



7 March 2025

**To: Victorian Department of Energy, Environment and Climate Action**  
**Re: Strategic Review of the Victorian Energy Upgrades (VEU) program**

Thank you for the opportunity to provide feedback on the Victorian Department of Energy, Environment and Climate Action's strategic review of the VEU program.

Victoria faces a changing energy context, with fast-depleting local gas resources, gas prices rising faster than electricity prices, and increasingly variable costs and emissions intensity for electricity over time. As a result, while the core focus of the VEU program remains valid, IEEFA believes that some adjustments are needed to better reflect this changing context:

- The biggest market trends that should shape the VEU program in the next five years are electrification, the increased value of demand flexibility, and upcoming gas supply challenges.
- While a continued focus on emissions is appropriate, the purpose and metrics should be updated to reflect the value of demand flexibility, and the review should consider adding a secondary gas reduction target.
- The VEU program should extend its product offering in electrification and demand flexibility, and restrain gas efficiency improvements.
- The VEU review should consider at least partially removing additionality requirements on residential water heating and heating electrification.

Our full response is detailed in the following pages. Please do not hesitate to contact us to discuss any aspects of our submission further.

Kind regards,

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The biggest market trends that should shape the VEU program in the next five years are electrification, the increased value of demand flexibility, and upcoming gas supply challenges

**Questions:**

1. What are the big opportunities for the VEU program in the next five years?
3. What are the biggest challenges with the VEU program as it currently operates?

Several factors are changing the business case and emissions impact of activities to reduce energy use:

- Victoria is facing [upcoming gas supply challenges](#) that will likely limit the availability of gas in the coming years, and push prices up for energy users.
- [Gas prices have already been increasing about twice as fast as electricity prices](#), improving the business case for electrification and the value of gas efficiency measures.
- The price and emissions intensity of electricity is [increasingly varying by time of day](#), as solar drives large reductions in price and emissions in the middle of the day.
- As the grid continues to decarbonise, the price and emissions intensity of electricity may also vary increasingly by season, [if winter electrification coincides with a higher dependence on gas generation in the NEM](#). This would increase the value of energy savings in winter months.

The result of these trends is that it increases the value of:

- Accelerated electrification, in particular in the [residential sector where early retirement of gas appliances often make financial sense](#) and can help keep the available gas for harder-to-electrify industrial facilities.
- Gas efficiency improvements where electrification is not yet feasible or cost-prohibitive.
- Demand flexibility, especially shifting electricity demand to capitalise on low-cost abundant energy in the middle of the day.

The VEU program should adapt to better position itself to respond to this changing context and capture those opportunities.



While a continued focus on emissions is appropriate, the purpose and metrics should be updated to reflect the value of demand flexibility, and the review should consider adding a secondary gas reduction target

**Questions:**

4. (a) Is the current purpose of the VEET Act fit for a future with increased renewable energy generation and increased electricity demand?  
  
(b) Are there any limiting features to the current VEET Act objects that prevent the entry of new energy efficiency, demand management, and/or electrification-enabling activities into the VEU program?  
  
(c) What factors need to be considered by the review when conducting its analysis of the VEET Act purpose and objects?
5. (a) How does the current VEEC metric (GHG emissions abated) influence the range of activities incentivised by the VEU program?  
  
(b) Do you think a different certificate metric should be used? Why? Please identify any potential risks, challenges or unintended consequences arising from altering the metric.

As renewable energy generation increases, a primary focus on reducing emissions remains warranted given that the electricity system may still rely on fossil fuels for at least some periods of time (for example, gas generation utilised during peak times of day and seasons), and some sectors/applications will continue to rely on direct fossil fuel combustion for several decades.

However, adjustments to the purpose would be warranted to capture the increased value of demand flexibility, as opposed to just energy efficiency, and to capture the increased value of gas demand reduction through electrification and a shift to renewable alternatives (provided they made financial sense). IEEFA would support the broadening of 'energy efficiency certificates' to include energy flexibility and fuel shift. As a result, IEEFA supports the retention of greenhouse gas (GHG) emissions reductions as the core metric, but recommend some adjustments:

- The adoption of flexible electricity emissions intensity factors to reflect: the changes in grid electricity emissions intensity during the day and over the year; and the availability of locally generated/stored solar electricity. This will make the scheme more resilient to the impacts of the grid's transition to renewables.
- The consideration of the introduction of a secondary gas demand reduction target, to reflect the specific state context around upcoming gas market challenges.



## The VEU program should extend its product offering in electrification and demand flexibility, and restrain gas efficiency improvements

### Questions:

2. What new activities or products should be incorporated into the program?
7. How can the VEU program help consumers make informed decisions about energy efficiency upgrades? How can APs and installers support customer education?
12. What is the role of the VEU program supporting businesses to reduce gas consumption where electrical alternatives are not yet technically feasible?

IEEFA recommends that the VEU review includes a full evaluation of opportunities to reduce emissions through energy efficiency, energy flexibility and fuel-shifting. It is likely to identify some activities that are not currently captured in the VEU program.

Our existing research already identified a few uncaptured opportunities, such as:

- The opportunity to shift from gas heating to existing reverse cycle air-conditioners (RCAC), with many households currently having both but only using RCACs for cooling and not for heating. This could have benefits both for [overall energy use](#) and for [peak demand](#), but would require educational programs rather than appliance deployment.
- The opportunity to [shift existing hot water systems from running overnight](#) (as is often the default setting) to running in the middle of the day to absorb solar generation. While this reduces GHG emissions, it doesn't reduce energy use and is therefore not currently included in the VEU program.
- The opportunity to [flex air conditioning demand during peak periods](#). Minor reductions in air conditioner consumption across even a small cohort of households can significantly reduce peak demand and GHG emissions. Moreover, there is demonstrated consumer willingness to participate in demand response programs when appropriate incentives are in place. This would require RCACs to be fitted with demand response capabilities, which would be a low-cost measure but is not currently included in the VEU.
- Limited applications of [industrial heat pumps](#) are currently included in the VEU. IEEFA has found that the food and beverage sector, which is one of Victoria's largest industrial gas users, could see large energy and cost savings through the implementation of industrial heat pumps. The [example of New Zealand](#) shows that limited financial support was successful in kick-starting the industry.



- A NSW program showed the large energy-saving opportunities in [compressed air systems](#), which represent about 10% of Australia's industrial electricity use. Leakage audits presented large savings with very short paybacks and system redesign could save 80-90% of energy use.

In contrast, some products could be constrained in the VEU offering. In particular, any gas efficiency improvements should be subject to a test first to see whether electrification is a commercially viable alternative.

## The VEU review should consider at least partially removing additionality requirements on residential water heating and heating electrification

### Question:

6. What should the review consider in its assessment of the VEET Act additionality requirements?

The VEU review should consider removing additionality requirements, at least for low- and medium-income households. While the shift from gas to electric appliances will deliver a large cost saving to consumers over their lifespan, it will incur higher upfront costs. Removing additionality requirements for low- and medium-income households will therefore help ensure that the shift is affordable for all.

Fully removing additionality requirements on water heating and heating electrification could also have operational benefits. Indeed, it may be hard to distinguish between replacements at end of life (covered by the proposed policy) and early retirements of appliances, which should stay within the VEU scope.

It is also likely that electrification may result in a 'rebound effect' where some particularly low-income households use proportionally more energy than expected to increase their comfort levels. This reflects a key benefit of efficient electric appliances – improving energy affordability – and should not be penalised.