To: Legislative Council Environment and Planning Committee

7 November 2025

Inquiry into decommissioning of oil and gas infrastructure

We appreciate the opportunity to provide feedback to the Legislative Council Environment and Planning Committee on the decommissioning of oil and gas infrastructure in Victoria and Commonwealth waters.

About Environment Victoria

Environment Victoria is the leading not-for-profit environmental advocacy organisation in Victoria. With more than 40 grassroots member groups and over 200,000 individual supporters, we've been representing Victorian communities on environmental matters for over 55 years. Through advocacy, education and empowerment, Environment Victoria seeks significant and enduring solutions that will safeguard the environment and future wellbeing of all Victorians.

Scope of this submission

Our submission is limited to discussion of onshore gas distribution networks, although we view the other areas of focus of this inquiry as equally important and would direct the Committee to submissions from The Wilderness Society and Friends of the Earth regarding offshore infrastructure. Our submission addresses the following parts of the Terms of Reference:

- (b) the scale and nature of oil and gas infrastructure requiring decommissioning over the coming decades, including onshore works and works in Commonwealth and Victorian waters;
- (c) the regulatory powers of the Victorian Government to ensure oil and gas companies deliver planned and timely infrastructure decommissioning;
- (g) identifying current and potential leaked greenhouse gases from Victoria's existing and retired oil and gas infrastructure, including relevant projects in Commonwealth waters and the quantity of leaks; and
- (h) any actions the Victorian Government can take to cap and otherwise protect the population from leaked greenhouse gases across Victoria's existing and retired oil and gas infrastructure.

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A fair gas transition for households and businesses

Victoria's transition away from gas is underway. Gas demand is decreasing rapidly as people and businesses respond to high gas prices and take up electric alternatives. Concern about climate change and the health impacts of burning gas indoors is also motivating people to electrify. Residential and small commercial (tariff V) demand per connection in Q2 has dropped 33 percent since 2020, and the previously strong correlation between winter weather and residential gas use is breaking down.[1] This trend is not surprising given the tripling of gas prices over the last decade since the commencement of LNG exports from Queensland and the terminal decline of gas reserves in Bass Strait.[2]

Victoria is now undergoing its first tranche of gas network decommissioning. In August 2025 the gas retailer Solstice Energy, owned by Tasmanian Gas Networks, announced that its compressed natural gas (CNG) networks would be closed down as they are not economically viable. This shutdown affects around 1100 customers in Robinvale, Swan Hill, Kerang, Nathalia, Marong, Maldon, Heathcote, Terang, Lakes Entrance and Orbost.[3]

The decommissioning of the Solstice Energy CNG networks provides a cautionary example of conflicting messaging and an unorganised transition from gas. These networks were built as part of the Ballieu-Napthine government's *Energy For The Regions* program in the mid-2010s. They were never economically viable; originally conceived as pipeline extensions, the government of the day did not receive an acceptable tender response. Instead, they induced gas distributors to participate by allowing trucked-in CNG as an alternative to extending scheme pipelines, and by paying them subsidies.[4]

Energy for the Regions relied on customers opting in – paying to connect and purchasing the appropriate appliances. As 'non-scheme' pipelines with a small number of customers, the cost to access these networks was not shared across a broad base of customers as the larger gas networks are. Furthermore, their operation coincided with a significant jump in gas prices as LNG exports commenced. The economic failure of the scheme was inevitable.

Nevertheless, then-Deputy Premier Peter Ryan promised in 2014 that households and businesses would "have their energy bills slashed" with access to "Victoria's abundant offshore gas reserves".[5] A well-briefed Deputy Premier would have known at the time that both claims were dubious at best. Those who did connect to the CNG networks acted on bad advice and are now bearing the consequences.

