

Submission
No 24

**INQUIRY INTO PETROLEUM (ONSHORE) AMENDMENT
(CANCELLATION OF ZOMBIE PETROLEUM
EXPLORATION LICENCES) BILL 2021**

Organisation: Santos Limited

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Santos Ltd
ABN 80 007 550 923
Santos Centre
60 Flinders Street
Adelaide South Australia 5000

GPO Box 2455
Adelaide South Australia 5001
Telephone: +61 8 8116 5000
www.santos.com



23 June 2021

The Hon. Mark Banasiak, MLC
Committee Chair
Portfolio Committee No. 4 – Industry
Parliament House
Macquarie Street
SYDNEY NSW 2000
(via email: portfoliocommittee4@parliament.nsw.gov.au)

Dear Mr Banasiak,

Re: Inquiry into the Coal and Gas Legislation Amendment (Liverpool Plains Prohibition) Bill 2021 and Petroleum (Onshore) Amendment (Cancellation of Zombie Petroleum Exploration Licences) Bill 2021

Santos welcomes the opportunity to provide a submission to the New South Wales (NSW) *Portfolio Committee No. 4 – Industry* examining the proposed bills seeking to prohibit mining for coal and gas in the Liverpool Plains region and to cancel petroleum exploration licences more broadly in NSW.

Santos is a proudly Australian clean fuels company leading the way in decarbonisation with a commitment to achieve net-zero emissions by 2040.

Santos is Australia's biggest domestic gas supplier.

Natural gas will continue to play an important role in serving the clean energy needs of Australia and the world for at least the next two decades. The International Energy Agency forecasts in its net-zero emissions scenario that by 2050 about 40 percent of natural gas production will be used for zero-emissions hydrogen production in association with carbon capture and storage (CCS). Converting gas into hydrogen offers the fastest, lowest-cost pathway to a hydrogen economy and, combined with CCS, could put Australia at the forefront of this new industry while the technology for renewable hydrogen evolves and the costs come down.

Natural gas is particularly important in the Australian context for feedstock to make chemicals such as the plastics that are used in wide-ranging applications from milk bottles to medical appliances and water pipes, for industrial heating to make bricks, aluminium and many other products that Australians rely on in their daily lives, and to provide home heating in southern parts of the country. In addition, natural gas provides a role in firming renewable electricity and stabilising the electricity grid.

Santos is developing the Narrabri Gas Project (NGP) in NSW solely for the domestic market. In addition, Santos holds petroleum exploration tenures in other prospective areas of NSW.

Santos has spent more than A\$1.5 billion in NSW so far on acquiring the Eastern Star business (which formerly owned the project), exploration and appraisal of NSW's gas resources across the Gunnedah Basin, development of the Wilga Park Power Station and obtaining government approvals.

According to Business NSW, gas customers in Sydney pay much more for gas than the same businesses in Brisbane. This is because NSW imports more than 95 percent of its gas from other states. For example, a baker in Sydney pays \$26,400 more for gas each year than the same business in Brisbane and a drycleaner in Sydney pays \$660 a year more.¹

Santos understands that it is vitally important that the environment and water resources are protected, and that the community benefits from the development of natural gas in NSW through regional investment, employment opportunities and affordable natural gas supply. We are committed to protecting the environments we work in, and in particular, the precious groundwater resources that our farmers and communities rely on.

This commitment was reinforced through the Narrabri Gas Project Environmental Impact Statement (EIS) assessment in which the Department of Planning, Industry & Environment's Assessment Report concluded "*the Department has found it difficult to reconcile the significant community concerns about the Narrabri Gas Project with the technical advice from experts that the risk of any significant impacts occurring is generally low and can be controlled using standard engineering practice and imposing strict conditions on Santos*".

Any future natural gas exploration and appraisal activity would be subject to a stringent regulatory framework and would implement suitable controls to manage any risks which are considered low.

As rural and regional NSW comes out of hibernation following more than three years of drought, extensive bushfires and more recently the economic downturn as a result of the COVID-19 pandemic, our communities need new projects to facilitate new investments, new jobs, new business opportunities and economic recovery.

The natural gas industry coupled with emissions reduction technologies could be at the forefront of the region's economic recovery, while also delivering more competitively priced gas supplies for industry and households across NSW.

The attached submission provides an overview of the importance of the gas industry to NSW as well as specific comments about the *Coal and Gas Legislation Amendment (Liverpool Plains Prohibition) Bill 2021* and *Petroleum (Onshore) Amendment (Cancellation of Zombie Petroleum Exploration Licences) Bill 2021*.

