



15 February 2022

Dr Paul Vogel
Chairperson, NT Environmental Protection Authority
Level 1, Arnhemica House
16 Parap Road
PARAP NT 0820

By email: Paul.Vogel@epa.nt.gov.au

Dear Dr Vogel

Darwin Pipeline Duplication Project – Comment on referral of proposed action

1. The Environment Centre Northern Territory Inc (**ECNT**) is the peak body for conservation in the NT, with over 7000 supporters.
2. We refer to the statutory notice published¹ by the Northern Territory Environmental Protection Authority (**NT EPA**) on 18 January 2022 in respect of the “Darwin Pipeline Duplication Project” proposed action (**Pipeline**), including:
 - a. A referral form;
 - b. A “referral main document” (**Referral Document**); and
 - c. Appendices to the Referral Document.
3. These are our submissions as to whether the Pipeline should be assessed and the required method of assessment.

A. BACKGROUND

4. Santos Ltd (**Santos**) operates a liquefied natural gas (**LNG**) processing plant at Wickham Point in Darwin (**Facility**). The Facility currently processes up to 10 million tonnes per annum of methane gas from the Bayu-Undan field for export as LNG. LNG is a fossil fuel primarily used for combustion to create energy.
5. Santos now seeks to develop a new fossil fuel resource, the Barossa field, which is 300 km north-northwest of Darwin. Methane gas would be extracted from the Barossa field and transported by pipeline to the Facility for processing into LNG for export (**Barossa Project**). The pipeline for transporting the gas would be either:

¹ Available: <https://ntepa.nt.gov.au/consultation/darwin-pipeline-duplication-project>.



- a. A 260km pipeline from the field to a tie-in point on the existing Bayu-Undan to Darwin pipeline (**Original Pipeline**); or
- b. A 330km pipeline from the field to Darwin, including a new 100km segment in NT waters and lands, to enable potential use of the Original Pipeline for carbon sequestration (**CCS**) in the Bayu-Undan field once depleted.

The Pipeline proposed in this referral is the second option.

6. The Barossa Project is proposed to first deliver LNG in 2025 and to produce until 2045, subject to potential further expansion to nearby fields for additional fossil fuel production after this period.

Legislative framework

7. The *Environmental Protection Act 2019* (NT) (**EP Act**) sets out the framework for environmental impact assessment of proposed actions such as the Pipeline. Key aspects of the EP Act for this decision include:
 - a. The objects of the EP Act, which are set out in s 3 and must be applied by the NT EPA. These include protection of the environment, promotion of ecologically sustainable development (**ESD**), community involvement and recognition of the role of Aboriginal people as stewards of country.
 - b. The principles of ESD, which are defined in Part 2, Division 1 and must be applied by the NT EPA.
 - c. The environmental decision-making hierarchy, which is set out in s 26 and must be applied by the NT EPA.
 - d. The purpose of environmental impact assessment, which is set out in s 42 of the EP Act.
8. Section 55 of the EP Act requires that the NT EPA consider and deal with the referral in accordance with the *Environmental Protection Regulations 2020* (NT) (**EP Regulations**).
9. To determine the method of assessment for a referral, the NT EPA is required to have regard to the criteria in r 59, being:
 - a. the significance of the potential impact of the proposed action;
 - b. the level of confidence in predicting potential significant impacts, taking into account the extent and currency of existing knowledge;
 - c. the level of confidence in the effectiveness of any proposed measures identified in the referral to avoid, mitigate or manage potential significant impacts of the proposed action;



- d. the extent of community engagement that has occurred in relation to the proposed action; and
 - e. the capacity of communities and individuals likely to be affected by the proposed action to access and understand information about the proposed action and its potential significant impacts.
10. While not an express element of the legislative regime, the NT EPA in exercising its powers under the EP Act should have due regard to potential climate impacts on young people in particular. The Federal Court of Australia recently recognised a duty to exercise reasonable care to avoid personal injury to children from climate change impacts (*Sharma v Minister for the Environment* [2021] FCA 560). There is significant potential for the duty of care to apply to decision-makers exercising power under NT legislation such as the EP Act and EP Regulations.

11. In **Section B** of this submission we set out the issues of concern and potential effects of the Pipeline to inform the NT EPA’s decision under rr 56-57 of the Environment Regulations.

