

**Submission
No 48**

**MINERALS LEGISLATION AMENDMENT (OFFSHORE DRILLING AND
ASSOCIATED INFRASTRUCTURE PROHIBITION) BILL 2023**

Organisation: Advent Energy Limited

Date Received: 8 September 2023

Mr Clayton Barr, MP
Chair
Legislative Assembly Committee on Environment and Planning
NSW Parliament House
6 Macquarie Street
Sydney NSW 2000

8th September 2023

Dear Chair,

Minerals Legislation (Offshore Drilling and Associated Infrastructure Prohibition) Bill 2023

Advent Energy welcomes the opportunity to submit a response to the Minerals Legislation Amendment (Offshore Drilling and Associated Infrastructure Prohibition) Bill 2023.

Advent, through its wholly owned subsidiary Asset Energy, has an 85% interest in the PEP-11 exploration licence which lies in federal waters off the coast of New South Wales and is currently going through the process of re-applying to have the licence extended.

The terms of the licence allow for Advent to explore for natural gas, this includes activities such as geological, geochemical and geophysical studies and the drilling of exploration and appraisal wells. All of those activities require specific environmental approvals from the independent regulator, the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).

The current licence does not allow for production of any commercial gas resources that may be discovered, that is a separate process whereby the exploration licence is converted to a production licence.

Significant geoscience work has been carried out before and after Advent acquired its interest in the licence in 2004, including the drilling of the New Seaclem-1 well in 2010, with zero safety or environmental incidents.

It is the submission of Advent Energy that New South Wales needs the development of new natural gas resources to meet the ongoing needs of its homes and businesses, and that there is no environmental, safety or other reason to prevent exploration and production occurring in Federal waters offshore the state.

The urgent need for new sources of natural gas in New South Wales has been repeatedly stressed in a significant number of reports, some of which are detailed in this submission.

The Australian Energy Market Operator (AEMO) recently released its [2023 Electricity Statement of Opportunities \(ESOO\) report](#), providing a 10-year reliability outlook that signals development needs for each state in the National Electricity Market (NEM). It is further evidence that urgent and ongoing investment is needed to maintain energy reliability, with AEMO warning of a “material risk” to Australia’s power supplies because of future gas shortfalls and a lack of investment in gas generation. It highlights “ongoing availability” of energy sources such as gas “will be critical to the reliability” of the NEM, along with over 1.5GW of new gas power generation capacity needed in New South Wales and Victoria by 2026/27 to meet current reliability standards.

Further key points from the 2023 GSOO are highlighted in Appendix A.

Another important document is “Running on Empty,” a 2019 report from the state’s leading business chamber, Business NSW, which provides the following critical observations:

- NSW imports 98 per cent of its gas requirements from other states
- A constrained national gas market will see further price rises for every household and business in NSW.
- In NSW, an estimated 250,000 jobs rely on gas supply. Gas supplies around 1.3 million households and 33,000 businesses.
- NSW’s manufacturing sector, which is approximately 84% of the state’s Industrial gas load, adds \$33 billion in industry value.

The report found without addressing NSW’s looming gas shortfall these could be at risk, and:

- Inaction on gas and energy security are now holding the future of businesses in NSW to ransom, threatening employment losses and reduced investment.
- As the southern (Victoria, Tasmania, NSW and South Australia) fields further decline in the future and if no more southern resources are developed, pipeline constraints (particularly in the pipelines from north) will impact [supply to NSW.]

As the Australian Petroleum Production & Exploration Association has highlighted:

- Gas meets almost 30 per cent of Australia’s energy needs.
- More than 5 million Australian households use gas directly for heating and cooking.
- Gas is a critical component of products we rely on every day, including ammonia (for fertilisers) and the manufacture of bricks, glass, plastics and medical products.
- Gas is around 50 per cent cleaner than coal for generating electricity.
- Gas plays a key role in supporting the integration of intermittent renewable energy sources such as wind and solar.

Prospective gas resources have been identified in PEP-11 of 5.7 TCF¹ across multiple structures along the continental shelf. The prospective resource, if proven, has the possibility of supplying NSW with the bulk of its gas needs for 20 years.

It is Advent’s intention to test one of these structures, the Baleen prospect, by drilling the Seablue-1 well which would occur approximately one year after granting of the licence extension, subject to specific environmental approvals and offshore drilling rig availability.

¹ Berge 2010, Independent Expert Report - Permo Triassic, as released by MEC Resources to the ASX 22nd December 2010

Advent Energy can play a significant and direct role in NSW's energy transition and help to reduce energy costs.

Potential gas production offshore from Newcastle, and the potential to use that same area to permanently store captured carbon emissions, can both contribute to meeting the challenges of climate change and sustaining secure employment in the region.

Of course, we must demonstrate that these activities can be conducted safely and sustainably.

The good news is we know they can. The offshore oil and gas industry might be unfamiliar to many in NSW, but around Australia it has a long and strong track record.

More than 3,000 wells have been drilled over the last 60 years, more than 1,000 of which are offshore Victoria – which also boasts some of the country's most productive commercial fisheries, whale nurseries, and a spectacular coast that attracts millions of visitors every year.

Closer to home, people from the Hunter region might remember the gas well which was safely drilled off Nelson Bay in 2010, which caused no negative impacts to the marine environment.

As stated above, successful gas exploration and production could provide gas to supply NSW homes and businesses for more than 20 years. That would support local jobs and boost local industry. Business NSW estimates 250,000 jobs in NSW rely upon gas as a feedstock and energy source – that includes workers at Orica, BlueScope Steel, Qenos, and other companies.

Further, assessing the viability of permanently storing CO₂ in rock structures deep below the seabed offshore Newcastle could become an important part of the Australian Government's technology-led approach to emissions reduction. The area could be an ideal location for carbon capture and storage, about 100 km from some of Australia's largest CO₂ emitters.

In short, replacing coal with gas-fired power generation and advancing CCS are obvious steps to help Australia meet the challenges of climate change.

We believe there is no reason offshore gas exploration and production should impact the NSW coast in any negative way.

Advent Energy does not propose any offshore activity closer than 15km to the coast. That is well beyond the horizon. And after the 60-90 day drilling period, the drill rig and any other infrastructure are removed and there is nothing visible from the coast or from the air.

