

## 18 October 2023

NSW Legislative Assembly Committee on Environment and Planning Parliament of New South Wales 6 Macquarie Street Sydney NSW 2000

Dear Chair

## **RE: Response to Questions on Notice**

Please find below responses to the Questions on Notice put to Australian Energy Producers regarding the Minerals Legislation Amendment (Offshore Drilling and Associated Infrastructure Prohibition) Bill 2023.

1. The future gas strategy consultation paper (p19) states that the gas market in WA is not connected to the rest of the country. Why is this? Is this an untapped resource?

Natural gas is a significant part of the West Australian economy and vital to the state's energy mix. WA's gas supply is largely accounted for by domestic and export demand, and it underpins the state's mining and resources sector. WA's gas supply therefore cannot be considered an "untapped resource" for the east coast.

Gas-fired power generation is the largest energy source for electricity generation in WA (accounting for 55 per cent of electricity generation<sup>1</sup>), and accounts for more than half of all energy consumed in WA. Gas is the major energy source for the substantial manufacturing and mining sector, as well as long-term export markets whose investment has made much of this gas production possible.

WA is Australia's largest consumer of gas in Australia, driven by mining and minerals processing – from iron ore and nickel – to critical minerals such as lithium which are vital to a cleaner energy future. Mining in WA is one of the largest consumers of natural gas, accounting for around a third of the state's gas consumption, while manufacturing and minerals processing accounts for around one fifth of WA's natural gas consumption.

The concept of building a gas pipeline network to connect the west coast to the east coast is one that governments have considered in the past and deemed impractical and not a viable solution to the gas supply challenges on the east coast.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> https://www.energy.gov.au/data/australian-energy-mix-state-and-territory-2021-22

<sup>&</sup>lt;sup>2</sup> For example - <a href="https://www.energy.gov.au/publications/west-east-gas-pipeline-pre-feasibility-study">https://www.energy.gov.au/publications/west-east-gas-pipeline-pre-feasibility-study</a>



For NSW, the priority must be to bring on new gas supply within the state, such as the Narrabri Gas Project, to address the near-term structural gas shortfalls that regulators are warning could hit the east coast from 2027.

Santos' Narrabri Gas Project could supply NSW homes, small businesses, major industries and electricity generators with up to half the state's natural gas needs and bring substantial economic benefits to Narrabri and the region. Australian Energy Producers urges the NSW Parliament to prioritise getting this project operational to secure the state's energy needs in the near and long term, and to avoid bans and moratoriums on gas explorat

 Confirm when consultation will be taken to have been completed and how requests for further time are managed.

ion and production which will constrain the state's capacity to bring on new supply in the future.

The recent ACCC June 2023 Interim Gas Inquiry Report<sup>3</sup> warned that NSW and Victoria were increasingly reliant on Queensland and needed "substantial volumes of gas" to avoid shortfalls. The ACCC report highlights there is not enough gas being produced in NSW and Victoria where huge populations rely on gas while uncertain regulatory regimes and bans are stifling investment in new supply.

Because of these bans, moratoriums and interventions, millions of NSW and Victorian gas users pay an extra \$2/GJ whenever their state has to transport gas from Queensland. The best way to avoid shortfalls and put downward pressure on prices is to bring on new gas supply close to where it's used because the cheapest gas is the gas closest to the customer.

In addition to gas supply, an expansion of gas infrastructure is needed in NSW, including gas power generation. The Australian Energy Market Operator's 2023 Electricity Statement of Opportunities Report, September 2023 estimated that that over 1.5GW of new gas power generation capacity is needed in New South Wales and Victoria by 2026/27 in order to meet current reliability standards. In NSW, AEMO said there were "significantly increased risks if thermal fuels are scarcer, highlighting the importance of maintaining the availability of coal, gas and distillate fuels, and the effective management of their supply chains".

As the NSW Government-commissioned *NSW Electricity Supply and Reliability Checkup*⁴ by Marsden Jacob Associates earlier this year noted:

While there is an ongoing debate about the role of gas-powered generation (GPG) in supporting the energy transition, in NSW their role is assured. The state already has five GPG plants, with two more under construction. Together those plants will provide 2352 MW of firming support to the market by 2025.

As coal exits and wind and solar increases, the role of GPG as a peaking generator and as back-up during periods of low renewable output will become increasingly important....

https://www.accc.gov.au/about-us/publications/serial-publications/gas-inquiry-2017-30-reports/gas-inquiry-iune-2023-interim-report

<sup>&</sup>lt;sup>4</sup> https://www.energy.nsw.gov.au/nsw-plans-and-progress/regulation-and-policy/electricity-supply-and-reliability-check



NSW currently has no gas production occurring within its borders. Traditionally the state has relied on supplies of gas from Victoria and South Australia, which are depleting rapidly. Until (and assuming) Narrabri is developed, new gas will increasingly come from the northern gas fields in Queensland and the Northern Territory. Those fields must also meet Liquid Natural Gas (LNG) export contracts.