Preliminary matter – acceptance of referral

12. We also refer to our previous correspondence of 8 September 2021 (**Call-In Request**), and your response dated 26 November 2021, in respect of a previous decision by the NT EPA not to assess the “Darwin Liquefied Natural Gas Transition Work Program” (**DLNG Extension**). We **attach** a copy of this correspondence. As noted above, the DLNG Extension is a proposal to operate the Facility for an additional 25+ years to process a new source of methane gas, as part of the Barossa Project.
13. Our understanding is that the NT EPA appreciates the need for greenhouse gas emissions of the magnitude proposed by way of the Barossa Project to be properly assessed and managed, including by way of referral and assessment under the EP Act.
14. The Referral Document expressly states (p 17) that processing gas from the Barossa field at the Facility is “excluded” from the referral and that the DLNG Extension was “approved by the NT EPA” under the previous *Environmental Assessment Act 1982* (NT) (**EA Act**). This is incorrect. The NT EPA decided not to assess the DLNG Extension, which is not the same as a completed assessment under the EA Act.²
15. We reiterate our request that the NT EPA call-in a referral under s 53(1) of the EP Act of the DLNG Extension and the broader Barossa Project.
16. In relation to the Pipeline, we submit that the NT EPA should have exercised its power in r 47(c) of the EP Regulations to refuse to accept the referral, on the basis that it only provides information about one element of a larger action (the Barossa Project) that needs to be

² See EP Act, s 300(2).



considered more holistically. The referred action and the DLNG Extension are necessary components of the Barossa Project, which must be assessed from a cumulative perspective.

17. Now that the NT EPA has decided to accept the referral of the Pipeline, the only means by which the action can be sensibly assessed in the context of the broader Barossa Project is by way of an “inquiry” level of assessment. Further reasons supporting the application of this assessment method are set out below in **Section B**.

B. INQUIRY LEVEL OF ASSESSMENT REQUIRED

18. The EP Regulations require the NT EPA to determine whether to assess a referred action, and if so the appropriate assessment method. The methods of environmental impact assessment are listed in r 5(1) as:

- a. assessment by referral information;
- b. assessment by supplementary environmental report;
- c. assessment by environmental impact statement; and
- d. assessment by inquiry (which, according to r 5(2), can be carried out separately or with any of the other methods of EIA).

19. It is not clear from the Referral Document what level of assessment Santos proposes should be applied to the Pipeline.

20. For the reasons discussed below in this Section, we submit that the NT EPA must assess the Pipeline at the highest level, through an assessment by inquiry.

21. Further, should the Pipeline be assessed by way of environmental impact statement, this should be combined with an inquiry as contemplated in r 5(2) of the Environment Regulations.

22. Should a combined assessment method be applied, an inquiry could be undertaken specifically into the potential impacts of the Pipeline and broader Barossa Project on environmental factors of “Culture and Heritage” and “Atmospheric Processes” (these impacts are discussed below in this Section). These impacts have the widest and most serious potential impacts and require the particular levels of transparency, community engagement and scrutiny that an inquiry assessment can deliver.

Significance of potential impacts

23. The potential impacts of the Pipeline and the broader Barossa Project are highly significant. We are concerned that the significance of potential impacts is not adequately addressed in the Referral Document and that Santos has failed to identify several potential significant impacts altogether.



