

**Submission on Environment Protection (Sea Dumping)
Amendment (Using New Technologies to Fight Climate
Change) Bill 2023 [Provisions]**

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From

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His website is www.davidshearman.org which links to many articles of relevance to this submission

Introduction

Thank you for allowing me to send in a slightly late submission due to my illness. I am making this effort because I see the issue as of major importance to the survival of Australia at a time of rapidly advancing climate change. I write as scientist with past service on the IPCC and as a medical doctor with expertise in the health impacts arising from climate change.

Essentially the proposed amendments to the Sea Dumping Act would enable the Minister to grant permits for the export of carbon dioxide streams from carbon dioxide capture processes for the purpose of sequestration into a sub-seabed geological formation, and allow for the placement of wastes or other matter for a marine geo-engineering activity for scientific research.

This legislation is being put forward at a time when a vast majority of scientists agree we now live 5 minutes or less to midnight which is collapse of our society. It is not only that world temperatures are rising faster than modelling has suggested and expected impacts are more severe, called the "new abnormal" by climate scientist Michael Mann, <https://www.independent.co.uk/us/voices/air-quality-index-nyc-fires-smoke-b2354703.html> but the promises of action by national leaders are not being fulfilled, and democratic systems are incapable of reform to encompass urgent needs.

The Act is misleading and deceptive, and inconsistent with the stated purpose of reducing CO2 emissions.

1 It assumes that CCS for major projects is effective and secure

There are many independent scientific and engineering reports on major CCS projects which indicate their inadequacy in to reducing emissions. CCS fails to sequestrate a significant proportion of carbon dioxide even in some projects where great efforts have been made to improve performance over many years.

The independent Australian Institute for Energy Economics and Financial Analysis (IEEFA) studied 13 major CCS projects around the world and [found technology and regulatory frameworks wanting](#) and there was inadequate removal of emissions.

For example their study "found that Shute Creek in the US underperformed its carbon capture capacity by around 36% over its lifetime, Boundary Dam

in Canada by about 50%, and the Gorgon project off the coast of Western Australia by about 50% over its first five-year period”.

In Australia approval for more large gas projects is imminent with the expectation of concomitant CCS. The government’s own Climate Change Authority has issued a report promoting this. It announces that the Gorgon project reduced emissions in 2020 by around 3 Mt CO₂ but failed to mention that an equal amount was discharged into the atmosphere. [Then in the 12 months to June 2022](#) just 1.6 million tonnes of CO₂ went underground and 3.4 million tonnes was vented into the atmosphere. Clearly this is government manipulation of the data.”

The most recent IPCC report has been used by protagonists of CCS. The report states

“Net zero CO₂ energy systems entail: a substantial reduction in overall fossil fuel use, minimal use of unabated fossil fuels, and use of carbon capture and storage in the remaining fossil fuel system.” It appears that [Saudi Arabia insisted CCUS be included in the IPCC report](#) and this has been capitalised by other large oil and gas producing nations.

However the most recent report of the IPCC and its Secretary General is that the science says there must be no new fossil fuel developments. Yet The Act is essential to support huge new Beetaloo development by reducing its emissions to fit with national emission targets.

There are growing scientific concerns over CCS. Recently evidence has emerged in two Norwegian projects Sleipner and Snøhvit, that [CCS](#) may be unsafe. These are long cited as success stories which store carbon dioxide under the sea. Each Project has its specific geology which it has been found can change over time making continued storage problematic. The report says “While the oil and gas industry is used to dealing with uncertainty in exploration and production, the risks multiply when trying to place something like CO₂ back in the ground,”

The earth is facing more geological movements as evidenced by increases earthquakes large and small due to the balance of the earth and its geological strata being influenced by rise in sea level, the melting of polar ice, the huge extraction of water from underground aquifers and the mining of oil and gas <https://www.euronews.com/2023/02/09/climate-change-is-triggering-more-earthquakes-big-oils-interests-are-a-factor>, as consequences of climate change

This deeply concerning information is rarely available in documentation on the importance if CCS perpetrated by industry and governments sources. We read about the quantity of carbon dioxide which is sequestered but not the amount lost into the atmosphere,

2 Statement of Compatibility with Human Rights

The Act states

“Prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011* This Bill engages the following human rights:

The sea dumping Bill cites the right to health in Article 12(2) of the International Covenant on Economic, Social and Cultural Rights (the ICESCR); Article 12(1) of the ICESCR makes provision in relation to the right to health, specifically the right to the enjoyment of the highest attainable standard of physical and mental health”

This is embarrassing. To develop Beetaloo at a time when thousands of scientists argue there can be no more fossil fuel developments, Australia proposes a solution to reduce green house emissions from project which in the interests of humanity should not proceed. Australia then claims that by partly reducing emissions from Beetaloo, it is reducing the health impacts from climate change—which is a human right.

It would be good if we avoided the shame when this Act is read by the small island states some of which will be inundated soon under current climate change projections.

I suggest that the Act and its attachment be dumped before the Prime Minister again looks a Pacific Island leader in the face and says we are mitigating climate change.

3 Methane Production- the “Gas Bomb”

Export of methane is the rationale for Beetaloo but methane leaks from every stage of the gas mining industry, well heads, transport, pipe lines, loading on boats and flaring etc will occur. Yet over decades identification and correction of leaks by the industry has been perfunctory

Methane emissions are 84 times more climate forcing than CO2 and regulation has been inadequate <https://reneweconomy.com.au/australias-fossil-fuel-methane-emissions-are-nearly-twice-as-bad-as-industry-reports/> There are international pledges to reduce atmospheric methane by 2030 this decade

It is becoming clear that one crucial recommendation of the Pepper enquiry—to reduce total CO2 and methane emissions has not been enacted. A Reputex analysis, which estimated that a high production scenario in the Beetaloo would create a “carbon bomb” of 1.4bn tonnes of total emissions globally, about 70 times the territory’s current annual emissions

<https://www.theguardian.com/australia-news/2023/may/23/nt-government->

[knew-it-could-not-reduce-climate-risk-when-it-green-lit-carbon-bomb-gas-production-in-beetaloo-basin](#) .

For more detailed analysis of Beetaloo and climate change, read pages 8-14 of <https://apo.org.au/sites/default/files/resource-files//apo-nid319415.pdf>

Conclusions

The Act will facilitate development of gas deposits in the NT at a time of climate change acceleration and pleas from the IPCC and the UN Secretary General to cease all further fossil fuel developments

The Act will facilitate the use CCS to try and curb emissions in order to remain within national emission reduction targets. CCS is only partly effective and its use will inevitably allow emissions to increase.

Attempts by the Act to show that the human right to health will be enhanced by CCS are embarrassing and should be withdrawn

An increase in methane emissions by the Beetaloo development is unavoidable.

CCS development in many other countries is proceeding with the same misinformation that this Submission has detailed for Australia. It would help Australia and the world if our government showed leadership to others by abandoning the Beetaloo development and the Act.