

## **SUBMISSION AGAINST THE SANTOS/NARRABRI COAL SEAM GAS PROJECT – SSD-6456**

### **Introduction**

I am a resident of the Inner West of Sydney. I have been a member of Stop CSG Inc. Sydney since 2011. In 2017 I made a submission to the Environmental Impact Statement (EIS) opposing this project. ***My opposition remains.***

Santos' Narrabri Gas Project is an abomination. If allowed to proceed it would add greatly to Australia's already high per capita greenhouse gas emissions and therefore undermine our efforts towards reaching the Paris Agreement targets of 2015. It would further degrade links with the land of the traditional owners, the Gomeroi people. It would also contribute highly to other detrimental environmental impacts – local and far beyond.

In 2017 the NSW Department of Planning and Environment received almost 23,000 submissions in response to the project's EIS stating "this is the most submissions the Department has ever received on a development application". Ninety-eight percent (98%) of total and 64% of local submissions *opposed* the project. Yet the proponent and the NSW State Government appear to have ignored the evidence-based and grave concerns expressed by the majority submitters, instead glossing over evidence and questions with superficial and vague claims or assurances.

By the end of 2017 it was clear there was no social licence for this project. There certainly is not in 2020.

It is beyond belief that in light of continuing majority opposition with even stronger evidence against this Project, the NSW State Government continues to support it.

### **Of the many reasons for objecting, I set out below six (6) of them:**

#### **1. The impacts on Aboriginal heritage and connection to the traditional land of the Gomeroi people**

Aboriginal heritage is not adequately assessed in the report. No detailed *new* surveying of the area for Aboriginal cultural heritage has taken place yet. Santos' proposal to undertake detailed surveys *after* it gets approval and avoid newly-found sites of high significance is a very risky strategy. Once granted the approval would not be able to be revoked – unjust in itself and a ploy reminiscent of the lack of detail and informed consent from the PKKP people to Rio Tinto, which led to the recent destruction of Juukan Gorge caves in Western Australia.

Graeme Samuels, independent chair of the Federal Government's current review of the EPBC Act 1999 when releasing the panel's recent interim report stated inter alia,

"... the EPBC Act had failed to fulfil its objectives as they relate to Indigenous Australians.

"Sustained engagement with Indigenous Australians is needed to properly co-design reforms that are important to them. Much more needs to be done to respectfully incorporate valuable Traditional Knowledge of Country in how the environment is managed. Indigenous Australians seek, and are entitled to expect, greater protection of their heritage..." <https://epbactreview.environment.gov.au/news/media-statement-professor-graeme-samuel-ac-releases-interim-report,20.7.20>

Mr Samuel's comments can be applied to Santos' proposal and their "tick-a-box" attitude to allegedly acknowledging the lands and wishes of Gomeroi representatives. This is just not acceptable and requires more detailed scrutiny by the IPC.

## 2. Its contribution to climate change (more accurately “global heating”) impacts

Australia is already struggling to meet its commitments under the Paris Climate Agreement of 2015 to which we have pledged to cut emissions by at least 26% from 2005 levels by 2030 – a level too low. The evidence for this is overwhelming – see for example the Climate Council report of 28.11.18. <https://www.climatecouncil.org.au/resources/un-report-australia-not-on-track-to-meet-paris-target/>.

Worse, evidence is mounting that Australia and the world are more likely to reach 2 degrees warming or higher, rather than 1.5 degrees, as Ian Dunlop recently noted:

“Dangerous climate change is occurring at the 1oC temperature increase already experienced. The 2degC Paris upper limit now represents the boundary of extremely dangerous climate change..” (**The Rapidly Changing Context of Global Climate Change**, Submission to the Royal Commission into Natural Disaster Arrangements – Bushfire Royal Commission, 27.4.20 <http://itdunlop.com/>)

Greenhouse gas emissions from Australia’s continuing burning of fossil fuels – coal AND gas, including coal seam gas with its fugitive emissions, are the main culprits in continuing this process. See for example the report by Climate Analytics: [https://climateanalytics.org/media/australia\\_carbon\\_footprint\\_report\\_july2019.pdf](https://climateanalytics.org/media/australia_carbon_footprint_report_july2019.pdf).

Total greenhouse gas emissions produced by the Narrabri project could be 127.8 million tonnes of carbon dioxide equivalent, or 5 million tonnes a year. Put another way, a recent report by chemical engineer and energy industry veteran, Dr Andrew Grogan, has analysed the Santos proposal in great detail and concluded that :

“Santos could extract up to 200 terajoules (TJ) of gas per day over 20 years through unconventional gas extraction known as fracking. If combusted, 200 TJ of gas would release 10,000 tonnes of CO<sub>2</sub>-equivalent to the annual emissions of between 3,300 – 6,000 cars” (Grogan, April 2020 in <https://www.michaelwest.com.au/cherry-picking-santos-selects-convenient-data-to-deflect-narrabri-gas-challenge/>)

In summary, Australia cannot afford any *new* contributions to our already dangerous emission levels! Furthermore, intergenerational equity for a liveable climate in even 30 years is already under severe threat.

