Victorian Government Response June 2023

Environment and Planning Committee's Inquiry into Renewable Energy in Victoria





Tabled in the Legislative Council pursuant to Standing Order 23.23.

Image

Bulgana Green Power Hub

Acknowledgement of Country

Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Jupagulk Country

Photo credit

Department of Energy, Environment and Climate Action

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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Minister's Foreword



Victoria is leading the nation in combating climate change and driving the development of renewable energy. This is creating tens of thousands of jobs and putting downward pressure on power prices.

Renewable energy is essential to meeting Victoria's emissions reduction targets of 50 per cent by 2030, 75-80 percent by 2035 and net zero by 2045. We have set out our plan to transition to renewable energy with targets of 65 per cent by 2030 and 95 per cent by 2035.

With action at every level – households, business, neighbourhoods, and government - we can transition our energy sector to net-zero emissions.

The opportunities of this transition will be maximised by bringing back the State Electricity Commission (SEC) which will drive down power bills and create thousands of jobs. Through government ownership of energy generation, 4.5 gigawatts of renewable energy and storage will be made available to the grid at a time when coal generators are being progressively retired. This will also help create 59,000 jobs, including 6,000 apprenticeships, across the state.

This Inquiry and the Government's response highlights the activity already underway to continue the rapid deployment of renewable energy, support the take up of zero emissions vehicles, and enable the transition of our gas sector and buildings to renewable alternatives. We are doing this while maximising the employment and regional development opportunities, giving energy users greater control over their energy and placing downward pressure on prices.

I am heartened by the dedication that Victorian communities have shown to transitioning to renewable energy through their submissions to the Parliamentary Inquiry. Support has come in from across the board, everywhere from urban areas to communities in rural and regional Victoria.

The Victorian Government welcomes this report, and thanks the Legislative Council's Environment and Planning Committee from the 59th term of Victorian Parliament, its Chair Sonja Terpstra, Deputy Chair Clifford Hayes, and members Matthew Bach, Melina Bath, Dr Catherine Cumming, Stuart Grimley, Andy Meddick, Cesar Melhem, Dr Samantha Ratnam, Nina Taylor and Sheena Watt for their extensive engagement and enthusiastic work.

The Government also thanks the Victorian community for its resolve and passion, which is reflected in the 90 submissions from peak bodies, distribution businesses, local councils, youth groups, lobby groups, trade unions, government departments, other businesses, and members of the public.

The Committee's findings and recommendations reinforce the point that transitioning to renewable energy and addressing climate change is a collective endeavour. Our support for the recommendations in this report demonstrates that we are committed to working with all Victorians to tackle climate change together.

Introduction

The Inquiry into Renewable Energy in Victoria shows the depth of ambition – and action – across the state to take meaningful action on transitioning our energy system and economy to renewables and tackling climate change.

The Victorian Government recognises that transitioning to renewables requires sustained collective effort. Individuals, households, businesses, industries and communities must work together so that we can achieve this transition which is vital to meet our target of net-zero emissions by 2045, as well as our renewable energy targets of 65 per cent by 2030 and 95 per cent by 2035.

Victoria is working actively with communities and consumers to understand impacts of renewable energy and ensure their benefits are maximised, including to support Self-Determination of Traditional Owners. The Government's responses to the Inquiry's 32 recommendations reflects that need for united action. To achieve this, the Government has invested \$1.6 billion in clean energy – the largest investment of any State Government, ever. Substantial additional funding was announced by the Government in recent months, including to bring back the State Electricity Commission, which will help deliver large-scale renewable energy projects, support training and jobs in renewable energy, and to drive down bills.

Measures to transition to 100% renewable energy

Recommendation 1

If it has not already done so, the Victorian Government should conduct a strategic land use assessment in Victoria's renewable energy zones to identify suitable sites for generators and transmission infrastructure. Such a land use assessment should take into account agricultural and other land uses, the views of communities as well as the possible environmental and cultural impacts of proposed infrastructure.

Response: Support in principle

In June 2023 the Victorian Government released the final design of the Victorian Transmission Investment Framework (VTIF). This followed the release of a draft design in July 2022, which was subject to public consultation. Feedback from that consultation was incorporated into the final design.

The VTIF proposes an integrated approach that incorporates strategic land use planning to guide the siting of transmission and generation infrastructure in renewable energy zones (REZs). This planning will be based on land use, environmental, economic and community / social considerations, with end-to-end community engagement and regional development priorities incorporated into the process for developing Victoria's future electricity system. The strategic land use assessment process seeks to ensure that electricity system planning takes into consideration alternative and strategic, high-value land uses, such as strategic agricultural land, key mineral resources, tourism locations and biodiversity, landscape and cultural heritage values.

The first tranche of legislation to enact the VTIF is expected to be introduced into the Victorian Parliament in early 2024.

Recommendation 2

That the Victorian Government consider the introduction of a Community Energy Target that includes subsidies for the growth of localised community energy projects.

Response: Support in principle

The Victorian Government supports a wide range of energy projects that deliver community or neighbourhood-level energy generation and storage. The Community Power Hub (CPH) pilot program delivered 15 community renewable energy projects across three hubs located in Ballarat, Bendigo and the Latrobe Valley from 2017-2020. The hubs installed 1.35 MW of renewable energy capacity into their communities, reduced annual carbon emissions by 1,839 tonnes, and saved the community sites \$364,000 in annual electricity costs and

generated \$14.5 million in value for the communities involved. The CPH pilot program also built community resilience and connectedness by engaging with 200 businesses and organisations and facilitating 114 public events and meetings. The Government extended the program until 30 June 2022, with \$5.94 million in funding to expand the CPH program to one metropolitan community and up to five communities in regional Victoria.