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[1] Joshua Runciman, 'Slump in Eastern Australia Gas Demand Shows No Signs of Easing', accessed 23 October 2025, https://ieefa.org/resources/slump-eastern-australia-gas-demand-shows-no-signs-easing.
[2] Kevin Morrison and Amandine Denis-Ryan, *LNG Exports Prompt Fall in East Coast Gas Demand* (IEEFA, 2024), https://ieefa.org/sites/default/files/2024-12/LNG%20exports%20prompt%20fall%20in%20east%20coast%20gas%20demand_Dec24.pdf.
[3] 'Gas Supply to 10 Regional Victorian Towns to Be Cut by End of 2026', *ABC News*, 4 August 2025, https://www.abc.net.au/news/2025-08-05/solstice-energy-to-cut-gas-supply-to-10-regional-victorian-towns/105610966.
[4] Regional Development Victoria, 'Energy for the Regions', 16 June 2014, https://www.parliament.nsw.gov.au/ladocs/other/8135/Presentation%20notes%20-%20%27Energy%20for%20the%20Regions%27%20-%20Regional%20Development%20Victoria%20(16%20June%202014).PDF.
[5] '"Priority Towns" Cooking with Gas', 30 September 2014, https://www.weeklytimesnow.com.au/news/opinion/victorias-priority-towns-cooking-with-gas-under-energy-for-the-regions-program/news-story/4febf340316d58c5e92387c79ac51e38.

In October 2025, Environment Victoria sought to ask those affected by Solstice Energy shutdown about their experience. We directly emailed people in our supporter database and posted on local social media groups, and received 11 responses, including six people directly affected. Although this is a small response, the feedback was illuminating. We summarise key insights as follows:

- People would not have invested in gas-connected homes had they known the network was not viable. This money has now been spent, which limits their ability to choose now.
- People who would like to electrify their home haven't been given sufficient time to save and plan to make use of the rebates on offer. People would also prefer not to throw out appliances that still work.
- The reliability of the local electricity network is a major factor in people's willingness to go fully electric. Regional towns that are vulnerable to gas shutdowns can also tend to experience frequent power outages.
- Information and help about what to do now is lacking, and people are still confused about how their appliance choices impact their energy costs. (We note that the government has made efforts to improve the availability of information and service providers. Evidently, at time of writing this had not yet reached the survey respondents.)
- The assistance and rebates offered by Solstice Energy push people towards the most expensive running costs.[6]
- People are resentful that the government wasted public money on *Energy for the Regions* and this has contributed to distrust.

We provide some direct quotes from the respondents in Attachment 1.

The Solstice Energy shutdown provides an example of what happens if gas network decommissioning is not well managed. Households and businesses that have acted on absent or incorrect information are left worse off while the gas company walks away.

It is foreseeable that other parts of Victoria will follow. Gas network extensions also occurred two decades ago under the Bracks government's *Natural Gas Extension Program* which extended scheme pipelines to East Gippsland, the Macedon Ranges, Yarra Ranges and other part of Victoria. Similar to the Solstice Energy case, this program relied on customers opting in, leading to (we understand) low customer density. The continuing viability of these extensions is likely to depend on a very small number of larger gas consumers. However, businesses (e.g. dairy farms) are now considering the merits of shifting to electric technology with lower running costs, such as heat pumps backed by on-site renewables. Recent extensions to the gas network are also more vulnerable to strategic decommissioning because they are topologically linear (rather than mesh) and relatively simple to disconnect.

[6] Solstice Energy has offered to switch affected customers to liquefied petrolem gas (LPG) for free. Alternatively, customers are offered rebates to partly cover the cost of electric appliances and must arrange their own installations. Rewiring Australia has estimated that households affected by the Solstice Energy shutdown would save $45,000 on running costs over 15 years if they switch to efficient electric heating, cooking and hot water instead of LPG.

The Victorian government has partially addressed this problem with the Gas Substitution Roadmap, which protects consumers from the costly consequences of connecting to white elephant gas infrastructure when building new, and sets in train the broad-scale shift of some appliances away from gas. These are commendable measures that will leave Victorians far better off. However, gaps remain: major appliance categories such as gas space heating are not covered, some measures are yet to commence in legislation, and the issue of electricity reliability in regional areas is not included in the problem definition.