¹ Business NSW 2019. www.nswbusinesschamber.com.au/Issues/Thinking-Business/Running-on-empty

Introduction

Santos welcomes the opportunity to provide a submission to the inquiry into the *Coal and Gas Legislation Amendment (Liverpool Plains Prohibition) Bill 2021* and *Petroleum (Onshore) Amendment (Cancellation of Zombie Petroleum Exploration Licences) Bill 2021*.

A proudly Australian company, Santos is a leading supplier of natural gas, a fuel for the future providing cleaner energy to improve the lives of people in Australia and Asia.

Santos has been working in partnership with local communities around Australia for 65 years, providing jobs and business opportunities, safely and sustainably developing Australia's natural gas resources to power Australian industry. Santos has been involved in coal seam gas (CSG) exploration in the north-west of NSW since 2008 including areas around Narrabri, Gunnedah, Boggabri, Coonabarabran, Quirindi and Scone.

Santos supports a robust regulatory framework that enables the sustainable and safe exploration and development of Australia's valuable and abundant reserves of gas for the benefit of all Australians.

Santos remains committed to strengthening our engagement with the community as we develop our business in NSW. Santos acknowledges the resources industry generally, and coal seam gas proponents specifically, must do more to allay the concerns held by some regional communities around the economic, environmental and social impacts of our activity.

East coast gas

NSW produces little of its own gas, so it is highly trade dependent. NSW has previously been supplied by Victorian sources but has become increasingly more reliant on northern gas fields in Queensland. The only sustainable, long-term solution to east coast gas shortages is bringing on new sources of gas supply to provide more competition and put downward pressure on prices.

NSW currently produces less than 5 percent of the gas it uses each year. It imports over 95 percent of its gas supplies from Victoria, South Australia and Queensland. Strong demand for that gas in other states, particularly Queensland, will see availability of gas to NSW diminish. NSW urgently needs to plan for its future sources of supply of this essential commodity.

NSW's manufacturing sector, which is approximately 84 percent of the state's industrial gas load, employs 253,000 people in 26,127 businesses, adding \$33 billion in industry value. Without NSW developing its own gas resources, its businesses and households will continue to face higher energy costs than across the border in Queensland, putting NSW businesses at a disadvantage. In December 2019, Business NSW released a report, *Running On Empty*, that found that more than 1.3 million homes in NSW use gas for cooking and heating. Gas underpins around 250,000 jobs in the NSW manufacturing sector.

Thousands of small businesses, from commercial laundries to bakeries depend on gas. The *Running on Empty* report found that a baker in Sydney pays \$26,400 a year more for gas than a similar business in Brisbane². Developing gas in NSW will undoubtedly benefit NSW customers who will pay less for their gas than they do now.

² Business NSW 2019. www.nswbusinesschamber.com.au/Issues/Thinking-Business/Running-on-empty

Potential customers are very interested in sourcing domestic NSW gas supply because they recognise the advantages of having a reliable and competitively priced source of gas in NSW.

Santos has already signed non-binding memoranda of understanding with Brickworks and Weston Energy for the supply of gas to commercial and industrial customers across NSW. Santos has also entered a memorandum of understanding (MOU) and subsequent heads of agreement (HOA) with Perdaman, a fertiliser producer looking at a new plant that would create hundreds of construction and ongoing local jobs and small business opportunities.

Additionally, Santos continues to work with customers to encourage new gas-based manufacturing opportunities in NSW. For instance, Santos is working with the Narrabri Shire Council to encourage new gas-using industries to locate in Narrabri, supporting the development of the Narrabri Special Activation Precinct and bringing even more jobs and business opportunities, and helping to build stronger, diverse and more vibrant regional communities.

Developing NSW's natural gas resources will improve NSW's energy security and generate substantial economic revenue and employment opportunities for the state, Narrabri and the surrounding region.

Energy Security

Reliable, secure and affordable sources of natural gas is important in order to provide dispatchable capacity and other services to NSW and the National Electricity Market (NEM).

The Australian Energy Market Operator (AEMO) predicts that NSW will steadily increase its gas demand driven mainly by the projected growth in new connections and that gas will remain an important source of peaking capacity. The flexibility provided by gas power is expected to play a key role to help meet evening peak electricity demand once solar generation declines, or overnight under low wind conditions. Without associated dispatchable and firming generation, renewable generation projects would not be viable as an effective part of the energy mix.