The Victorian Government is committed to supporting community energy projects. In addition to supporting a renewable energy economy and promoting decarbonisation, community energy projects empower local communities, drive local procurement, job creation and training, and deliver local community and economic benefits. For example, the Victorian Government is supporting the \$1.1 million Renewable Newstead project, which began construction in October 2022 and offers a strong example for roll out of community energy projects. Funding has also been committed, by the returning Victorian Government, to renewable energy projects in Healesville and Benambra.

The government is also supporting communities to transition to renewable energy through targeted programs such as the Neighbourhood Battery Initiative (and \$42.3 million committed by the returning Victorian Government to support the installation of up to 100 neighbourhood batteries), the Microgrid Demonstration Initiative, Solar on Public Buildings program, the New Energy Jobs Fund and the Destination Charging Across Victoria program to empower communities, deliver tangible benefits to communities and support resilience. The Government will also continue to work with stakeholders to consider other policy mechanisms that may be appropriate to support community energy.

Recommendation 3

The Victorian Government should monitor the impact of the Australian Energy Market Commission's determination on access, pricing and incentive arrangements for distributed energy resources, and advocate for amendments if the export of power into the grid from distributed energy resources diminishes as a result of the determination.

Response: Support in full

The Victorian Government considers that export tariffs will not be attractive to consumers and introduce a risk that export of power into the grid will be diminished, or solar uptake reduced, if they are introduced. The Department of Energy, Environment and Climate Action (DEECA) is currently undertaking a work program to consider what action Victoria should take in the long term in response to export pricing.

DEECA is working with the Essential Services Commission to implement consequential changes to Victorian regulatory instruments to give effect to the desirable elements of the AEMC's final determination. DEECA has worked with the Australian Energy Regulator to support the implementation of a range of beneficial reforms proposed through the Access and Pricing reforms, including on incentivising and measuring export service performance.

Through the Neighbourhood Battery Initiative, DEECA is working with distribution network service providers (DNSPs) to trial discounted network tariffs for neighbourhood scale batteries (see response to Recommendation 4 below).

Recommendation 4

That to enable more distributed energy resources to export power to the grid without risking system stability, the Victorian Government should continue to explore options for more varying feed-in tariffs and progress its Virtual Power Plant Pilot Program to enable state-wide delivery.

Response: Support in full

Through the Government's Neighbourhood Battery Initiative, DEECA is working with DNSPs to test trial network tariffs for neighbourhood scale batteries. DEECA is continuing to consider how to appropriately charge for local use of the system, when energy is generated, stored and used locally, to support the deployment of neighbourhood scale batteries.

¹ AEMC Rule Determination, *National Electricity Amendment (Access, Pricing and Incentive Arrangements for Distributed Energy Resources) Rule 2021*, 12 August 2021.

Launched in December 2021, Solar Victoria's Virtual Power Plant (VPP) pilot program offers households the opportunity to participate in an approved battery aggregation program and access a higher value battery rebate of \$4,174. The pilot program is based on extensive market research and has been designed to unlock the consumer benefits of VPPs and test innovative solutions to increase grid resilience. The pilot's initial findings indicate that increased consumer and industry understanding of VPPs and strong leadership and endorsement from Government will be key to building consumer trust and supporting the growth of orchestrated behind-themeter battery storage in Victoria. The lessons from this pilot will inform any future programs to further scale and stimulate VPP participation in Victoria.

Recommendation 5

That the Victorian Government produce a guide for community engagement and consultation for all renewable energy generation and transmission projects in Victoria, not just for those constructed under the renewable energy auction process. The guide should include direction on informing communities about the need for renewable energy zones to tackle climate change and to secure Victoria's renewable energy future, ensuring that Traditional Owners are integral to any consultation process.

Response: Support in full

The Community Engagement and Benefit Sharing (CEBS) Guide (July 2021) sets out Victorian Government expectations for community engagement and benefit sharing for renewable energy development in Victoria. The CEBS Guide includes some guidance for appropriate engagement with Traditional Owners on renewable energy projects.

The final VTIF aims to ensure that Traditional Owners, local communities, agriculture and farm businesses, individual landowners and other regional stakeholders and industries are engaged on the development of REZs and related transmission infrastructure in a proactive, inclusive and coordinated way. The VTIF outlines principles to improve engagement processes and outcomes for local communities, based on the CEBS Guide, including transparent and accessible engagement processes and early planning and dialogue to prepare these groups for engagement so they can provide meaningful input into the transmission planning process.

In October 2022, the Australian Energy Market Commission² recommended that the Australian Energy Regulator (AER) provide additional guidance to stakeholders to clarify expectations on transmission providers regarding engagement with local communities and stakeholders affected by major transmission projects.

Additionally, some Traditional Owner Corporations have created documents under the Traditional Owner Renewable Energy Program that contains their preferred method of engagement and renewable energy aspirations.

Recommendation 6

That any state-wide guide for community engagement and consultation for renewable energy projects in Victoria should include a community benefits and economic development portion that addresses the need for: local procurement, job creation and training, community benefit funds, and community co-investment and co-ownership.

Response: Support in principle

The Community Engagement and Benefit Sharing (CEBS) Guide (July 2021) details how renewable energy development can deliver community benefits and economic development. New energy infrastructure should be delivered in a way that ensures Victorians continue to have access to affordable and reliable power, maximises regional development and job opportunities and minimises impacts. The Victorian Government established VicGrid to work with Traditional Owners, stakeholders and local communities to plan and develop REZs and deliver benefits to regional communities.

