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Working for an Australia free of poverty

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Legislative Council Environment and Planning Committee
Parliament of Victoria

Submission to Inquiry into Renewable Energy in Victoria

The Brotherhood of St. Laurence (BSL) welcomes this opportunity to comment on the Inquiry into Renewable Energy in Victoria ('the inquiry'). Renewable energy is an essential part of Victoria's decarbonisation process, and therefore a key pillar in our response to climate change.

It is crucial that Victoria and Australia transition to 100% renewables in keeping with the Paris Agreement. Warming above 1.5 °C presents unacceptable risks to Victoria and Australia, such as more frequent and intense droughts, bushfires and heatwaves. Many of these impacts of climate change will hit people facing disadvantage hardest, in part because they have limited capacity to adapt to the changes, for example because they live in poor-quality housing or have little or no insurance.

Equally, Victoria's transition to renewable energy must be socially equitable, for example by creating decent job opportunities in the communities near renewable energy developments, resourcing and implementing clear transition plans to provide ongoing work in communities affected by fossil fuel generator closures, lowering electricity prices for all, and enabling new industries that create green jobs.

The transition to renewables presents a major opportunity to bring social, economic and health benefits to Victoria, but this will require careful, long-term planning from the Victorian Government. The sudden closure of Hazelwood Power Station in 2017 demonstrates the perils of leaving such decisions to the private sector, which usually do not have incentives to act in the interests of the general public. Along with job opportunities, the benefits of 100% renewables are likely to include cheaper energy for households and businesses across the state, substantially reduced pollution in the Latrobe Valley and improvements in in-home air quality as a result of removing gas cooking and heating.

This submission outlines the BSL's responses to the Committee's terms of reference.

1 Measures to enable Victoria to transition its energy supply to 100% renewable energy

This section outlines suggested policy to transition Victoria to 100% renewable energy equitably.

1.1 Support Renewable Energy Zones

Renewable Energy Zones (REZs) are an important tool for integrating renewables in Victoria, and we support the Victorian Government's approach to them. We also recommend that the Victorian Government investigate ways to realise co-benefits from REZs, including through the social procurement and local content frameworks it applies to some REZ projects.

Spending wisely on transmission that offers value for money is a crucial factor, since transmission is the key bottleneck for many potential renewable projects that could otherwise lower energy prices. However, we also encourage consideration of alternatives such as installation of battery storage where it offers better value for money, especially given that the costs are ultimately borne by consumers.

Where possible, REZs should also enable the development of offshore wind projects, although these may be in the Commonwealth's jurisdiction. We welcome Victoria's $40 m funding for offshore wind via the Energy Innovation Fund.[1]

1.2 Homes: electrification, phasing out gas, and energy efficiency

Victoria consumes more energy from gas than electricity (Victorian Government 2021). Unlike electricity from renewables, fossil gas is non-renewable and its consumption contributes to global warming. Therefore, gas will need to be phased out if Victoria is to transition to 100% renewables or meet its climate targets.

In homes, electrification is the most viable pathway to replacing gas usage today. All types of domestic gas appliances can already be replaced with electric equivalents whose usage results in no greenhouse gas emissions when they are powered by renewable electricity, and electrifying usually lowers running costs (ATA 2018). Electrification of homes powered by 100% renewables is, in our view, vastly more likely than other fossil gas replacements, such as hydrogen. We recognise the potential of green hydrogen, especially for industry and export; however, the case for transitioning the residential sector to hydrogen has not been made. Specifically, the costs involved in transforming the gas network for all residences to use 100% hydrogen are likely to be uncompetitive (at both network and household levels), and transitioning from gas appliances to hydrogen-compatible ones appears complex.

Improving energy efficiency is a critical complement to electrification. Saving electricity is often cheaper than generating it (ACEEE 2014), and improved efficiency would reduce the scale of renewable energy generation we need to install.

The BSL recommend the development of a structured plan for electrification that supports households, especially those facing disadvantage, to transition away from gas. Below we suggest policies focusing on electrification and energy efficiency in the home, acknowledging that some of this work is underway as part of the Victorian Government's Gas Substitution Roadmap. Additional detail can be found in the BSL (2021) submission to the Roadmap.

1.2.1 Support low-income homeowners to electrify and improve energy efficiency

Low-income homeowners face greater barriers to electrifying their homes. These include barriers common to many households, such as a lack of trusted advice or trusted service providers, the hassle factor of switching appliances from gas to electricity, the cost[2], and the perceived risks (justified or unjustified). In addition to these common barriers, many low-income households also face greater financial constraints, especially those facing multiple forms of disadvantage.

As a result, these homeowners will need financial support to shift to 100% electricity and to improve the energy efficiency of their homes. The Victorian Government's Home Heating and Cooling Upgrade Program provides a very good initial step, as does the Solar Victoria rebate. Future programs will need to

[1] https://www.energy.vic.gov.au/renewable-energy/offshore-wind

[2] All alternatives to gas, such as hydrogen, will involve costs at a household and network level, and it is likely that electrification will be cheaper.

build on these successes. For heating and cooling, we recommend that the Victorian Government commit to a larger-scale program commensurate with the size of the problem. Providing support to landlords is also most welcome, although energy efficiency standards will be required to electrify rented homes on a large scale (see below).

