

Building Electrification – Regulatory Impact Statement

EEC submission

February 2025

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About the EEC

The EEC is the peak body for Australia’s energy management sector.

We are a membership association for businesses, universities, governments, and NGOs that have come together to ensure Australia harnesses the power of efficiency, electrification, and demand management to deliver a prosperous, equitable, net zero Australia with:

- People living and working in healthy, comfortable buildings;
- Businesses thriving in a decarbonised global economy; and
- An energy system delivering affordable, reliable energy to everyone.

The EEC works on behalf of its members to drive world-leading government policy, support businesses to rapidly decarbonise, and to ensure we have the skilled professionals to drive Australia’s energy transformation.

General comments

The EEC welcomes the opportunity to provide comment on the Victorian Government's consultation on the *Building Electrification Regulatory Impact Statement*.

Gas appliances have served households well for many years, but with rising gas prices, declining reserves, and the increasing affordability of clean, renewable electricity, it is time to transition to modern, efficient, electric solutions.

We acknowledge the government's preferred approach (option 3) is a starting point to help Victorian homes and buildings transition to a net zero compatible, climate resilient condition, while reducing operating costs. The proposed measures ensure that households will only transition when their existing appliances reach the end of their useful life and will not prohibit the right to repair. This will help to minimise financial impacts, while maximising long term savings and health benefits.

However, given the urgency of electrifying Victoria's buildings for climate, health and energy security reasons, the EEC recommends adopting option 2, which includes the phaseout of residential gas cooktops and the inclusion of commercial buildings (excluding commercial cooking). Given the risks associated with excluding residential cooktops (outlined in this submission), on health grounds alone option 2 should be the preferred option. Irrespective of whether the government adopts option 2 or 3, a range of complementary measures will be required to help mitigate the risks outlined in this submission.

Below, we provide detailed feedback based on our members' insights, identifying key benefits, possible unintended consequences, and complementary measures we believe to be critical to the success of this intervention.

Key benefits of the proposed approach

Through discussion with our members, we identified four key areas of benefit associated with option 2, and option 3 to a lesser extent. These include:

Cost savings for Victorians

- Homes and buildings with efficient electric appliances, such as heat pump hot water systems and reverse-cycle air conditioners, pay significantly lower energy bills compared to those relying on gas.
- Avoiding continued investment in gas infrastructure will prevent locking properties into higher bills.

Climate commitments

- Electrification is one of the fastest and most cost-effective pathways to decarbonisation.
- The International Renewable Energy Agency estimates that energy efficiency will deliver a full quarter of the entire world's emissions reductions to 2050.¹
- Australian research confirms these figures hold locally and that energy efficiency and electrification can deliver 14 per cent and 26 per cent of Australia's emissions reductions, respectively, at low cost.² This underscores the importance of Victoria's decision to pursue action to improve efficiency and electrification in its homes and buildings.

Health benefits

- If included, transitioning from gas cooktops – which have been linked to respiratory and other health issues, particularly for children – would reduce health risks.
- Burning gas creates airborne toxins such as nitrogen dioxide and benzene. Children living with gas stoves have a 30% increased risk of developing asthma, similar to children living with second hand cigarette smoke. Benzene increases lifetime risk of leukaemia.³
- The burning of fossil gas contributes to accelerated climate change, which is a threat to the health of the entire population.

¹ International Renewable Energy Agency (IRENA) 2022, [World Energy Transition Outlook 2022](#).

² Northmore Gordon 2023, [Energy efficiency scenario modelling](#).

³ Healthy Futures, [Can you help Victoria get off gas?](#), 2024, citing: Lin et al., '[Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children](#)', International Journal of Epidemiology, vol. 42, no. 6, pp1724–1737, Jayes et al. 2016, '[SmokeHaz: systematic reviews and meta-analyses of the effects of smoking on respiratory health](#)', CHEST, vol. 150, no. 1, pp 164–179, Vork, et al., 2007, '[Developing asthma in childhood from exposure to secondhand tobacco smoke: insights from a meta-regression](#)', Environmental Health Perspectives, vol. 115, no. 10, pp 1394–1400.

Flexibility and futureproofing

- Electric solutions integrate well with renewable energy and storage, such as rooftop solar and batteries, lowering costs at a household level. When used strategically, electric appliances support the electricity network more broadly – for example, by assisting with the grid integration of renewables and maximising distribution network use.

Risks to be managed

While there is strong support for regulation to phase out gas appliances and connections, there are also risks with the proposed design of the regulations that need to be addressed to ensure its success:

Gas cooktop exemption (option 3)

- Gas cooktops can act as a ‘gateway’ for continued gas use and delay broader electrification efforts.
- Without a clear policy driver to transition away from gas cooktops, there is a risk of households and strata buildings being stranded on gas networks.
- This exemption could potentially delay broader gas network transitions. For example, just a few homes steadfastly remaining on gas could delay a street or neighbourhood from exiting a network – which drives the cost and complexity up for all stakeholders.
- Cultural attachments to gas cooking warrant time and consideration and will require sensitive management.

Allowance of conversion from reticulated fossil gas to bottled liquefied petroleum gas (LPG)

- The exposure draft of the regulations leaves open the option of replacing existing reticulated gas appliances with LPG appliances.
- While this may be unlikely to trigger high numbers of conversions to LPG appliances, it is important that LPG use remains an exception and does not become a new barrier to increased electrification – particularly as regulations prohibit the placement of LPG tanks near heat pump compressors.
- As LPG is a fossil fuel, with negative impacts for health when combusted indoors, it is our view that LPG should only be used as a fuel of last resort for certain, hard-to-electrify consumers.

Negative consumer experiences

- Households accustomed to unlimited hot water from instantaneous gas water heaters may find the transition to tank-based systems challenging, particularly in larger households. This could be exacerbated further if new systems, such as heat pumps, are not fit for purpose.
- Homes with poor thermal envelopes may experience discomfort when switching from radiant gas heating to reverse cycle systems.⁴

Infrastructure and power supply issues

- Older residential and commercial properties may require costly switchboard or wiring upgrades to support electrification.
- Inadequate power supply in some buildings, particularly apartments, could limit the feasibility of electrification until electricity infrastructure is upgraded. This may exclude some of the population from participating in, and benefitting from, this transition. As they will be stranded and 'last on the gas network,' they are also likely to pay a disproportionately high cost, as others exit, and network fees rise.
- Over 12% of Victorians now live in apartments.⁵ Apartment and strata living demographics tend to be more diverse,⁶ creating an intersection of issues and barriers to consider when supporting this group. Complementary measures will be required to preserve transition equity for these households.

Existing commercial buildings

- While exempting existing commercial buildings in option 3 may appear to make sense in the short-term given the diversity and complexity of this work, failing to create a driver for the electrification of these buildings means they may become stranded in the mid-long term.
- Complementary measures should be put in place to stimulate the retrofit of these buildings. These may include financial incentives, or other regulatory interventions targeted specifically at this subset of buildings.
- Victoria should encourage the Commonwealth to accelerate work on the government roadmap to guide future expansion of the Commercial Building Disclosure (CBD) Program.

⁴ The Conversation, [Replacing gas heating with reverse-cycle aircon leaves some people feeling cold. Why? And what's the solution?](#), 2023.

⁵ ABS, [Snapshot of Victoria](#), 2021.

⁶ UNSW, [Higher density and diversity: apartments are Australia at its most multicultural](#), 2018.

Impacts on rural and regional communities

- These communities often face power reliability issues and limited access to skilled tradespeople.
- Fossil gas may currently serve as a more resilient energy option in some remote areas, where electricity supply is routinely disrupted.

Skills shortages

- Many tradespeople and advisors lack experience with energy efficiency retrofits and electrification, potentially leading to suboptimal outcomes.
- In Victoria, the construction industry is experiencing the highest number of skills shortages, including for electricians.⁷ This can increase difficulty for securing a trade to electrify a home or building, and drive-up costs due to supply and demand pressure.

Social license and messaging

- Clear communication is essential to address potential resistance, particularly regarding cultural attachments to gas cooktops and concerns about cost and industry impacts.

Costs for households stranded on the gas network

- Without a clear transition plan for phasing down gas networks supplying Victorian residential properties, households left on the network will face disproportionately high costs to run their homes.
- This is a significant equity issue, as those most likely to remain on the network—such as apartment dwellers (including many renters), residents in older homes or areas with inadequate power supply, and others facing barriers to electrification—are also the most vulnerable.
- Those least able to switch will bear the costs avoided by more flexible households, while missing out on the benefits of electrification.
- Cost recovery strategies for the decommissioning of the network need careful consideration, and to be clarified and communicated clearly. Allowing cost recovery on bills for low income and other households facing hardship should be avoided. While this is a complex challenge, the solution cannot be as simple as making the last consumer pay for everyone else—especially when that consumer is likely to be among the most vulnerable.