Economic and community benefits of energy investments are also driven by the Local Jobs First Policy, and Social Procurement Framework, which prioritise local procurement and local jobs. Energy projects awarded funding by the Victorian Government must demonstrate alignment to this policy and framework.

² In its published final report for Stage 2 of the Transmission planning and investment review.

The VTIF recognises that sharing the benefits of infrastructure development can enhance social and economic outcomes for local communities, Traditional Owners and regions and foster community support for the energy transition. The Victorian Government is considering a range of options to improve benefits to local REZ communities and Traditional Owners through the VTIF. Bringing back the SEC, will also support local procurement, job creation and training.

Recommendation 7

That the Victorian Government consider including provisions for compensation and benefit sharing in any alternative regulatory investment test for transmission infrastructure ordered under the National Electricity (Victoria) Amendment Act 2020.

Response: Support in principle

The final VTIF recognises that the energy transition will deliver benefits to all Victorians through reductions in emissions, energy prices and improved reliability. It also recognises that local communities and Traditional Owners, particularly in regional Victoria may be directly affected by renewable infrastructure development.

An important part of the VTIF is introducing community benefits so that Traditional Owners and communities that host new transmission infrastructure also directly benefit through that development. To achieve this, the new framework will introduce additional payments to private landholders hosting easements for major new transmission infrastructure, and REZ Development Funds for hosting communities of new renewable energy infrastructure.

The purpose of the REZ Development Funds is to coordinate financial contributions by project proponents towards regional infrastructure and programs according to local needs and priorities. The proposed approach to the funds, as outlined in the VTIF, will be developed following further community and stakeholder consultation.

These measures would build on the Government's existing Social Procurement and Local Jobs First policies.

Recommendation 8

That the Victorian Government conduct an education campaign informing the public about the benefits of reducing energy consumption as one measure amongst a range of ways individuals can help to combat climate change and to also play their part in protecting Victoria's energy security as the state transitions to renewable energy.

Response: Support in full

The Victorian Government provides extensive information to help consumers reduce their bills and their emissions by being more efficient with their energy use. This is provided at energy.vic.gov.au and homescorecard.gov.au with public messaging also conveyed through:

- The Solar Homes program, which provide rebates to support households to install solar technologies and publishes advice on how to use solar during the day to reduce energy consumption from the grid and maximise bill savings;
- The Government's 7 Star Homes Program, which works with businesses and individuals across the building and construction supply chain to increase capability and capacity for delivering energyefficient homes;
- The Victorian Energy Upgrades program, which gives households and businesses access to discounted energy efficient products and services; and
- The Residential Efficiency Scorecard program, which utilises accredited assessors to provide an efficiency rating and tips on residential energy efficiency.
- Tips and Fact Sheets available through energy.vic.gov.au.

The Victorian Government is also currently rolling out a five-part video series on Ways to Save for Business, focused on cafes and restaurants and highlighting ways to reduce energy consumption and save on bills.

The Victorian Government also has a suite of Energy Savings Tips that provide practical ways for Victorians to reduce their energy usage and save money on their energy bills. These tips are shared via DEECA's Facebook and Twitter pages during periods of peak electricity demand and are permanently housed on the Energy website.

For the winter, DEECA has developed a social media campaign to educate Victorians on how switching to electric options for heating and hot water can help reduce emissions, slash energy bills and help to alleviate the increasing pressure on gas supply.

A just transition to renewable energy

Recommendation 9

That the Victorian Government continue to build on the lessons learnt from the closure of Hazelwood and apply them in the lead up to the closure of Yallourn and later Loy Yang A. This includes the need for a strong Worker Transition Service. Work should be undertaken to identify the supply chain companies that service Yallourn ahead of time to help them to be ready to transition when it closes in 2028.

Response: Support in full

The Government is bringing back the SEC, which will support workers and employment in the Latrobe Valley and have a presence in Morwell. An SEC Centre of Training Excellence will be established in collaboration with the energy industry, unions, TAFEs and registered training organisations.

The Government is continuing to build on the lessons learnt from the closure of Hazelwood, which closed with only five months' notice. By contrast, the long notice periods and lead times provided prior to the closure of Yallourn and Loy Yang A (seven years and 13 years respectively) allow for comprehensive worker support to be put in place. The government established the Latrobe Valley Authority (LVA) in 2016 to support the transition of Latrobe Valley workers, their families and the community at the time of the Hazelwood closure. Our original \$266 million investment kick-started the work of the LVA and enabled hundreds of jobs to be created through the construction of approximately \$750 million in new projects. Since 2016, investment of almost \$1.5 billion has contributed to the creation of more than 4,000 additional jobs through major projects and business support in the region. The Victorian Government, in partnership with industry and the community, will continue to build on the achievements made to ensure the Latrobe Valley community is supported into the future.

In 2021, the government committed to establishing a dedicated Yallourn Workers Transition and Support services to extend the current functions provided by the LVA. In consultation with impacted workers, relevant unions and the local community, the government is developing tailored worker and supply chain transition programs and an economic diversification program prior to the closure of Yallourn Power Station in 2028. The Victorian Government continues to work with EnergyAustralia to ensure a managed transition, and the company has committed to a \$10 million package in services and support for their workers, including tailored career planning, training and accreditation, financial advice, and mental health services. Furthermore, the government will work with EnergyAustralia to map supply chain impacts and help businesses to adapt and change. This will be done by identifying businesses affected by the closure and connecting them to government support programs and other providers.

