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Submitted online via Engage.vic

20 June 2025

Geelong Sustainability Submission to the Vopak Victoria Energy Terminal draft EES scoping requirements

Thank you for the opportunity to make a submission on behalf of Geelong Sustainability to the Vopak Victoria Energy Terminal draft EES scoping requirements.

<u>Geelong Sustainability</u> is a for-purpose community organisation and registered charity that supports residents of Geelong and the surrounding Barwon region to be more sustainable in their everyday lives. We have 147 members, over 50 active volunteers, and over 20,000 supporters throughout the region.

Since our establishment in 2007, Geelong Sustainability has become the region's leading sustainability group with extensive networks in community, government and business throughout Geelong and the Barwon region. We are recognised for our evidence-based innovative projects, which educate and support our community's transition to a net zero, climate resilient future.

Geelong Sustainability is committed to working towards - and advocating for - urgent climate action to meet our net zero commitments and protect future generations. We seek ambitious renewable energy, electrification, energy efficiency, and demand management as ethical and effective responses to our current climate emergency and potential gas shortages.

While our priority is no new gas infrastructure, we recognise the terms of this consultation process and therefore recommend the following amendments are made to the Environmental Effects Statement (EES) requirements for the proposed Vopak gas import terminal project in Port Phillip Bay to ensure a safe and sustainable pathway to a net zero future for our region:



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1. Climate change

- Climate change is a 'high priority' concern
- The climate impact assessment should include a consideration of the upstream and downstream climate effects of the project (including transport and gas emissions intensity)
- The near-term (20-year) impacts of fugitive methane emissions should be considered
- In terms of climate impacts:
 - should be evaluated against other solutions to Victoria's forecast shortfalls, including demand side measures
 - o the project's lifetime emissions should be considered
 - should be considered beyond their implications for Victorian Climate Action Act
 2017 targets alone
 - should be considered in a realistic and meaningful rather than a hypothetical and relative way.
- 2. Energy efficiency, security, and affordability
 - The project's likely impact on Victorian energy costs should be considered against alternative solutions, including targeted demand side alternatives.
- 3. All other necessary approvals, including navigational safety studies, should be completed before the EES is assessed or approved.

1. Climate Change

Climate change is a 'high priority' concern

The 'Draft EES Scoping Requirements Vopak Victoria Energy Terminal Project' paper (Scoping Document), divides specific environmental effects into 'high priority', 'medium priority' and 'other priorities', without defining these categorisations, or describing their relevance to the process. Climate change should not be considered a medium priority.

The Intergovernmental Panel on Climate Change (IPCC) describes climate change as 'a grave and mounting threat to our wellbeing and a healthy planet.' The World Health Organization states that climate change presents a fundamental threat to human health. Victoria's continued dependence on fossil gas is directly relevant to the progress of emissions reduction

https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health

¹ IPCC (2022) 'Climate change: a threat to human wellbeing and health of the planet. Taking action now can secure our future.' https://www.ipcc.ch/2022/02/28/pr-wgii-ar6/

² WHO (2023) 'Climate Change'



and reducing the risks from climate change. Climate change also poses well-documented local threats to the greater Geelong region, and across Victoria.³

Therefore the project's climate change impacts should be considered as a high priority.

The climate impact assessment should include a consideration of the upstream and downstream climate effects of the project (including transport and gas emissions intensity)

The draft Scoping Document states the EES should consider 'Energy use and upstream greenhouse gas emissions (including fugitive emissions) resulting from all modes of project operations.' This is appropriate, but it should be revised to clarify that the EES should quantify and evaluate:

- Emissions associated with gas production, LNG production, regasification and transport from the likely gas sources (noting that a 2024 study demonstrated, using US case studies, that the lifecycle emissions impact of imported LNG was 33% worse than coal over a 20-year period, partly due to the methane emissions associated with LNG shipping.4)
- Downstream emissions relating to gas imported from this terminal, with a particular focus on:
 - A comparison of continued gas use with the alternative scenario of using targeted demand side solutions to avoid potential shortfalls
 - The impact of higher-emissions-intensity gas from the import terminal on the emissions intensity of Victoria's gas mix, especially for a 20-year Global Warming Potential (GWP) metric (but also for a 100-year GWP), and the impact of this on the state's energy transition.
- The climate impacts should be considered in relation to the likelihood that the import terminal, with the anticipated volumes of gas to be imported during its lifetime, will require the development of new gas fields to supply this terminal (should east coast gas' international exports also continue as expected). AEMO's 2024 Gas Statement of Opportunities (GSOO) states that relying on import terminals to serve southern supply