It is also often said in the public debate that exploration and development within PEP-11 could see activity offshore Sydney's beaches. While the permit's current boundaries do reach as far south as 30km offshore from Manly, Advent Energy has made clear that the company has no intention of conducting activity in the southern portion of the permit area. The company has previously indicated its willingness to relinquish areas below a line extending east from the coast south of Terrigal to focus its activity offshore the Lower Hunter, which is the area we believe is most prospective for future gas development.

A map of the current permit boundaries is in Appendix B.

It is also important to note that Advent Energy is exploring for natural gas, not oil. All the scientific evidence collected over years show that the area where we are planning to explore is a gas prospect. Claims that oil spills could result from the proposed activity are not credible.



ADVENT ENERGY LIMITED

“The late Permian coal measures could provide a viable, mature, gas/condensate source along the length of the Offshore Uplift with simple migration pathways updip to the crest of the uplift....”

“This model results in all of the Late Permian Coal Measures being in the gas window”

Figure-Offshore Sydney Basin –Inferred Maturity and Migration Pathways

Source “Evolution and Hydrocarbon Prospectivity of the Offshore Sydney Basin
Bradley G New Petroleum Symposium
1993”

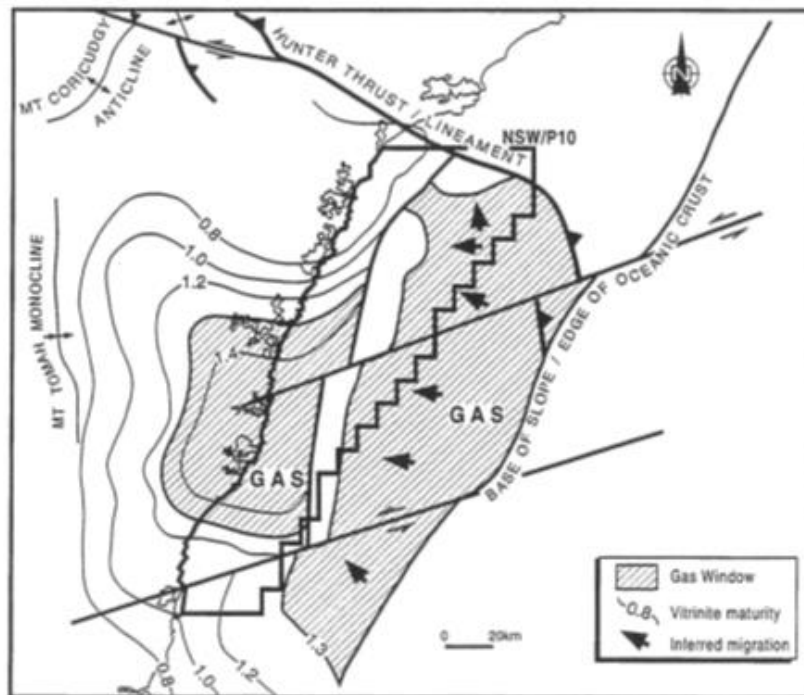


Figure 1: 1993 map extract highlighting gas prone area

Advent Energy acknowledges that many in the community have questions about an industry unfamiliar to most in NSW. Advent Energy is committed to responding to them in a forthright and truthful manner.

It is expected this Inquiry will also address those concerns in an honest, science-based manner that reflects the reality of the offshore petroleum industry around Australia and Parliamentarians’ obligation to truly serve the interests of the wide community they represent.

It is important that public discussion is grounded in fact. False and exaggerated claims do nothing to inform the sometimes difficult and often complex issues that policy makers must consider.

Much of the public and political discussion of PEP-11 assumes widespread and even overwhelming opposition to gas exploration offshore NSW.

That is inconsistent with our discussions with businesses and community members in the Hunter region, and polling we conducted following this year’s NSW state election.

The polling suggests that gas exploration offshore the Hunter region has far stronger support than opponents of development have acknowledged, and that politicians may have realised.

The polling, commissioned by Asset Energy, captured responses from 1,000 respondents aged 18 and over in the Hunter region. The polling found a much higher level of concern over the impacts of likely gas shortages in the region than concern about plans to extract gas offshore.

Specifically, it found:

- 50% of respondents said cost of living was the biggest issue in this year's NSW election, while 12% listed "managing the economy" and 8% said environment and climate change was the major issue. Less than 1% listed gas exploration as the most significant issue.
- 61% of Hunter Region voters supported exploring, developing and using more of Australia's gas reserves, while only 10% opposed that activity.
- 37% of respondents said they supported gas exploration offshore the Hunter region. 41% neither supported or opposed the activity, and 22% opposed this local gas exploration.

The poll was conducted by data and insights firm Pureprofile in the week immediately after the March 25 NSW State election. The survey size means it is accurate within a 3% margin.

Detail of the poll questions and responses are attached as Appendix C.

Advent has engaged over the last 12 months with the NSW community across five Federal electorates in the Hunter Region via a targeted social media campaign and can demonstrate approximately 250,000 unique interactions, the great majority of which are positive on the need for drilling off the coast of NSW to confirm this much needed energy resource, and are highly critical of the energy cost impact of current policies.

Terms of Reference

Advent Energy makes the following comments in respect of the Inquiry's terms of reference, noting the proposed amendment to legislation intends to prohibit mining and development of offshore oil, gas, and mineral resources in NSW.

These comments apply specifically to the intent to prohibit the development of offshore gas resources.

(a) Any constitutional issues or unintended consequences raised by the bill, and whether any amendments may address those;

As the PEP-11 licence lies in Commonwealth waters, exploration and production licenses are managed by a Joint Authority, comprising the State and Federal Resource Ministers, with the Federal Minister having the casting vote with respect to decisions relating to the licences.

A declared intention of some supporters of the Bill is that in the event the Federal Government approving the extension of the PEP-11 permit, and NOPSEMA granting necessary environmental approvals, that the Bill could be used to prevent the building of infrastructure to bring any subsequent gas production to shore.

That would seem an extraordinarily short-sighted and capricious act, to prevent a product that had been safely produced and was much in demand from reaching the homes and businesses that demanded it. As this Term of Reference implies, this may be in breach of provisions in the Australian Constitution.

Under the current legislative framework in NSW, Advent would have options to bring the gas to market, the most direct route would be via pipeline to shore, a relatively short distance of 27km, to tie into the Jemena gas trunk at the Munmorah gas-fired power plant.