AGL recently announced its plan to close Loy Yang A power station in 2035. This allows time for workers to plan, reskill and retrain, and for government to respond with resources at the right time and in the right way. The 2022-23 State Budget included a further \$7.5 million of funding for the LVA to continue building on work since 2016, including a comprehensive transition plan for the region to ensure the support they provide to the community meets future needs. A discussion paper for the *draft Latrobe Valley and Gippsland Transition Plan* was released for public feedback on 4 January 2023. It provided a summary of the process to date and the key messages heard during engagement. It requested feedback and further input from the community on the vision, principles and goals proposed for inclusion in the Plan.

The draft Plan was released for public feedback on 25 January 2023. The draft incorporated feedback and engagement following the release of the discussion paper. It provided further opportunity to maximise visibility of the Plan during development and for community to provide feedback. With the community's aspirations and

priorities at the heart of the transition plan, it will provide a roadmap for future activity to support strong employment, economic, social, environmental and health and wellbeing outcomes.

Recommendation 10

That the Victorian Government in conjunction with the energy sector ensure that new jobs in renewable energy are long term, secure, well paid and underpinned by skills and training provided through TAFE. Workers transitioning from coal-fired power stations should be supported with skills and training development opportunities to help them transition to jobs in the renewable sector. The Victorian Government should, wherever possible, support a position of no forced redundancies in the sector, supporting workers with redeployment and retraining opportunities.

Response: Support in principle

Renewable energy is a key economic opportunity for Victoria, which will create investment and employment opportunities in transitioning to renewable energy. These employment opportunities will be driven by the Victorian Government's new renewable energy and storage targets, including:

- 95 per cent renewable energy by 2035
- At least 2.6 GW of energy storage capacity by 2030
- At least 6.3 GW of energy storage capacity by 2035
- Offshore wind targets of 2 GW by 2032, 4 GW by 2035 and 9 GW by 2040

Together, these initiatives will increase Gross State Product by about \$9.5 billion and support 59,000 jobs through to 2035.

A key element of the Victorian Government's commitment to bring back the SEC. To support the pipeline of skilled workers in this growing sector, the Victorian Government will support at least 6,000 apprenticeships and traineeships. Additionally, 10,000 secondary school students will be given work experience opportunities through the SEC.

The Victorian Government is engaging closely with the energy industry and training providers to progress towards these goals, as well as working with other State jurisdictions and the Federal Government on national skills and workforce planning initiatives. The Government has made specific commitments to develop an Energy Workforce Development Plan, provide funding to establish a training centre for workers in the offshore and onshore wind industry, and for an accredited training organisation to support the delivery of a Hydrogen Worker Training Centre, including a Hydrogen Worker Plan.

The Government has committed to a \$50 million TAFE Clean Energy Fund that will also be delivered as part of the Victorian Government's ongoing investment in TAFE. In the first instance, the TAFE Clean Energy Fund will support Gippsland TAFE, South West TAFE and Federation TAFE with funding to deliver a range of priority renewable energy training initiatives.

Along with the direct opportunities presented by constructing renewable energy projects, there are associated operation and maintenance, supply chain and supporting industries that will grow around them to provide long term employment opportunities. The Victorian Government is investigating opportunities to facilitate regional economic development, leveraging the comparative advantages and emerging strengths of each region, especially those affected by coal-fired power station closures.

The Victorian Government is helping coal workers retrain, reskill and find new opportunities by designing worker and supply chain transition programs and ongoing support services, delivered in consultation with workers, unions and the local community as outlined in response to recommendation 9. In Gippsland, the Latrobe Valley Authority has established a dedicated Yallourn Workers Transition and Support service, which complements investment by industry – for example, EnergyAustralia's \$10 million support package to assist its workforce with the transition.

The Victorian Government has had a sustained focus on renewable energy jobs and skills. The Government's \$10 million Clean Economy Workforce Skills Initiative comprises the Clean Economy Skills and Jobs Taskforce, the \$6 million Clean Economy Workforce Capacity Building Fund, and the Clean Economy Workforce Development Strategy. This 10-year Strategy will focus on skills and training for renewable energy. In developing the Draft Strategy, the Victorian Government recognises the need for a 'just transition', acknowledging the importance of supporting workers in declining industries, such as the fossil-fuel industry.

More broadly, the Victorian Government, through Solar Victoria, is investing \$11 million to deliver a comprehensive training and workforce development package to help grow Victoria's clean energy workforce. This includes solar safety training, solar photovoltaic (PV) and battery design and installation training, and upskilling of electricians to become Licensed Electrical Inspectors. The package also includes a Victorian Government commitment to attracting more women to take the first steps in a fulfilling and rewarding career in the solar and renewable energy sectors – and supporting them in their journey.

The benefits and costs of transitioning to 100% renewable energy

Recommendation 11

That the Victorian Government ensure the Environment Protection Amendment Regulations 2022 accurately reflects the variability of wind farm noise and the corresponding monitoring allows for assessment of the noise both during the day and at night.

Response: Support in full

The Victorian Government has established a robust regime to ensure that wind farms are operating within their permitted range. The Environment Protection (Wind Turbine) Amendment Regulations 2022 require wind farm operators to ensure that noise from wind turbines does not exceed levels established for both the day and night. The regulations require operators to make sure that adequate controls are in place to meet these noise limits, and specifically require that wind farms provide EPA annual statements that outline their performance. The regulations also require wind farms to undertake post construction monitoring and subsequent monitoring every five years to continue to demonstrate they are meeting day and night noise limits.

Recommendation 12

That the Victorian Government explore ways that affected residents may be assisted in upgrading the soundproofing of their homes to mitigate against intrusive impacts that may arise from wind farms where they are in reasonably close proximity to residences.