³ DEECA (2024) 'Climate ready Victoria Barwon South West.' https://www.climatechange.vic.gov.au/__data/assets/pdf_file/0024/732390/Victorian-Climate-Science-Re port-Collateral-Regional-Reports-Barwon.pdf

⁴ Howarth RW. The greenhouse gas footprint of liquefied natural gas (LNG) exported from the United States. Energy Sci Eng. 2024; 12: 4843-4859. doi:10.1002/ese3.1934



gaps will require the development of new northern supply projects.⁵ This trajectory is inconsistent with the consensus amongst climate change studies and IPCC reports that new gas projects are inconsistent with any chance to keep global temperature rise above pre-industrial levels, below 1.5 degrees.⁶

The recent Victorian Minister for Planning's decision on Viva's proposed import terminal in Corio Bay ruled upstream and downstream Scope 3 emissions to be outside Viva's 'operational boundary', suggesting that they are beyond Viva's control. That finding is questionable, but more importantly, it is irrelevant to judging the impact of the project in its EES. For the purposes of the EES, it is clear that emissions associated with LNG production and regasification and transport will be a direct result of whether or not the project is approved - and therefore, they should be considered for the EES.

The near-term (20-year) impacts of fugitive methane emissions should be considered

A high proportion of the emissions associated with the activities of the import terminal, and the gas imported via the terminal (upstream and downstream emissions) relate to the release of fugitive methane. The proportion of fugitive methane in the emissions profile of imported LNG is higher than for Victoria's traditional sources of gas.

Fugitive methane has a disproportionately high impact on warming in the near term i.e. in its 20-year GWP, rather than the 100-year GWP. Emissions accounting generally considers the 100-year global warming potential, and this is true for Victoria's emissions targets.

There are several reasons for greater urgency in addressing climate change. The impacts are already being felt by Australian communities⁷, the high global temperatures recorded in recent years (which may indicate that the most recent IPCC budgets were overly generous⁸,

⁵ AEMO (2024). 'Gas Statement of Opportunities for Australia's East Coast Gas Market' https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2024/aemo-2024-gas-statement-of-opportunities-gsoo-report.pdf p82

⁶ Evans (2022) 'New fossil fuels 'incompatible' with 1.5C goal, comprehensive analysis finds', https://www.carbonbrief.org/new-fossil-fuels-incompatible-with-1-5c-goal-comprehensive-analysis-finds/

⁷ CSIRO and Bureau of Meteorology (2024), 'State of the Climate' https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate/australia s-changing-climate

⁸ Hansen, J. E., Kharecha, P., Sato, M., Tselioudis, G., Kelly, J., Bauer, S. E., ... Pokela, A. (2025). Global Warming Has Accelerated: Are the United Nations and the Public Well-Informed? *Environment: Science and Policy for Sustainable Development*, *67*(1), 6–44. https://doi.org/10.1080/00139157.2025.2434494



and the fast-diminishing global carbon budget for retaining livable temperatures⁹. Hence the criticality that the EES process considers the project's impact on the 20-year, as well as the 100-year time scale.

Additional emissions over the next 20 years will severely hamper our remaining opportunity to mitigate climate change's long term damage.

Climate impacts should be evaluated against other solutions to Victoria's forecast gas shortfalls, including demand side measures

The Scoping Document explains that the EES is to document the justification of the proposed project against alternative designs, but clarifies "The assessment of alternatives does not include evaluating alternatives *to* the project (such as other forms of energy generation), but rather alternatives *for* the project which would allow project objectives to be met."

However, Engage Victoria's website for the Vopak proposal describes the aim of the Project as being 'to provide Victorian's access to a reliable supply of natural gas from the global market that can scale up and down to meet Victorian's energy needs.'

We argue that Victoria's energy needs are directly relevant to the aims of the project, and as such, we urge the EES process to consider the impact of this project compared to alternative solutions to Victoria's energy security, including the potential to deploy targeted demand-side measures.

Recent modelling undertaken by the Institute for Energy Economics and Financial Analysis (IEEFA) has demonstrated that demand-side measures offer a lower cost alternative to addressing Victoria's energy needs, with a lower climate impact.¹⁰

The climate impacts of the project's lifetime emissions should be considered

The climate impact of emissions should be considered in relation to the expected, and the minimum economically-viable operating life for the proposed development.

Geelong Sustainability Group Inc.

