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**Brotherhood
of St. Laurence**

Working for an Australia free of poverty

Department of Environment, Land, Water and Planning
Victorian Government

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Submission regarding Gas Substitution Roadmap

The Brotherhood of St. Laurence (BSL) welcomes this opportunity to comment on the Victorian Government's Gas Substitution Roadmap. Transitioning away from fossil gas will be essential for Victoria's efforts to limit its contribution to climate change, yet the transition presents equity issues and will require changes to millions of homes.

Viewed through both equity and sustainability lens we believe the roadmap should, at a minimum, address the following three broad issues:

First, it is crucial that the roadmap provides support and certainty to households, particularly those living on low incomes or coping with disadvantage to transition away from gas by addressing barriers they face and mitigating the risk that they bear the cost of a gas network with fewer and fewer users. Failing to do this will create inequities and slow the transition.

Second, the roadmap should identify the trajectory for employment in the gas industry and provide opportunities to retrain in fields that provide decent, well-paid work, potentially including related sectors such as installing heat-pumps for heating, cooling and hot water.

Third, the roadmap must also be consistent with the objective to limit global warming to well below 2 °C, in keeping with Victoria and Australia's commitments. Warming above 2 °C presents unacceptable risks to Australia, such as worse and more frequent droughts, bushfires and heatwaves; and gas is a fossil fuel that inherently contributes to warming.

This submission addresses questions in the Gas Substitution Roadmap consultation paper that relate to households facing disadvantage.

1 Transitioning the Victorian economy efficiently and equitably (issue 6)

1.1 How can we ensure that the costs of transition to lower emissions energy sources are borne equitably?

To ensure that the transition away from gas is equitable, we recommend that the Victorian Government implement strong policy in the following areas:

1.1.1 Minimum standards that phase out gas appliances in rented homes

For renters, the barriers to shifting away from gas are not only financial, but also related to their lack of rights. Rented homes are likely to be affected by a split-incentive problem whereby landlords have the right (but no incentive) and tenants have the incentive (but no right) to electrify or increase energy efficiency, so neither party acts.

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

This problem is best addressed through minimum standards for rented homes, which could build upon those implemented by Victoria for efficient heaters. A possible first step would be to amend the heating standards to require the replacement of gas heaters with reverse-cycle air conditioners from a certain year. The Victorian Government could then develop further standards to remove other gas appliances (such as hot water systems and cookers) in keeping with its Gas Substitution Roadmap, ideally giving the public several years' notice before each step.

Standards are more likely to achieve widespread change in rented homes than voluntary or incentive-based approaches, which often have low uptake among landlords. For example, a subsidised insulation program run in 2008 by the Commonwealth aimed to reach 500,000 rented homes but reached fewer than 6,000 in practice.¹

Minimum standards to remove gas appliances would have other advantages. These would include lowering costs for renters through energy efficiency and no longer needing to pay a gas service charge, and enabling rented homes to be more thoroughly weather-sealed and thus become more efficient (including through another minimum standard), which is presently unsafe in homes with certain gas heaters due to the risk of carbon monoxide build-up.

1.1.2 A plan for costs in a network with fewer customers

As homes and businesses shift away from the gas network, the remaining users will each have to pay a larger share of the network's costs through their bills, which may lead to highly inequitable energy costs if low-income households and renters disproportionately remain gas users.

Consideration should be given to the options for addressing this inequity, which will become larger as more users leave the gas network.

1.1.3 Limiting new residential gas connections

We recommend that the Victorian Government allow new residential developments to go ahead without connecting to the gas network, as recommended by Infrastructure Victoria.²

Consideration should also be given to banning all new residential gas connections. Expanding the gas network now is counterproductive to the transition and will unnecessarily impose future costs on households and government.

1.1.4 For low-income homeowners, assistance with the upfront cost of electrification

See 1.2 below.

¹ Auditor General 2010, *Home Insulation Program*, Australian National Audit Office, Canberra, <https://www.anao.gov.au/sites/default/files/ANAO_Report_2010-2011_12.pdf>.

² Infrastructure Victoria 2020, *Victoria's draft 30-year infrastructure strategy*, viewed 6 August 2021, <https://www.infrastructurevictoria.com.au/wp-content/uploads/2020/12/Victorias-Draft-30-Year-Infrastructure-Strategy-Volume-1-1.pdf>, p.48.

1.2 How can we help low-income and vulnerable households manage any upfront costs in changing energy sources?

To assist low-income homeowners to transition away from gas, we recommend a program of grants for the replacement of gas appliances with electric equivalents.

The Victorian Government's Home Heating and Cooling Upgrades program is a good first step that should be used to test future approaches. It is clear that a much larger program will be needed if a significant proportion of the more than 80% of Victorian households with gas³ are to be assisted, often with multiple appliances.

Importantly, many of the households we work with will not be able to afford a co-contribution. Provision should be made for full (or close to full) funding of upgrades for higher-needs households. Community organisations like the BSL and others have the capacity to assist in identifying and assisting such households to access these upgrades. For future programs, subsidies could be scaled according to household income, with the lowest income households, ideally receiving the full cost of upgrades (and attendant work such as plumbing and rectification).

Consideration should also be given to providing incentives to shift to solar and improve energy efficiency as households shift from gas and towards electricity.

1.3 What are the barriers for households in improving the efficiency of their use of gas for heating, cooking and hot water and/or switching to solar/pump hot water in existing homes?