As stated in the *Report of the Liddell Taskforce*³, existing combined-cycle gas turbines are forecast to play critical complementary roles in NSW:

- + to provide longer-term firming (overnight, or during week-long wind-droughts)
- + to cover summer peak demand periods or periods when unfortunate coincidences of generation outages or weather patterns reduce available supply, and
- + in key power system service roles to provide grid security and stability.

In addition to firming intermittent supply, the development of domestic natural gas improves the resilience of the NSW energy system and reduces the reliance on Queensland and Victoria. This reliance is summarised by the NSW Business Chamber⁴ who identify that an over reliance on imported energy puts NSW at risk where supply is curtailed from those exporting states.

³ Report of the Liddell taskforce 2020 www.energy.gov.au/government-priorities/energy-markets/liddell-taskforce

⁴ Business NSW, Running on Empty (Page 16)

Recent significant events impacting on the national electricity market have served to further highlight the importance of secure, stable domestic generation underpinned by flexible natural gas generation. In particular:

- + The turbine failure and fire at the Callide C Power Station on 25 May 2021 resulted in the loss of transmission lines and the under-frequency load shedding of 2,300MW of Queensland load which caused a significant blackout throughout the state. This outage resulted in the greater use of gas-fired power to help fill shortfalls in the east coast grid.
- + Tragic flooding in the Gippsland region on 12 June 2021 resulted in impacts to the network, and reduced generation at Yallourn power station and coal mine due to flooding. This has significantly increased the pressure on an already stretched Australian energy market.

Conclusion

The Narrabri Gas Project has the potential to play a significant role in the domestic energy space. Natural gas has a vital role to play in delivering energy security, whilst having the additional benefit of being 50 percent cleaner than coal resulting in a significant reduction in carbon emissions. The development of new natural gas resources is crucial in assisting Australia's move towards a clean energy future.

In NSW alone, more than one million homes and 33,000 businesses rely on natural gas as a source of energy. The NSW Government estimates the top 500 industrial gas users provide more than 300,000 jobs which rely on an affordable, secure supply of natural gas and has recognised NGP's significance, declaring it a Strategic Energy Project.

Santos has already spent more than A\$1.5 billion in NSW and further development can be undertaken without significant impacts on the local community or the environment. This is critical for energy security and reliability and would deliver significant economic benefits to NSW and the Narrabri region.

Specific responses to the two private members' bills follow.

Petroleum (Onshore) Amendment (Cancellation of Zombie Petroleum Exploration Licences) Bill 2021

Significant investment in greenfield developments can only be made where benefits can accrue to both the state and the proponent. Multibillion dollar investment decisions will only occur within a framework that encourages appraisal and development, provides certainty for investment, and provides rigorous but efficient and affordable regulation of the activity.

The Narrabri Gas Project (NGP) remains the centre of our exploration and appraisal work in the Gunnedah Basin in NSW. A comprehensive cost-benefit analysis has been presented in the EIS for the NGP and was further considered through the 2020 Independent Planning Commission (IPC) hearings and submissions. The cost benefit analysis was completed in accordance with NSW and Commonwealth government assessment guidelines and shows that the development of the NGP has significant economic benefits for both Santos and NSW.

Santos and our joint venture partners currently hold 12 Petroleum Exploration Licenses (PELs) covering 53,433 km² in central NSW. Much of these areas are prospective for natural gas and have significant potential for future development and investment. The continued retention and operatorship of additional tenure in the Gunnedah Basin will allow Santos to undertake coordinated development of its acreage in line with community support, government regulation, scientific assessment and the energy needs of NSW.

Santos is seeking to renew PELs pursuant to section 19 of the *Petroleum (Onshore) Act 1991*. Through this process Santos is seeking to proactively relinquish a proportion of the licenses well above the minimum standard requirements. The intent of this approach is to provide certainty to governments and local communities that only the most prospective areas will be held and that a genuine exploration effort will be undertaken in these regions to better understand NSW's resource potential.

Santos has continued to invest in exploration in the region while developing the core assets in Narrabri. To date Santos has invested more than \$1.5 billion.

The PELs were unable to be progressed until recently due to the NSW Government's decision to pause activity while completing and considering the Chief Scientist's independent report and while the NGP approval was progressed.

Section 20 of the *Petroleum (Onshore) Act* allows for the title to continue to be in force until the renewal is withdrawn or the renewal application is either accepted or rejected by the Minister. This provision is not unique to NSW nor to petroleum legislation. These provisions are common across regulatory regimes to provide certainty to a proponent that an outstanding decision, political delays, machinery of government or other force majeure circumstances do not extinguish title and significant investment. Removing this provision will remove sensible provisions for the orderly development of resources and would put NSW out of alignment with the rest of Australia, and also be contrary to a well-established regulatory system. **Attachment 1** provides further detail of mirror provisions from other Australian jurisdictions.