Response: Support in principle

The Victorian Government has strong processes and controls to monitor and minimise any undesirable noise impacts from wind energy facilities. Under the Environment Protection (Wind Turbine) Amendment Regulations 2022 and Planning controls, (e.g., permit conditions), wind farm operators are responsible for ensuring that noise from wind turbines does not exceed levels established for both the day and night. A buffer distance is also required between turbines and neighbouring properties and operators.

In some cases, operators may enter into private agreements with residences to commit to additional measures to reduce impacts, as well as undertake Best Practice Engagement and Community Benefits Sharing. The Victorian Government's Community Engagement and Benefit Sharing (CEBS) guide includes sound proofing or dampening as examples of ways neighbouring residents can reduce the impacts of wind farms and ensure facilities can continue to build social license and trust with the community.

Recommendation 13

That the Victorian Government consider funding further research to determine the best approach for ensuring terrestrial and offshore wind farm developments don't adversely impact resident and migratory species particularly Brolgas (Grus rubicunda), Orange-bellied Parrot (Neophema chrysogaster), seabirds, penguins and cetaceans.

Response: Support in principle

In Victoria, environment assessment of the potential environmental impacts or effects of a proposed renewable energy development may be required under the Environment Effects Act 1978. This process enables statutory decision-makers to make decisions about whether a project with potentially significant environmental effects should proceed. An Environmental Effects Statement process is the most comprehensive and robust assessment process available in Victoria. An EES provides an integrated and transparent examination of a proposed project and its environmental effects.

In addition, the Victorian Government supports the development of a strategic biodiversity assessment and marine spatial planning approach that considers impacts from renewable energy development and plans the optimised location of facilities across Victoria rather than at a project level. The government will investigate opportunities to undertake further research to address knowledge gaps and better identify and manage biodiversity impacts, which will inform strategic planning for renewable energy projects.

Recommendation 14

That the Victorian Government include the solutions for processing renewable energy waste in any of its renewable energy strategies and plans and support the development and deployment of technologies that maximise the possibility of recycling, such as installing recyclable blades or recycling solar PV panels.

Response: Support in principle

The Victorian government has made significant investments to support end-of-life (EoL) management of renewable energy waste products, particularly solar PV panels. The Victorian Government is investing in Breakthrough Victoria's new Challenge program, which seeks ideas to tackle solar photovoltaic waste and will invest up to \$10 million in developing scalable, innovative panel recycling technologies within Victoria. Over \$700,000 of grants have also been awarded under the Circular Economy Markets Fund to develop solar panel recycling processes and available end markets for reused components. Solar Victoria is working with the solar industry to promote responsible management of end-of-life solar panels and compliance with Victoria's e-waste ban, which applies to solar system components.

Victoria's circular economy policy, *Recycling Victoria: A new economy*, supports strong stewardship arrangements for priority products like electronic products, including solar panels. Photovoltaic systems are also considered a priority on the Australian Government Environment Minister's Priority List of products needing a product stewardship approach. In October 2022, at the Environment Ministers Meeting, Ministers noted the Australian Government's intention to develop a regulatory product stewardship scheme for solar panels and household electronics. The Victorian Government continues to work with the Australian Government in progressing a product stewardship scheme for electronic products, particularly solar panels, nationally.

Further opportunities to reduce emissions

Recommendation 15

That the Victorian Government continue the zero emissions vehicle subsidy program until zero emission vehicle prices reach purchase price parity with internal combustion engine vehicles, along with measures to stimulate the zero emissions vehicle second-hand market to improve accessibility to zero emissions vehicles.

Response: Support in part

Since May 2021, the Victorian Government has supported over 8,000 Victorians to purchase new zero emissions vehicles (ZEV) through its ZEV Subsidy program with applications closing on 30 June 2023. In the first year the subsidy was available, Victorian ZEV sales rose by 310 per cent. In 2023, 6.6 per cent of all vehicles sold in Victoria are ZEVs – up from 1.8 per cent in 2021. The Victorian Government continually monitors purchases of new ZEVs and is laying the groundwork for 50 per cent of all light vehicle sales being ZEVs by 2030.

The Victorian Government is also supporting the establishment of a second-hand ZEV market by adding 400 new ZEVs to the government fleet.

Recommendation 16

That the Victorian Government publicise its zero emissions vehicle policies more broadly so that the public understand and know how to access the support available to them.

Response: Support in principle

The Victorian Government supports increasing public awareness of the benefits of ZEVs. To date, the Victorian Government has held events such as the Geelong ZEV Showcase to build broader public awareness of ZEV policies and programs. Solar Victoria has attended public events that serve audiences beyond those already engaged in ZEV events or motor industry trades, as an exhibitor to further promote ZEV policies and programs. Major events include the Autumn and Spring Home Show events and the Melbourne Royal Show.

The Victorian Government will consider further activities to build public understanding, including publishing more information on ZEV uptake in Victoria and other supporting materials.

Recommendation 17

That the Victorian Government advocate to the Commonwealth Government to pursue national-level policies favourable to zero emissions vehicle uptake, such as ones regarding luxury vehicle tax and vehicle import duties.

Response: Support in full

The Victorian Government continues to advocate to the Commonwealth Government to pursue national-level policies favourable to ZEV uptake. The Commonwealth Government invited the Victorian Government to partner in developing its National Electric Vehicle Strategy (NEVS) and vehicle fuel efficiency standards. The Victorian Government is advocating to the Commonwealth Government for swift and ambitious action to encourage the ZEV transition, and strong national vehicle fuel efficiency standards as a key policy measure for driving zero emissions vehicle uptake and transport emissions down.

Recommendation 18

That the Victorian Government continue to pursue opportunities to work with the other states and territories and the Commonwealth Government to advocate for national vehicles emissions standards for all new vehicles.