Impacts not identified

24. The Referral Document identifies only three environmental factors (“Coastal Processes”, “Marine Environmental Quality”, “Marine Ecosystems”) as being significantly impacted by the Pipeline.
25. ECNT is concerned that the environmental factor of “Culture and Heritage” is not addressed in the Referral Document.
- a. The Referral Document acknowledges (p 50) that the selected site for the Pipeline “has some significant ... heritage sensitivities”. While Santos may feel confident that the level of knowledge means that these can be managed, the high sensitivity of this environmental factor necessitates comprehensive assessment and management measures.
 - b. The Referral Document also notes (p 49) that key stakeholders had a common concern as to the impacts of the Pipeline on “areas of cultural and indigenous heritage”.
26. ECNT is concerned that the environmental factor of “Atmospheric Processes” is not addressed in the Referral Document.
- a. The Referral Document claims (p 120) that the greenhouse gas emissions of the Pipeline are limited to construction and that operations do not “alter” emissions beyond those already “approved”. As discussed above in **Section A**, we strongly submit that an additional 25+ years of operation of the Facility should be properly assessed and managed. Plainly, as the Pipeline is a necessary component of the Barossa Project, it facilitates significant greenhouse gas emissions and undermines the Paris Agreement goal of limiting warming to 1.5 degrees and reaching “net zero” emissions by 2050, as stipulated in the NT Government’s “Climate Change Response: Towards 2050” (July 2020).
 - b. The Referral Document includes numerous references to elements of the Barossa Project, including the Pipeline, which indicate that comprehensive assessment of this environmental factor is required, such as:
 - i. the statement on p 16 that annual rates of greenhouse gas emissions at the Facility will increase by approximately 5% when processing Barossa gas (in stark contrast to the previous finding³ that annual rates of emissions would be lower than current operations);

³ In the NT EPA’s “Statement of Reasons” for its decision not to assess the DLNG Extension proposed action, available: https://ntepa.nt.gov.au/_data/assets/pdf_file/0006/882006/decision-statement-reasons-darwin-Ing-transition-work-program-conocophillips.PDF.



- ii. references to the “Bayu-Undan CCS Opportunity” without providing any details of whether CCS is feasible or how Santos proposes to make this unproven technology work; and
 - iii. acknowledgement that, due to the extremely high content of carbon dioxide in the Barossa field, a significant but unspecified amount of greenhouse gas will simply be vented into the atmosphere in order to transport it through the Pipeline.
- c. The Referral Document contains no figures or estimates for the greenhouse gas emissions associated with the Pipeline and broader Barossa Project, and does not make any reference to the indirect emissions associated with the combustion of produced LNG.

Significance of potential impacts

Impacts on Coastal processes, Marine Environmental Quality and Marine Ecosystems

27. Darwin Harbour is of very high environmental, recreational and cultural value for Territorians.⁴ The 2021 Integrated Darwin Harbour Report Card identified 12 values that are integral to the Harbour, including resilience and climate change, clean water, healthy ecosystems and landscapes, biodiversity, Indigenous values, management, lifestyles and recreation, sustainability and tourism.⁵ Darwin Harbour is home to very many diverse ecosystems, including intact mangrove systems, coral reefs, mudflats and seagrass beds. It supports high biodiversity and provides habitat for nesting turtles, dolphins, dugongs, migratory shorebirds and fish. It also is important as a recreational fishing ground for many Darwin people. The health of Darwin Harbour is also vital for important Northern Territory industries, such as pearling, tourism and barramundi.
28. Darwin Harbour has been subject to considerable industrial development in recent years, including from the construction and operation of the Darwin LNG facility, the construction and operation of the Inpex processing plant, the development of heavy industry at East Arm, and the redevelopment of Larrakeyah Barracks. Moreover, Darwin Harbour’s unique values are threatened by climate change, which will lead to sea level rise, high terrestrial and sea surface temperatures, mangrove die-back, coastal inundation and tidal loss, and biodiversity loss. The Pipeline will further impact Darwin Harbour’s precious and at-risk ecosystems, disrupt recreational activity in the harbour, and potentially adversely impact a number of iconic Northern Territory industries.
29. It is crucial, given these values, that the Pipeline, and the broader Barossa project, is subject to a rigorous assessment at the highest level, including of the cumulative and indirect impacts of the Proposal.

⁴ Darwin Harbour: 2021 Integrated Report Card at

https://nt.gov.au/_data/assets/pdf_file/0003/1059330/darwin-harbour-2021-integrated-report-card.pdf.

⁵ Ibid.



