Assessing our future gas resource potential

##### Natural gas is an important resource for Victorian communities and industry. It heats homes, fuels gas-fired power plants and is a key input for manufacturing. Gas is also a strategic part of Victoria’s transition to a more diverse mix of energy sources to meet our climate change targets.

In 2017, the State Government directed the Geological Survey of Victoria (GSV) to undertake a scientific analysis of the prospective resource volumes[[1]](#footnote-1) of undiscovered onshore conventional gas and offshore gas available to the state.

GSV developed the Victorian Gas Program (VGP), which will run until mid-2020 and provide a resource estimate to inform future decisions by government.

#### Gas supply and demand in Victoria

Since the 1960’s, Victoria has been a major producer of oil and natural gas from waters off the Gippsland coast. In the past few decades, gas has also been produced in the Otway Basin around the Port Campbell area.

Currently, there are no proved or probable (ready for imminent development) onshore conventional gas reserves in Victoria.

Over 1.8 million Victorian homes are connected to gas. The State’s gas demand of approximately 200 petajoules (PJ) per annum is met from gas reserves located in the Gippsland, Bass and Otway Basins. These reserves can also supply up to 200 PJ per annum interstate to help meet demand for gas in eastern Australia. The state is also at the forefront of using underground storage to manage seasonal gas demand and short-term supply interruptions.

Victoria’s heavy reliance on gas means that the VGP’s evidence-based approach to understanding the potential for undiscovered onshore conventional gas and offshore gas is vital for future government decisions about gas.

#### How is natural gas regulated in Victoria?

Onshore exploration and production of oil and gas is regulated under the Victorian *Petroleum Act 1998*. Offshore exploration and production is regulated within state-controlled waters under the Victorian *Offshore Petroleum and Greenhouse Gas Storage Act 2010*.

*The Resources Legislation Amendment (Fracking Ban) Act 2017* permanently banned the exploration and development of all onshore unconventional gas (including hydraulic fracturing or ‘fracking’ and coal seam gas extraction) in Victoria. This decision was made for the protection of agriculture, the environment and regional communities.

The Act also extended the moratorium on the exploration and development of onshore conventional gas until 30 June 2020, providing time for the VGP studies to be completed.

* The moratorium does not affect:
* Offshore gas activities
* Access to offshore gas resources from onshore areas
* Existing production permits for underground gas storage
* Extraction of carbon dioxide, or
* Underground carbon storage research.

#### The Victorian Gas Program

The VGP is delivering geoscientific and environmental research into Victoria’s potential for further discoveries of natural gas (onshore conventional gas and offshore gas). It is also looking at the risks, benefits and impacts of any future onshore conventional gas exploration and production.

The program is focussing on Victoria’s two most prospective regions for undiscovered accumulations of gas: the Otway Basin (currently considered as having the highest potential for new discoveries) and the Gippsland Basin.

The VGP has three scientific components:

* Onshore conventional gas: Scientific, technical and environmental studies designed to provide an evidence-based estimate of prospective gas resources. The studies are being overseen by Victoria’s Lead Scientist and a Stakeholder   
  Advisory Panel made up of farmers, industry, local government and community groups.
* Offshore gas: Work to support commercial exploration for further discoveries of gas off Victoria’s coast by identifying prospective areas in the offshore Otway Basin. This includes an airborne gravity survey and the release in 2018 of new offshore acreage for exploration.
* Underground gas storage: Opportunities for further underground gas storage in depleted fields in the onshore Otway Basin are being investigated to help secure more reliable gas supplies and to mitigate short term price peaks, particularly during interruptions in the gas supply system.

This scientific work is supported by regular engagement with farmers, industry, local government and regional communities. There is also provision for land resource planning and potential regulatory reform in response to the findings of the scientific studies.

GSV has established a team of scientists, technical and engagement specialists at Warrnambool for the duration of the program.

All study results will be made publicly available.

#### Stay in Touch

Information about the Victorian Gas Program can be found at: earthresources.vic.gov.au/gasprogram

Regular progress reports about the scientific studies can also be found on the website.

To be added to the Victorian Gas Program emailing list, please send a request to: [vgp@ecodev.vic.gov.au](mailto:vgp@ecodev.vic.gov.au)

1. Accumulations of gas are classified as either resources or reserves, depending on the level of certainty with which the quantity of gas has been determined. The level of certainty is dependent on the amount of exploration and testing that has occurred. If the accumulation is highly uncertain, it is termed a ‘resource’. If the quantity of a gas accumulation can be quoted with confidence and it is economical to extract, it is classified as a ‘reserve’. [↑](#footnote-ref-1)