A different approach is possible. In 2023, the town of Esperance, Western Australia was disconnected from reticulated gas. Over the 15 months prior, Horizon Power managed the transition by engaging the 400 affected customers to demonstrate unfamiliar technologies such as induction cooktops and heat pumps, and help them choose the alternative that best suited them. The program included funding, repurposing or recycling uninstalled appliances, and installation. In other words, the government stepped in to remove pain points. Over 85 percent of affected customers chose full or partial electric options and feedback has been overwhelmingly positive.[7]

The Esperance process has been well documented and evaluated by Horizon Power so that others may learn from this good example. We encourage the Committee to consider the merits of such an approach for those Victorian towns that are vulnerable to early gas network decommissioning.

Fugitive emissions from gas pipelines

Gas pipelines leak methane, and methane is a very powerful greenhouse gas. Over a 20 year period the global warming potential of methane (GWP_{20}) is 82.5 times that of carbon dioxide. Over 100 years the global warming potential (GWP_{100}) is 29.8 times. By convention, greenhouse gas emissions are reported according to GWP_{100}, which was an arbitrary choice made in the 1990s when little attention was being paid to methane as a cause of global heating.[8] This means that the contribution of methane to global heating, particularly during the critical years between now and 2050, is being greatly underestimated.

We estimate that for each unit of gas that is delivered to Victorian gas pipelines, around 1.4 percent is emitted as fugitive unburnt (methane). This is a conservative value based on the amount of unaccounted for gas allowed by the Essential Services Commission (ESC) and the proportion of unaccounted for gas that is estimated to be leaked. Studies in the United States have found an average distribution network leakage rate of 2.2 percent.[9] A leakage rate of 1.4 percent is significant: it means that fugitive emissions account for 31 percent of the emissions from distributing and using gas in homes and businesses (GWP_{20}). (Refer to Attachment 2 for our calculations and assumptions.)

[7] 'Esperance Community Successfully Transitions from Reticulated Gas: A Milestone in the Journey to Cleaner Energy', accessed 6 November 2025, https://www.horizonpower.com.au/about-us/news-announcements/esperance-community-successfully-transitions-from-reticulated-gas-a-milestone-in-the-journey-to-cleaner-energy2/.

[8] Robert W. Howarth, 'The Greenhouse Gas Footprint of Liquefied Natural Gas (LNG) Exported from the United States', *Energy Science & Engineering*, ahead of print, 3 October 2024, https://doi.org/10.1002/ese3.1934.

[9] Howarth, Robert W, 'Methane Emissions from the Production and Use of Natural Gas', *Em The Magazine for Environmental Managers*, December 2022, https://www.research.howarthlab.org/documents/Howarth2022_EM_Magazine_methane.pdf.

Currently, there is little to incentivise gas networks to reduce fugitive emissions, other than the need to ensure leaks are below levels likely to cause explosions.[10] Victorian's Environment Protection Authority does not regulate methane emissions from gas pipelines, despite the significant scale of leakage.

Similarly, the ESC do not see the regulation of leaks as their responsibility. According to the ESC, the appropriate mechanism to incentivise the reduction of leaks would be the access arrangements process adminstered by the Australian Energy Regulator (AER).[11] We note that a program to drive down fugitive emissions without shifting away from gas would involve reinvestment in the gas networks, passing on excessive costs to consumers at a time when consumers are turning away from gas.[12]

Victoria's legislated climate targets require the state to reach net zero emissions by 2045, which is consistent with what is required to maintain a safe climate. Fugitive emissions from gas infrastructure are currently a significant, unmeasured and unmanaged source of emissions, which will supercharge the impacts of climate change in the near-term. As Victorians switch off the gas, a comprehensive approach to decommissioning is crucial to protect consumers and ensure the full emission reductions are realised.

You are welcome to contact me on the details below, should you wish to discuss this submission in more detail.

