



**Lakes Blue Energy NL
ASX Announcement**

12 July 2021

Nangwarry Resource Upgraded

Highlights:

- *Nangwarry-1 extended production testing results confirm the commercial potential of Nangwarry with gross saleable carbon dioxide resource upgraded to 25.9 Bcf.*
- *Nangwarry-1 well capable of producing at a raw gas rate of up to 18.6 MMscfd.*
- *Retention Licence already in place over Nangwarry area.*
- *Nangwarry resource capable of producing in excess of 150 tonnes per day of carbon dioxide over 20+ years.*

The Directors of Lakes Blue Energy NL (**Company**; ASX:LKO) are pleased to announce that, following completion of independent expert analyses of data from extended flow testing of the Nangwarry-1 well, the Nangwarry best case saleable carbon dioxide (CO₂) resource estimate has been confirmed and upgraded to 25.9 billion standard cubic feet (Bcf), as tabulated below. This represents a slight increase from the previous estimate of 25.1 Bcf (August 2020), which was based upon measurements made during drilling of the Nangwarry-1 well, but greatly increases the confidence in the size of the Nangwarry-1 resource.

CO ₂ Gross Sales Gas Estimate (Bcf)			Gross Gas Contingent Resources (Bcf)		
Low	Best	High	1C	2C	3C
9.0	25.9	64.4	0.5	1.6	4.1
CO ₂ Net Sales Gas Estimate (Bcf)			Net Gas Contingent Resources (Bcf)		
4.5	12.9	32.2	0.3	0.8	2.0

Notes:

1. Gross volumes represent a 100% total of estimated recoverable volumes within PRL 249.
2. Working interest volumes for Otway Energy Ltd's (a subsidiary of Lakes Blue Energy) and Vintage Energy Ltd's share of the Gross recoverable volumes can be calculated by applying their working interest in PRL 249, which is 50% each.
3. Sales gas stream for Nangwarry is CO₂ gas.
4. Gross Contingent Resources represent a 100% total of estimated recoverable hydrocarbon gas volumes within RPL 249. P5232 Nangwarry-1 CPR6.
5. These are unrisks Contingent Resources that have not been risked for Chance of Development and are sub-classified as Development Unclassified.

The Directors of Lakes Blue Energy are also pleased to confirm that gas flow rates achieved during testing of Nangwarry-1 highlight the deliverability of the well, with raw gas flows of up to 18.6 million standard cubic feet per day (MMscfd) recorded. In contrast, a raw gas flow of only 3 MMscfd is required to meet a purification plant capacity of 150 tonnes per day. The Nangwarry-1 well has already been completed for production and, on 5 May 2021, the surrounding tenement was upgraded from Exploration to Retention Licence status.

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Mr Richard Ash, Chairman of Lakes Blue Energy, said “The final results from production testing of the Nangwarry-1 well confirm the commercial potential of the Nangwarry resource. The Company, with joint venture partner Vintage Energy, is now well placed to progress works toward establishing arrangements for commercial development of Nangwarry to produce food-grade carbon dioxide.”

Carbon Dioxide is used in a broad range of medical, food and industrial applications and is in high demand. The JV is proposing to construct a purification plant capable of producing up to 150 T/day of food grade quality CO₂. To achieve this a raw gas flow rate of approximately 3 MMscfd is required (representing around 1 Bcf per year). The resource identified to be recoverable from the Nangwarry-1 well is capable of supplying this demand for in excess of 20 years.

Basis of Resource Estimate

The independent estimate was prepared by ERC Equipoise Pte Ltd (ERCE) using a probabilistic methodology consistent with that prescribed by the June 2018 Society of Engineers Petroleum Resources Management System.

ERCE is an independent consultancy specialising in geoscience evaluation, engineering and economic assessment. ERCE has the relevant and appropriate qualifications, experience and technical knowledge to appraise professionally and independently the assets.

ERCE’s work was supervised by Mr Adam Becis, Principal Reservoir Engineer at ERCE, who has over 14 years of experience in the oil and gas industry. He is a member of the Society of Petroleum Engineers and also a member of the Society of Petroleum Evaluation Engineers. Mr Becis has consented to the form and context in which the estimate of carbon dioxide sales gas is presented.