PEP11 Project



Figure 2: Likely connection of offshore gas production to existing onshore infrastructure.

Another unintended consequence of this bill is that it could see higher energy prices in New South Wales and disruption to gas supply that could threaten tens of thousands of local jobs.

The situation with domestic gas supply on the east coast has been identified as critical for several years. Population growth, establishment and growth of new and existing industries, closure of legacy power stations, mainly coal powered, and a lack of onshore exploration across the two most populous states have led to a looming shortage of domestic gas supply to the eastern seaboard.

The Importance of New Gas Projects and Gas Supply

1. The analysis contained in the Australian Competition & Consumer Commission *Gas inquiry 2017-2030 interim report* (January 2023) (**ACC Report**) is particularly important. That analysis makes clear that from 2026 there will be a shortfall of supply in gas in the Australian east coast gas market. As that report relevantly notes:²

From 2026 onwards the east coast gas market is expected to experience a shortfall in supply from [proved and probable (2P)] reserves unless additional supply comes online. Under a Step Change scenario for gas demand [which models a steep decline in gas demand], the shortfall may be deferred until 2027. However, in the long-term there is not expected to be sufficient gas production from 2P reserves to meet demand....

² Australian Competition & Consumer Commission *Gas inquiry 2017-2030 interim report* (January 2023), [5.3.3].

[G]as demand is expected to decline over the longer-term through a shift to greater electrification and as energy policy shifts towards net-zero emissions targets. However, natural gas will likely be part of the transition between coal power generation and renewable energy sources, and there will be ongoing need for gas from commercial and industrial users in particular.

Without expansion in production, gas supply shortfalls are expected arising from export and domestic demand even under a Step Change scenario in which there are greater shifts to electrification, consistent with net-zero emissions targets.

This would place continued upward pressure on prices in the gas market, as well as pressure on the electricity market through the role that gas powered generation will likely play in meeting peak electricity demand and maintaining the stability of the east coast energy system.

Additional gas supply will be needed to avoid future shortfalls.

2. The analysis of the ACCC is reflected by the recent representative public comments of senior Commonwealth Government Ministers.

(a) The Prime Minister the Hon Anthony Albanese MP said that “gas will play a role in renewables”³ when defending the role that gas will play in the transition to clean energy.

(b) The Hon Madeleine King MP correctly noted that:⁴

In the short term, medium term and long term we will need gas. You need gas to process critical minerals and rare earths which are essential for clean energy technology.

(c) The Hon Chris Bowen MP said that:⁵

Gas is a flexible fuel necessary for peaking and firming as we undertake this transformation [to the government’s renewables target].

(d) The Hon Dr Jim Chalmers MP noted that the gas industry is a “really important”⁶ part of the nation’s economy, and that the Commonwealth Government is working on increasing gas supply⁷ to combat rising energy prices.

3. The views of the ACCC are reflected within industry. Dr Kerry Schott (the former head of the Energy Security Board) recently observed that the pathway to net zero emissions is

³ AFR Business Summit (7 March 2023) accessible at: <https://www.pm.gov.au/media/afr-business-summit-0>

⁴ Interview with Tom Connell, Sky News (15 February 2023) accessible at: <https://www.minister.industry.gov.au/ministers/king/transcripts/interview-tom-connell-sky-news>

⁵ Address to the Sydney Institute (13 March 2023) accessible at: <https://minister.dcceew.gov.au/bowen/speeches/address-sydney-institute>

⁶ Press Conference, Blue Room, Canberra (25 January 2023) accessible at: <https://ministers.treasury.gov.au/ministers/jim-chalmers-2022/transcripts/press-conference-blue-room-canberra-1>

⁷ For example, Interview with Neil Mitchell, 3AW (26 October 2022) accessible at <https://ministers.treasury.gov.au/ministers/jim-chalmers-2022/transcripts/interview-neil-mitchell-3aw-0>; Interview with David Speers, Insiders ABC (30 October 2022) accessible at: <https://ministers.treasury.gov.au/ministers/jim-chalmers-2022/transcripts/interview-david-speers-insiders-abc-0>

not realistic without further gas supply.⁸ A similar observation has been attributed to Mr Adrian Dwyer (CEO of Infrastructure Partnerships Australia).⁹ The Australian Petroleum Production and Exploration Association has also observed the need for Australia to increase its domestic gas supply in light of the shortfall projections noted above.¹⁰

4. Closely related to the need for Australia to have new gas supply is the fact that a lack of gas supply is a key driver of inflation. As Dr Phillip Lowe, the former Governor of the Reserve Bank of Australia, said in a Senate Estimates Hearing:¹¹

One way of tackling inflation induced by supply-side shocks is to address the supply side. At the moment there are two areas I think we could be focusing on. It's the supply of gas and electricity in the domestic market—what we can constructively do to increase the supply. I don't want to get drawn into what the right measures are, but just at the analytical level, increased supply of gas and electricity in the domestic market would be helpful.

It is also worth noting that in submissions to the Federal Government's review of the Australian Domestic Gas Supply Mechanism¹² last year several significant NSW gas users and other business groups made comment on the need for the development of new natural gas resources.

Some examples of key points in submissions included:

Causmag International

- States should not place restrictions on development of new gas fields once all the environmental conditions have been met. Australia has some of the world's strictest environmental regulations and the gas producers should not be restricted once they have satisfied these regulations.
- The states need to let their environmental regulators process applications from gas producers on merit, without influence or interference from political considerations. The Commonwealth should not bar companies like Asset Energy from utilizing their exploration permits for off-shore drilling. Off-shore drilling is a common practice internationally to access gas without damaging the environment.

CSR Ltd

- Australia's domestic gas supply-demand balance has been forecast to tighten for a number of years, and a coordinated federal and state energy transition is required that will ensure adequate levels of domestic gas supply are brought to market at sustainable prices.
- An energy transition plan must be put in place that ensures enough gas is brought to market at the right time.

⁸ See the commentary in "States hits for 'demonising' gas" *Australian Financial Review* (28 February 2023).

⁹ See the commentary in "States hits for 'demonising' gas" *Australian Financial Review* (28 February 2023).

¹⁰ APPEA Media Release, "Government Strategy for New Games Supply Needed After More Shortfall Warnings" (16 March 2023).