## 3. The NSW Chief Scientist and Engineer’s report of 2014 and NSW Upper House Review into that report of 2020

In 2014, the Chief Scientist and Engineer made 16 recommendations to guard against the risks of CSG damage, yet only two have been fully implemented and half have not been implemented at all. Moreover, in February 2020, the Chair of the Upper House Review into that report noted in his summary:

“... It [also] became apparent to the committee that in the five years since the release of the NSW Chief Scientist's report, public communication and access to information about coal seam gas activities has not improved, with efforts by stakeholders to gain information often unsuccessful. The committee has therefore recommended that the NSW Government commit to further improving the accessibility and transparency of information relating to coal seam gas and the wider gas sector ...” (<https://www.parliament.nsw.gov.au/lcdocs/inquiries/2557/Final%20Report%20-%20Implementation%20of%20the%20recommendations,pvii>).

It is difficult to avoid the conclusion that a veil has been drawn across the true impacts of the CSG industry in NSW and indeed Australia. In this context, how is it possible for the Santos/Narrabri project to even be considered a safe proposition for the millions of people who would be directly and indirectly affected by it?

I trust the IPC will further investigate the outcomes of the Upper House Review to reveal the reluctance of CSG executives and their acolytes (including in government) to reveal accurate and honest information to your inquiry.

#### 4. **There is sufficient gas available already in Australia and it is not a transition fuel**

There is much well-documented evidence that Australia **already** produces sufficient gas for domestic use until renewable sources can provide more than 80% energy for domestic and commercial use. Bruce Robertson, IEEFA gas analyst states:

“Australia has significantly increased its production of natural gas over the last decade, with the growth in supply almost exclusively being directed into the export market, in search of lucrative prices being offered by industrial customers in South Korea and Japan” ([https://ieefa.org/ieefa-australia-gas-is-not-a-transition-fuel/March 2020](https://ieefa.org/ieefa-australia-gas-is-not-a-transition-fuel/March%2020)).

There are more recent indications of a global *glut* of gas. Michael Mazengarb reported in July 2020:

“...[there is] yet another warning of the risks of pursuing a ‘gas-led’ recovery for the Australian economy, as the industry may be heading into a period of significant contraction. Even before the twin shocks of the COVID-19 pandemic and global gas price collapse, LNG projects were facing an increasingly difficult economic environment.” (quoting from a report published by US-based think tank Global Energy Monitor, in *Renew Economy, clean Energy News and Analysis*, 9 July 2020), <https://reneweconomy.com.au/gas-plans-under-threat-due-to-emissions-reality-oversupply-and-public-opposition-88901/>

So why is Santos claiming the Narrabri gasfield is needed to “increase supplies” of gas when there is already a glut of exported gas from Queensland?

Furthermore, despite government and industry propaganda, gas is **not** a transition fuel: this is a promotional line spouted by the gas industry and its acolytes. Bruce Robertson again:

“The (gas) industry claims burning fossil fuels such as ‘natural’ gas is cleaner than burning coal, a commodity on its way out as the world transitions to cleaner more sustainable energy sources. This is simply not the case. Gas is worse than coal in the short term due to its release of methane into the atmosphere...” (as quoted by *Michael Mazengarb*, [https://ieefa.org/ieefa-australia-gas-is-not-a-transition-fuel/, March 2020](https://ieefa.org/ieefa-australia-gas-is-not-a-transition-fuel/,%20March%2020)).

It would seem Santos is not telling the whole story about the need for more gas, where its Narrabri gas would go, and the spread or impact of emissions from it. They must be challenged far more rigorously for current evidence before this project can even be considered further. A number of gas/energy experts should be sought and challenged also.

#### 5. **Its probable impacts on the Great Artesian Basin (GAB)/water supplies to the Pilliga and surrounds**

The aquifers within the Great Artesian Basin (GAB) are complex and the connectivity poorly understood. They have taken millennia to develop and are essential for life in a vast area around the proposed gasfield and far beyond. It is well known that in this whole region, people and ecosystems are extensively dependent on high quality, reliable groundwater sources particularly in light of more frequent and intense droughts.

Despite Government blandishments and Santos obfuscation re testing aquifers and checking all phases, there remain many serious risks, anomalies and unknowns such as:

- Gas wells can contaminate aquifers they pass through via leakage, and water removed from the coal seams is contaminated with salts and heavy metals, which then contaminate surface water;
- there may be *unknown* faults in geological structure, risking acceleration of water movement and /or escaping methane emissions; and
- Santos' ability to obtain licences to account for the water the gasfield would take over decades and centuries into the future, since the productive groundwater sources affected are fully allocated and have limited water trading.

Overall, there are too many risks of leaks from wells of produced water, pollution and the depressurisation of aquifers – which would be permanent and unremediable.

The DPIE is downplaying the importance of the Pilliga Sandstone as a recharge aquifer of the Great Artesian Basin and claims that there will be “no significant impact” but how can they make this claim when there is not enough information for them to make it?

Meanwhile, it is abundantly clear that landholders who rely on the GAB, the Gunnedah Oxley Basin and other groundwater in the area are strongly opposed to this project and expressed this opposition forcefully and in large numbers when responding to the EIS in 2017. Their opposition has only increased since then, particularly in light of one of the worst droughts ever recorded.