30. The Pipeline will have very significant impacts on the three environmental factors identified by Santos in the Referral Document, namely Coastal Processes, Marine Environmental Quality and Marine Ecosystems. Since there is some overlap between these three environmental factors, and the activities which will impact them, they are addressed collectively in the paragraphs following.

a. As an overarching comment, there is a lack of information in the Referral Document by which to appropriately assess the marine impacts of the Pipeline, and broader Barossa Project. Some of the information provided in the Referral Document is inaccurate and seems designed to de-emphasise important environmental values associated with the Harbour. For example:

- (i) the Referral Document does not refer to the most recent research mapping benthic communities in Darwin, which predicts a very high probability of extensive hard coral habitat in Darwin Harbour, including in the areas to be traversed by the Pipeline. These areas are extremely significant for marine biodiversity, providing habitat and shelter for a vast diversity of species. None of the Darwin Harbour marine habitat maps (corals, seagrasses, mixed communities) from this report are used in the Referral Document;⁶
- (ii) the Referral Document suggests instead that Darwin Harbour comprises largely sand-mud and soft sediment communities, which is contradicted by the above research;
- (iii) the baseline survey provided in the Referral Document (Appendix D) is restricted to the project area only, and does not refer to marine habitat studies of Darwin Harbour, or outer Darwin Harbour, which is the potential zone of influence of the Pipeline's construction and operation;
- (iv) the Referral Document mentions the need to build a cofferdam but does not specify its size or even if it is required. The impacts of shoreline erosion associated with a cofferdam needs further assessment;
- (v) the list of threatened species is inaccurate and is a significant underestimate. Only 7 marine threatened species are listed, and 2 migratory species;
- (vi) no detail is provided on the source of rock for infill of the trench or the quantity needed, or where the dredge spoil will be dumped. If the rock for the trench infill is coming from reef areas significant damage to habitat for already overfished fish stocks may occur.

b. The potential impacts from the proposed dredging and reclamation activities on bathymetry and coastal processes have not been adequately established in the Referral Document. The proponent must comprehensively investigate the potential impacts of the proposed dredging and trenching associated with the project as outlined in the *NTEPA Guidelines for*

⁶ R. Galaiduk, B. Radford, S. Harries, M. Case, D. Williams, D. Low Choy, N. Smit, (2019) "Technical Report; Darwin – Bynoe Harbours predictive mapping of benthic communities", Australian Institute of Marine Science, Perth.



the Environmental Assessment of Marine Dredging in the Northern Territory to ensure that the environmental values of the coast are protected, taking into account the latest research regarding benthic habitats in Darwin Harbour.

- c. Existing pressures on Darwin Harbour include industrial activities, urban runoff and discharges, maintenance dredging and clearing of mangroves. The most recent Darwin Harbour report card demonstrated degraded sediment quality and elevated metal concentrations at nearby East Arm. Construction and operation activities have the potential to disturb marine sediments, with a great deal of uncertainty regarding the characteristics of the material to be dredged. It is crucial that detailed geotechnical investigations occur to address uncertainties in the sediment characteristics. Further studies (including modelling) are also required to establish the zone of influence and the scale of any likely sediment plumes. Further investigation into borrow grounds, spoil dumping grounds and dredge plumes are required. Dredge plume modelling should include hydrodynamic and ecological modelling and ascertain impact prediction to inform an impact management program. Without these studies, it is not possible to assess potential environmental impacts including potential impacts on habitats supporting threatened species. ECNT notes that there are numerous other dredging projects currently occurring and proposed by other proponents. For example, the Darwin Ship lift project requires another 500,000m³ of dredging and the development of 5 new product loading jetties for the Middle arm Sustainable Development Precinct (MASDP) will likely require a similar level of dredging to the Ichthys project. Cumulative impacts of underwater noise, air quality and water quality also need to be assessed in the context of the plans to further industrialise the harbour. There is potential for the Pipeline to contribute significantly to cumulative impacts. Full characterisation of the contamination of marine sediments in the Project Area is required to obtain a greater understanding of recently accumulated sediments and to assess the impact of proposed dredging and trenching on marine environmental quality.
- d. The Referral Document lists various risks to water quality such as treated sea water release during a wet buckle event and unplanned marine diesel spills. The report does not refer to the hydrodynamic modelling studies which suggest the harbour is poorly flushed due to the lack of big river flows and the diurnal tidal cycle resulting in 20 day flushing times⁷. Any chemical or petroleum release into the harbour is likely to remain in the Harbour for a considerable period of time as seen from the 2016 oil spill from the cargo vessel *Antung* that spread some 30 km. Considering up to 600 m³ of treated seawater containing Biocides and Oxygen Scavengers may be discharged into Darwin Harbour in the event of an accident, modelling of wet buckle release of treated seawater and hydrocarbon spills will be essential to understand impacts.