Some key groups at high risk of energy-related stress are likely to miss out on the benefits of these programs as currently constructed. We recommend greater support for:

- households who cannot meet the co-contribution required, who should be provided with fully funded retrofits
- people with high needs, for example chronic health conditions that necessitate sustained use of heating or cooling (for example neurological and other conditions eligible for the medical cooling concession).

1.2.2 Enact standards that phase out gas appliances in rented homes

Many renter households are unlikely to move away from gas without government intervention because tenants have no right to change from gas to electric appliances (nor an incentive if they will not stay long enough to receive a payback), and landlords have limited incentive because they will not benefit from energy cost savings.

This split-incentive problem may lead to an inequitable situation where renters, including many with low incomes, become 'stuck' with gas appliances and bear a disproportionate cost as gas and the gas network become more expensive.

Gas usage in rented homes is best addressed through minimum standards for rented homes, which could build upon those implemented by the Victorian Government for efficient heaters. A possible first step would be to foreshadow the switch away from gas for rented properties, with, for example, a date for switching to efficient electric heating. There would need to be sufficient notice for an orderly transition. The Victorian Government could then develop further standards and dates to replace other gas appliances (such as hot water systems and cookers) in keeping with its Gas Substitution Roadmap.

See section 3.2 below for a general comment on efficiency standards for rented homes.

1.2.3 Consider a moratorium on new residential gas connections

Consideration should be given to ceasing new residential gas connections. Expanding the gas network now is counterproductive and will impose costs on both households and government now and in future.

1.3 Equitable plans for regions affected by fossil fuel closures

Fossil fuel – fired power plants will need to be closed as we transition to 100% renewables, and the social and economic outcomes for the communities around them are likely to be far better if there are equitable transition plans in place. See section 4 for detail.

1.4 Increase affordability of electric vehicles

Adopting 100% renewable electricity creates the opportunity to decarbonise Victoria's road vehicles; however, electric cars are currently unaffordable for many households. We recommend that the Victorian Government adopt policies to increase the affordability of electric cars, such as government

fleet purchasing of electric vehicles to stimulate the second-hand market. Targeted subsidies in the new car market could also be considered.

2 Jobs and economic benefits and implications of Victoria transitioning to 100 per cent renewable energy

Constructing and operating renewable energy projects – as well as complementary projects, such as electrification, improving energy efficiency and clean energy exports – present a huge opportunity for job creation, but effective public policy will be needed to enable this work.

Research by the University of Technology Sydney (2020, p. 13) estimated that 11,000 renewable energy jobs would be lost nationally by 2022 in the absence of additional policies. Accenture (2021, p. 28) recently estimated that 67,500 clean export jobs, enabled by renewable energy, could be created in Victoria, but found that this would require policy action such as investment in support for workers and regions to diversify. The National Low-income Energy Productivity Program proposed by ACOSS and others would create around 22,000 jobs nationally, as well as benefiting households and the economy (Deloitte Access Economics 2020); however, government would need to make a substantial financial contribution.

Ideally, this policy would be made by the Commonwealth and coordinated across the country. In the absence of federal leadership, Victoria should look to maximise the benefits of renewable energy jobs, preferably in partnership with other states.

2.1 Policy to align skills with jobs may be needed

Without government leadership, there is a risk that workers will not have the skills needed for renewable energy projects. We welcome Victoria's new Skills Authority and its Clean Economy Jobs and Skills Taskforce. It will be important that regions are represented and regional are addressed, particularly so that skills for large-scale renewable energy work are available in REZs (ACTU 2020) and workers losing in declining industries can be reskilled.

In some cases, workers in declining fields may be able to be retrained for new technologies. For example, people who work in the gas industry could be trained to work with hydrogen (which may be adopted in industrial settings even if it does not become common in homes), and people who work with internal-combustion road vehicles could work with electric vehicles. Government should also stimulate new jobs through schemes such as energy efficiency retrofit programs.

2.2 Social procurement and local content requirements

Government can maximise the co-benefits of the transition to renewable energy through social procurement and local content requirements. Social procurement can ensure that the benefits of renewable energy construction are inclusive and create jobs for groups who often otherwise face discrimination and difficulty finding employment (BSL 2019). Local content requirements can stimulate local manufacturing, like the Keppel Prince wind turbine factory in Portland, which employs 350 people in secure jobs and is one of the region's largest employers (ACTU 2020).

We are pleased that both social procurement and local content requirements apply to the Victorian Renewable Energy Target 2 auction and recommend that consideration is given to expanding them to

other programs, such as Solar Homes and the Home Heating and Cooling Upgrade Program, at least for larger suppliers.