Response: Support in full

The Victorian Government views strong national vehicle fuel efficiency standards as a key policy measure for driving cost-effective decarbonisation of transport. As per the Government's response to recommendation 17, the Victorian Government will work with the Commonwealth and other jurisdictions to develop a robust approach to national vehicle emissions standards that drive ZEV uptake and reduces internal combustion engine emissions from new vehicles during the transition.

Recommendation 19

That the Victorian Government should set its own ambitious vehicle emissions standards similar to that introduced in New South Wales.

Response: Do not support

New South Wales, like Victoria and other sub-national jurisdictions, does not have vehicle fuel efficiency or emissions standards, as these lie within the Commonwealth's jurisdiction. The Commonwealth Government is looking at introducing national vehicle emissions standards as part of its National Electric Vehicle Strategy. Victoria is currently working with the Commonwealth to develop proposed new national standards.

Recommendation 20

That the Victorian Government adopt a cut-off date for sales of new internal combustion engine vehicles. This must go in hand with an education campaign about zero emissions vehicles and extensive development of the required infrastructure for zero emissions vehicles, supported by a wide range of zero emission vehicle models available to consumers.

Response: Under review

The Victorian Government is committed to accelerating the transition to ZEVs. Victoria is collaborating with the Commonwealth on the National Electric Vehicle Strategy that will look at a broad range of measures to drive further ZEV uptake and reduce transport emissions, including fuel efficiency standards. The National Strategy will also consider the best ways the Commonwealth, states and territories can work together to support change.

Victoria has already taken significant first steps to drive the transition through the launch of Australia's first ZEV purchase subsidy scheme, rollout of an ambitious public charging infrastructure program, commitments to shift public buses and government fleets to ZEVs and extensive public and industry engagement through the Victorian ZEV Roadmap released in May 2021.

The Victorian Government also signed the Glasgow COP26 declaration in November 2021 requiring it to work towards a goal of 100 per cent zero emissions new vans and cars in government fleets by 2035. Victoria will continue to build on existing policies to further encourage the shift away from internal combustion engine vehicles towards ZEVs. This includes public education of ZEVs through the Be Surprised! campaign, supporting and hosting industry events, and working with vehicle manufacturers to support and encourage greater model availability.

Recommendation 21

That the Victorian Government continue to collaborate with local government authorities, electricity network operators and electric vehicle makers to coordinate and accelerate the roll-out of electric vehicle charging network development along the road, other public facilities and in new and existing residential and commercial buildings, with an emphasis on a regional area rollout.

Response: Support in full

The ZEV Roadmap includes the \$19.21 million Acceleration of Zero Emissions Vehicle Adoption (AZEVA) Program, which aims to accelerate the roll-out of EV charging infrastructure across Victoria. AZEVA includes

a suite of programs ranging from charging infrastructure grants, feasibility studies and technology demonstration grants. This includes \$5 million to support the installation of fast-charging stations at popular destinations around Victoria, including regional town centres, tourist hotspots and high-use locations; \$3 million to support the installation of EV charges in private business fleets and local government fleets; \$3.18 million to support pre-commercial EV charging technologies towards full commercialisation. Innovative EV charging technologies will support broader uptake of ZEVs.

The Victorian Government will continue to collaborate with local government authorities on the accelerated rollout of public charging infrastructure. The Victorian Government continues to engage with electricity networks and agencies to improve information sharing and effectively integrate public and private charging infrastructure into the grid

The Victorian Government supported efforts to ensure new and existing buildings are EV ready and advocated for 100 per cent EV readiness in new Class 2 apartment buildings as part of the National Construction Code (NCC) 2022, which was endorsed by Building Ministers' Meeting on 26 August 2022.

The Victorian Government will participate in the Australian Building Codes Board work program to investigate updates to commercial energy efficiency provisions scheduled for delivery as part of NCC 2025 updates. These provisions will include an investigation of update options to improve provisioning for EV charging infrastructure in commercial buildings.

Recommendation 22

That the Victorian Government continue to build active transport infrastructure such as separated cycle paths so that people can safely choose active transport for their journeys and that active transport opportunities form part of any new infrastructure projects that are developed.

Response: Support in full

The Victorian Government will continue to build walking and cycling transport infrastructure as part of its record investments in infrastructure to deliver the transport projects Victoria needs. The State Budget 2022-23 also allocated \$21.8 million investment to the active transport program and improvements are being delivered through the Level Crossing Removal Project, Major Road Projects Victoria, North East Link Project, Rail Projects Victoria, and West Gate Tunnel Project. These investments contribute towards the government's climate change commitment of 25 per cent active transport mode share by 2030.

Recommendation 23

Programs that the Victorian Government has developed to support the move away from gas should be enhanced to ensure that disadvantaged groups who may suffer from financial impediments are not excluded.

Response: Support in full

Assisting low income and energy consumers experiencing vulnerability to access energy efficiency and electrification opportunities is a key direction of the Gas Substitution Roadmap. In 2021 Victoria's Residential Tenancies Regulations introduced a minimum requirement for heating in rented homes. This is expected to drive the installation of efficient reverse cycle air conditioners in rental properties.

The Big Housing Build program is also well underway, with thousands of new energy efficient public housing units being built, with all-electric specification pursued wherever possible. The Energy Efficiency in Social Housing Program is upgrading 35,000 social housing properties. Under the program, major gas appliances will be replaced with efficient electric alternatives, such as installing efficient split systems in place of gas heaters.

There are also energy consumers within the business sector who will need assistance to move away from gas.