⁷ https://ntepa.nt.gov.au/__data/assets/pdf_file/0004/287311/Appendix-B-Hydrodynamic-and-Water-Quality-Modelling.pdf



- e. The impacts of project activities on marine ecosystems provided in the Referral Document rely on key information and assumptions that are out of date and lacking in critical information. Santos repeatedly claim that this project is smaller than the Inpex Ichthys project therefore the environmental impacts will be acceptable. Very little evidence is available suggesting there was an acceptable level of impact from construction of Inpex Ichthys LNG. For example, key condition indicators for the Anson-Beagle bioregion for dredging impacts include seagrass extent and density, and combined regional pressures requires assessment of marine megafauna abundance⁸. Limited surveys on marine megafauna populations suggest significant impacts did occur with almost half of the recorded Humpback Dolphin population leaving the harbour. The last marine Turtle survey was conducted in 2014⁹. Without repeated surveys it is impossible to ascertain the level of impacts from developments.¹⁰ This project may push the remaining marine megafauna from the harbour considering the projects proximity to the relative safe haven of the undisturbed West Arm. Updated data on marine megafauna populations, coral extent and seagrass health are essential to understand the impact of this proposal.
- f. The Pipeline will impact significant marine conservation areas including the Charles Point Reef Fish Protection Area and Weed Reef, and this should be explicitly addressed. Construction of a gas pipeline through the Charles point reef fish protection area needs thorough investigation considering the importance of this zone to the overfished stocks of Golden Snapper and Northern Mulloway. Weed Reef is regarded by Traditional Owners and eco tour operators as the primary location for Dugongs in Darwin Harbour. Trenching activities will have a significant impact on dugong habitat.
- g. The Referral Document states that Fannie Bay is the closest seagrass to the pipeline route, however this information is based on the incomplete habitat mapping data from 2016 and is incorrect. Benthic habitat mapping surveys should be completed that include the nearshore areas and alternative pathway options need to be assessed.
- h. Marine megafauna data is poor and many assumptions provided in the referral report are incorrect. While Inpex provided funding for marine mammal research in 2016, that research has not been continued. The last available research suggested that almost 50% of Dolphins had left the harbour after the construction of Ichthys LNG and no recent data is available to

⁸ Edyvane K & S Whiting. (2009). The Northern Territory Marine, Coastal and Estuarine Monitoring, Evaluation and Reporting Framework. Department of Natural Resources, Environment and the Arts. Northern Territory Government

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https://ntepa.nt.gov.au/__data/assets/pdf_file/0006/761496/draft_eis_darwin_processing_facility_appendixT_technical_report_marine_fauna.pdf

¹⁰ <https://www.abc.net.au/news/2018-11-30/darwin-harbour-dolphin-population-decline-worries-scientist/10157960#:~:text=Her%20research%20shows%20the%20humpback,2011%20to%2050%20in%202017.>



verify these results¹¹. Snubfin Dolphins and Bottlenose Dolphins are well documented in Darwin Harbour and yet the referral only mentions the presence of Australian Humpback Dolphins. Other assertions about absence of whales from the project area are also incorrect with recent sightings of Humpback Whales recorded along the west coast of Bathurst Island and Van Diemen Gulf¹². Comprehensive marine megafauna population assessments and applied research into the causes of population decline are required along with ongoing biodiversity monitoring¹³. Targeted marine benthic habitat surveys of the areas to be disturbed during construction, and assessment of underwater noise impacts during construction and operation are required.

- i. The Pipeline is part of the larger Barossa Project, which entails the development of a major new gas field with the highest carbon dioxide content of any Australian offshore field.¹⁴ Approximately 15 Mt/pa of life cycle greenhouse gas emissions will be released for a period of 25 years from this project, generating over 350 million tonnes of carbon dioxide equivalents. Darwin Harbour already experiences 8.3mm/pa sea level rise and research indicates the 20,000ha mangrove estate within the harbour is only just coping with this rapid change. Darwin mangroves play a key role in preserving water quality by intercepting catchment-derived pollutants and they substantially influence the movement of sediment through the estuary. The future health of Darwin Harbour depends substantially on the protection of the mangrove estate against further pressures from climate change.¹⁵ Increasing carbon dioxide and other greenhouse gas emissions from the Barossa Project, will increase sea level rise and amplify impacts on coastal processes. The indirect impacts of climate change of the Pipeline, and Barossa Project should also be assessed.

Impacts on Cultural Heritage

31. The Pipeline and broader Barossa Project will have a potentially significant impact on the “Cultural Heritage” environmental factor.
32. There are numerous terrestrial and marine sacred sites in both Darwin Harbour, and on the Cox Peninsula. The area north of Charles Point is of particularly high cultural value to the Kenbi Traditional Owners and Larrakia and Belyuen residents and the Pipeline route may well traverse areas of cultural and spiritual significance. The zone of influence of the project may be far greater than the Pipeline footprint itself, due to sediment plumes, turbidity and altered light. This may have adverse impacts on sacred sites and culturally significant areas. The Referral Document stops short of stating that the proponent will obtain an authority certificate under the *Northern*

¹¹ <https://www.abc.net.au/news/2018-11-30/darwin-harbour-dolphin-population-decline-worries-scientist/10157960>

¹² Pers comm Tiwi Marine Rangers

¹³ <https://dhir.org.au/values/biodiversity/>

¹⁴ <https://ieefa.org/ieefa-santos-barossa-gas-field-emissions-create-major-risks-for-shareholders/>.

¹⁵ N. Munksgaard, L. Hutley, K. Metcalfe, A. Padovan, “Environmental challenges in a near-pristine mangrove estuary facing rapid urban and industrial development: Darwin Harbour, Northern Australia”, November 2018, *Regional Studies in Marine Science*, 25.



Territory Aboriginal Sacred Sites Act. This should be a precondition of any environmental approval.

33. In addition, there are also numerous cultural heritage sites in Darwin Harbour. Hiscock and Hughes relates that there are significant prehistoric shell mounds throughout Darwin Harbour.¹⁶ Further, recent research indicates that submerged cultural heritage is common in northern Australia, but under threat due to a lack of information about them. A regional assessment of submerged archaeological potential in the Northern Territory found that the submerged areas off the coast of the Northern Territory may contain a wealth of important archaeological material.¹⁷ Recently, research revealed archaeological material across terrestrial, coastal and submerged environments at Murujuga in north-west Australia.¹⁸ This research was funded by Woodside Petroleum. There is no reason why the proponent should not ensure a similar survey is undertaken as part of the environmental assessment of the Pipeline. An extensive cultural heritage survey of marine and submerged areas in the vicinity of the pipeline, preferably in partnership with Larrakia people, is required.

Impacts on Atmospheric Emissions

34. The Pipeline and broader Barossa Project will have a potentially significant impact on the “Atmospheric Emissions” environmental factor through large contributions to global greenhouse gas concentrations.

- a. There are extensive reputable scientific resources addressing the issue of climate change and the need to urgently reduce greenhouse gas emissions.
 - i. The Intergovernmental Panel on Climate Change (IPCC) report “Climate Change 2021: The Physical Science Basis” (August 2021) found that human influence on the climate by way of anthropogenic greenhouse gas emissions was “unequivocal”, already causing unprecedented changes to the climate system, and that the 1.5°C and 2°C warming levels will be exceeded during the 21st century unless deep reductions in greenhouse gas emissions occur in the coming decades.
 - ii. The IPCC Special Report “Global Warming of 1.5°C” (October 2018) highlights the importance of emissions reductions beginning as soon as possible – by 25-45%

¹⁶ P. Hiscock and P. Hughes (2001) “Prehistoric and World War II Use of Shell Mounds in Darwin Harbour”, *Australian Archaeology*, 52:1, 41-45.

¹⁷ J. McCarthy, C. Wiseman, K. Woo, D. Steinberg, M. O’Leary, D. Wesley, L. Brady, S. Ulm and J. Benjamin (2022) “Beneath the Top End: A regional assessment of submerged archaeological potential in the Northern Territory, Australia”, *Australian Archaeology*, 88:1.

¹⁸ <https://theconversation.com/australias-coastal-waters-are-rich-in-indigenous-cultural-heritage-but-it-remains-hidden-and-under-threat-166564>.



from 2010 levels by 2030, with more rapid reductions producing better warming outcomes.