I cannot repeat this truism more forcefully: water is life. In summary therefore, WHY TAKE THE RISK of contaminating the GAB in any areas at all?

## **6. The unknown measures for safe disposal of wastewater and metallic-laden salts**

Linked to the above, Santos states that over 20 years it will remove 37.5 billion litres of water from deep below the Pilliga and treat it at the Leewood water treatment facility. This treatment will produce up to 840,000 tonnes of solid salt, laced with heavy metals. My reading of Santos' glossy brochure about this facility raises more questions than it answers, being full of qualifiers such as “Santos will work with industry experts to develop salt handling solutions which will be put in place when the Project moves in the development phase....” Local councils surrounding the Pilliga have already made it clear they do not have the capacity – or the desire – to take the waste in their landfill sites and will not. Obviously, Santos still has no firm disposal plan for this toxic salt.

Moreover, it *must* be taken into account that in 2013 Santos recorded over twenty spills and leaks of toxic CSG water (10,000 litres) causing forest dieback that is unremediated to this day. It is confirmed that an aquifer is now contaminated with uranium and heavy metals. For this shocking breach of environmental damage the company was fined a mere **\$1,500!**

<https://www.theguardian.com/world/2014/mar/08/santos-fined-coal-seam-gas-contaminates-aquifer-uranium>

That fine has apparently sent no warning to Santos to implement stronger and more specific, accountable environmental safety measures. In this current proposal, expert analysis shows that up to 130 spills are likely over the project life. Clearly, the already-challenged environment simply *cannot* risk further chemical or salt leakage, accidents and spills.

In concept, this problem is similar to claims for the disposal of radioactive nuclear waste for which there are still no agreed safe, community-accepted sites (see for example <https://www.theguardian.com/environment/2019/aug/01/what-should-we-do-with-radioactive-nuclear-waste>).

I refer the IPC to the recent American film *Dark Waters*, a docu-drama based on the true legal case of a lawyer who took more than 20 years to successfully prosecute the Dupont Corporation (manufacturers of Teflon products) after providing irrefutable evidence that a West Virginia farmer's land was contaminated by buried waste adjacent to his property, his farm animals dying from the effects of polluted water. The lawyer eventually pursued a class action after many people

in nearby areas using the chemically contaminated waters from this manufacturing became ill or died of diseases, especially cancers (<https://time.com/5737451/dark-waters-true-story-rob-bilott/>).

The film is an object lesson in how large corporations lie, obfuscate and then deny liability for short and long-term damage to people and the environment. It should be compulsory viewing for any company and their backers planning intrusive impacts on fragile environments, especially threatening unique water sources such as the GAB and other groundwater in the area. As I understand them, Santos are giving no guarantees for any loss of artesian water quantity or quality, livestock contamination or loss of property value.

## Summary

I have addressed only six of the many reasons why this project should be refused. Other important elements include of course:

- the predicably negative impacts on biodiversity of the Pilliga Forest;
- health impacts on people and animals;
- the increased risk of worsening droughts and fires;
- the lack of clarity and impacts around the two planned pipelines to remove any gas to other areas;
- the impacts on the “dark sky” due to 24-hr lighting and flaring; and
- the strong possibility of fewer local, lasting jobs provided by this project while the renewables sector is already providing a stronger and more positive pathway for short and long-term employment in many parts of the region to be affected.

I have no doubt other submitters will address these in great detail.

There is near scientific consensus: earth's climate is warming and this of course includes Australia's climate. <https://climate.nasa.gov/scientific-consensus/>. This warming (heating) is placing Australia under severe and looming threat. It is well documented that CSG extraction is a contributor to global heating. Further, it is highly disruptive to surface and groundwater, forest, and farmland.

The Government's Assessment Report of the project minimises (at best) these facts, apparently having little regard for them. Santos' own summary documentation and claims for promoting this project are indeterminate, conditional, superficial and obfuscatory. In many respects the proponent is seeking approval first and then to conduct research (for example on Aboriginal heritage sites and safe disposal of wastewater and salts). References to compliance with legal requirements and obligations are also vague. Moreover, given past records there is no guarantee that legal sanctions would be imposed by government agencies if breaches occurred, or that penalties would be burdensome enough to deter further breaches/cessation of work.

## Conclusion and recommendation

I am alarmed that despite the collective, strong scientific and experiential evidence this project is bad for the environment, bad for the climate, bad for the majority of the people and not necessary for energy supply, it has reached this stage. The overwhelming response in 2017 to Santos' EIS for this project was **rejection**. Since then, the climate crisis has deepened yet DPIE, Santos and its backers are ignoring or minimising scientific and experiential warnings.

There is no logical, rational reason for this Project to proceed. On every assessment criterion, it is far too risky to be undertaken. At the very least, the “precautionary principle” should be employed (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1240435/>).

**RECOMMENDATION:** Given all the predictably high negative impacts already addressed for this project,

**the Independent Planning Commission must unanimously reject the Narrabri CSG project outright.**

**Adrienne Shilling**  
Petersham NSW 2049

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