



The Hon Jaclyn Symes  
Minister for Resources

Dear Minister

## **RISKS, BENEFITS AND IMPACTS OF ONSHORE CONVENTIONAL GAS EXPLORATION AND DEVELOPMENT**

As Victoria's Lead Scientist and Chair of the Victorian Gas Program's independent Stakeholder Advisory Panel for Onshore Conventional Gas, I am pleased to present you with a report outlining the assessment of risks, benefits and impacts of any potential onshore conventional gas exploration and development in Victoria (the assessment).

### **Key findings from the assessment**

The assessment considers the likely risks, benefits and impacts of seven hypothetical gas development scenarios in the Otway and Gippsland basins on seventeen economic, social and environmental receptors.

The key findings are:

- Victoria is prospective for onshore conventional gas, with amounts estimated to be in the range 128–830 petajoules.
- Development of onshore conventional gas would create jobs and benefit regional communities and economies. Up to 242 jobs, \$312 million in gross regional product and \$43 million in royalties could be generated each year during production. This could potentially start from 2023–24 if industry makes a gas discovery, considers it commercially feasible to develop and secures the necessary regulatory approvals.
- An onshore conventional gas industry would have no significant impact on water quality and quantity. This finding is based on the groundwater science studies, which showed that impacts on groundwater quantity and quality would be negligible due to the large geological separation between conventional gas reservoirs and aquifers.
- An onshore conventional gas industry may have a slight impact on agriculture in respect to land access, livestock and biosecurity.
- Victoria's onshore petroleum regulatory framework is robust for managing environmental and safety risks. The regulatory framework could be improved in its provisions for community engagement and transparency.
- Social research undertaken by CSIRO found about 80 per cent of the South-West and Gippsland communities would embrace, support or tolerate onshore conventional gas development. Community support would be enhanced by providing genuine engagement opportunities and more information about industry activity and how the community's interests are being managed.

- The additional 128–830 petajoules of gas that could be produced in the State would contribute to gas supply but would not alleviate Victoria’s forecast shortfalls. This gas would improve energy security by increasing the diversity of gas supply. It would also benefit industrial users, particularly in regional areas, by providing new options for local gas supplies that save on transmission costs.
- The expected amount of new gas would not be a large enough volume to impact gas prices or gas demand in the State.
- The additional greenhouse gas emissions from producing the gas domestically onshore would be between 122,000 to 329,000 tonnes CO<sub>2</sub>-e annually. This would represent 0.1- 0.3% of Victoria’s net 2017 greenhouse gas emissions and would need to be accounted for.

### **The integrity of the process**

The assessment report was delivered by Ernst & Young with project management oversight and scientific expertise from the Department of Jobs, Precincts and Regions. The assessment was supported by strong engagement with and feedback from the Stakeholder Advisory Panel and the Scientific Reference Group.

The economic and greenhouse gas modelling was based on expert assumptions and modelling undertaken by Ernst & Young. In addition, data provided by a pilot study of Beach Energy’s Port Campbell gas processing facility and Beach Energy’s Halladale–Speculant–Blackwatch project was used to validate the findings.

In line with its terms of reference, through this assessment the Stakeholder Advisory Panel has discharged its responsibility to provide you with a scientifically based advice on Victoria’s prospectivity for new gas discoveries and on the risks, benefits and impacts of developing those discoveries. The Stakeholder Advisory Panel has assessed the attached report and concluded it is factual and objective in making an accurate representation in the Victorian context.

Stakeholder Advisory Panel members have views about further gas exploration and development in line with their representative constituents. These views are summarised at the end of this letter.

The assessment was also independently peer reviewed by the Victorian Gas Program Scientific Reference Group, whom in line with its terms of reference has advised that the assessment has been undertaken with strong technical rigour and is suitable for informing government in its decision making.

A number of Stakeholder Advisory Panel and Scientific Reference Group members formed the view that the assumptions and assessments in the report were rightly conservative and fit for purpose, providing assurance that the benefits are not overstated and the risks are not understated.

The Scientific Reference Group has acknowledged that the Victorian Gas Program air and water benchmarking data places Victoria ahead of most jurisdictions in its ability to both safely regulate the industry and provide communities with confidence that the benefits of an industry would not come at the cost of the environment. The Scientific Reference Group has requested that the findings of the Victorian Gas Program be disseminated at industry conferences as it sets a strong precedent for a science-driven approach to risk management.