⁷ Victorian Government, [Workforce challenges are likely to persist](#), 2022.

Desirable complementary measures

To mitigate these risks and maximise the effectiveness of implementing regulation of this nature, we recommend the following complementary measures:

Consumer protections and support

- Ensure that households and impacted businesses have access to quality, independent advice about transitioning to electric appliances. This includes investment in promoting existing programs such as the Victorian Energy Upgrades (VEU) and Solar Victoria.
- Funding for switchboard upgrades would reduce financial barriers for older properties and have the secondary benefit of improving the general electrical safety of these homes.
- As households accustomed to 'unlimited' gas hot water may find the transition to tank-based systems challenging, support for behaviour change regarding water use and shower time may be of value. This solution may be education based, technology based, or both.

Thermal performance upgrades

- Pairing high performing thermal building shells with efficient heating and cooling reduces both energy waste and the size of infrastructure needed to maintain comfortable homes. This pairing can also help householders to maximise the benefits of rooftop solar and increase occupants' comfort.
- Support measures should be put in place to improve the thermal performance of homes, ensuring heating systems perform effectively and efficiently.

Skills development programs

- Expand training for plumbers, electricians, designers, inspectors, and other professionals to better support households during the transition to efficient all-electric homes.
- An effective example of this is the upskilling program for plumbers installing heat pump hot water systems offered by the Plumbing Industry Climate Action Centre (PICAC) and supported by Solar Victoria.

Support for local manufacturers

- Ensure any transition assistance for local gas appliance manufacturers includes support for pivoting towards electric solutions, such as heat pumps and solar hot water systems.
- Many of Australia's local manufacturers supplying residential gas hot water systems already have electric, solar and heat pump product lines that could be built on.

Strategic messaging

- Communicate the health benefits of transitioning away from gas, particularly in reducing respiratory risks associated with gas cooktops (whether included in this intervention or not).
- Communicate the benefits of the switch in terms of reducing household costs.

Alignment with policies for rental properties

- Introduce minimum rental standards to drive electrification and thermal performance improvements in rental properties, where owners may have less direct incentive to upgrade appliances.
- Steps should be taken to avoid duplication between any regulatory interventions introduced as a result of this consultation, and those introduced from the ongoing consultation on Victoria's minimum rental standards. For example, a requirement to electrify hot water services in all Victorian homes at end of life (except where genuine exemptions apply) may make a minimum rental standard to drive hot water electrification in rental properties redundant.

Further consideration for apartments

- Although exempting apartments (Class 2 buildings) is reasonable in this context, particularly if cooktops are excluded, continuing to exempt them from policy and regulatory interventions without actively supporting electrification in these settings presents a missed opportunity.
- Many Victorians, including a high proportion of renters, live in apartments. Without a regulatory driver to phase out gas appliances like cooktops, even owners' committees (OCs) willing to electrify will face challenges. If most private apartments—many owned by investors—still rely on gas for cooking, securing support to disconnect from the network will be difficult, even if progress is made in other areas like installing solar or electrifying bulk hot water.

Compliance and enforcement

- The success of these interventions will rely on many service providers – including SME businesses – changing their operations to comply with the new regulation.
- In addition to complying with the regulation, these providers are also crucial trusted voices to ensure households understand, and accept, the new requirements.
- Victoria will need to invest in strong compliance and enforcement measures to ensure the desired outcomes of the regulation are achieved practically, and to support social license for the upgrades.

Conclusion

This RIS represents a significant step forward for Victoria. With thoughtful regulation and the implementation of complementary measures, this approach can deliver substantial cost savings, health benefits, and emissions reductions for Victorians.

We strongly encourage the government to proceed with option 2, for the reasons highlighted in this submission.

The government should also work to address the identified risks and ensure robust support for households, trades, and industries during this transition. By doing so, Victoria can set a leading example in building electrification, and secure a cleaner, healthier, and more affordable energy future for the state.

Should you wish to discuss the matters raised in this submission further, please contact our Senior Advisor, Rachael Wilkinson at Rachael.Wilkinson@eec.org.au.

Sincerely,

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