- iii. The International Energy Agency's report "Net Zero by 2050: A Roadmap for the Global Energy Sector" (May 2021) confirms that to achieve net zero emissions by 2050, fossil fuel use needs to decline drastically and no new oil and natural gas fields are required.
 - iv. Extensive analysis of carbon budgets compatible with warming scenarios such as 1.5°C, for example the Climate Council document from April 2021 "Aim High, Go Fast: Why Emissions Must Plummet", which also highlights the need for rapid emissions reductions before 2050.
- b. The Barossa Project is a new fossil fuel development. The total greenhouse gas emissions that would be produced by the Pipeline and broader project have not been provided to the NT EPA. Plainly, any additional sources of greenhouse gas emissions in the current context would have a significant impact on the above goals. Given the urgency of action required and the catastrophic consequences of failure to reduce atmospheric concentrations of greenhouse gas emissions from current levels, we strongly submit that this environmental factor requires comprehensive assessment and management under the EP Act.

Community engagement and capacity

35. The extent of community engagement that has occurred in relation to the Pipeline is minimal.
- a. We do not consider ECNT was properly engaged as a key stakeholder and representative peak body organisation ahead of the Referral Document.
 - i. The Referral Document lists ECNT as a stakeholder included in Santos' "pre-referral engagement".
 - ii. Appendix C to the Referral Document states that Santos had a meeting with ECNT on 17 November 2021. At this meeting, Santos indicated its intention to refer the Pipeline for assessment to the NTEPA. ECNT stated at the meeting that it considered the referral of the Pipeline to be inadequate and misleading about the true extent of the Barossa Project's impacts. ECNT reiterated its position that the impacts of the Barossa Project, including its significant greenhouse gas emissions, should be referred for assessment to the NTEPA.
 - iii. In the summary list on p 48-49 of the Referral Document our central concern as to climate impacts is not included.
 - b. We are aware of significant public interest and community concern about the Pipeline and the Barossa Project which necessitates transparency and further opportunities for public participation in this assessment. This is evidenced by the high volume of individual



submissions which ECNT understands have been provided to the NTEPA in relation to this referral.

- c. Santos appears to rely on “opportunities for public comment as part of the referral process *and subsequent assessment phases*” for ongoing engagement (p 49, emphasis added). This supports the need for an assessment method which includes sufficient opportunities for public participation (e.g. an inquiry), as there are no other means by which Santos proposes to engage the community with respect to the Pipeline and the Barossa Project.

36. The capacity of communities and individuals likely to be affected by the Pipeline to access and understand information about the proposed action and its impacts is not adequately addressed by the Referral Document and Santos’ engagement to date.

- a. The Pipeline and the Barossa Project are of immense scale and technical complexity, including concepts such as hydrocarbon spills, subsea construction and seabed disturbance, infrastructure decommissioning, and climate change.
- b. Potentially affected communities and individuals for this referral include those with limited technical expertise or education, limited time and resources to devote to reading complex project documents, limited access to the internet, and cultural or language barriers including living remotely.
- c. These communities and individuals would be better able to understand information about the Pipeline and Barossa Project if the opportunities to participate in the assessment:
 - i. included opportunities for oral engagement, which may include formal and/or informal settings (e.g. public hearings);
 - ii. were transparent, independent and not conducted solely by Santos representatives;
 - iii. were administered by appropriate persons (e.g. members of a panel with experience and/or suitable qualifications to engage with these affected communities); and
 - iv. had been determined and programmed well in advance so that communities and individuals were able to make necessary arrangements to participate (e.g. subject to a terms of reference which included a schedule of how an inquiry would be conducted).

37. On the basis of these factors, we submit that the NT EPA must require an assessment by inquiry for this referral.



ACTION REQUIRED

38. The Pipeline and broader Barossa Project will have a wide range of potential significant environmental impacts. As set out in this submission, the highest level of assessment must be applied, being assessment by inquiry.

Please contact us at kirsty.howey@ecnt.org should you wish to discuss the content of this letter.

Yours sincerely,

Environment Centre NT Inc

Shar Molloy
Co-Director
Environment Centre NT

Kirsty Howey
Co-Director
Environment Centre NT