

Lighter Footprints

Effective local climate action

Influencing decision makers and community

Reducing Victoria's emissions

Background

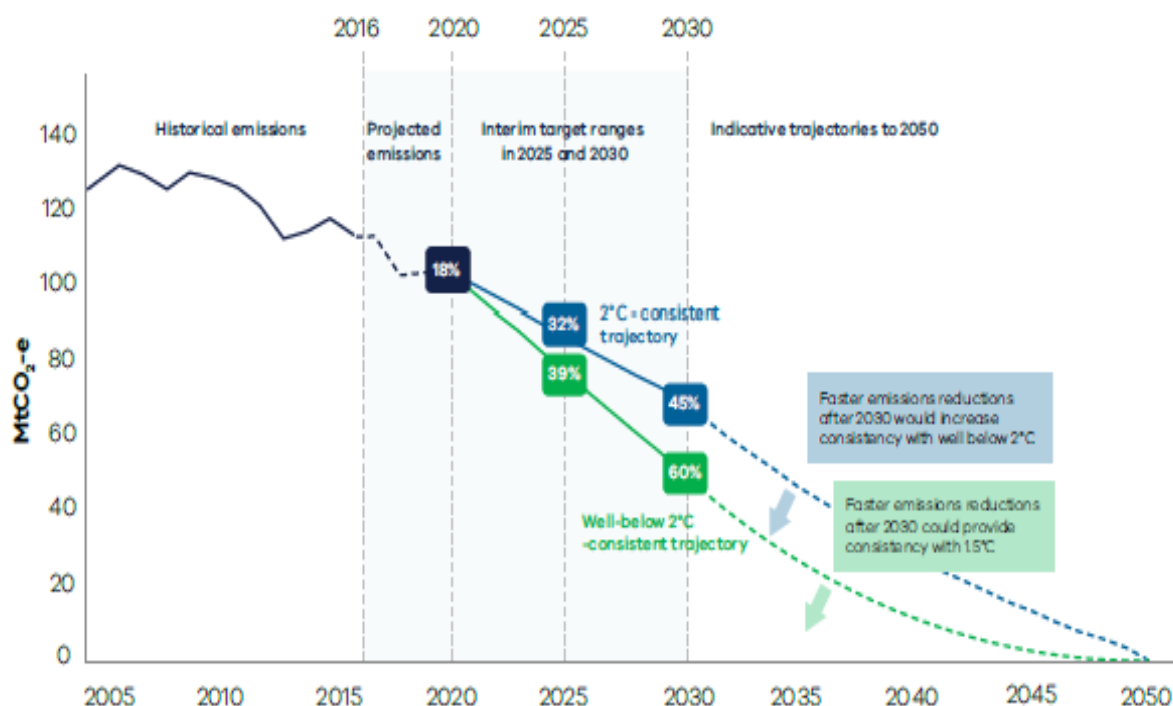
14 June 2020

The Victorian Government has previously committed to achieving net zero emissions by 2050. All States and Territory governments have now committed to net zero emission by 2050, a non-radical goal agreed as part of the Paris agreement in 2016.

The 2016 Paris Agreement involved all countries agreeing to targets that would keep global warming to well below 2 degrees and pursue efforts to limit the temperature increase to 1.5 degrees if possible. Under Victoria's Climate Change Act 2017, the government is required to set interim emission reduction targets for 2025 and 2030 by 31 March 2020. The government established an Independent Expert Panel chaired by the Hon Greg Combet to advise the Victorian Government on the interim emission reduction targets.

The Combet report¹ recommended that emissions reduction targets for 2030 be between 45% and 60% from 2005 level emissions. The 45% reduction target was broadly consistent with two degrees of warming and the 60% reduction target broadly consistent with 1.5 degrees. (refer to figure ES1 below which is an extract from the Combet report).

Figure ES1: Indicative trajectories to net zero by 2050, consistent with the recommended interim target ranges



¹ Final Report: Independent Expert Panel on Interim Emissions Reduction Targets for Victoria (2021-2030), March 2019

We must take all efforts to pursue 1.5 degrees

Victoria has just experienced over the 2019-20 summer what a 1-degree Celsius hotter climate can mean. The costs of not taking action on climate change has proven to be extremely high and certainly higher than that modeled by the consultants assisting the Combet Review. The Community expects the government to make genuine, evidence-based efforts to keep them safe and this means aiming to keep within 1.5-degree Celsius increase. Therefore the Government needs to commit to a 60% reduction in greenhouse emissions – anything less will mean we are not doing our share to deal with this issue.

