

Senate Standing Committee on Environment and Communications

Inquiry into Middle Arm Industrial Precinct

Brief additional submission and documents to be tabled

The Environment Centre NT refers to its submission to the Inquiry lodged in November 2023, and provides the following additional information in support of this submission.

1. Draft Social Impact Assessment for Middle Arm

ECNT seeks leave to table a draft Middle Arm Preliminary Strategic Social Impact Assessment, undertaken for the strategic environmental impact assessment for the project by DIPL. ECNT was on the Expert Committee that guided the development of the assessment, which was provided with the draft in March 2023.

The social impact assessment – while only a draft – demonstrates that the NT Government’s own independent assessment of the social, cultural, economic and environmental impacts of the project at March 2023 and makes clear there are a range of very serious risks associated with the project, which cannot be easily avoided, mitigated or offset.

Given the lack of any publicly available EIS documentation to date, ECNT believes it is necessary that the Committee and the public have access to this information, because it confirms the fears that so many people in Darwin have about the impacts of this project, and that the government has known about them for some time. It also runs counter to the economic narrative being pushed by government and industry about the precinct – in fact, many of the economic impacts will be profoundly negative if the precinct goes ahead.

The social impact assessment engaged deeply with the Darwin community about the project and found a suite of broad-ranging social, cultural, economic and environmental risks associated with Middle Arm including:

- Industrialisation of the harbour undermining Darwin’s quality of life and values of the harbour;
- Fears of toxicity and pollution from water discharges and air emissions, close to residential areas;

- Concern at the social and ecological impacts of dredging, shipping, construction and operations of marine infrastructure and projects in Australia;
- Lost access to recreational fishing, and in particular Elizabeth River boat ramp;
- Severe impacts of skills shortages as a constraint to current and future economic activities;
- Concerns about impacts on other economic sectors such as aquaculture, tourism, recreational fishing;
- Strong opposition to continued use of fossil fuels, concern about increases in greenhouse gas emissions and fears of climate change;
- Comments across the board that people lacked the information to provide informed feedback;
- Concerns that pressure to fast-track economic development and streamline approvals should not undermine the public's right to be informed and comment on individual project approval notices.

A risk matrix appears at pages 203 to 227 of the social impact assessment (also tabled as a separate document), disclosing the following high or very high risks to social, cultural, environmental values:

- A very high risk that the greenhouse gas emissions associated with Middle Arm jeopardise the NT's zero emissions targets and contribute to climate change;
- A high risk of disturbance to strongly held social, economic, cultural and environmental values and use of Darwin Harbour;
- A very high risk of reduced ability to enjoy highly valued recreational fishing in Darwin Harbour, particularly in the region of the Elizabeth River;
- A high risk of increased road trauma or reduced feelings of safety on transport routes;
- A high risk of reduced marine safety in the harbour due to dredging and increased marine traffic;
- A high risk of reduced health and safety due to emissions, pollution, discharges;
- A high risk of saturation of short-term accommodation in Greater Darwin to house FIFO workers;
- A high risk of pressure on the affordability and quality of housing in the region;
- A high risk of pressure on transport infrastructure;
- A very high risk of pressure on water supply leading to scarcity and constraints on residential and industrial growth;
- A very high risk of reduced resilience and capacity of Greater Darwin's residential supplies, increasing the risk of a "system black" which could delay integration of renewables into the grid;
- A very high risk of pressure on emergency services' capacity to respond to incidents at Middle Arm, because emergency services are already under considerable strain;
- A very high risk of skills shortages which could lead to constrained growth and crowding out;
- A high risk of displacement of other sectors due to land and sea use conflicts;
- A high risk of distress at damage to sacred sites from land clearing, dredging or construction activities;
- A high risk of poor water quality and reductions in fish health;
- A high risk of diminished ecological values of the harbour;

- A high risk of constraints on the aquaculture sector due to pollution, biosecurity risks, and reduced water quality;
- A high risk of reduced quality of life due to nuisance impacts, such as noise and vibrations, dust, light pollution, visual and smells; and
- A high risk of loss of trust and confidence in the public's ability to influence decision-making.

This is not a study commissioned by the Environment Centre or other environmental advocacy organisation. It is the government's own independent assessment obtained as part of the strategic environmental assessment for the project, conducted by an experienced consultant according to a rigorous methodology.

In a small city like Darwin, defined by its harbour, its laid-back lifestyle, and the people's love of abundant nature, this assessment demonstrates that Middle Arm will fundamentally change the social and cultural fabric of Darwin. The project has no social licence, and if the huge response to this Inquiry is anything to go by, any acceptance it does have is slowly eroding as people become more informed about the project.

2. Air pollution data

The NT Government has frequently asserted that the strategic environmental impact assessment will work to set limits on a range of impacts, including air and water emissions, and accordingly risks can be appropriately managed in the future.

The Inquiry should be aware that the NT has a poor track record as an environmental regulator, with compliance, monitoring and enforcement mechanisms frequently poorly funded or absent. Estimates of discharges and pollution given in environmental impact assessments are frequently exceeded during operations at major sites across the Northern Territory, with no apparent consequences.

To give one directly relevant example, air quality data for the Inpex/Ichthys LNG facility at Middle Arm shows that projected estimates of air pollutants in an EIS are regularly exceeded at the Inpex facility, with no apparent regulatory repercussions.

The National Pollutant Inventory requires regular reporting of air emissions from facilities, and there are very worrying trends regarding volatile organic compounds (VOCs) and sulfur dioxide at Inpex's LNG facility. Breathing VOCs can cause difficulty breathing, nausea, damage the central nervous system, and can cause cancer.

Inpex claimed in their EIS that they would only emit 500 tonnes of VOCs per annum at their Darwin facility. In 2021-2022, they produced 11,000 tonnes – 22 times the amount they estimated.

Inpex also claimed they would emit only 950 tonnes per annum of sulfur dioxide – however, in 2021-2022 they produced double that.

Inpex's national pollutant inventory data can be found here:
<https://www.npi.gov.au/npidata/action/load/individual-facility-detail/criteria/state/null/year/2023/jurisdiction-facility/NT545>.

	2018-2019	2019-2020	2021-2022	2022-2023
Total VOCs	1,900,000kg (1900 tonnes)	4,800,000kg (4800 tonnes)	11,000,000kg (11,000 tonnes)	3,900,000 (3900 tonnes)
Carbon monoxide	5,000,000kg	3,800,000kg	3,600,000kg	2,900,000
Benzene	24,000kg	11,000kg	6,600kg	6,100kg
Sulfur dioxide	320,000kg	1,300,000kg	1,800,000kg (1800 tonnes)	490,000kg

The estimates from Inpex [EIS](#) are below (p 214):

Table 5-1: Estimated annual combustion emissions from routine operations of the Ichthys Project

Ichthys Project emissions* (t/a)		
Air emission	Offshore facilities	Onshore processing plant
NO _x (as NO ₂)	5000	2700
CO	5800	Not calculated
SO _x (as SO ₂)	16	950
CH ₄	8500	10 500
PM ₁₀ [†]	Not calculated	150
VOCs	1100	500

* Values are based on normal operating conditions and do not include fugitive or vented emissions.

† PM₁₀ from dust is not included in this calculation because quantification of a non-point-source emission is difficult.

3. Poor value for money, and an alternative economic vision for the Northern Territory

ECNT seeks leave to table Infrastructure Australia assessment documents obtained under freedom of information.

The documents, dated March 2023, comprise the Northern Territory Government's stage 2 submission to Infrastructure Australia for funding for Middle Arm, together with an assessment by Infrastructure Australia of the submission. The submission enabled Middle Arm to proceed from stage 1 to stage 2 of the Infrastructure Australia assessment framework (announced in August 2023).

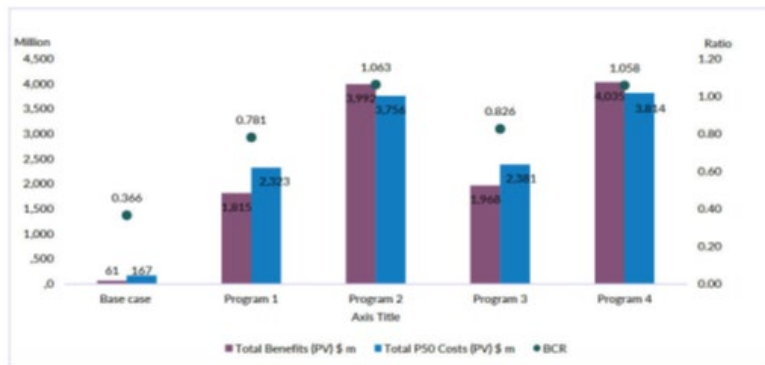
The documents reveal that while the Government has publicly announced \$1.5 billion in funding for the Middle Arm project, the taxpayer could fund approximately \$5 billion for the project. This amount is made up of Capex for the preferred programs (programs 2 and 4) at approx. \$3.5 billion, plus [\\$1.45 billion for a new dam on the Adelaide River](#) to supply water to Middle Arm, also being considered by Infrastructure Australia. See table 42 below, which appears at page 189 of the Appendices to the documents.

Table 42: P50 capital costs summary

Descriptions	Base case	Program 1	Program 2	Program 3	Program 4
Capex (AUD\$m, real) – P50	119	2,117	3,552	2,166	3,601
Present value of capex (AUD\$m, PV) – P50 ³⁵⁰	100	1,788	3,001	1,830	3,043
Net capex relative to base case (AUD\$m, real) – P50		1,998	3,433	2,047	3,483
Net capex relative to base case (AUD\$m, PV)- P50		1,688	2,901	1,729	2,942

The dominant rationale given for the project is that Middle Arm will generate income for the Northern Territory and reduce fiscal dependence on the Australian Government. However, as set out in ECNT’s submission, there are real questions about whether this precinct presents value for money and will return a profit.

Infrastructure Australia, in responding to the NTG’s Stage 2 Submission, notes that “demand uncertainty for an industrial precinct such as this is high.” The NTG’s own submission finds a troublingly low benefit-cost ratio across all cases:



Source: NTG Stage 2 Submission to Infrastructure Australia, p 90

It also notes that the cost benefit analysis provided is based on revenue, but does not include externalities such as social, environmental, and economic impacts. These are likely to be very considerable according to the social impact assessment referred to above, and may mean the project is uneconomic at the stage 3 business case assessment stage.

ECNT commissioned Tom Quinn of Springmount Advisory to develop an alternative economic vision for the Northern Territory, which would represent a better alternative for expenditure of the \$1.5 billion investment. The Recharging the Territory package would:

- Create 7622 good-quality, sustainable jobs for local workers;
- Establish a four-campus Northern Australia Renewable Energy Training Centre of Excellence;
- Subsidise TAFE training and electrical degrees for local students;
- Provide solar, insulation and air conditioning upgrades for every single public housing dwelling;
- Fund climate safe upgrades for every low-income household;
- Deploy solar on twice as many household rooftops and catch up to neighbouring states;
- Construct a Darwin Big Battery and fix systemic grid stability issues;
- Expand the deployment of microgrids throughout the NT;
- Build hundreds of new homes and household expansions in remote areas;
- Open up East Arm and the Port of Darwin for a future industries precinct.

ECNT seeks leave to table this report.