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## Middle Arm Industrial Precinct: Too risky & destructive to proceed

### Opening remarks to the Middle Arm Senate Inquiry

*Footnotes, references and FOI materials available on request*

#### The climate change imperative

According to the UNFCCC, International Energy Agency and global scientific consensus, no new fossil fuel projects should be approved or built if we are to have any chance of a safe climate, identified as keeping global average temperature rise to below 2 degrees while pursuing efforts to stay within 1.5.

2023 was the hottest on record, with maximum temperature records smashed around the globe. Every one of the twelve consecutive months to May 2024 were individually the hottest on record. 2024 is on track to be warmer than 2023. It is established beyond doubt that the extraction and burning of fossil fuels is the number one cause of climate change.

Public funding in the form of equity investments and/or subsidies in infrastructure that enables new gas developments is inconsistent with Australia's commitments under the Paris Agreement. Emissions estimates related to fracking the Beetaloo Basin and the Barossa offshore gas field would substantially impact Australia's climate emissions and ability to achieve international climate commitments.

It has been estimated that the Middle Arm Precinct would itself generate 15 million tonnes of carbon emissions per year, increasing the Northern Territory's (NT's) emissions by 75%.

#### Introduction

Although the proposed Middle Arm precinct may support some renewable energy-based projects, the business case for Middle Arm is centred around its heavy concentration on fossil fuel-based industries and its role in enabling massive new gas developments on and offshore in the Northern Territory.

We know this via the NT Government's own website and promotional materials for the project, as well as Freedom Of Information (FOI) correspondence obtained by the Environment Centre Northern Territory (ECNT).

The proposed Middle Arm Precinct would;

- House a major new gas and a carbon capture and storage facility,
- Be a major manufacturing hub for a range of gas-based industries, including petrochemicals produced using gas (ammonia, urea, ethylene, methanol) and hydrogen made with gas,
- Justify the exploitation of the Beetaloo and Barossa gas fields.



In addition;

- Underinvestment in the existing NT energy grid means;
  - major solar projects already built are sitting idle because they can't connect to the grid,
  - it has the lowest penetration of rooftop solar of any jurisdiction on the mainland despite having some of the best solar resources in the world.
- Proposed Middle Arm wharves aren't common user as such but for gas and gas and fossil generated exports,
- The Middle Arm subsidy will contribute towards dredging Darwin Harbour, building five export jetties on the Elizabeth River, increasing shipping traffic by 1000 ships a year and involve planned and unplanned discharge events into the harbour,
- Doctors have warned that the project poses 'unacceptable health risks to local communities.

The NT needs a plan for its future economic independence. Middle Arm is a fundamentally flawed plan for this future. Investing in the Middle Arm gas and petrochemical export hub does not stack up economically or environmentally, and the Commonwealth's financial support will cause harm to Territorians, damage Darwin Harbour, pollute its air, and damage its climate.

There is a better way. ACF worked constructively with the Queensland government throughout 2022 and 2023 to help develop its Ten-Year Energy and Jobs Plan and associated legislated 75% by 2035 emissions reduction target. The target, one of the strongest in the nation, is supported by the LNP Opposition. This is despite the fact that Queensland has the highest carbon emissions of any Australian state or territory and is one of the most fossil fuel dependent economies in the world.

The Plan positions the Queensland economy for jobs and growth as the global economy decarbonises. By contrast, the Middle Arm precinct lets the Northern Territory and the nation down by investing in the technologies of the past in a sector positioned for decline.

### A financial analysis of the project: IEEFA – June 2023

A credible cost-benefit analysis and full economic and financial risk assessment is needed. Normally, a detailed business case by Infrastructure Australia would have been undertaken.

The fatal flaw of the NT government's development plan for Middle Arm is its dependence on fossil fuels and flawed assumptions about the future of existing and new industries, according to the Institute for Energy Economics and Financial Analysis report, *Middle Arm Gas and Petrochemicals Hub: Combination of problems makes it unprofitable for business and a red flag for the public*.

IEEFA concludes that the plan for Middle Arm relies on too many unproven assumptions including;

- Planned revenues and profits will be insufficient to cover the substantial social and physical infrastructure needs of the area,
- Viability of carbon capture and storage which is unproven and prohibitively expensive at scale,



- Unrealistic assumptions about the future trade in LNG – a 40% increase in seaborne LNG supply is expected to create a LNG oversupply by 2028, with major trading partners including Japan already on selling imported Australian LNG elsewhere in Asia,
- The plan to extract gas from the Beetaloo Basin is based on fracking, which has proved to be a risky investment in other countries. The plan also relies on exploitation of the controversial Barossa gas field.

### Public Investment in Middle Arm

The Australian Government has committed;

- \$1.5 billion as an equity investment to support the construction of ‘common user infrastructure’,
- A further \$440 million equity investment announced to help develop ‘regional logistic hubs’.