⁹ Forster et al (2024) 'Indicators of Global Climate Change 2023: annual update of key indicators of the state of the climate system and human influence.' https://doi.org/10.5194/essd-16-2625-2024

¹⁰ IEEFA (2024) 'No shortage of solutions to gas supply gap'

https://ieefa.org/sites/default/files/2024-04/No%20shortage%20of%20solutions%20to%20gas%20supply%20gap_Apr24.pdf



Climate impacts should be considered beyond their implications for Victorian *Climate Action Act 2017* targets alone

The Scoping Document states the climate impact should be considered in relation to the "potential for direct and indirect greenhouse gas emissions to result from all stages and modes of operation of the project, and the implications of these emissions in the context of the targets outlined in the *Climate Action Act 2017.*"

While the proposal's pollution should be considered in relation to Victoria's climate targets, including its implications for the emissions reductions required to achieve Victoria's 2035 target, it should also be considered in a meaningful and realistic way in relation to Australia's commitment under the Paris Agreement to 'pursue efforts to limit temperature increase, relative to pre-industrial levels, to 1.5°C.'

The rate of observed global warming in recent years has accelerated, for reasons not yet fully understood by climate scientists, with single-year global average temperatures in 2024 breaching 1.6 degrees. A possible explanation is that the cooling influence of aerosols were underestimated in the 2021 IPCC models.¹¹

Our commitment to efforts to limit temperature increase to 1.5°C in this context warrants urgent avoidance of emissions wherever possible.

The project's pollution should be considered in comparison to alternative solutions, such as targeted demand side measures.

Climate impacts should be considered in a realistic and meaningful, rather than a hypothetical, way

The urgency and the scale of the climate crisis warrants a meaningful and realistic assessment of the project's likely climate impact, in the full sense, and compared to all other alternative solutions, including demand side measures.

A hypothetical assessment of whether the project's narrowly-defined emissions might be potentially compatible with a Victorian pathway to net zero is inadequate in the context of the urgent reality of climate change.

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¹¹ Hansen, J. E., Kharecha, P., Sato, M., Tselioudis, G., Kelly, J., Bauer, S. E., ... Pokela, A. (2025). Global Warming Has Accelerated: Are the United Nations and the Public Well-Informed? *Environment: Science and Policy for Sustainable Development*, *67*(1), 6–44. https://doi.org/10.1080/00139157.2025.2434494



2. Energy efficiency, security, and affordability

The project's likely impact on Victorian energy costs should be considered against alternative solutions, including targeted demand side alternatives

The impact of the project on the future energy costs for Victoria and its communities should also be assessed as part of the EES. This is warranted given the Act's definition of 'Environment' to include social and economic impacts, and the importance of energy costs to Victoria's society and economy. This assessment should consider a scenario where the plant supplies at least the volume of gas required for the project to be economically viable into the Victorian system, at the price it would need to operate commercially.

The assessment should include an estimate of the likely price for gas supplied through the terminal. This should consider the cost of extraction from the sites most likely to supply this terminal over its operational life, the costs for liquefaction and gasification, its transport, and processing at the FSRU (considering operational and capital costs). It should also consider the impact for customers of associated required upgrades to the Victorian Transmission Network, including proposed capacity upgrades on the South West Pipeline between Geelong and Melbourne (and in the current context where customers are charged for the accelerated depreciation of gas assets).¹²

It should also consider the risks associated with increasing Victorian energy price exposure to the uncertainty of future global gas prices, at import parity costs.

The total impacts of this project on Victorian energy costs should be evaluated against alternative options, including targeted demand side measures that would reduce or avoid the need for new investment in infrastructure.

3. All other necessary approvals, including navigational safety studies, should be completed before the EES is assessed or approved

The Viva import terminal was recently approved by the Victorian Minister for Planning, despite outstanding concerns raised by the community, and by Ports Victoria, about the absence of required navigational safety studies.

¹² AEMO (2025), '2025 Victorian Gas Planning Report,' https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/vgpr/2025/2025-victorian-gas-planning-report.pdf?la=en p.82



Without these safety studies, the full extent of the Viva project's potential environmental impact can't be considered to have been adequately assessed. For example, many experts have advised that the project's associated dredging may need to be far greater than the dredging proposed by Viva in the design considered by the EES process, when details of the navigational plan are finalised.

The public is currently uncertain about the assessment process that will be applied to Viva's final dredging plan, and whether this will adequately capture our concerns.

As such, EES approval for the Vopak project should not be granted before all other relevant approvals are obtained - given the potential for other approvals processes to require changes to the design of the proposed works.

Thank you for considering this submission.

Yours sincerely,

David Spear Chair **Jane Spence**

Chief Executive Officer