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18 January 2022

Northern Territory Environmental Protection Agency Submitted via email

Dear NTEPA,

Thank you for the opportunity to make a submission to on the *Darwin Pipeline Duplication (DPD) Project* and for the extension of time granted to 18 February.

This consultation is calling for feedback into the new proposed pipeline by Santos and whether the proposal requires environmental impact assessment. We urge the NTEPA to require a full assessment.

The presentation of the project as a duplication aimed at facilitating carbon capture and storage (CCS) is misleading. When seen in wider context, the aims of the project appear to be to increase gas exports through the Barossa Project and to delay the \$1.1 billion decommissioning costs estimated for the Bayu Undan field.¹

Santos' describes Bayu Undan CCS as an "opportunity". This is unusual. Santos do not refer to it as a project, or even a proposal, but simply as a potential future opportunity. There is no public documentation around how this non-project would work, what its environmental impacts might be, or how much it might cost.

Even if Santos were to progress CSS in Bayu Undan, there is little evidence it would succeed. CCS has failed to date, despite decades of effort and billions in public funding. The global capacity of genuine CCS projects (projects that are not aimed at enhancing oil recovery) is just 10 million tonnes per year.² The largest by far of these is Chevron's Gorgon project in Western Australia, which has been beset by delay and technical failure.³ It injected only 30 percent of promised emissions in its first 5-year reporting period,⁴ and only 50 percent last year.⁵

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¹ Fitzgerald (February 2022) Santos's Bayu-Undan carbon capture and storage plans may not stack up, report says, https://www.abc.net.au/news/2022-02-16/bayu-undan-carbon-capture-storage-santos-barossa/100827540

² Global CCS Institute (2020) Global Status of CCS 2020, https://www.globalccsinstitute.com/wpcontent/uploads/2020/12/Global-Status-of-CCS-Report-2020_FINAL_December11.pdf

³ Swann (2018) Gorgon-tuan Problem, https://australiainstitute.org.au/report/gorgon-tuan-problem/

⁴ Morton (July 2021) A shocking failure': Chevron criticised for missing carbon capture target at WA gas project, https://www.theguardian.com/environment/2021/jul/20/a-shocking-failure-chevroncriticised-for-missing-carbon-capture-target-at-wa-gas-project

⁵ Mazengarb (Februeary 2021) Australia's only large-scale CCS project operated at half-capacity in first full year, https://reneweconomy.com.au/australias-only-large-scale-ccs-project-operated-at-half-capacity-in-first-full-year/

Analysis shows that even if carbon dioxide could be successfully permanently stored in the Bayu Undan fields, the emissions required for processing, compression and transport of the CO2 would be approximately equivalent to the amount injected, meaning that there would be no net reduction in the projects very high emissions.⁶

Regardless of its lack of substance or low prospects of success, the promotion of CCS at Bayu Undan facilitates the greenwashing of the Barossa LNG Project.

If it proceeds, Barossa would be, by far, the most emissions intensive LNG project in Australia.⁷ It would extend the life of Darwin LNG by a least 20 years. The gas from the Barossa fields will result in around 3.4 million tonnes of emissions within Australia annually,⁸ and a further 10.5 million tonnes of emissions when the gas is burned overseas.⁹

Worse still, Santos proposes a tie in point to the pipeline that will allow gas from other fields around Barossa to be developed. Some of these fields have an even higher CO2 content than Barossa, notably the enormous Evans Shoal field which reportedly has a 30 percent CO2 content.¹⁰

This is unacceptable from a climate perspective, particularly in the light of the IEA's recent statement that in order to achieve net zero by 2050, no new coal and gas projects should be approved,¹¹ and the IPCC issuing a "code red for humanity".¹² Santos has virtually ignored the emissions impact of the full Barossa project in its proposal to the NTEPA. Instead, the proposal considers the "duplicate" pipeline within NT waters in isolation from the overall project, with vague assertions that some of the emissions will be sequestered.

⁶ Roberts (February 2022) Santos' Proposed New Darwin Harbour Pipeline for Barossa Gas – Potentially Enabling a CCS Scheme – Remains Problematic Commencement of Work on the Barossa Project Should Be Suspended, https://ieefa.org/wp-content/uploads/2022/02/Santos_Proposed-New-Darwin-Harbour-Pipeline-for-Barossa-Gas-Remains-Problematic_February-2022.pdf

⁷ Roberts (March 2021) Should Santos' Proposed Barossa Gas 'Backfill' for the Darwin LNG Facility Proceed to Development? Barossa Has More CO2 Than Any Gas Currently Made Into LNG, Making Market Access Difficult, http://ieefa.org/wp-content/uploads/2021/03/Should-Santos-Proposed-Barossa-Gas-Backfill-for-the-Darwin-LNG-Facility-Proceed-to-Development_March-2021.pdf

⁸ Conoco Phillips (2017) Barossa Offshore Project Proposal, Table 4.8 P.131, https://www.nopsema.gov.au/sites/default/files/documents/2021-03/Draft-for-public-comment-Barossa-Area-Development-Offshore-Project-Proposal-July-2017.pdf

⁹ 3.7 mtpa LNG capacity (Conoco Philips), 54.4 GJ/t (AES), 0.052 tCO2/PJ (AES)

¹⁰ Milne (2021) Santos and ENI team up to tackle dirty gas and decommissioning, https://www.boilingcold.com.au/santos-and-eni-team-up-to-tackle-dirty-gas-and-decommissioning/

¹¹ International Energy Agency (2021) Net Zero by 2050: A roadmap for the global energy sector, https://www.iea.org/reports/net-zero-by-2050

¹² UN News (2021) IPCC report : 'Code red' for human driven global heating, warns UN chief, https://news.un.org/en/story/2021/08/1097362

We urge the NTEPA to consider the full climate implications of the project. Without doing so, the Authority cannot claim to meet its objectives of protecting the environment of the Northern Territory and promoting ecologically sustainable development.

The Australia Institute strongly recommends that Santos' DPD Referral undergo environmental assessment in the form of an inquiry, as set out in the Environmental Protection Regulations 2020 (NT) which considers the full climate implications of Santos's related Barossa project.

The Australia Institute will publish a more detailed analysis of this flawed and dangerous project in the coming weeks.

Yours sincerely,

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