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23 July 2020

Narrabri Gas Project: Submission to Independent Planning Commission

I am writing to urge that the Independent Planning Commission refuse development consent for the **Narrabri Gas Project**.

Santos' plan to develop a network of 850 interconnected coal seam gas wells, pipelines and associated plant and machinery in what still remains of Eric Rolls' *million wild acres* is flawed at many levels. It is unbelievable that such a project should proceed in the year 2020 given what it puts at risk, the damage it will cause and the abundant availability of alternative energy solutions.

The Pilliga is the largest temperate woodland in eastern Australia and this proposal will industrialise 95,000 hectares of it, clearing nearly 1,000 hectares in small patches for well-pads, infrastructure and gas lines and will require the removal of several endangered ecological communities.

NSW CSG review 2013

In February 2013, NSW Chief Scientist and Engineer, Professor Mary O'Kane, was directed by the NSW Premier to conduct a comprehensive review of CSG-related activities, focussing on the human health and environment impacts. Professor O'Kane presented her *Initial Report* to the Premier in July 2013. In the *Final Report*, Professor O'Kane warned there was "*much for the government to do*" in order to manage the "*non-trivial technical challenges and risks*" associated with the CSG industry¹.

Yet a NSW parliamentary committee in 2020 found that of the 16 recommendations made by the Chief Scientist in 2014 to guard against the known risks of coal seam gas extraction, only two have been fully implemented and fully eight recommendations have not been addressed at all².

In the case of Narrabri Gas those "non-trivial technical challenges and risks" include the proposed extraction, storage and treatment of 37.5 billion litres of ground water and the safe disposal of the 840,000 tonnes of salts and heavy metals the water is estimated to contain. In 2014 water leaked from a storage pond at Santos' Narrabri project contaminated groundwater with heavy metals and other elements, elevating uranium levels to 20 times the safe drinking limits - according to the EPA³. A range of other potential impacts on water supply and quality from aquifer depressurisation, dewatering and cross-contamination remain unclear because Santos has only a rudimentary understanding of the geology it will encounter.

Economic value of CSG

Market demand for methane as a fuel is falling for a number of reasons, including its known contribution to greenhouse climate forcing and the rapid development and market preference for energy from renewable sources such as solar, wind and green hydrogen. These sources are plentiful, inexhaustible, cheap and do not destroy and do not continue to damage the planet's hard pressed natural environment. In its full year projections for 2020 the IEA has this to say:

Global natural gas demand could decrease by 5% in 2020, based on our broad assumptions for the year. This decline is less than the anticipated fall in oil demand, reflecting the fact that natural gas is less exposed to the collapse in demand for transportation fuels. But it nonetheless represents a huge shock to a gas industry that is used to robust growth in consumption. This drop would be the first in annual consumption since 2009, when consumption fell by 2%, and the largest recorded year-on-year drop in consumption since natural gas demand developed at scale during the second half of the 20th century. During the Great Depression in the early 1930s, gas demand in the United States fell by 13% in 1931 and by 7% in 1932. At that time, however, the United States was the only major producer and consumer of natural gas in the world; now gas is a global commodity accounting for well over 20% of global primary demand. Natural gas consumption is expected to fall in every sector and region in 2020 compared with 2019, but most of the declines are in power generation⁴.

¹ ([The Implementation of the Recommendations Contained in the NSW Chief Scientist's Independent Review of Coal Seam Gas Activities in New South Wales](#))

² ([Hannam, 2020](#))

³ ([Nicholls, 2014](#))

⁴ ([IEA, 2020](#))

The International Energy Agency advised only last month that global demand for gas in 2020 is set to fall by twice as much as it did after the 2008 financial crisis due to the coronavirus pandemic and a warmer winter in the northern hemisphere. The IEA's latest annual market report *Gas 2020* does not assume a rapid return to the pre-crisis trajectory, casting a shadow over the viability of projects and future investment⁵.

Biodiversity

According to Environment NSW, "almost 1000 animal and plant species are at risk of extinction in NSW"⁶. The Pilliga forests and woodlands represent the largest, relatively unfragmented stand of temperate, semi-arid forest and woodland in eastern Australia. As such they provide a crucial refuge for endangered biodiversity in a landscape largely cleared for agriculture - a matter that has been skated over in the environmental assessment.

Surveys undertaken as part of the assessment of the gasfield - limited though they were - have found 10 threatened plants and 35 threatened fauna in the gasfield area, including pygmy possums, koalas and the Pilliga mouse.

Contribution to climate change

Methane is a potent greenhouse gas. A tonne of methane contributes to 28 times more to global warming than a tonne of carbon dioxide, over a 100 year period. Emissions of methane have surged to new record levels and are on track to deliver some of the worst global warming scenarios, according to a new research report from 39 international researchers. Published in the journal *Earth System Science Data* last week, the report warns that unless methane emissions are substantially reduced, the world may be on track for 3 to 4 degrees of global warming before the end of the century. The researchers say that growth in emissions from fossil fuel use and agriculture - both anthropogenic sources of methane emissions - are to blame for the rise in emissions⁷.

The study estimated that around two-thirds of all global methane emissions attributable to human activities are caused by the agriculture sector with most of the remaining methane emissions being released by the fossil fuel sector and these sectors have been equally responsible for increases in methane emissions since 2000.

The researchers singled out the growth in gas exploration in Australia, which has occurred rapidly over the last decade and with encouragement from Australian governments as something that must be addressed if there is to be a chance of limiting warming to below 2 degrees. Producing more natural gas, and as a result, we're emitting more methane from oil and gas wells and leaky pipelines."

Citing a recent report by the *Global Energy Monitor*, the researchers highlighted the problems with expanded gas production, which has significant issues of methane leakage or 'fugitive emissions'.

Compared to the early 2000s, annual methane emissions have increased by 9 per cent, and the growth in human-caused fugitive emissions of methane have exceeded the ability for it to be absorbed through natural processes. This has led to an accumulation of additional methane in the atmosphere that contributes to global warming which creates a diabolical problem.

Fugitive emissions of methane found in coal seams are not the only source of this potent greenhouse gas. Naturally produced methane has been sequestered over millions of years in or beneath permafrost and beneath the oceans in the form of hydrates. As anthropogenic global warming causes the permafrost to melt and the oceans to begin to warm these sinks start to release their own stores of methane into the atmosphere creating a feedback effect. This accelerates global warming which leads to further emissions and in short order we have a runaway climate. Reining back climate change either takes place early and before the tipping point, or it is the end of the line for most species, including humans. Methane must be left in the ground.

Researchers from the CSIRO's Global Carbon Project, who co-authored the EESD research paper, say that growth in methane emissions since the turn of the century have been consistent with a warming trajectory of 3 to 4 degrees Celsius before the end of the century. This is in line with some of the more pessimistic warming scenarios developed by the authoritative Intergovernmental Panel on Climate Change. Pep Canadell, a member of the CSIRO's Global Carbon Project says: "*Methane is now responsible for 23 per cent of global warming due to greenhouse gases, with emissions rapidly growing in many parts of Asia and the Americas*".⁸

Please respect the science and refuse development consent for this gas development.

⁵[Ibid.](#)

⁶ [NSW Environment, Energy & Science, "Threatened Species."](#)

⁷ [Saunio et al., "The Global Methane Budget 2000–2017."](#)

⁸ [Mazengarb, "Methane Emissions Surge to New Record in Blow to Gas Lobby."](#)