Our analysis suggests the most compelling evidence supports shifting away from gas, rather than focusing on improving the efficiency of gas appliances, for carbon emissions and running costs. Energy efficiency improvements of homes and fixtures/appliances do however provide an important opportunity to reduce overall energy usage. Common barriers to energy efficiency and electrification include:

1.3.1 Lack of money and sometimes incentives

Regardless of the long-term savings, many households cannot afford the upfront cost of an efficient appliance even when replacing a broken appliance, let alone to replace a working appliance with a more efficient one or to electrify a house with multiple gas appliances. In some cases, households also lack an incentive to electrify, because electrifying does not always deliver savings, especially for hot water systems and if the household does not have solar panels.⁴

The BSL's research on the Home Energy Efficiency Upgrade Program (HEEUP), which assisted over 750 households to upgrade hot water systems, has shown that a subsidy can bring forward upgrade decisions and shift households towards more efficient options.⁵ Further, different subsidy levels, and different

³ Infrastructure Victoria 2020, *Towards 2050: gas infrastructure in a zero emissions economy*, p.11.

⁴ For example. replacing a gas hot water system with a heat pump is more expensive in all Victorian locations See Alternative Technology Association 2018, *Household fuel choice in the National Energy Market*, viewed 6 August 2021 https://renew.org.au/wp-content/uploads/2018/08/Household_fuel_choice_in_the_NEM_Revised_June_2018.pdf

⁵ Sullivan, D et al. 2016, Home Energy Efficiency Upgrade Program final report, http://library.bsl.org.au/jspui/bitstream/1/10184/1/Sullivan_Home_Energy_Efficiency_Upgrade_Program_final_report_2016.pdf

formulations (e.g. a \$1,000 subsidy vs a \$1,000 fixed price for an upgrade) will lead to different responses from households.

1.3.2 Issues around information, knowledge and trust

Shifting from an existing type of heating, water heating and cooking system (such as gas hot water to heat pump, or gas heating to reverse cycle air-conditioning) adds complexity to a decision to replace an appliance. Households confront a number of factors including:

1.3.2.1 Knowledge and preferences

Many people lack knowledge about energy efficiency, and misperceptions about the cost, usability and environmental impacts of electric appliances are common. As a result, people often have insufficient information to electrify or upgrade their energy efficiency. Deciding on efficiency upgrades can be complex and dependent on individual circumstances, and households often see nowhere to turn for trustworthy information.

The BSL's research on HEEUP has shown that trusted advice (paired with a subsidy in our case) can shift purchasing decisions towards heat pump and solar hot water systems.⁶

Many people also prefer gas appliances, particularly for cooking and heating, and will resist electrifying even if they have accurate information.

We also recommend that the Victorian Government plan a campaign to understand and respond to people's preferences and knowledge gaps about electric appliances.

1.3.2.2 Status quo bias of consumers and suppliers

Upgrading a major appliance (or fixture) such as a hot water system or home heating is a significant investment for many households.

Households often have to decide in haste, when a system is broken down. At such times they are more likely to choose a like-for-like replacement (e.g. replace a gas hot water system with another gas system).

A key advisor on upgrade decisions will be their hot water or heating technician, whose bias and abilities become important in shaping the upgrade decision. Also, shifting to a different type of unit adds complexity and unknowns into the decision-making process (e.g. 'will this system be as reliable as my old system?').

2 Outcomes framework and multi-criteria assessment

2.1 Do the range of outcomes measures identified above adequately cover key considerations for assessing the costs and benefits of options and strategies to decarbonise the use of gas in Victoria?

While we are pleased to see 'affordability and equity' as an outcome measure, we suggest that this measure needs to go further than 'the net cost of energy for households and businesses'. It should cover the distribution of that cost and its affordability for different kinds of household. If households facing disadvantage bear a disproportionate or unaffordable share of the transition's cost, it will be inequitable regardless of the overall cost.

⁶ [ibid.](#)

3 Supporting Victoria's workforce, industry and the institutions that support them (issue 4)

3.1 How can government, industry and unions best work together, including through the Victorian TAFE and Training system, to help to build these skills and capabilities, and support existing workers through the transition?

The large number of jobs in the gas industry necessitates a transition that is planned over the long term and well-resourced by government. Workers should have certainty that the transition will lead to decent, well-paid jobs, otherwise they are likely to, understandably, oppose it.

The BSL suggest looking to successful transitions in other jurisdictions, such as the transition of coal and industrial workers in the Ruhr region of Germany, although Victoria's gas industry is less concentrated in a particular region. Successful transitions share several features: broad consultation with affected workers and industries, retraining provided well before job losses begin, sufficient funding and cohesive leadership.⁷

We recommend that retraining and job creation efforts focus on industries that are mature and likely to provide stable jobs, rather than relying excessively on comparable but speculative fields. For example, training gas workers in hydrogen jobs may be riskier than electrical trades or water plumbing because it is unclear how widespread hydrogen usage will be in future. Electrification, particularly the shift to heat pumps, is likely to create a large volume of work that seems like a logical retraining opportunity.

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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⁷ See Sheldon, P, Junankar, R & de Rosa Pontello, A 2018, *The Ruhr or Appalachia? Deciding the future of Australia's coal power workers and communities*, Industrial Relations Research Centre, UNSW, viewed 6 August 2021, https://www.ituc-csi.org/IMG/pdf/ruhrorappalachia_report_final.pdf.