The Victorian Energy Upgrades (VEU) program provides households and businesses with upfront incentives to reduce their gas use by installing new equipment such as energy efficient electric water heaters and space heaters to support their ability to transition from gas. The program also provides support to businesses upgrading commercial and industrial gas boilers. A new commercial and industrial heat pump hot water activity was introduced in February 2022. Businesses can also earn credits for bespoke 'project based' energy efficiency, electrification and fuel switching activities that cut emissions.

Victorian manufacturers will also benefit from nearly \$20 million provided in the 2022-23 Victorian Budget, including to invest in renewable energy and low-carbon component manufacturing, and to help their workers transition into highly skilled, digital jobs.

Recommendation 24

That the Victorian Government establish a community education campaign about the benefits of gas substitution and to inform householders, retailers and installers of the steps necessary to get them ready for the transition to renewable energy.

Response: Support in principle

Gas is used by over 80 per cent of Victorian households for space heating, water heating and cooking. Around 60 per cent of Victorian households currently have reverse cycle air conditioning with heating capability that is underutilised. Consumer survey results demonstrate that though Victorian households continue to have a high preference for gas appliances, there is an emerging trend in favour of electric appliances (particularly from younger people, future home buyers and landlords).

The Gas Substitution Roadmap identifies that a public education campaign, targeting households in winter, will explain the practicalities and benefits of reducing or switching away from gas. Using reverse cycle air conditioning to heat homes, for example, can free up significant gas demand – including at peak time – and can save households on bills. An update to the Gas Substitution Roadmap is due in late 2023.

Recommendation 25

That the Victorian Government, in cooperation with local government authorities, make available information and consultation services to facilitate residents' access to information who want to transition away from gas.

Response: Support in part

Through the Residential Efficiency Scorecard program, homes can receive an energy star rating and advice on how to save money on energy bills. Assessments and information are tailored specifically for each individual home and are delivered by government-approved assessors.

The Scorecard program is currently developing functionality for the tool that will allow assessors to make electric-only upgrade recommendations to assist householders to understand how to improve the energy performance of their homes while also transitioning away from gas. Associated consumer-facing communications materials will be developed to support this functionality in the tool.

Recommendation 26

That the Victorian Government consider reviewing and removing the regulations that mandate connection of new buildings to gas infrastructure and consider enacting a moratorium on new residential gas connections. In doing so, consideration should be given to ensuring no disruption to energy supply and that the impact on workers affected by the transition is minimised by ensuring just transitions for workers are factored into any anticipated downturn in gas connections.

Response: Support in principle

Amendment VC221 to the Victoria Planning Provisions was finalised and gazetted in August 2022. This amendment removes any requirement for new residential homes and developments to connect to gas. This is

in line with the intent of the Gas Substitution Roadmap to remove barriers and increase consumer choice. However, this does not mandate electric-only new connections or place a moratorium on new gas connections.

The Victorian Government has funded \$10 million for the Clean Economy Workforce Skills Initiative, which includes a 10-year Clean Economy Workforce Development Strategy. One of the main areas of focus is skills and training for renewable energy. In developing the Draft Strategy, the Victorian Government recognises the need for a 'just transition', acknowledging the importance of supporting workers in declining industries, such as the fossil-fuel industry, so that their transferrable skills are recognised and that there are opportunities for workers in transition to re-skill and up-skill for the renewable energy sector and supply chain industries.

Recommendation 27

That the Victorian Government design an education program on gas substitution specific to tenancy landlords and businesses to enhance their understanding of the benefits of the substitution, the alternatives and the support available to them.

Response: Support in principle

Gas is used by over 80 per cent of Victorian households for space heating, water heating and cooking. Around 60 per cent of Victorian households currently have reverse cycle air conditioning with heating capability that is underutilised. The Gas Substitution Roadmap identifies that a public education campaign, targeting households in winter, will explain the practicalities and benefits of reducing or switching away from gas. Using reverse cycle air conditioning to heat homes, for example, can free up significant gas demand – including at peak time – and can save households on bills. An update to the Roadmap is expected by the end of 2023.

Recommendation 28

That the Victorian Government consider updating the minimum standards for rental properties to keep it in line with Victoria's Gas Substitution Roadmap and provides incentives to businesses to encourage them to switch away from gas.

Response: Support in principle

The Victorian Government is committed to reducing energy bills for renters while making rented homes more comfortable and energy efficient. That is why a minimum energy efficiency standard for heaters in rented homes came into effect from March 2021.

Under the standard, a fixed heater in good working order must be present in the main living area for all rented domestic or residential properties, that meets a minimum 2-star energy efficiency rating. The government will continue to assess features covered under the minimum rental standards.

In terms of encouraging businesses to switch away from gas, there are several initiatives being undertaken in the VEU program that will support businesses in this transition - for example:

- VEU introduced a new activity in early 2022 that provides incentives for commercial and industrial
 users to install heat pump water heaters. DEECA has worked with industry to promote this activity by
 releasing guidelines to support best practice design, optimisation and installation;
- Project-based activities (PBA) under the VEU program help businesses access incentives for large and custom upgrades while offsetting the cost of their energy efficiency improvement projects;
- DEECA is also supporting businesses in hard-to-abate sectors where viable pathways for electrification do not currently exist - for example, in 2022 the VEU program revised requirements for gas boiler upgrades to improve the uptake of more efficient gas boilers for energy intensive businesses; and
- DEECA will introduce incentives for households and businesses to upgrade from gas to energy
 efficient electric hot water and space heating on 31 May 2023.

Recommendation 29

That the Victorian Government update the State Planning Policy Framework to integrate the 7-star standard of the Nationwide House Energy Rating Scheme into its requirement for Environmentally Sustainable Design of new buildings.