This announcement is authorised for release to the market by the Board of Directors of Lakes Blue Energy NL.

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Further Information: About Nangwarry

The Nangwarry project is a 50:50 joint venture between Lakes Blue Energy subsidiary, Otway Energy Ltd (as Operator), and Vintage Energy Ltd. The project is located within Petroleum Retention Licence 249 (formerly Petroleum Exploration Licence 155), South Australia, about 30 km north of Mt Gambier and around 50 km north of the Caroline-1 carbon dioxide project.

The Caroline-1 project closed down in 2016 after producing around 10,000 tonnes per annum of carbon dioxide for nearly 50 years. The Australian carbon dioxide market is now suffering tight supply.

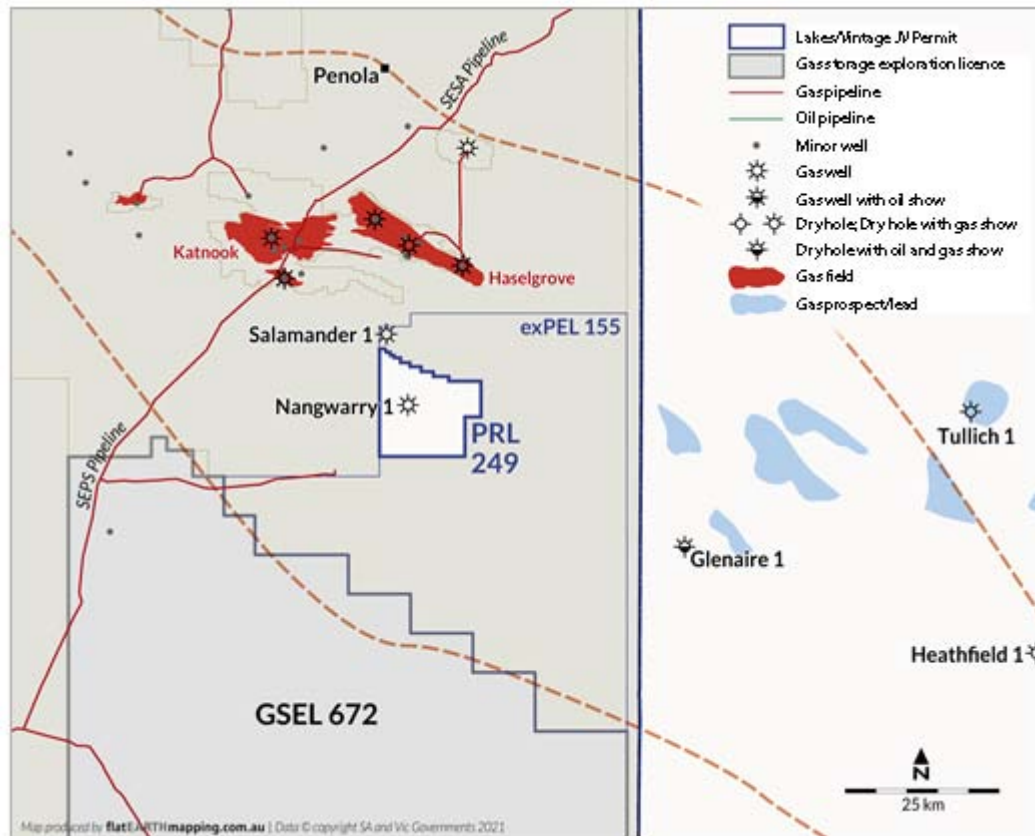


Figure 1. PRL 249 map showing Nangwarry-1 CO₂ discovery location (courtesy of Vintage Energy)

The Nangwarry carbon dioxide resource was discovered in early 2020 through drilling of the Nangwarry-1 well. The Nangwarry reservoir contains a carbon dioxide rich (greater than 93%) gas resource, with the balance of the resource being natural gas.

The joint venture recently announced it had entered into a Memorandum of Understanding with Supagas Pty Ltd regarding preliminary design and costing of facilities for processing Nangwarry carbon dioxide. Minor quantities of natural gas that will be produced in association with carbon dioxide will be used to fuel the proposed carbon dioxide purification plant.