

Senate Standing Committee on Economics  
Parliament House  
Canberra ACT 2600 2 October 2019  
Australia's Oil and Gas Reserves

1 November 2019

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Dear Senate Standing Committee on Economics,

This submission is being prepared as an individual. Please note that this Inquiry came to my attention on the night of 1 November 2019 and therefore this submission is not as thorough as I would have liked it to be.

I studied two doctoral degrees and have conducted qualitative research in natural gas regulation since 2005 in Australia, Sweden, Spain and Mexico. Generating knowledge in this area of study has been the main aim of my research, synthesised in seven journal articles, a book chapter, two doctoral theses and one Diploma of Advanced Studies thesis. My research interests are: energy governance, gas security, investment and modelling of unconventional gas development and natural gas transmission pipelines.

Hereafter, I will present some general considerations relating to the development of shale gas, which I would be happy to elaborate in the future.

1. Discussing Australia's oil and gas reserves and its terms of references is of the highest relevance. I note that there are only two submissions. Therefore, I may suggest extending the period for submissions and reaching out to the stakeholders of unconventional resources. These stakeholders are: community, industry, alliances and consortia, activists, government and academic. Extending the time and scope may allow for a more informed discussion.
2. It is inherently difficult to govern shale gas development due to its high complexity (Konschnik and Boling, 2014). The development of shale gas will be specially difficult to govern when it takes place on a large scale for the first time in Australia.
3. The development of unconventional resources take place under specific "above ground" conditions. These conditions are institutional, social, environmental... and need to be accounted for before, during and after engaging in the development of shale gas.
4. The technological progress and geological scanning allow for an accurate description of the oil and gas reserves. However, only work carried out on the field will allow an Inquiry to know the "above ground" conditions. In synthesis, travelling to locations where shale gas is planned to be developed, such as in the Northern Territory, and getting to know its people, institutions and landscape may prove enriching.
5. As it frequently happens in the development of shale gas, the Northern Territory people was not consulted if they wanted this. There was a thorough Scientific Enquiry, whose recommendations were accepted and this facilitated the "green light" to this development. Specifically, following this process the moratorium on hydraulic fracturing was lifted in 2018.
6. Going ahead with such an important project without a social licence to operate makes this development more prone to conflict. Unconventional gas development is a highly contested field in which there could be a large gap between the private and the public interest and between stakeholders and the general public.
7. Therefore, it is pivotal that engagement amongst the stakeholders is prioritised.
8. The environmental and social impacts of this development are inherent. They can only be lessened not avoided. Therefore, monitoring is of key relevance. The Northern Territory vast landscape offers specific challenges to monitor these impacts, which may require strengthening regulatory capacity.

9. Hydraulic fracturing requires large amounts of water and there is an ongoing drought in Australia. There is the potential for contamination of the Great Artisan Basin. There is also potential to impact people's health. Thus, strict monitoring is required.
10. According to the 2016, "Aboriginal and/or Torres Strait Islander people made up 25.5% of the population" (ABS, 2016). They know the land for thousands of years and are the traditional owners of the land, and therefore they should be consulted, taken into consideration and their land rights prioritised (ie the Aboriginal Land Rights Act). This will require specific regulatory guidelines.

## REFERENCES

ABS (2016). 2016 Census QuickStats, Northern Territory. Available at: [https://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/7?opendocument](https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/7?opendocument)

Konschnik, K., Boling, M., 2014. Shale gas development: a smart regulation framework. *Environ. Sci. Technol.* 48 (15), 8404–8416. Kooiman, J., 2003. *Governing as Governance*, SAGE.