Response: Support in principle

On 26 August 2022, Victoria agreed to increase minimum energy efficiency building standards for new homes from 6 to 7 stars (National House Energy Rating Scheme) under the National Construction Code 2022 (NCC). Changes also include a new Whole-of-Home energy use budget that includes fixed appliances such as heating and cooling, hot water and lighting. These stronger minimum standards will make new homes more comfortable to live in, cost less to heat and cool, and help reduce greenhouse gas emissions.

Inclusion of 7-star NatHERS minimum standard for residential energy performance within the state ESD framework is duplicative of existing requirements. Existing controls within Victoria's building legislative framework, which give effect to the National Construction Code (NCC), are the appropriate regulatory means to require new residential houses and apartments to meet 7-star NatHERS requirements.

Recommendation 30

That, if the Victorian Government integrates the 7-star standard of the Nationwide House Energy Rating Scheme, it should have incentives to encourage developers to apply the higher energy efficiency standard.

Response: Support in full

Ahead of new 7-star energy efficiency building requirements becoming mandatory, the Victorian Government is offering incentives to registered builders and land developers of \$4,000 per new home built through the 7 Star Homes Program. Launched in May 2021, this program is building industry capability and capacity to deliver more energy efficient homes.

Up to 80 homes will be built through the program to demonstrate how to deliver more energy efficient homes. 34 builders and developers, including six of the 20 biggest firms in Australia are participating in the program. Participants receive access to a range of resources including training in the Whole-of-House pilot rating tool, as-built verification workshops and training in design and construction of 7-Star homes.

Additional face to face and online training material is also available to support Victorian builders more broadly. To date more than 1,600 building industry participants from over 500 companies have attended training. As part of the program the Government has released a 7 Star Upgrade Analysis handbook which includes ten case studies that show how 7 stars can be achieved without significant additional costs or changes in materials and construction.

In addition to incentives and training, the Victorian Government is providing information resources, including practice notes and fact sheets, to guide builders, consumers and developers through the transition to 7 stars. These resources showcase the importance of early design considerations so builders can consider and promote cost-effective upgrades, provide tips on information for buyers such as benefits and bill savings, and link to government supports that may be available to customers such as the Solar Homes program.

All newly constructed homes delivered under the \$5.3 billion Big Housing Build will also meet or exceed a 7-star NatHERS rating (or a 7 stars average, 6 stars minimum for class 2 developments). The Big Housing Build is delivering in excess of 12,000 new social and affordable dwellings.

Recommendation 31

That the Victorian Government consider appropriate incentives to encourage home builders to adopt best energy efficiency practices and introduce necessary measures to ensure that the impact of incentives flows on to home buyers.

Response: Support in full

On 26 August 2022, Victoria agreed to increase minimum energy efficiency building standards for new homes from 6 to 7 stars (Nationwide House Energy Rating Scheme) under the National Construction Code 2022 (NCC

2022). As stated in the response to recommendation 30, the Victorian Government is supporting builders to adopt best energy efficiency practices and will continue to look for opportunities to do so.

At present, a range of financial incentive programs, targeted retrofit programs and policy reforms are also in place to drive efficiency improvements across Victoria's housing stock. In 2018, the Victorian Government launched its 10-year, \$1.3 billion Solar Homes Program. The program will provide 778,500 rebates to support Victorian households to install solar photovoltaic (PV) panels, solar or heat pump hot water systems, or solar batteries. As of December 2022, the Solar Homes program has supported the installation of PV, batteries and solar hot water at over 220,000 homes, with more than 1.3 GW of new solar PV capacity installed. From 24 August 2022, the Victorian Government expanded the eligibility of the \$1,400 Solar Homes solar PV rebate to homeowners building a new home, enabling households to save on installation costs and electricity bills as soon as they move into their newly built home.

Another Victorian Government initiative is the VEU program which provides subsidies for a range of low and no-cost energy-saving options such as low-flow showerheads and subsidies to replace major appliances such as hot water systems and heaters. Since 2009, the program has supported over 2 million households and over 150,000 businesses to upgrade appliances and equipment. The energy savings targets for 2022 to 2025 for the VEU program are expected to reduce Victorian electricity consumption by 7 per cent in 2025 and drive a net reduction of energy bills by \$3.8 billion to 2050.

In addition to incentives, the Victorian Government has released information resources to guide homeowners through the transition to 7 stars. The resources showcase the importance of early design considerations so home builders and buyers can consider cost-effective upgrades, make informed decisions when building a home and understand the benefits and bill savings. Information resources will also link to government supports that may be available to customers such as incentives offered through the Solar Homes program and other key resources.

Recommendation 32

That the Victorian Government consider expanding current energy efficiency related programs (Solar Homes, Victorian Energy Upgrades) to cover energy efficiency improvement practices such as insulating, weather proofing, double glazing and replacing gas with efficient, electric appliances, and focusing on low-income households.

Response: Support in principle

The Victorian Government's Solar Homes Program is supporting the installation of energy efficient and renewable energy technologies including solar PV, solar and efficient electric hot water, and solar batteries in Victorian homes. Support is available for owner-occupiers, renters and community housing organisations. The program is reducing cost barriers to accessing renewable energy for Victorians, including low-income households. As of December 2022, around 56 per cent of applications were from households with a combined annual income below \$100,000 per year. The Victorian Government will consider future options to support the electrification of homes and provide continued support for low-income households through the program.

The VEU program is accessible for all Victorians, including renters. This is important to ensure low-income households can access incentives for energy efficient upgrades. The VEU program also currently offers incentives for weather sealing, draught stoppers and window glazing. DEECA will introduce incentives for households and businesses to upgrade from gas to energy efficient electric hot water and space heating on 31 May 2023.

