

## Department of Planning

### Major Projects

22 May 2017

To whom it may concern,

### Submission on the Narrabri Gas Fields EIS, economic, environmental and social impacts

#### *Strategic economic importance of the Narrabri Gas Field (NGF) Chapter 3*

The public is well aware of the fact that the strategic context and need for gas to supply NSW from the Narrabri Gas Field (NGF) is compromised by two things:

1. a failure to properly regulate gas pipelines on the Eastern coast of Australia; and
2. the greed of gas companies who sold gas to foreign interests that had not been approved.

Now the majority of Australian gas resources are committed to offshore markets. The value of gas in NSW is no longer governed by local market forces. We know that gas prices will continue to rise to appease massive off shore demand no matter how much supply is increased. The only way that governments can reduce gas prices to affordable levels is to require proponents like Santos to reserve a large percentage of gas for domestic use.

The approval of this project will have a perverse result and increase prices in line with foreign demand. Gas prices will never return to what they were before they were compromised. If the NGF is approved the exploitation of this finite resource will be for company profit only - there will be no profit to the NSW community who own the resource.

Rumours that Santos will sell the NGF reinforce community views that Santos is not committed to doing the right thing by NSW.

Santos' claim that the NGF will deliver benefits for residents of the Narrabri Shire is a claim that has not proved true in other CSG projects. Typically, economic activity from CSG projects provides a few years of benefits but dislocates residents of affected towns by inflating house prices for a short period. Why is a community benefits fund needed if the social benefits of the NGF are worth approving? It is needed because communities do not benefit from local resources being exploited merely for profit.

Approval of the NGF cannot be justified economically because energy users can choose cheap and clean sources of energy such as solar power, to avoid the high cost of this non-renewable source of energy. The attraction of going off-grid and energy self-reliance is magnified when considering that gas prices are only going to increase in this generation's lifetime. No-one needs to be connected to an expensive energy source in the age of renewables.

**The NGF should not be approved because it will not result in an affordable source of energy for NSW. If it is approved then a condition of approval should require Santos to reserve a large percentage of gas for domestic use. Approval of the NGF will not have a beneficial economic impact on the Shire of Narrabri in the long term.**

## ***Groundwater and geology Chapter 11***

The EIS states that the project will have low impacts on every aspect of groundwater resources. This claim is made candidly because Santos cannot assess the long term impacts of the project and will not be around to reap what they have sown. Current users, irrigators, will be around.

The reasons given for these low impacts are that the maximum predicted impacts are assessed over a period of 200 – 300 + years with the water table of the Pilliga Sandstone and the Namoi Alluvial drawn down 0.5m in that time. The predicted impact appears low from a 2017 viewpoint but it is very high in 5017. The Namoi Alluvial aquifer will need to support food production in 5017. The Pilliga Sandstone aquifer will need to support the distinctive ecosystem services and functions of the Pilliga Scrub, the benefits of which impact global environmental health, in 5017. Half a metre draw down over a relatively short time frame compared to the water resources existence. Three hundred years is not insignificant to future generations of farmers or the earth's ecosystem services contained in the unique resource of the Pilliga Scrub.

This is a matter of intergenerational equity, a matter which has not been measured in this EIS but will have impacts that make the project unacceptable unless the NSW Government intends to degrade the Great Artesian Basin permanently in this way.

Santos' EIS fails to take future groundwater impacts seriously because these impacts are not realised until hundreds of years into the future. Hundreds of years past the expiry of any approval to cause those impacts and therefore negligible to them.

**The NGF should not be approved because of its long term impacts. If the NGF is approved it should be on the condition that Santos ensure rehabilitation of the extracted seams so that long term draw down doesn't occur at all or that the Shire of Narrabri is fully compensated for known impacts on water resources.**

### ***Average water use of 1.5GL per year***

Bores were drilled into the Namoi Alluvial over 150 years ago, even before Federation. It would be very convenient for irrigators to claim their water use impact as an average over 150 years. This is how Santos calculates its water impacts as an average over the proposed life of the NGF. If irrigators were able to average their water usage the way that Santos does, Santos' project would have unacceptable impacts in comparison.

But the real reason for averaging the NGF water usage is that it is an expedient way to avoid confronting the more serious impacts in the second to fourth years of the project which will see intensive use of that water instead of average use as impact assessed.

If the NGF will really only use 1.5GL of water each year then this should be the amount allocated on their water licence. Instead Santos have been allocated much more than this and the EIS' conclusion that the NGF will have negligible effects on water use and conceals the actual impact on groundwater resources in years two to four of the project. Will there be draw down from the Namoi Alluvial and the Pilliga Sandstone during intensive extraction of water from the Great Artesian Basin? It's suggested but we just don't know. The assessment ought to have made these impacts plain but the EIS does not explain the difference between the long term use of 37GL and the intensified use of it during any particular period of the project on this model.

These uncertain impacts are of serious concern to irrigators as they will be most affected by changes in the water table of the Namoi Alluvial. The differences between licencing irrigation water and

mining water are not lost on irrigators who see the double standard and lose faith that water resources are being managed properly in mining operations. It is the farmers who bear these ultimate risks not Santos.

The averaging of water use over the 20 year life of the NGF disguises the actual impacts of water use and actual allocations that Santos will hold for the NGF. The size of Santos' allocations should be made public so that water users can trust the NSW Government is working for them and not putting private interests ahead of the public interest. Santos' water take will be by special ministerial intervention and as such Santos ought not to be able to profit from the sale or trade of licenced water. Santos will seek to profit by on-selling its access licence it at the end of the NGF project or earlier.

**The NGF should not be approved to use water extensively over the second to fourth years of the project's life without transparency about the actual amounts of water that will be drawn from the local water sources and allocated to Santos for the NGF. If the NGF is approved it should only be on the condition that the water allocated for the NGF cannot be sold on the water market.**

#### ***Bohena Alluvium aquifer***

The EIS does not address the impacts on the Bohena Alluvium which is directly impacted by the NGF. It appears that this aquifer and associated surface waters will be impacted directly by its presence on the NGF land, including by wastewater flows.

**The NGF should not be approved without a proper understanding and assessment of the project's impacts on the water sources immediately connected with the land that is the subject of the proposal.**

#### ***Cumulative Impacts Chapter 29***

Unfortunately, the EIS completely disregards climate change impacts. The extraction of CSG has three tiers of impact on the climate and cumulative effects should be counted where the gas is used ie in a foreign country. Irrigators cannot bypass responsibility for climate change impacts and are required to absorb past and future climate impacts regarding water use. Cumulative Climate Change impacts have not been assessed for the NGF and no-one knows how to determine the liability left with the community by the NGF and its impact on current land uses now and into the future.

**The NGF should not be approved without an assessment of the climate change impacts of the project or if it is approved the approval should be should contain conditions to determine and mitigate these well recognised impacts.**

Yours sincerely,



Libby Ciesiolka