¹¹ Commonwealth of Australia, *Official Committee Hansard (Senate): Economics Legislation Committee* (Monday, 28 November 2022) p4.

¹² <https://consult.industry.gov.au/adgsm-extension/submit-your-feedback/list>

Chemistry Australia

- The \$38 billion chemistry industry plays a vital role in the Australian economy, underpinning more than 212,000 jobs and supplying products, technologies and innovations to 108 of Australia's 114 industry sectors.
- The chemistry sector represents approximately 10% of east coast domestic gas demand and a very small percentage of overall east coast production. Our members use gas (methane and ethane) as a non-substitutable feedstock for manufacturing a broad range of key products used throughout the economy for both domestic and export markets.

Cement Industry Federation

- As such, ensuring the adequate supply of affordable energy in all forms, including natural gas, must be a key priority for all Australian governments to ensure a strong, growing manufacturing industry and economy in general.

Australian Aluminium Council

- The Australian alumina and aluminium industries are highly dependent on gas for their operations and viability; directly using more than 1661 PJ of gas per annum as well as indirect consumption via the electricity market.
- Energy typically accounts for 30-40% of the industries' cost base, and therefore it is a key determinant of their international competitiveness.

Australian Chamber of Commerce

- Even if they can afford to pay the elevated prices, many (Commercial and Industrial) gas users are finding it very difficult to source gas on the spot market. Many businesses relying directly or indirectly on gas as feedstock, heat or power generation, face closure as they cannot continue to operate at current gas prices.
- Even before the current gas crisis, C&I gas users nearing the end of their current gas supply contract were finding it extremely difficult to negotiate new long-term contracts at affordable prices.
- By way of example, Incitec Pivot recently announced it will cease manufacturing of AdBlue at its Brisbane-based Gibson Island plant at the end of 2022, as it had been unable to secure a long-term contract for affordable gas supply from 2023 onwards. Incitec Pivot is the only Australian producer of AdBlue, which is an important fuel additive to reduce greenhouse gas emissions from diesel engines.
- State regulation — such as the Victorian Government's moratorium on unconventional (coal-seam) onshore gas exploration and all forms of off-shore unconventional (coal seam gas) exploration, and the NSW Government's 'go-slow' on environmental assessment for unconventional gas field development — is having a substantial impact on gas exploration and investment decisions.
- Similarly, in NSW which relies on the importation of 98 per cent of its gas requirements from other states, the environmental approval process for the Narrabri gas field development has been extremely slow.
- Federal and State Governments must focus their attention on lifting restrictions on gas exploration and extraction and facilitating faster approvals for new gas projects to increase the volume of gas available in the network.

Business NSW

- Many manufacturers are dependent on gas for processes which cannot be fuel-switched to use electricity. As the Australian Chamber of Commerce and Industry (ACCI) state in their recent submission on the Australian Domestic Gas Security Mechanism Extension: “These prices are unsustainable. Already we are seeing [Commercial and Industrial] gas users under extreme pressure and indicating that if the price pressures cannot be relieved shortly, they will be forced to close and/or leave Australian shores.”
- Longer term, other gas development proposals in NSW should be given serious consideration as, in the aftermath of the Ukraine invasion, market conditions have altered considerably since the first time it was reviewed. Both Commonwealth and NSW Governments will need to be more open to new gas field developments to bridge the gap to hydrogen or other options becoming viable.

Energy Users Association of Australia

- The cost of producing everything from pasta sauce and other processed foods through to beer and toilet paper has gone up due to unsustainably high gas prices, feeding the surging cost of living pressure being felt by households and business alike.
- Australian manufacturers, food processors and heavy industry such as steel and cement have also invested tens of billions of dollars over the past decades as they built significant productive capacity and underwrote 850,000 jobs.
- We can assure you that sufficient supply of gas at \$15Gj+ is largely irrelevant for a vast majority of domestic C&I gas users. It is our firm view that stronger measures are required to ensure gas suppliers deliver on both supply and price.
- There is strong support for removing gas moratoria: Replacing the blunt instruments of moratoria with transparent technical assessment, robust planning/monitoring and a just compensation framework for landowners should be a priority.

Australian Workers Union

- In early August, the ACCC released its alarming assessment of the domestic gas market. It predicts a 10% shortfall of over 50,000 terajoules.
- The current crisis was not foreseen until February this year as Russia invaded Ukraine.
- Industrial users for heat or feedstock have no relief but stand to lose just as much if the market collapses. Unlike electricity users, they have no reasonable alternative to gas use.
- Actions to avoid the next gas crisis:
 - In the medium-term (over the next 3 to 5 years), Australia will also need a sensible national gas supply policy, making genuine efforts to bring more gas online in consultation with state and territory.

Committee members are urged to consider the serious message being sent to policymakers by these organisations, and their warnings of the consequences of playing politics with gas supply.

(b) Whether there are other ways to achieve the intended outcomes of the proposed bill including through the New South Wales Government offshore exploration and mining policy;

Presumably the overriding intention of this Bill is to protect the NSW coast and marine environment.

One clear way to do this is to permit offshore gas exploration and development but only under the most robust regulatory environment and the highest operating standards.

Advent Energy is committed to complying with such regulations and meeting world-best operating standards. It is the Australian industry’s delivery against these objectives that has enabled the economic and energy benefits of offshore gas exploration and production while protecting the marine and coastal environments wherever it has operated around the country.

The fact is that resources with a high energy density such as gas require a much lower production footprint that those with lower energy density, and therefore have much less impact on the environment, both onshore and marine.