Coal and Gas Legislation Amendment (Liverpool Plains Prohibition) Bill 2021

Coexistence

Santos' existing operations demonstrate that agriculture and natural gas extraction can coexist successfully. As the global population increases, sustainable and multiple uses of land is the best response to increased domestic, regional and global demand for food and energy. This is particularly true when both can be provided safely and sustainably from the same land.

Santos has a long track record in Australia of responsible and safe operations, respectful engagement with landholders and as a responsible corporate citizen in the communities in which we operate.



Figure 1. Cattle grazing near a drilling rig at the Kahlua pilot site north-west of Gunnedah.

Santos, and Australia's wider oil and gas industry, has adapted over a decade of coal seam gas development in Queensland. Coal seam gas operations, such as Santos' Arcadia fields, are co-designed with landholders to ensure that operations work together with productive agricultural activities.

Partnerships that Santos has formed with landholders across Australia has allowed farm productivity improvements and provided a source of non weather-related revenue through land access agreements. Many landholders acknowledge that these additional farm revenues have effectively 'drought proofed' their operations.

Communities that have gas operations are coping better than those that don't. Because the gas industry provides extra jobs, water for farmers, income for businesses, revenue for local councils, and valuable off-farm income for farmers with gas wells on their properties.

Environmental protections

It is very important to Santos that the environment and water resources are protected. Santos is committed to protecting the environments we work in, and in particular, the precious groundwater resources that our farmers and communities rely on.

The Chief Scientist's Independent Review into Coal Seam Gas Activities in NSW and subsequent implementation of the NSW Gas Plan have ensured the regulatory and compliance regimes in place in NSW are among the most rigorous in the world.

In 2012, the NSW Government introduced the Strategic Regional Land Use Policy (SRLUP) to better manage the potential conflicts arising from the proximity of mining and coal seam gas activity with high quality agricultural land in some parts of the state.

Since the introduction of the SRLUP, the government has introduced a range of additional initiatives to further manage the interface between resources and agricultural land, including:

- introduction of the Gateway process which introduces an upfront, scientific assessment of state significant mining and coal seam gas proposals on the state's strategic agricultural land
- introduction of the NSW Aquifer Interference Policy (AIP) in 2012 to protect aquifers
- introduction of the codes of practice for the coal seam gas industry covering well integrity (to protect the cross contamination of aquifers), managing produced water and hydraulic fracturing
- banning the use of evaporation ponds and BTEX (benzene, toluene, ethylbenzene and xylene) chemicals and requiring all other chemicals to meet Australian drinking water health guidelines
- reforms to ensure landholders and the local community share in the benefits of any gas development, including changes to the land access and arbitration process, benchmarking of landholder compensation rates, and creating a regulatory framework and guidelines for the establishment of Community Benefit Funds for gas projects
- improving community engagement through actions such as appointing a NSW Land and Water Commissioner, establishing community consultative committees for coal seam gas projects, and making it easier for the community to get access to key information on specific projects via the government's Major Projects Portal and key scientific databases, including the SEED, DIG and Common Ground databases
- appointment of the Environment Protection Authority (EPA) as the lead regulator for all coal seam gas development in NSW and is responsible for monitoring and enforcing compliance with any conditions of approval
- establishment of the independent Mining and Petroleum Gateway Panel, comprising experts in the fields of hydrogeology, mining and petroleum, and agricultural science, to oversee the Gateway process
- introduction of coal seam gas exclusion zones which prohibit coal seam gas activity in and within 2 kilometres of residential areas across the state, and the north west and south west growth centres of Sydney
- release of SRLUPs for the Upper Hunter and New England north west regions of the state.

In addition, the NSW Government has finalised mapping of more than one million additional hectares of the state's most valuable farming land – known as biophysical strategic agricultural land (BSAL). BSAL is land with high quality soil and water resources capable of sustaining high levels of productivity.

Any state significant mining or coal seam gas proposal on BSAL is subjected to an additional level of scrutiny via the Gateway process – an independent, upfront and scientific assessment of the land and water impacts of the proposal.

The *Coal and Gas Legislation Amendment (Liverpool Plains Prohibition) Bill 2021* would ban certain activities from certain regions of New South Wales. These certain activities are not determined based on their actual impact, project or footprint and removes the rights of landholders and the community to make their own decisions whether to host natural gas development on their property. The proposed Bill deprives New South Wales of the ability to determine whether to proceed with a State resource on its individual merits.