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[10] Howarth, Robert W, 'Methane Emissions from the Production and Use of Natural Gas'.
[11] Essential Services Commission, *Review of Unaccounted for Gas Benchmarks - Final Decision* (2022), https://www.esc.vic.gov.au/sites/default/files/documents/Final%20decision%20-%202022%20UAFG%20Benchmarks%20Review%20for%202023-28.pdf.
[12] Zincara Pty Ltd, *Review of Gas Distribution Businesses: Unaccounted for Gas* (St Kilda East, 2022), https://www.esc.vic.gov.au/sites/default/files/documents/Zincara%20Report%20-%202022%20UAFG%20Final%20decision.pdf.

Attachment 1: Direct quotes from our Solstice Energy survey

People made decisions based on bad information

"My home is just over a year old, paid over $2400 for natural gas installation and $5000 for gas stove top and I have no way of going fully electric because Im on the carers pension and I do t want gas bottles as to me they are dangerous." Joanne, Lakes Entrance

"We just brought a house late last year, 2024. If we had of known we would not have made the purchase or asked the seller to drop." Pauline, Lakes Entrance

Some people would like to go electric but haven't had time to prepare

"There was no sufficient time. At least if it was 5 or 10 years I would get my money back on my appliances, put money away to go fully electric." Joanne, Lakes Entrance

"2 to 3 years [notice would be reasonable]." "I dont want to connect to bottled gas, however what choice will i have." Nathan, Kerang

Confusion about running costs

"Hopefully LPG works out cheaper as natural is expensive." Tara, Lakes Entrance

"If I'm forced to go to LPG, the cost will be higher and the reliablity issues." Nathan, Kerang

"We are in a difficult situation if we connect appliances to gas it's the on going running cost but changing all to electricity it's going to cost us a lot." Pauline, Lakes Entrance

Electricity reliability is a major barrier to getting off gas

"Make sure our electrical supply lines are not interrupted as happens now!" David, Orbost

"[Gas is] more reliable than electricity in Orbost." Dave, Orbost

"Twice we have experienced no power here and that is why I chose to have my stove top ar least natural gas." Joanne, Lakes Entrance

Resentment about government expenditure

"I thought it was a weak solution that wasted money that could have been much better spent." Rob, Lakes Entrance

"Pay all that money to put in the infrastructure and then unused. The government promised us to have reticulated gas in Orbost. Then only half the town was done and instead of tapping into pipeline that went past the end of the town they put in this stupid gas tank. It could never work and now it is to shut down. We can not trust the government!" Dave, Orbost

"The government has spent millions of dollars to install the natural gas infrastructure and paid money in rebates to encourage residents and businesses to convert to gas. 6 years later it has been decided by who knows that it's a great idea to cut communities off and take away our rights and freedom of choice." Tara, Lakes Entrance

Help is yet to arrive, and the messages are confusing

"Still waiting for DEECA and Solstice to hold an information session in Lakes Entrance." Tara, Lakes Entrance

"The goverment is wanting people to go to electricity but what's confused Solstice are l believe encouraging us to stay on gas as there is no charge to stay on gas." Pauline, Lakes Entrance

Attachment 2: Greenhouse gas emission calculation assumptions

In advice to the ESC, Zincara Pty Ltd estimated that between 18 and 40 percent of unaccounted for gas is lost as fugitive.[13] We assumed the average of these values (29 percent).

We used the average of the Class B unaccounted for gas benchmarks set by the ESC for 2022-2028 (4.72 percent). We did not use Class A benchmarks as gas transmission losses are included in the National Greenhouse Accounts for combusted gas, and thus counted elsewhere.

Taking both values into account give 1.4 percent of gas delivered to the pipeline.

To calculate the overall GWP20 emissions from transmission, distribution and combustion we followed the method detailed by Howarth, using the above and other values for Victoria where relevant.[14]

[13] Zincara Pty Ltd, *Review of Unaccounted for Gas Benchmarks - Methodology* (2017), https://www.esc.vic.gov.au/sites/default/files/documents/review-of-unaccounted-for-gas-benchmarks-methodology-prepared-by-Zincara-20170731.pdf.

[14] Howarth, 'The Greenhouse Gas Footprint of Liquefied Natural Gas (LNG) Exported from the United States'.