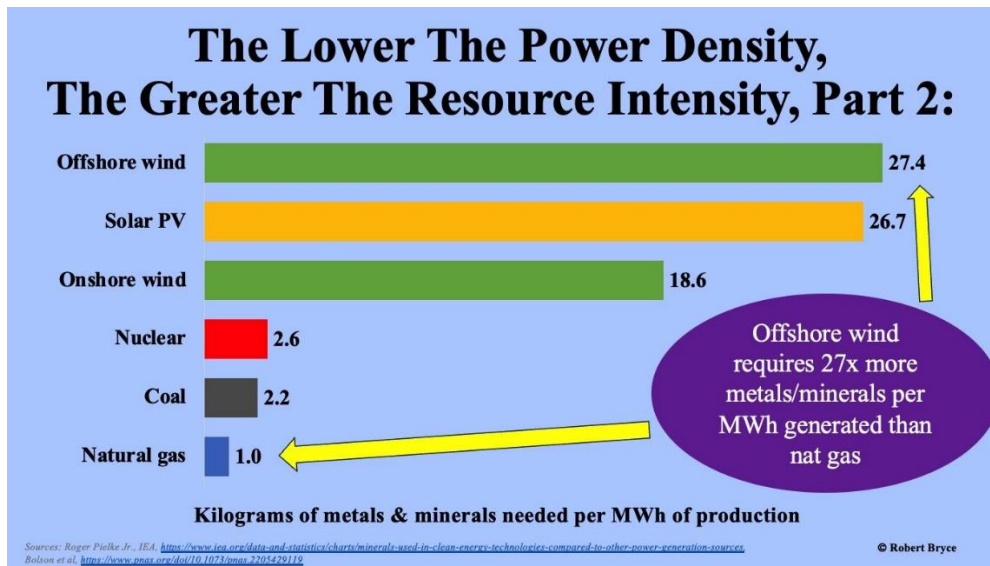


Figure 3: International Energy Agency analysis of metals and minerals used in energy production.

(c) Enforcement and compliance issues raised by the bill;

In seeking to prohibit mining and development of offshore oil, gas, and mineral resources in NSW, the obvious enforcement challenge raised by the Bill is that the Government of NSW has no jurisdictional authority beyond State waters, which typically extend only 3 nautical miles from the coast.

In Advent’s view there may be enforcement and compliance issues raised by the Bill, should it become law and apply to State waters only. If the amendment was passed, the development of a gas resource could still commence, and the gas could be processed, stored and off taken at the location, some 27km off the coast of NSW with no connection to NSW.

This would be a suboptimal outcome with little rational justification, but compliance would be possible albeit without new gas supply likely being available to NSW homes and businesses.

(d) Environmental impacts of offshore drilling

There are currently in the order of 500 offshore drilling rigs operating around the world in water depths from tens of metres to several kilometres, and approximately 9,000 offshore production facilities producing oil and gas. The vast majority of these operations proceed without incident, safely and with minimal impact to the environment.

This is especially the case in jurisdictions such as Australia, New Zealand, Canada, the USA and countries that border the North Sea, where the regulatory process is highly rigorous.

The Australian offshore safety and environment regulator NOPSEMA is rightly regarded as one of the most rigorous of the regulatory bodies across these jurisdictions.

The Offshore Sydney Basin is a proven gas basin. At the lighter end of the spectrum, condensates and gas pose the least threat to the local environment, dispersing rapidly under marine conditions.

Through geological studies and direct sampling of the gas that continuously percolates up to the seabed off the NSW coast from the underlying structures, Advent has established that the hydrocarbon type in PEP-11 is predominantly methane and ethane, with the possibility of a small amount of other light condensates.

As is mandated by NOPSEMA, any Environmental Plan submitted in preparation for drilling on PEP-11 would require robust modelling of any potential hydrogen release. Preliminary studies show that, no hydrocarbons would reach the NSW coast in the extremely unlikely event of loss of control of the well.

It can be stated with confidence that the risk of spillage and contamination of NSW beaches by marine grade fuel from the many freight vessels that visit Newcastle and other ports along the NSW coast is considerably higher than from drilling for gas some 25km from the coast.

As in other states and territories, there is no reason NSW cannot have a safe, sustainable and successful offshore gas industry.

(e) Any other related matter.

Advent believes NSW risks exacerbating an already serious energy supply situation by passing the proposed legislation, and while Advent would have a viable alternative to bring gas to market which would completely avoid NSW, we would caution against such a move.

From Advent's recent informal contacts with several industrial users of gas across NSW, it is evident that due to current high prices and the distinct possibility of curtailment of supply, some of these companies are already making plans to relocate their manufacturing plants overseas where there is less risk of surety of supply of the vital raw material that is gas. The proposed amendment may introduce further sovereign risk through breaking of LNG export contracts, in the event the Australian Government was forced to respond to gas shortages by intervention in this market.

Advent Energy welcomes the recent announcement of declared wind zones off the Hunter coast and elsewhere and has been in contact with several of the organisations who are bidding to provide wind power off the coast of NSW. As in the North Sea, the Gulf of Mexico and other areas, the goal of our industries is to collaborate, sharing our knowledge of the areas and looking for synergies that may exist, including taking energy to shore.

Our media release on the offshore wind zone announcement is attached as Appendix D. Our submission to the Federal Government consultation process can also be accessed here.

Summary

To conclude this submission, we would urge committee members to put fact, science and the established track record of the Australian offshore gas industry ahead of false, exaggerated and ideological claims of many industry opponents.

In summary and in simple terms, Advent seeks to:

- Provide gas to NSW for 20 years: It is estimated there is enough gas off the coast of the Hunter (5.7 tcf) to provide clean energy to NSW people and businesses for 20+ years.
- Support jobs and local industry: Business NSW estimates 250,000 jobs in NSW rely upon gas as a feedstock and energy source. Gas supports thousands of jobs at BlueScope Steel, Causmag, Orica, and other companies. The presence of ethane could also secure much-needed supplies to the Qenos plastics plant in Port Botany.
- Explore Carbon Capture and Storage potential: The drilling will also be used to explore CCS potential. This could be an ideal location for CCS, about 100 km from some of Australia's largest CO₂ emitters.

Advent Energy is not seeking to:

- Explore offshore Sydney: The gas target is more than 100km from Sydney. The size and shape of the permit, which was originally granted in 1999, does not reflect the area of proposed activity. Advent has indicated its willingness to relinquish the southern portion of the permit most directly northeast from Sydney's beaches.
- Explore close to any coast: At sea level, the horizon is about 5km from the coast. Asset would not contemplate any future offshore activity closer than 15km to the coast.
- Drill for oil: Asset is exploring for natural gas, not oil. Seafloor geochemical sampling has shown the presence of gas, and not oil. This is supported by repeated independent and government geological reports.

There is no sound reason to prevent our proposed activity from proceeding.

The PEP-11 joint venture shareholders, comprising Advent Energy investees BPH Energy Ltd and MEC Resources along with Bounty Energy which holds 15% of the permit, have over 4,000 shareholders resident in NSW, and over 14,000 shareholders in total, who would be adversely affected by the passage of this amendment.

