

ASX Release Update: Enterprise North and Nangwarry Projects

Highlights:

- The Enterprise North prospect is a potential saviour for southeast Australian households and industry, which are facing acute gas shortages and high prices. There is a dire need for new sources of gas supply.
- Development of the Enterprise North prospect will be straightforward and can be expedited.
- The opportunity for development of the Nangwarry carbon dioxide resource is being pursued. Development of the project will ease carbon dioxide supply shortfall problems that are threatening supply of consumer products including beef and chicken.

The Directors of Lakes Blue Energy NL (**Lakes**, or the **Company**; ASX:LKO) are pleased to provide the following general updates regarding two of the Company's key, near-term project opportunities.

Enterprise North

With a prognosed potential of up to 419 billion cubic feet of gas in place (205 Bcf net to Lakes, see Note), the onshore Enterprise North prospect is poised to a significant source of gas supply for southeast Australian households and industry, which are presently experiencing widely reported supply shortages and high prices. On 23 March 2023, Victoria's largest gas producer (ExxonMobil) warned that "the number of wells it operates in the Bass Strait could almost halve in the next eighteen months" and that "new gas production would be needed to meet demand in southern Australia". In 2022 gas from the offshore Gippsland Basin fields accounted for 70% of southeast Australian gas demand (source: David Berman, ExxonMobil Australia Commercial Director, Domestic Gas Outlook Conference, 20 March 2023).

Lakes (49%), with joint venture partner Armour Energy Limited (51%), is working to secure approval for drilling of the Enterprise North-1 well, development of which could be expedited given the wells proximity to existing, underutilised gas pipeline and processing infrastructure. The Company's objective is to drill the Enterprise North-1 well before the end of 2023. Updates regarding progress with approvals processes will be provided as and when available.

Enterprise North is located onshore, 3 kilometres north of Beach Energy Limited's Enterprise gas discovery, which free-flowed 62 million cubic feet per day of gas from a highly permeable and productive Waarre Sandstone reservoir, estimated to contain 161 Petajoules of gas (source: Beach Energy ASX announcements). Through seismic data and well matching, Lakes has identified likely similar reservoir characteristics at Enterprise North. Numerous other gas reservoir targets and prospects for carbon dioxide sequestration have also been identified.

Nangwarry Carbon Dioxide

Lakes (50%), with joint venture partner Vintage Energy Limited (50%), is continuing with efforts to commercialise the high-quality (>93%) Nangwarry carbon dioxide resource. The Nangwarry reservoir contains a certified carbon dioxide sales gas resource of 25.9 billion standard cubic feet (12.9 Bscf net to Lakes, see Note).

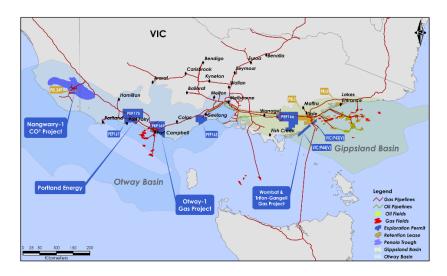
During flow-testing, the Nangwarry-1 well flowed gas at stable rates in excess of 10 million cubic feet per day. Pending availability of markets, this could support production of up to 500 tonnes per day of food grade carbon dioxide. The Australian carbon dioxide market is valued at around \$260 million per annum (source: IBISWorld).

Development of the Nangwarry resource would ease recently reported shortages of carbon dioxide supply that are threatening supply of consumer products, including beef, carbonated beverages and chicken, in both Australia and New Zealand (where rationing has been necessary to ensure supply to meet medical, safety and water needs).

Development of the Nangwarry resource will involve installation of a purification plant to produce pure carbon dioxide for food, medical and industrial applications. The Nangwarry-1 well is already completed for production.

In addition to the projects outlined above, Lakes is of course continuing to advance:

 its other Victorian initiatives, especially the Wombat and Otway-1 onshore gas projects (depicted below); and



the Buna Prospect in Papua New Guinea, in respect of which TotalEnergies is at its expense presently
carrying out comprehensive geological and geophysical studies, including reprocessing of historic
seismic data. Total Energies can earn a 75% interest by carrying Lakes through a US\$30 million well
on the Buna structure, which is currently prognosed to contain in excess of 3 trillion cubic feet of
gas. Numerous direct hydrocarbon indicators are evident on Buna seismic data.

Lakes Blue Energy is well positioned to take advantage of the opportunities presented by the changing Australian and international energy landscapes and to help support the transition to a low-carbon future.

This announcement has been authorised and approved by the Board of Lakes Blue Energy NL for lodgement with ASX.

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Note: the resource figures set out for Enterprise North, Nangwarry and Buna are as announced on 28 September 2022, 12 July 2021 and 12 July 2022, respectively. The Company is not aware of any new information or data that materially affects the information included in the relevant market announcements and confirms that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed