Submission on Draft Terms of Reference – Bonaparte Carbon Capture and Storage Project

To: Northern Territory Environment Protection Authority

Re: Draft Terms of Reference for the Environmental Impact Statement – Bonaparte Carbon Capture and Storage Project

15th June 2026

Beyond Gas Network is a national network of community organisations, climate groups and concerned citizens advocating for a rapid and equitable transition away from fossil gas and towards clean, renewable energy. The Network works to protect climate, nature, communities and future generations from the environmental and economic risks associated with continued fossil fuel expansion.

We welcome the opportunity to comment on the Draft Terms of Reference for the Environmental Impact Statement (EIS) for the Bonaparte Carbon Capture and Storage (CCS) Project.

The Bonaparte CCS Project is proposed at a scale unprecedented in Australia and has implications extending far beyond the operational footprint of the project itself. The proposal raises significant questions regarding climate policy, marine biodiversity, long-term environmental stewardship, First Nations rights, cumulative impacts, environmental law reform and intergenerational responsibility.

The final Terms of Reference should be strengthened to ensure that the EIS comprehensively assesses these issues.

Climate Change and Fossil Fuel Expansion

The EIS should not treat the proposal as a stand-alone carbon storage project. The Bonaparte CCS Project is closely linked to the continued operation and potential expansion of LNG production and export infrastructure.

The climate consequences of the project cannot be separated from the fossil fuel activities it is intended to support.

The EIS should therefore assess:

• direct and indirect greenhouse gas emissions associated with the project;

• lifecycle emissions associated with LNG production facilitated by the project;

• emissions from construction, operation and monitoring activities;

• emissions resulting from future carbon dioxide streams accepted by the project;

• impacts on Australia's legislated emissions reduction targets;

• consistency with Australia's commitments under the Paris Agreement; and

• consistency with Australia's commitments under the Global Methane Pledge.

The assessment should explicitly assess whether the project facilitates additional fossil fuel production that would otherwise not proceed or would face greater commercial or regulatory constraints.

Strategic Expansion of Carbon Storage and Additional Carbon Dioxide Streams

The Bonaparte CCS Project should not be assessed solely as a storage solution for current Ichthys emissions.

The proposal appears capable of becoming a major long-term carbon storage hub. The EIS should therefore assess whether the project is likely to receive carbon dioxide from additional LNG projects, industrial facilities or other sources in future decades.

The assessment should examine:

• the project's maximum practical storage capacity;

• future expansion scenarios;

• likely future sources of carbon dioxide;

• cumulative impacts associated with increasing storage volumes;

• whether the project may facilitate future fossil fuel developments; and

• the implications of establishing a regional carbon storage hub in Australian waters.

The EIS should assess reasonably foreseeable future development rather than limiting assessment to the initial project proposal.

The NT EPA should specifically require the proponent to address the following question:

Is the Bonaparte CCS Project intended solely as a storage solution for current Ichthys emissions, or is it being designed as infrastructure capable of supporting future LNG developments and accepting additional carbon dioxide streams over coming decades?

The answer to this question has important implications for cumulative impacts, climate consequences, storage capacity, monitoring requirements, future liability and the overall environmental significance of the proposal.

Bonaparte as Nation-Shaping Carbon Disposal Infrastructure

The Bonaparte CCS Project should not be assessed solely as a project-level development proposal.

On the information presently available, the project has the potential to become nationally significant strategic infrastructure that could influence Australia's future emissions management framework, LNG industry development, offshore environmental management obligations and international climate responsibilities for decades.

The scale of the proposal, its anticipated operational life, its potential capacity to accept carbon dioxide from multiple sources and its possible expansion over time distinguish it from conventional industrial developments.

The EIS should therefore assess not only the direct impacts of the proposal but also the broader implications of establishing major long-term carbon disposal infrastructure in Australian waters.

The assessment should examine:

• whether the project may become critical enabling infrastructure for future fossil fuel developments;

• whether future industrial developments may become dependent upon access to the storage facility;

• whether the project may alter incentives for direct emissions reduction at source;

• the implications of establishing a long-term carbon disposal industry in Australian waters;

• the cumulative environmental footprint associated with future expansion; and

• governance arrangements appropriate for infrastructure that may operate across multiple generations.

The EIS should also consider whether approval of the project would create expectations or pressures for future expansion beyond the scope of the current proposal.

Given the long operational horizon and potential strategic significance of the project, the assessment should not be confined to the immediate proposal footprint. Rather, it should consider the broader trajectory that approval of the project may set for Australia's climate, environmental and industrial future.

Projects capable of reshaping future development pathways warrant a correspondingly high level of scrutiny and precaution.

Australia as a Carbon Storage Destination

The EIS should assess the broader implications of Australia becoming a long-term repository for carbon dioxide generated by multiple industrial facilities.

The proposal raises the possibility that Australian waters and seabed formations could increasingly be used to store carbon dioxide from sources beyond the immediate Ichthys project and potentially beyond Australia itself.

The EIS should therefore examine:

• who bears responsibility for stored carbon dioxide over the long term;

• who bears responsibility for monitoring and remediation if leakage occurs;

• how liabilities would be managed if corporate ownership changes;

• implications of transboundary carbon dioxide storage arrangements;

• cumulative environmental impacts associated with becoming a regional storage destination; and

• intergenerational implications of long-term storage commitments.

The environmental consequences of leakage would occur in Australian waters regardless of the original source of the carbon dioxide.

Nationally Determined Contributions and Carbon Accounting

The EIS should assess implications for Australia's Nationally Determined Contributions (NDCs) and future greenhouse gas accounting obligations.

If carbon dioxide stored beneath Australian waters leaks in future decades, questions may arise regarding:

• attribution of emissions under international accounting frameworks;

• impacts on future emissions inventories;

• responsibility for remediation;

• implications for future emissions reduction commitments; and

• credibility of claimed emissions reductions associated with the project.

The EIS should assess these risks transparently and should not assume that future governments or future generations will be willing or able to absorb the consequences of storage failure.

Performance and Reliability of Carbon Capture and Storage

The EIS should not assume that CCS is a proven or risk-free climate mitigation technology.

Experience from large-scale CCS projects internationally and in Australia demonstrates that projects may experience delays, operational difficulties, lower-than-anticipated capture rates and uncertainty regarding long-term storage performance.

Particular attention should be given to lessons arising from Australian CCS projects, including the experience of the Gorgon Carbon Dioxide Injection Project in Western Australia, where significant delays and performance challenges have highlighted the risks of assuming that projected storage outcomes will necessarily be achieved in practice.

The EIS should therefore assess:

• expected capture rates;

• expected storage rates;

• uncertainties in geological modelling;

• operational failures;

• leakage scenarios;

• storage underperformance; and

• lessons arising from comparable CCS projects.

The NT EPA should require independent expert review of all key assumptions regarding capture efficiency, storage performance and long-term containment.

Operational Performance, Long-Term Monitoring and Marine Impacts

Unlike a renewable energy project, a CCS project does not achieve its environmental objective merely by being constructed. Its claimed environmental benefit must be continuously demonstrated through monitoring and verification.

The environmental footprint of the monitoring regime therefore forms part of the environmental footprint of the project itself.

To establish that injected carbon dioxide remains contained, CCS projects typically require repeated geophysical investigations, including seismic monitoring and subsurface imaging. Such monitoring may continue throughout project operations and for decades after injection ceases.

The EIS should therefore assess:

• frequency and duration of monitoring activities;

• likely use of seismic surveys and other geophysical techniques;

• cumulative impacts of repeated monitoring;

• alternative monitoring technologies;

• thresholds for additional monitoring; and

• long-term environmental consequences of the monitoring program itself.

The EIS should not treat monitoring as a secondary operational activity. Monitoring is fundamental to the environmental justification for the project.

Seismic Monitoring and Marine Biodiversity

Particular attention should be given to the impacts of seismic surveys and other acoustic monitoring activities.

A substantial body of scientific literature has identified risks to marine species arising from underwater noise generated by seismic activities.

The EIS should assess impacts on:

• whales and dolphins;

• marine turtles;

• fish populations;

• commercially important fisheries;

• migratory species;

• threatened species;

• benthic ecosystems; and

• broader marine ecological processes.

Potential impacts may include:

• displacement from habitat;

• disruption of migration pathways;

• interference with communication and navigation;

• behavioural disturbance;

• impacts on feeding and breeding; and

• cumulative ecological effects arising from repeated disturbance.

The EIS should specifically assess the cumulative impacts of repeated monitoring surveys conducted over the life of the project and during any post-closure monitoring period.

A project that requires recurring acoustic disturbance of marine environments in order to demonstrate its effectiveness should assess those disturbances as a core project impact rather than a secondary operational matter.

The precautionary principle should apply where scientific uncertainty exists.

6. Long-Term Storage Integrity and Liability

The environmental rationale for the project depends entirely upon secure storage over very long periods.

The EIS should therefore assess:

• geological suitability of storage formations;

• fault activation risks;

• leakage through wells and geological structures;

• impacts of leakage on marine ecosystems;

• long-term monitoring requirements;

• remediation options;

• financial assurance arrangements; and

• responsibility for monitoring and liability after closure.

Assessment should extend beyond the operational life of the project and consider risks over centuries.

Marine Environment and Matters of National Environmental Significance

The EIS should provide detailed assessment of impacts on Matters of National Environmental Significance and marine biodiversity.

This should include impacts on:

• whales and dolphins;

• marine turtles;

• migratory seabirds;

• threatened marine species;

• fish populations;

• benthic habitats;

• marine food webs; and

• ecologically significant habitats.

The assessment should examine impacts arising from seismic surveys, drilling activities, vessel traffic, underwater noise, infrastructure installation and long-term monitoring.

7. Cumulative Impacts

The EIS should require assessment of cumulative impacts arising from:

• the Bonaparte CCS Project;

• the Ichthys CCS Project;

• the Ichthys LNG AGRU Upgrades and CCS Preparedness Project; and

• associated LNG infrastructure and operations.

These projects are functionally interconnected and should not be assessed in isolation.

The cumulative assessment should address climate impacts, marine biodiversity, fisheries, cultural heritage, shipping activity and ecosystem function.

First Nations Rights, Sea Country and Cultural Heritage

The EIS should contain a comprehensive assessment of impacts on First Nations peoples, Sea Country and cultural heritage.

This should include:

• meaningful engagement with affected Traditional Owners;

• assessment of impacts on cultural values and cultural practices;

• impacts on Sea Country;

• cumulative impacts on cultural heritage; and

• transparent reporting of concerns raised during consultation.

Traditional Owner knowledge should inform both project design and environmental assessment.

UNDRIP and Native Title Reform

The EIS should be informed by the principles contained in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including self-determination, participation in decision-making, protection of lands and waters and the objective of Free, Prior and Informed Consent.

The EIS should also recognise the relevance of the Australian Law Reform Commission's review of the future acts regime under the Native Title Act 1993 and broader national consideration of how environmental and development decisions better recognise and protect First Nations rights and interests.

The EIS should demonstrate not merely that consultation has occurred, but that Traditional Owners have had genuine opportunities to influence project design, assessment methodologies, mitigation measures and monitoring arrangements.

Alternatives Assessment

The EIS should include rigorous assessment of:

• alternatives to CCS;

• direct emissions reduction measures;

• renewable energy alternatives;

• alternative project scales;

• alternative locations; and

• scenarios involving reduced fossil fuel production.

Consistency with Emerging National Environmental Standards

The EIS should assess the proposal against the principles underpinning emerging National Environmental Standards and broader environmental law reform.

This should include consideration of:

• protection of Matters of National Environmental Significance;

• application of the precautionary principle;

• cumulative impacts;

• climate risk;

• transparency and accountability;

• independent scientific review;

• First Nations participation; and

• protection of Country and Sea Country.

Conclusion

The Bonaparte CCS Project is not merely a storage proposal associated with the Ichthys LNG Project. It has the potential to become nationally significant carbon disposal infrastructure that could influence the future trajectory of Australia's LNG industry, climate policy, offshore environmental management and carbon accounting obligations for decades.

The project is unusual in that its claimed environmental benefit depends on assumptions about geological behaviour, monitoring capability, institutional continuity and financial responsibility extending far beyond ordinary project approval timeframes.

Demonstrating permanent carbon storage necessarily requires long-term monitoring, potentially including repeated seismic surveys and other intrusive geophysical investigations. The environmental impacts of these activities should be treated as a core component of the project rather than a secondary consideration.

The project should therefore be assessed not merely as an industrial development but as a proposal that may commit Australia to centuries of environmental stewardship, monitoring, liability management and climate accounting obligations.

At a time when Australia is reviewing the future acts regime under the Native Title Act and seeking to better align decision-making with the principles of UNDRIP, the Bonaparte CCS Project presents an important test of whether large-scale industrial development can proceed in a manner that genuinely respects First Nations rights, interests and responsibilities to Country and Sea Country.

The burden should remain on the proponent to demonstrate, through robust evidence and independent review, that the project will deliver genuine and enduring environmental benefits without causing unacceptable impacts on climate, marine biodiversity, cultural heritage, Sea Country or future generations.

Approval of the project may represent more than approval of a single industrial development. It may represent a decision in principle that Australian waters and seabed formations should become a long-term repository for carbon dioxide generated by multiple industrial facilities over many decades.

Such a decision would carry enduring environmental, financial, governance and intergenerational consequences that should be fully examined before approval pathways are established.

Before Australia assumes such responsibilities, decision-makers should be satisfied that long-term storage integrity, monitoring requirements, seismic survey impacts, liability arrangements, impacts on marine biodiversity, implications for First Nations rights and interests, and future greenhouse accounting risks have all been rigorously assessed and independently reviewed.

In circumstances of uncertainty, the precautionary principle should apply.

We urge the NT EPA to strengthen the Draft Terms of Reference accordingly.