3 Investment, both public and private, required to achieve 100 per cent renewable energy generation in Victoria, including investment in grid infrastructure and energy storage

The transition to 100% renewable energy will require significant government investment. The Victorian Government can stimulate jobs and make the transition easier by implementing energy efficiency policies, investing in the regions to mitigate the impact of industrial closures (see section 4), as well as investing in the electricity grid.

3.1 Optimise electricity network and solar usage

The electricity network will need to be augmented to enable 100% renewables, but the extent (and its associated cost) can be limited through:

- encouraging use of solar electricity generated during the daytime, for example through a 'solar sponge' tariff (where electricity prices are lower in the daytime) once Victoria has excess solar generation
- reducing demand through increasing energy efficiency in buildings
- incentives for household, community-level and larger-scale batteries where efficient
- consideration of direct load control (or other smart management of) for high-demand items such as pool filters, electric vehicle charging and reverse cycle air-conditioning (with appropriate provision for those vulnerable to heat).

3.2 Implement home energy efficiency standards

Improving energy efficiency will make the task of transitioning to 100% renewables easier by reducing the amount of electricity Victoria needs and therefore lowering wholesale energy costs. The BSL supports the introduction of energy efficiency standards for both new and rented homes:

- **rented homes:** efficiency standards for rented homes will bring many co-benefits, such as lowering energy bills and improving health outcomes and thermal comfort, at little cost to government. Many rented homes are highly inefficient and neither landlord nor tenant generally has the incentive to improve them. We support Victoria's existing rental standards for heating and support its potential expansion into insulation and hot water systems.
- **New homes:** to maximise benefits, new homes should be built to use net zero energy. ClimateWorks Australia (2021) estimates that delaying increases to new home standards by 3 years would lock in $2 billion of extra household energy bills, 1 million homes built to a lower standard, and 9 million tonnes of greenhouse gas emissions.

See section 1 for other recommendations concerning energy efficiency.

4 Government action to support workers in impacted industries and communities

Social licence for – and the equity of – the transition to renewable energy will depend on government setting out and resourcing a long-term plan that creates security for workers and communities. People working in threatened industries and communities must have certainty that the transition will lead to decent, well-paid jobs, otherwise they are understandably likely to oppose it.

The BSL suggests looking to successful transitions in other jurisdictions, such as the transition of coal and industrial workers in the Ruhr region of Germany. Successful transitions share several features: broad consultation with affected workers and industries, retraining well before job losses begin, sufficient funding and cohesive leadership (Sheldon et al. 2018).

Government should strike a balance between taking advantage of existing job opportunities (such as electrification and the construction of renewables), and developing new clean-energy-powered industries, such as those described by Accenture (2021). Transition plans should not rely unduly on speculative industries that are not guaranteed, because workers in declining industries will need certainty about jobs, but government should invest sufficiently to develop potential opportunities in new industries.

5 The economic risks of not urgently reducing emissions by transitioning to 100% renewable energy

Failing to reduce emissions in keeping with the Paris Agreement would present two key risks for Victoria:

First, we face the economic risks of being left behind as the rest of the world transitions, and missing the opportunities for new industries and jobs that this entails. Eight of Australia's top ten exports are either fossil fuels, goods with high embodied emissions, or inputs into high-emissions products; all of these are vulnerable to the global transition away from emissions-intensive goods and services, regardless of domestic policy (Accenture 2021). Accenture's modelling (2021, p. 28) shows that the clean export sector could generate more jobs and be more valuable for Australia than fossil fuels by 2040, including creating 67,500 jobs in Victoria, but this will not happen without policy to coordinate skills and invest. Similarly, the Clean Energy Council (2020) finds that the Australian renewable energy sector could employ 44,000 people, but this too depends on policy.

Second, the transition to 100% renewables is unavoidable. By acting now, and putting in place measures to facilitate a fast, orderly and fair transition, Victoria can prevent unplanned and dramatic shifts. These unplanned shifts are likely to have a greater impact on those already facing vulnerability. For example, we know unplanned closures of coal power stations can lead to higher energy prices, job losses and regional impacts. A planned transition where power station closures are known well in advance and alternative jobs and energy sources are created would result in far better social and economic outcomes.

Finally, and most importantly, we face the risk of unchecked climate change, which poses unacceptable risks to all Australians, but particularly people facing disadvantage. For Australia, the impacts of 2–3 °C of warming are predicted to include even harsher and longer fire seasons, longer and more severe droughts, increased water stress, increased illness and death from heatwaves, less rainfall and more water shortages but more intense rain events, rising sea levels, more frequent and intense floods, and over $4 trillion of losses to labour and agricultural productivity in Australia by 2100 (CSIRO & Bureau of Meteorology 2015; IPCC 2018, 2014; Climate Council 2019). Climate change disproportionately impacts

people facing disadvantage, who may live in more vulnerable areas and are often less able to adapt – for example, because of ill health, low income or employment in fields threatened by climate.

For further information about this submission, please contact Damian Sullivan (e: dsullivan@bsl.org.au; m: 0405 141 735) or David Bryant (e: dbryant@bsl.org.au; ph: 03 9483 2470).

Yours sincerely,

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