Advent Energy would be available at any reasonable time to discuss this submission with the Committee.

If you require further information, please contact me on [REDACTED] or at [REDACTED]

Yours sincerely,

[REDACTED]

David Breeze
Executive Director

Appendix A

Key points from AEMO's 2023 Gas Statement of Opportunities (GSOO)

The Australian Energy Market Operator (AEMO) 2023 Gas Statement of Opportunities (GSOO) forecasts the adequacy of gas supplies, based on information from gas industry participants, to meet consumers' changing gas needs from now until 2042 in Australian jurisdictions other than Western Australia.

- Despite increased production commitments from the gas industry since the 2022 GSOO, gas supply in southern Australia is declining faster than projected demand. As Australia transforms to meet a net zero emissions future, gas will continue to complement zero emissions and renewable forms of energy, and to provide a reliable and dispatchable form of electricity generation, and may provide potential pathways to incorporate hydrogen and other 'green' gases within Australia's energy landscape.
- Extreme weather conditions across southern regions that drive high coincident peak demand for gas consumption may lead to gas shortfalls, particularly if combined with high gas generation (if alternative electricity generation resources are unavailable).
- Noting the risks above, annual physical gas supply from existing, committed and anticipated production is forecast to be adequate before 2027. Investments are needed in the near term to ensure operational solutions from 2027, despite falling gas consumption, noting that:
 - From 2026, without additional commitments to expand domestic supply, or alternative developments such as hydrogen or biomethane that may offset natural gas demand, gas contracted for export by Queensland LNG producers may instead need to be used to maintain domestic gas adequacy.
 - Investment uncertainty exists regarding the development of LNG import terminals, including the Port Kembla Energy Terminal (PKET) project. Based on information provided by the project proponent, this GSOO no longer considers Port Kembla Energy Terminal (PKET) as an anticipated project
- All future scenarios, however, forecast the long-term need for additional supply.

Gas for electricity generation

- As AEMO's 2022 ISP11 reported, electricity from gas generation is expected to play an important, continued role in the National Electricity Market (NEM).
- In the medium and longer term, as much of the coal-fired generation fleet retires, gas consumption for electricity generation is forecast to rise. In the long term, gas generation is forecast to continue to provide firming of electricity supply in a system with a high reliance on variable renewable energy (VRE) such as wind and solar, complementing electricity storage systems such as battery storages and pumped hydro.
- With the withdrawal of coal-fired generation, gas is forecast to take over some of coal's role as a seasonal energy reserve for the electricity system, particularly during times when weather-dependent VRE is less available.

The gas supply adequacy challenge from 2023 that AEMO reported in the 2022 GSOO remains, driven by:

- The continued decline of traditional supply from the Gippsland region
- Limitations on the Moomba to Sydney Pipeline (MSP) and Southwest Queensland Pipeline

Capacity limits may still inhibit even greater southbound support on peak demand days, even after the new Stage 2 of the East Coast Grid expansion completes from winter 2024 (expanding capacity by 90 TJ/d).

- Changing production and flow dynamics which mean that all southern regions (New South Wales, the Australian Capital Territory, Victoria, South Australia and Tasmania) share shortfall risks, with South Australia now forecast to be within the constrained supply region.

Expanded southern supply or increased transportation capacity to access northern supply is needed to avoid domestic supply gaps

- Although AEMO is forecasting declining gas consumption, supply is declining faster than forecast demand, and annual domestic supply gaps are forecast from 2027. Compared to the 2022 GSOO Step Change scenario, these annual supply gaps are forecast six years earlier.

In the longer term, new sources of supply will be needed even though annual domestic gas consumption is forecast to decline:

- Annual supply gaps are forecast as early as 2027
- Very little anticipated production is forecast to come online in southern regions in the next five years
- Existing and committed production is projected to decline significantly over the forecast horizon. Much of the short-term decline in southern production is occurring in the Gippsland Basin. The gas system relies heavily on supply from Gippsland to meet peak demand during winter.

Gas supply adequacy assessment

Based on the demand and supply forecasts ... this section provides a gas supply adequacy assessment for all Australian jurisdictions other than Western Australia. Key insights:

- There is a risk of peak day shortfalls in most scenarios across southern regions from 2023 if coincident, extreme conditions in southern regions coincide with a high need for electricity from gas generation.
- Shortfall risks could be avoided if the demand for electricity from gas generation was reduced at times of peak gas demand.
- During these conditions, pipeline capacity constraints on SWQP and MSP limit more supply from being provided by northern producers, even after committed upgrades are commissioned.

Domestic supply gaps are at risk of emerging:

From 2026, without anticipated supplies being developed, Queensland LNG exporters must divert gas contracted for export to the domestic market to maintain domestic adequacy.

From 2027, even with the development of anticipated supplies, and with Queensland LNG exporters diverting the maximum amount of gas possible (limited by pipeline capacity) to southern customers, supply gaps affecting southern regions are forecast to emerge.

Overall, to meet forecast supply gaps ... greater resource development is needed to offset declining production, particularly in southern states ...

- Peak day shortfalls are forecast under extreme peak days in every year from 2023 to 2026 where large demand for gas generation coincides with significant residential, commercial and industrial consumption (such as in reference year 2019).

LNG volumes contracted for export may need to be supplied to domestic customers from 2026 to maintain domestic supply adequacy without expanded domestic supply.

North Queensland supply adequacy is at risk.

- There is limited gas supply to meet forecast consumption from gas generation across the entire horizon. Alternative North Queensland generation sources exist, and the Queensland Energy and Jobs Plan⁸⁹ identifies further regional development opportunities.
- Committed supply only will be insufficient to meet demand from residential, industrial, and commercial customers on some days in 2024, and more frequently from 2025.

Various circumstances would exacerbate risks to supply adequacy

- Infrastructure delay
- Unavailability of the Newcastle Gas Storage Facility (NGSF) – the availability outlook for NGSF is uncertain.
- Increased gas generation consumption – gas generation is a key contributor to near-term shortfall risks... This GSOO explored two sensitivities that result in increased gas generation... delayed commissioning of new renewable generation (VRE Delay) and extended drought conditions akin to the water inflows from the 2006-07 millennial drought (Dry Year).