## Panel's advice

**Jo Beard** (member of the Great South Coast Group and Corangamite Shire Councillor) has been providing advice to the panel from a local government perspective, on behalf of the Great South Coast Group. She has highlighted that local government is extremely interested to understand where gas exploration and production can happen. She believes the scientific program is necessary and important to understand what resources are available and how they can generate investment for local communities. She is supportive of the transparency of the process and is satisfied that she is getting useful information that she can take back to engage with her stakeholders at a community level.

**Stephen Bell** (Chief Executive Officer, Qenos) is concerned with the shortage of gas in Victoria, especially given that his industry uses gas as a feedstock and there are no viable alternatives. The shortage of gas in Victoria sees Victorian-based energy intensive manufacturers becoming increasingly uncompetitive relative to their global competition. Unless this is addressed urgently, these industries and thousands of associated manufacturing jobs will be lost to the economy. He believes the state needs more gas desperately and that this process of scientific and technical studies is critical to ensure that decisions are made based on sound scientific evidence. He thinks the panel has a rich and well-informed perspective into the debate that will ensure the government is well placed to make a good decision.

**Linda French** (Community Manager, Australia New Zealand, for Beach Energy) has a view from both an industry and a community engagement perspective as a result of her position as Community Relations Manager Victoria for Beach Energy. She has been providing advice in relation to the need for industry to engage with the community. She has also advised that the effective assessment of land use can only be made after understanding the scope of gas development activities. She believes the process has been thorough, disciplined, educative and consultative, and that the program has continued to educate and involve the panel and the community along the way.

**Ben Davis** (Secretary, Australian Workers' Union) has been providing advice in relation to jobs and employment in the gas sector in Victoria. He believes the Victorian Gas Program brings clarity and science to a debate that often lacks it. The process demystifies the work that is going on in government so that people from diverse backgrounds and with diverse interests and views about gas are informed about the resources that exist, and the social and economic issues that are attached to the gas industry in Victoria. He believes the panel has been functioning well because, while members have their dissenting views, they are able to work together in a very collegiate, cooperative manner to get good outcomes.

**Jonathan La Nauze** (Chief Executive Officer, Environment Victoria) is disappointed that public money is being spent on searching for fossil fuels that contribute to climate change instead of backing renewable energy. He acknowledges that gas will be required for at least the next 10 years as Victoria transitions to renewables and believes that his opportunity to provide scrutiny to the program is a vital one, so that his members have confidence in the science, probity and integrity of the program. He finds that the panel is a useful way to explore stakeholders' alternative views and to understand the science that goes into exploring for future sources of gas.

**Gerald Leach** (Chair, Victorian Farmers' Federation Land Management Committee and National Farmers' Federation Climate and Energy Taskforce) has been providing advice on the risks, benefits and impacts of a potential onshore conventional gas industry on the agriculture sector. He believes the panel gives all members a chance to bring their views forward on behalf of their stakeholders. He has been excited to learn more about the different

scientific and technical studies being undertaken as part of the Victorian Gas Program. He has highlighted the need for the gas industry and other industries, including agriculture, to work together to get the best outcomes for all Victorians.

**Alison Marchant** (Secretary, Frack Free Moriac) is pleased to represent the community on the panel as it provides regional communities with confidence that they have a voice at the table, to ensure the hard questions are being asked. She has been providing advice on the community's views and has been able to ask the questions the community wants answers to. She believes the Victorian Gas Program process has been useful and informative.

**Tennant Reed** (Head of Climate, Energy and Environment Policy, Australian Industry Group) has been providing advice regarding industry and market issues in the energy space. He believes the Victorian Gas Program process is critical because if gas is going to be available in the future, community and industry need to have confidence their issues have been addressed. He is satisfied the program has provided a wealth of information and has been very responsive to the concerns and priorities that all panel members have raised. He is confident the panel will get to a result that has a lot of consent around it and that there will be no surprises.

Thank you for the opportunity to lead this important work. I trust that this information will be useful to government in deciding its position on the moratorium on onshore conventional gas exploration and development in Victoria.

Yours sincerely



**Dr Amanda Caples**  
Victoria's Lead Scientist

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