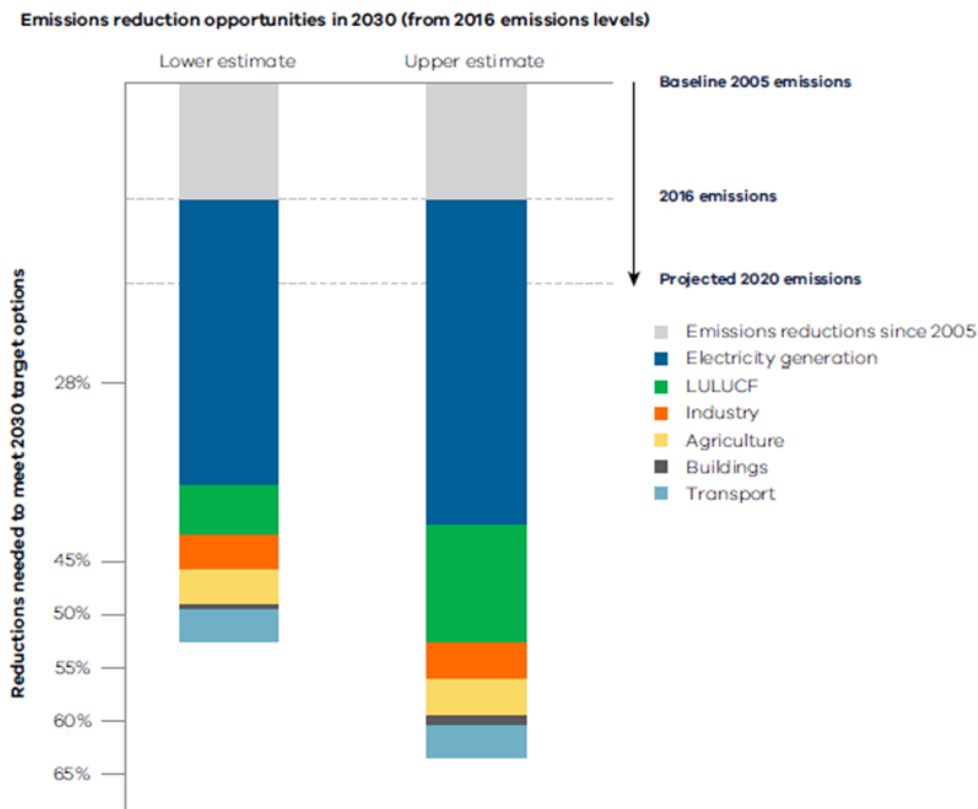
Policy actions to meet the target

To meet a 60% emissions reduction target – Victoria’s emissions need to reduce from 128 Mt/yr in 2005 to 51 Mt/yr in 2030. Victoria’s emissions have fallen since 2005 with the closure of the aging Hazelwood brown coal-fired power station to reach just over 100 million tonnes in 2018/19. The abatement task from 2020 to 2030 is therefore to get emissions down to around 50 million tonnes per annum.

An average reduction of 5 Mt/yr each year for the next 10 years is required.

The Combet report undertook an assessment of where the opportunities were to reduce emissions (refer to chart below). The majority of the abatement is expected to come from replacing coal-fired generation, with land use the next most important source of reductions.

Figure 6.7 Illustrative estimates of emissions reduction opportunities across the Victorian economy to 2030



Source: Combet report

The Victorian Government currently has the following Policy commitments:

- 50% renewable energy target by 2030, with the Victorian Government contracting with new large-scale generators
- Solar homes program to achieve 650,000 solar power systems over 10 years
- Victorian Energy Upgrades Program to support residential and business customers reducing their energy use (Targets are proposed to be set to 2025 only)

Specific policies required:

The Combet report identified the greatest opportunities for emission reductions are 1) Electricity Generation and 2) Land Use Sectors. We believe that the Government should focus policies in these two areas as a priority. Transport is the 3rd sector Lighter Footprints have highlighted, as the economics of this sector will be at tipping point by 2023 to 2025. Lighter Footprints proposes the following, consistent with 1.5 deg Celsius trajectory:

1. Reduce emissions from Electricity generation through:

Electricity generation reform remains the No. 1 priority to reduce overall emissions by 60 % by 2030.