Longer-term supply adequacy

- Although most scenarios forecast declining demand for gas as consumers seek alternative energy supplies to reduce emissions (via electrification, or from alternative gases such as hydrogen or biomethane), supply is projected to decline faster than forecast demand. Pipeline capacity for southern regions to access northern supply is forecast to become constrained and annual southern domestic supply gaps are forecast from 2027.

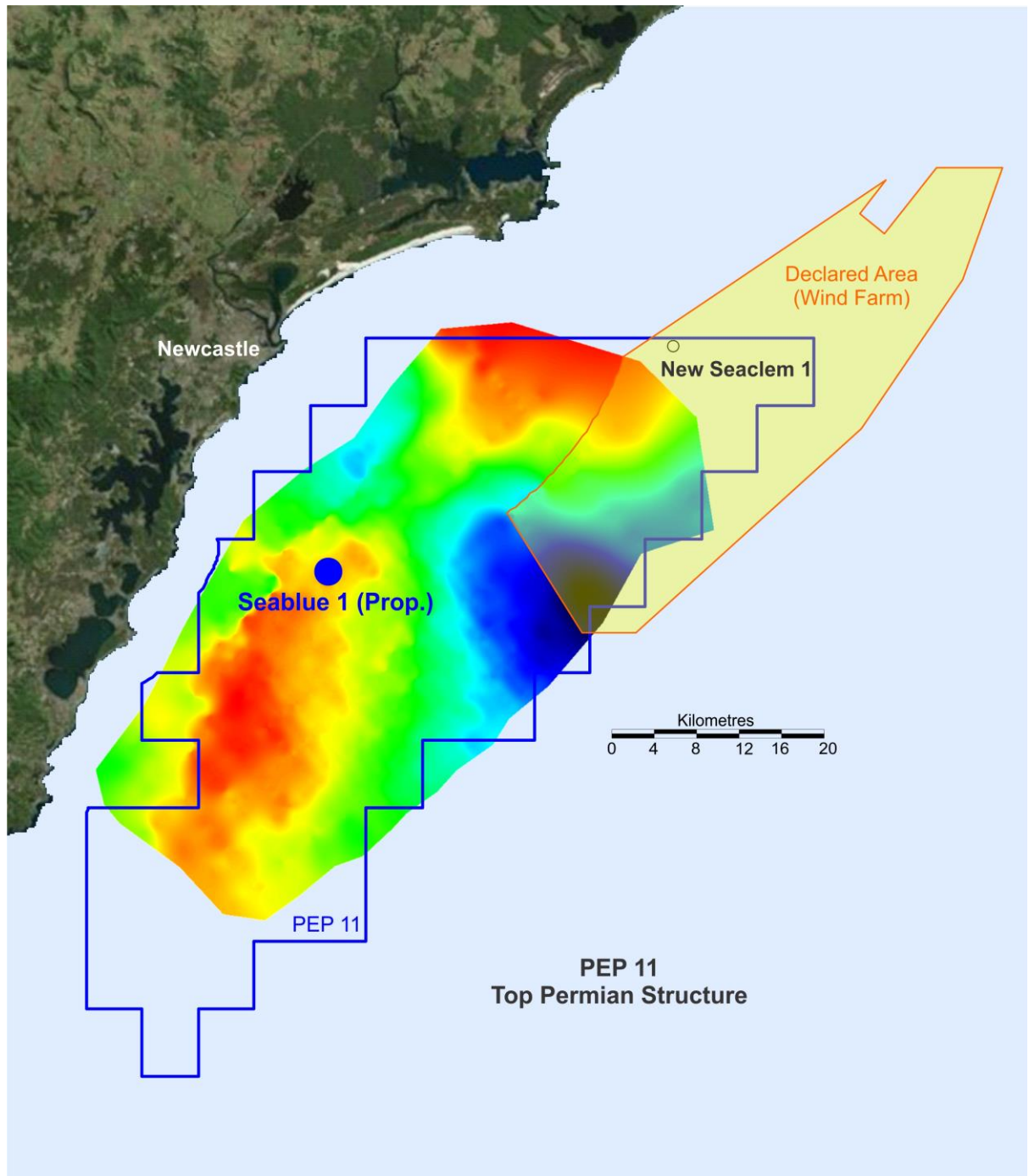
Northern Territory gas adequacy

- AEMO has collected production data for the Northern Territory voluntarily for the 2023 GSOO and produced approximate demand forecasts¹⁰¹. The Northern Territory is connected to the east coast network via the NGP... The NGP is unidirectional and supports flow from the Northern Territory to Queensland when there is a production excess, but does not support flow from Queensland to the Northern Territory.
- As flow from Queensland is unable to support Darwin demand in the event of unplanned outages, Power and Water Corporation (PWC, which manages large wholesale gas supply and transportation) may purchase gas from the LNG export facilities in Darwin under emergency circumstances¹⁰². This arrangement is useful to mitigate shortfall risks, but is not viable to respond to annual supply gaps. PWC is reported to have used this mechanism in 2022 to respond to supply issues from the Yelcherr gas plant.
- ENI, operator of the Blacktip field which supplies the Yelcherr gas plant, plans to drill development wells in the Blacktip field to return production capacity to normal rates in early 2023. If this is unsuccessful, less supply than forecast will be available to flow along the NGP to the east coast, and emergency supply from the LNG export facilities may be required to meet Northern Territory demand at peak times.

- Annual supply gaps are forecast to emerge in the Northern Territory from 2032 with committed supply, and from 2033 with committed, anticipated and uncertain supply. Mitigating these annual shortfall risks would require:
 - Additional supply developed in the Northern Territory, and/or
 - Pipeline transportation capacity developed from the east coast to the NT

Appendix B

Current boundaries of Petroleum Exploration Permit 11





MEDIA RELEASE

5 April 2023

Hunter poll shows strong support for gas development

New opinion polling shows that public sentiment towards gas exploration offshore the Hunter Region of New South Wales has far stronger support than activists have acknowledged, and politicians may have realised.

The polling, commissioned by Asset Energy, is based on results from 1,000 respondents aged 18 and over in the Hunter Region.

The polling found a much higher level of concern over the impacts of likely gas shortages in the region than concern about plans to extract gas offshore. Specifically, it found:

- 50% of respondents said cost of living was the biggest issue in last week's NSW election, while 12% listed "managing the economy" and 8% said environment and climate change was the major issue. Less than 1% listed gas exploration as the most significant issue.
- 61% of Hunter Region voters supported exploring, developing and using more of Australia's gas reserves, while only 10% opposed that activity.
- 37% of respondents said they supported gas exploration offshore the Hunter region. 41% neither supported or opposed the activity, and 22% opposed this local gas exploration.

