



ITEM

TITLE: Onshore Gas position

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BACKGROUND:

At the meeting held 3 May 2019 the Board received a briefing from Geological Survey of Victoria (GSV). Following questions and answers and discussion on the topic and findings to date the Board requested a position paper come to the Board for endorsement. It is proposed to endorse an in-principle position on conventional onshore gas exploration and if supported would be requested for all Councils to consider such a position individually to guide the final decision of the Board.

With the program now more than half way through its work, GSV wished to provide an update regarding:

- potential stratigraphic drilling to better understand local rock layers and structures at a regional scale
- the process leading up to the announcement of successful tenders of the offshore petroleum exploration acreage opened for project bids last year, and
- the assessment to Government on the potential amount of onshore conventional gas the State may have.

The Great South Coast Group has received several briefings on the program and its activities, and Corangamite Shire Councillor Jo Beard represents GSCG on the Stakeholder Advisory Panel for the Onshore Conventional Gas Studies, chaired by Victoria's Lead Scientist, Dr Amanda Caples.

DISCUSSION:

The Geological Survey of Victoria (GSV) is undertaking the Victorian Gas Program between 2017 and 2020 while the state moratorium on onshore conventional gas exploration is in force. A key focus of the program is to assess the potential for further discoveries of onshore conventional gas in both the Otway and Gippsland geological basins, including the risks, benefits and impacts if a resource was developed. GSV believes that the Otway Basin has the highest potential for new finds of onshore conventional gas. It has established an office of 14 people in Warrnambool to undertake geoscientific and environmental research and to engage with local communities and stakeholders about the program.

To date, scientific research has included an airborne gravity survey of 16,000 km² of south west Victoria, analysis of 3,500 rock samples from the Otway basin, sampling of 80 groundwater monitoring bores for deep water chemistry and the development of a regional profile of methane and carbon dioxide measurements.

GSV is also seeking insight from Councils on whether communities have concerns about onshore conventional gas and its development in the south west.

The issue of extraction from onshore reserves has been hotly debated in recent years, with many in the community concerned about negative environmental impacts associated with hydrological fracturing techniques (fracking).

In response to these concerns, a ban on onshore gas extraction was established by the Victorian State Government which was extended through legislation.

Conventional and Unconventional Gas

Fundamentally there are two sorts of onshore gas reserves – conventional and unconventional.

The CSIRO define conventional gas as being obtained from reservoirs that largely consist of porous sandstone formations capped by impermeable rock, with the gas trapped by buoyancy. The gas can often move to the surface through the gas wells without the need to pump. These gas reserves are similar in geology to the offshore gas reserves that currently supply processing facilities across the Great South Coast region.

Unconventional gas can be sourced from Coal Seams (CSG) or Shale Rock. The following is the definition from CSIRO:

CSG is found in coal seams attached to the coal and is trapped underground by water pressure. To extract CSG, water already in the coal seam, known as formation water, needs to be pumped out to release the gas. Shale gas occurs within rock formations under high pressure but having extremely low porosity making it difficult for gas to flow to wells. Hydraulic fracturing is always used in shale gas wells to increase the flow of gas from the reservoir.

Most community concern is directed to unconventional gas extraction because of the concerns about impacts on ground water and the use of chemicals in the fracturing process. It is also apparent, however that there is considerable confusion in the community about the difference between conventional and unconventional gas.

Royalties and Landowner Consent

The establishment of a Royalties to the Regions system was recommended by the Gas Market Taskforce Report chaired by Peter Reith in 2013.

Consideration of compensation for affected landowners was considered by the Reith report. The report recommends that compensations payments for affected landowners should be increased and notes that compensation could be extended to neighbouring properties where amenity impacts were likely to be experienced.

The report also notes that under existing Victorian legislation where land is to be occupied for exploration or mining, landowner consent or compensation agreement must be in place before work can be approved.

Payment of royalties directly to landowners, as occurs in some parts of the USA, is difficult given that in Australia minerals are owned by the State and not landowners. It is recommended the findings of the Reith review are supported which provides landowners with compensation for amenity impacts and also allows landowners to enter into commercial agreements before exploration or extraction works can commence.

Options for consideration

1. Support the ban on fracking but support exploration and extraction of conventional gas subject to appropriate environmental controls, the

- establishment of Royalties to the Regions scheme and protection of landowner interests through progressive compensation arrangements;
2. Support both conventional and unconventional gas exploration and extraction;
 3. Do not support any forms of onshore gas exploration or extraction.

RECOMMENDATION:

That the Great South Coast Board forms a position 'in-principle' to:

- 1. Support the ban on unconventional gas exploration or extraction, and**
- 2. Supports and advocates for the removal of the moratorium on exploration and extraction of conventional gas subject to creation of a Royalties to the Regional system and strong protection for landholder rights and the environment.**
- 3. This decision is referred to member Councils for deliberation and decision to instruct a Board Policy Position on Conventional Onshore Gas Exploration and Extraction.**