1. **Increase** Victorian Renewables Target, VRET [*current Policy commitment 50% by 2030*], to **79% renewables** by 2030. This is consistent with **ClimateWorks'** national target of 73-79% renewables by 2030 and less than South Australia's legislated Renewable Energy Target of 75% by 2025 and stated ambition of 100% renewables by 2030. This will require additional 'firming' and/or more 'storage' (as per Finkel recommendation) and a plan for the orderly closure of existing coal-generation.
2. More ambitious expansion of **Victorian Energy Savings Scheme** and extended to 2030.
3. Deal with increasing peak electricity demand through (i) expanded transmission interconnection and (ii) Peak demand reduction scheme (similar to NSW announcement) to support rollout of batteries and smart appliances (Demand response -enabled appliances such as air conditioning).
4. Work through **CoAG** to ensure that the post 2025 review of the National Electricity Code includes changes to objectives to ensure environmental sustainability and end use customer participation.

2. Develop a Land use strategy which involves the following initiatives

As identified by the Combet Report, land use, land use change and forestry (LULUCF) acted as a net sink in the 16 years to 2016, absorbing approximately 80 Mt CO₂-e more than it released (Combet Report p. 61). To implement greater emissions reductions the following policy initiatives are proposed:

1. **Livestock management policies** - Providing investment funding in research, development and innovation for new methane inhibitors for livestock will help address agriculture's largest source of emissions. Improving animal management aimed at a transition to low-emissions animals, novel feed additives and manure management should be encouraged (Combet Report p. 63).

2. **A carbon market mechanism** - Explore a range of incentives to increase Victorian participation in an offset scheme such as those under the Federal Carbon Farming Initiative (CFI). Offsetting emissions through ACCU's (Australian Carbon Credit Units) will help drive adoption of management changes in agriculture and forestry.² To encourage the uptake of carbon sequestration through land use changes, this system supports an effective and efficient market for carbon offsets.
3. **Emission reductions through agricultural soils** - Broad acre farmers can sequester carbon in soil and earn revenue through the creation of ACCUs but further modeling of how soil carbon accumulates and dissipates from soil is needed to help overcome the time and expense associated with soil sampling
4. **Testing and audits** - as required under the current CFI program of the Australian Government. These refinements are necessary to expand the CFI program beyond the corporate-run pastoral stations and indigenous landowners of northern Australia, many of whom participate at present.
5. **Driving reductions from Victorian Government operations** - All Victorian Government operations, e.g. schools and hospitals, should commit to carbon neutrality by surrendering offsets created through ACCUs. This helps create demand for ACCUs and encourages further update of CFI projects within Victoria.
6. **Capacity building** - Undertake capacity building, outreach and education programs for land sector stakeholders to participate in carbon markets. This is essential for all policy initiatives above, i.e. Land Strategies 2.1 to 2.4.

3. **Transport strategy: to include the following initiatives:**

1. Adopt state and local government Fleet Policy for 100% electric vehicles (similar to Australian Capital Territory Govt). *Lower operational/maintenance costs and leadership by example.*
2. Examine the 'trackless trams' option,³ in terms of economics, in comparison with bus, light-rail and train options in new areas where only buses currently operate. Shift the whole bus fleet to electric (as has been done in Canberra, ACT).
3. Incentivize electrification of short-haul bus fleets under government contracts. Facilitate and favour local manufacture. Likewise, incentivize electrification of taxi fleet via CPVV standards and licensing.
4. Exemption of electric vehicles from congestion (CBD) levies and inclusion in T2/T3 transit lanes. *Encourage faster EV adoption in areas where EVs most beneficial.*
5. Regulatory provision for, and accelerated introduction, of EV vehicle-to-home and vehicle-to-grid supply capabilities. *Engagement with electricity operators, charger and EV manufacturers.*
6. Support and leadership for communities, businesses and councils to install local rapid chargers – public, private carparks and on-street parking. *State and local government managed car parks and street-based charge infrastructure.*

² Garnaut, R. (2019). *Superpower: Australia's Low-Carbon Opportunity*. La Trobe University Press

³ Newman, P. (2019). The Trackless Tram: Is It the Transit and City Shaping Catalyst We Have Been Waiting For? *Journal of Transportation Technologies*, Vol 9, p.31-55.
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