The poll was conducted by data and insights firm Pureprofile in the week immediately after the March 25 NSW State election. The survey size means it is accurate within a 3% margin.

Asset Energy's plans to explore for gas 30km off the coast of Newcastle were being considered in an independent assessment process up until December 2021 when former Prime Minister Scott Morrison announced he would not allow Petroleum Exploration Permit (PEP) 11 to be extended.

That decision was voided in February this year after Asset challenged its validity in the Federal Court.

Asset Energy executive director David Breeze called on the NSW and Federal governments to urgently reconsider their position on gas exploration offshore Newcastle as part of the solution to the east coast energy crisis.

"There is evidently much stronger support for gas resource development offshore NSW than the sometimes-noisy public debate would suggest," Mr Breeze said. "What this research shows is that the people are with the science. This is a safe, highly regulated industry, which can support jobs and drive down energy costs, and do so without environmental impacts."

Asset has long argued the case for local gas development in NSW, but in light of significant changes in the international energy market following Russia's invasion of Ukraine and the prospect of sustained higher energy prices and gas shortages in Australia, the company is urging governments to reconsider their position and allow limited, safe, sustainable and robustly regulated exploration activity.

Mr Breeze said Asset's project could be a major part of any solution to NSW's gas shortages and high energy prices.

“Provided that the gas prospects across PEP11 are proven to be of commercial value, our project has the potential to supply 20 years’ worth of gas for NSW¹. We have committed to inject all of our produced gas into the domestic market – and more supply will mean lower prices,” Mr Breeze said.

“Natural gas will play a critical role in supporting the energy transition, while also underpinning the state’s manufacturing industries and other commercial activity. Business NSW estimates 250,000 jobs in NSW rely upon gas as a feedstock and energy source.”

“We acknowledge the widespread discussion around the potential impacts of gas exploration and future production, including in PEP-11, but all too often that discussion is distorted by false and exaggerated claims and ignores the long track record of safe and sustainable operations in Australia’s offshore petroleum industry and the ongoing need for gas to meet power generation, industry, and domestic demand.”

The key questions in the poll were:

What was the most significant issue that determined your vote in last week’s NSW election?

- Cost of living and/or interest rates - 49.8%
- Managing the economy - 12.5%
- Health and aged care - 11.2%
- The environment and climate change - 8.5%
- Energy reliability and affordability - 4.5%
- Roads and transport - 2.4%
- Crime and social order - 1.5%
- Defence and national security - 1.5%
- Offshore gas exploration - 0.5%
- Other issues - 7.6%

How concerned are you about the impact of likely gas shortages on your household budget and the broader NSW economy?

- Extremely concerned - 14.6%
- Highly concerned - 29.6%
- Slightly concerned - 21.7%
- Unaware - 21.9%
- Not at all concerned - 12.2%

Do you support Australia exploring, developing and using more of its own gas reserves?

- Strongly support - 23.6%
- Support - 37.7%
- Neither support nor oppose - 28.9%
- Oppose - 6.5%
- Strongly oppose - 3.4%

Do you support or oppose gas exploration offshore the Hunter region?

- Strongly support - 10.0%
- Support - 27.3%
- Neither support nor oppose - 40.9%
- Oppose - 14.1%
- Strongly oppose - 7.7%

¹ In accordance with regulatory requirements, this is not a production forecast or a forecast of future performance of the Company. This statement is an aspirational statement and is not referring to the Company’s advanced exploration targets based on existing exploration results.

Appendix D



MEDIA RELEASE

17 July 2023

Hunter's potential to be 'offshore energy hub' for NSW

The Hunter has the potential to be an offshore energy hub for NSW following the declaration of an offshore wind energy zone that complements the existing PEP-11 offshore gas exploration permit.

The government has declared a 1,854 square km area extending offshore from Norah Head to Port Stephens as suitable for offshore wind development.

David Breeze, CEO of Asset Energy which holds the PEP-11 gas exploration permit, said the area offshore the Hunter had the potential to be an outstanding example of gas and renewables working together to provide cleaner energy for the whole state.

The PEP-11 permit partly overlaps with the declared offshore wind zone, but Asset Energy's proposed drilling location lies outside the wind zone. Around the world, including in the North Sea and the Gulf of Mexico, offshore wind projects are located or planned next to existing oil and gas production areas.

"We welcome this declaration because it reinforces our belief that decarbonising the global energy system will require the use of a mixture of technologies, encompassing renewable resources, carbon sequestration and gas," Mr Breeze said.

"There are and will be offshore areas where wind, gas and carbon sequestration activities will overlap, and Asset believes a holistic approach should and will be taken to ensure energy is produced in an optimal manner.

"For the people and the businesses of NSW – and the environment – this is good news and indicates the potential of the Hunter to providing a solution to the state's long-term energy needs. Gas and renewables together could mean huge investment and jobs for the Hunter."

He said it had been shown in the North Sea that offshore wind and gas are compatible and complimentary.

"Different energy systems can co-exist to deliver stable and affordable clean energy supplies that meet the needs of homes and businesses, as well as the environment," Mr Breeze said.

He said it made sense to locate gas energy near wind so that it could provide "back up" when required.



Offshore wind and gas energy co-exist in the North Sea. (Credit: Kaisn/Shutterstock)

“It is becoming increasingly evident that as the transition proceeds across the globe that weather dependent energy such as wind and solar will require significant dispatchable backup and that gas is an acceptable solution,” Mr Breeze said.

Mr Breeze said that PEP-11 has the potential to be a significant gas resource, based on sampling studies conducted by Advent and confirmed by independent experts.

In January, the Federal Court overturned former Prime Minister Scott Morrison’s decision to block PEP-11 and now the company is waiting for the National Offshore Petroleum Titles Administrator (NOPTA) to re-assess the permit application, which will then go to NSW and Federal Resources Ministers for a final decision.

Asset Energy has an 85 % interest in PEP11 and is a wholly owned subsidiary of Advent Energy Ltd.

See Advent Energy’s submission to the call for submissions on the offshore Hunter wind energy zone:
<https://shorturl.at/esxyT>

Media inquiries: 