheap and that all communities support the sustainable energy transition. Strong, detailed, well-funded plans are essential - this cannot be left to the market. Trade unions must be involved from the start. There needs to be frank, ongoing and constructive consultation with the communities. Governments negotiating exit plans for fossil fuel industries need to ensure that substantial funds are available for the just transition plan.

Affected workers need to be offered retraining opportunities and new jobs in sustainable industries in their own communities. It is essential that new jobs provide decent work, are well paid and secure, and unionised.

Where possible, new jobs should be based on renewable energy, energy efficiency and storage, to help build support for the transition (eg. pumped hydro in Latrobe Valley).

## Other

This is an optional section to be used if you wish to provide additional comments on issues not covered by the questions above. You can also submit resources for the Panel's consideration or a separate written submission.

**16. Please provide any additional comments below.**

These responses and the attached submission were written by Darebin Climate Action Now and are supported by:

Baby Boomers for Climate Action  
Climate Action Moreland  
Council Action in the Climate Emergency  
Dandenong Ranges Renewable Energy Association  
Eastern Action for the Environment  
Frack Free Geelong  
Geelong Sustainability  
Higgins ACF Climate Action Group  
Psychology for a Safe Climate  
The Sustainable Hour – 94.7 The Pulse  
Wodonga Albury Toward Climate Health  
Yarra Climate Action Now

**17. Please provide any other information or evidence you believe the Panel should consider in preparing its advice on interim emissions reduction targets. This could include reports, data sets, journal articles etc. Topics include, but are not limited to: emissions reduction opportunities; impacts and benefits of reducing emissions; actions of other states and countries; technology costs.**

[Uploaded 'What lies beneath' together with our issues paper - see separate document.]