

## Submission: Oil and gas exploration and production in the Beetaloo Basin

Thank you for the opportunity to submit this response to the above inquiry, regarding oil and gas exploration and production in the Beetaloo Basin. This is a personal submission. I am a doctor practising in Melbourne, specialising in hospital medicine/infectious diseases.

I submit my grave concerns regarding this proposal, as summarised and then detailed below.

Summary: oil and gas expansion is not compatible with Australia's required course of action to limit climate change, and will cause significant excess illness and deaths directly and indirectly. I submit that the funds should be used to fund renewable energy resources with subsequent improvement in economic and health outcomes as detailed below.

- It is widely recognised that we need to limit global warming to less than 2 degrees, and preferably less than 1.5 degrees, to avoid the catastrophic implications of runaway climate change. Australia is widely viewed as one of the world's weakest high income countries when it comes to climate policy, despite being one of the highest risk for severe adverse weather events. Opening the Beetaloo Basin for gas production would significantly threaten Australia's ability to meet its obligations to make changes to keep global warming to less than 1.5oC. In fact, the International Energy Agency has highlighted that there can be no new coal, oil or gas projects from 2021 onwards if the world is to meet the aims of the Paris Climate Agreement [1].
- Carbon emissions from a single field of the Beetaloo Basin are estimated to be more than a fifth of Australia's current annual emissions (117 million tonnes of greenhouse gas from just one field [2,3], and the plans to offset these emissions are simply not realistic, as discussed by the former Commonwealth Environment and Energy Department in 2019 [2].
- The argument that gas is a clean transition fuel is not correct, and it will not help with decarbonising because it is itself a fossil fuel, primarily methane. This greenhouse gas has a massive warming effect on the climate, and has 86 times the warming potential of carbon dioxide over a 20 year period [4]. It accounts for around 25% of all global warming, and even a small methane leak makes this process as emissions intensive as using coal to generate electricity [5].
- The economic benefits of a gas-led recovery are dubious; statistics suggest that gas has not assisted with economic recovery from the recent pandemic [6]. The flow on effect to creating jobs is limited [6]. Furthermore, the global fossil fuel demand is declining and investing in new infrastructure as is proposed here is likely to generate stranded assets [7].
- I have grave concerns, as I understand do many of my colleagues from personal discussion, and from the work and public commentary from Doctors for the Environment Australia [8], that a gas led recovery is a hazardous course of action. The argument that gas is a clean transition fuel is incorrect, and is not required given the readily available renewable energy technologies available to us.

- The local health impacts on those who live near gas wells includes higher rates of asthma, skin rashes, headaches, sinus problems, as well as increased hospital admissions and some cancer rates; negative birth outcomes and mental health effects are also reported [9].
- Indoor gas use also has negative health implications due to the pollutants released during combustion of gas. This fine particulate matter is associated with higher heart, brain and lung disease [10] and of great concern is the recent finding that 12% of childhood asthma is related to indoor gas stove use [11]. A transition away from domestic gas use is required to improve the health of our children.
- The health impacts of climate change are complex, but there is no doubt that Australia is particularly vulnerable to environmental destruction and the severe health impacts that are brought with this. In particular, exposure to heatwaves, floods, droughts, bushfires and extreme weather events will cause excess deaths, illness and hospitalisations such as seen this week in Canada [12]. In the 2009 heatwave in Victoria, there were an additional 374 deaths above average for that period, nearly 50% increase in emergency callouts, and three times the rates of heart attacks, all attributable to climate-change induced heatwave [13].
- Finally, I note that fracking activity has not been condoned, nor consented to, by Traditional Owners of the land of the Beetaloo Basin [14]. Cultural sensitivity is imperative and I believe that oil and gas exploration of this area should not be considered without appropriate consent.

#### References:

1. <https://www.abc.net.au/news/2020-09-25/beetaloo-gas-development-lands-council-asked-to-withdraw/12701878>
2. <https://www.abc.net.au/news/2020-02-29/beetaloo-basin-gas-field-could-jeopardise-paris-targets/12002164>
3. <https://www.abc.net.au/news/2020-09-24/impact-of-gas-led-recovery-australias-carbon-emissions/12688564>
4. <https://www.climatecouncil.org.au/resources/why-is-gas-bad-for-climate-change-and-energy-prices/>
5. <https://reneweconomy.com.au/gaslighting-on-emissions-ieefa-says-burning-lng-worse-than-coal-for-climate-19615/>
6. The Australia Institute. May 2021: Too little too late: Gas in the COVID recovery. Available at: <https://australiainstitute.org.au/wp-content/uploads/2021/05/Too-little-to-late-WEB.pdf>
7. <https://theconversation.com/4-reasons-why-a-gas-led-economic-recovery-is-a-terrible-na-ve-idea-145009>
8. Doctors for the Environment Australia. Submission on the Gas Fired Recovery Plan. February 2021. Available at: [https://www.dea.org.au/wp-content/uploads/2021/06/202102\\_Gas-Fired-Recovery-Plan-Submission.pdf](https://www.dea.org.au/wp-content/uploads/2021/06/202102_Gas-Fired-Recovery-Plan-Submission.pdf)
9. Shearman D, Haswell M. The implications for human health and wellbeing of expanding gas mining in Australia Onshore Oil and Gas Policy Background paper December 2018.

[https://www.researchgate.net/publication/329801892\\_The\\_implications\\_for\\_human\\_health\\_and\\_wellbeing\\_of\\_expanding\\_gas\\_mining\\_in\\_Australia\\_Onshore\\_Oil\\_and\\_Gas\\_Policy\\_Background\\_paper\\_2018](https://www.researchgate.net/publication/329801892_The_implications_for_human_health_and_wellbeing_of_expanding_gas_mining_in_Australia_Onshore_Oil_and_Gas_Policy_Background_paper_2018)

**10.** Loxham M, Davies D, Holgate S. The health effects of fine particulate air pollution. 28 Nov 2019. British Medical Journal 367 <https://www.bmj.com/content/367/bmj.l6609>

**11.** Knibbs L, Wodeyohannes S, Marks G, Cowie C. Medical Journal of Australia 2018; 208 (7); 299-302. <https://www.mja.com.au/journal/2018/208/7/damp-housing-gas-stoves-and-burden-childhood-asthmaaustralia>

**12.** <https://www.abc.net.au/news/2021-06-30/heatwave-kills-dozens-in-canada-us/100255480>

**13.** Climate change and the health impacts of extreme heat. The Climate Council 2016 <https://www.climatecouncil.org.au/resources/silentkillerreport/>

**14.** <https://www.abc.net.au/news/2020-09-25/beetaloo-gas-development-lands-council-asked-to-withdraw/12701878>