## 2. Could you please provide more detail on where Carbon Capture and Storage (CCS) is currently an active and proven practice within Australia?

The Australian oil and gas sector is at the forefront of the deployment of carbon capture, utilisation and storage technologies. Chevron's Gorgon CO2 Injection Project in Western Australia and Santos and Beach Energy's Moomba CCUS Project<sup>5</sup> in South Australia (due to be commissioned in 2024) are amongst the largest CO<sub>2</sub> storage projects globally.

The Chevron-operated Gorgon Project is a joint venture between the Australian subsidiaries of Chevron, ExxonMobil, Shell, Osaka Gas, Tokyo Gas and JERA. The project safely and permanently stores CO<sub>2</sub> in a geological formation 2km under Barrow Island, Western Australia, and has stored 8.5 million tonnes CO2e since it commenced operation in 2019. It is expected to store 100 million tonnes CO2e over the life of the project (40+ years). The Australian Government has committed \$60 million to the Gorgon Carbon Dioxide Injection Project as part of the Low Emissions Technology Demonstration Fund (LETDF).

In addition to Gorgon, the Santos-operated Moomba projects in South Australia, which is a joint venture between Santos and Beach Energy, sees construction currently 70% complete with injection scheduled to commence in 2024. The Moomba project aims to store 1.7 million tonnes of CO2 per year. The Gorgon Project and the Moomba project – once operational – will represent two of the largest CCUS projects globally.

In addition to these operating and advanced projects, there are a host of other CCUS projects across Australia at various stages of development including the ExxonMobil-led South East Australia CCS Hub in Victoria; the Woodside-led Northern Carnarvon CCS project and the Santos-led Reindeer CCS project in Western Australia; and the Inpex-led Bonaparte CCS project and Santos-Led Bayu-Undan CCS project in Northern Territory.

These commercial projects build on over two decades of CCUS R&D in Australia by the CSIRO and Australian companies and universities, including at the CO2CRC Otway International Test Centre in Victoria which has been undertaking CCUS R&D since 2008 and has involved the injection and monitoring of almost 100,000t CO<sub>2</sub>.

Australia has world-class CO<sub>2</sub> storage resources along with a wealth of CCUS skills and experience within the industry, giving Australia a comparative advantage on the roll-out of CCUS.

Australia also has comprehensive regulatory frameworks for  $CO_2$  storage to ensure any local environmental risks are identified and mitigated effectively. The *Offshore Petroleum and* 

<sup>5</sup>https://www.santos.com/news/moomba-ccs-progressing-at-pace-and-on-track-for-2024



Greenhouse Gas Storage Act 2006 (OPGGSA)<sup>6</sup> provides an "effective regulatory framework for [...] the injection and storage of greenhouse gas substances [...] in offshore areas."

Further, accompanying regulation such as the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009<sup>7</sup> ensure that "greenhouse gas activity carried out in an offshore area is: (a) carried out in a manner consistent with the principles of ecologically sustainable development set out in section 3A of the EPBC Act; and (b) carried out in a manner by which the environmental impacts and risks of the activity will be reduced to as low as reasonably practicable; and (c) carried out in a manner by which the environmental impacts and risks of the activity will be of an acceptable level."

The OPGGSA applies to all  $CO_2$  stored in Commonwealth waters, including  $CO_2$  produced domestically as well as imported  $CO_2$ . The OPGGSA is then complemented by state legal and regulatory frameworks in Victoria, Queensland, South Australia, and under development in Western Australia.

Globally, CCUS is proven technology with over 25 years of experience storing CO<sub>2</sub> safely and securely offshore, in the sub-seabed.

Globally there are currently more than 30 commercial CCUS projects in operation today, which together store the equivalent of almost 10 per cent of Australia's emissions annually. The Sleipner project in Norway has been storing 1 million tonnes of CO<sub>2</sub> per year, in geology deep below the North Sea, continuously since 1996.

Please do not hesitate to contact me if you require anything further.

Yours Sincerely

Victor Violante

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Australian Energy Producers

<sup>&</sup>lt;sup>6</sup> Offshore Petroleum and Greenhouse Gas Storage Act 2006: <a href="https://www.legislation.gov.au/Details/C2022C00175">https://www.legislation.gov.au/Details/C2022C00175</a>

<sup>&</sup>lt;sup>7</sup> Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009: https://www.legislation.gov.au/Details/F2023C00107