This approximately \$2 billion in public funding will act as a fossil fuel subsidy supporting infrastructure that will enable new gas developments including fracking in the Beetaloo Sub Basin and the Barossa offshore gas development.

The initial business case for Middle Arm, prepared by the NT Government in 2020 and submitted to Infrastructure Australia, reveals that Middle Arm was designed as a “new gas demand centre” and that it would be a facilitator of gas expansion in NT including by opening up the Beetaloo Basin to fracking.

Material released via FOI reveal that Middle Arm would add to the feasibility of proposed offshore carbon capture and storage associated with the Santos Barossa offshore gas project.

Amongst the infrastructure to be funded by the Commonwealth – four of five proposed wharves -- are labelled for shipping of LNG, methanol, ethylene, ammonia and “clean petroleum”. The remaining wharf is labelled “hydrogen.”

FOI documents obtained by ECNT relating to the NT government’s submission to the Infrastructure Australia Stage 2 Business Case and dated March 2023, reveal that the taxpayer could be burdened for over \$3.5 billion for the new gas and petrochemical hub, meaning the NT government is seeking more than twice the amount already committed by the Albanese Government.

In addition to construction gas infrastructure including a modular offloading facility, gas-fed petrochemical wharves and jetties and a CCS facility, \$1.45 billion was also earmarked for a new dam on the Adelaide River.

The NT Government’s initial business case submitted to Infrastructure Australia also revealed;

- Middle Arm is designed as a “new gas demand centre”,
- Its focus is on expansion of the NT gas industry, including opening up the Beetaloo Basin,
- Middle Arm is designed for petrochemicals production using Beetaloo Gas.





The Albanese Government knew that Middle Arm was primarily about gas export from at least May 2022, and that the \$1.5 billion is for dredging of Darwin Harbour and construction of a number of modular jetties/wharves.

FOI documents reveal that Infrastructure Minister Catherine King was briefed as the incoming Minister in May 2022 and was made aware that Middle Arm is a “key enabler” for the export of Beetaloo gas from Middle Arm, as well as to carbon capture and storage associated with the Santos Barossa project.

Additionally, in June 2023 Tamboran was announced as an anchor tenant at the site. Their designated 170-hectare LNG facility will be located only three kilometres from the city of Palmerston. Tamboran Resources is progressing plans to frack the Beetaloo Sub Basin and have made arrangements to sell gas to Origin, Shell and BP and the NT government.

### Middle Arm & the Beetaloo gas field

Gas is the main product in FOI correspondence between Infrastructure Australia and Commonwealth /Territory governments. There are also frequent references to carbon capture and storage, Barossa and Beetaloo gas fields and the estimated 30 trillion cubic feet of untapped gas in the Timor Sea.

Reputex estimates that a high production fracking scenario in the Beetaloo Basin would produce lifecycle emissions of 89 million tonnes per year (Mtpa) of CO<sub>2</sub>-e in total, with 34Mtpa CO<sub>2</sub>-e of these emissions in Australia. This would equate to approximately 11% of all Australian emissions in 2030.

### Middle Arm & the Barossa gas field

Middle Arm has been described as central to the “feasibility” of proposed offshore carbon capture and storage, associated with the Santos Barossa offshore gas field and pipeline. The proposed Barossa offshore gas project, 285km north of Darwin in the Timor Sea, contains one of the largest CO<sub>2</sub> reservoirs in the world, and is one of the world’s dirtiest gas projects.

Conservative estimates project that Santos’ Barossa gas project would be responsible for around 469 million tonnes of carbon emissions over 20 years. For every tonne of LNG produced Barossa is expected to produce 1.4 tonnes of CO<sub>2</sub>-e, triple the level as other similar gas projects.

The pipeline that will connect Barossa gas to Middle Arm will cut through the Oceanic Shoals Marine Park, destroying critical habitat, and to pass within 6 kms of the Tiwi Islands.

### Carbon Capture & Storage (CCS) should not be used to enable more fossil fuels

- A CCS facility proposed for the site is designed to facilitate offshore and onshore gas projects,
- CCS is unproven at scale and over long timeframes; it is expensive, adding risk to Middle Arm’s already risky business case, and should never be used to propose or prolong fossil fuel use,
- CCS should only be used as a last resort for hard-to-abate emissions such as cement manufacturing, not greenwash gas projects,



- Adding complexity and risk, Santos is intending to use Middle Arm to pipe CO<sub>2</sub> emissions to Timor Leste waters for attempted sequestration under the seabed, which is currently banned by the London Protocol.

### First Nations Free, Prior & Informed Consent

- The Albanese government committed \$1.5bn to common user infrastructure without a cultural heritage assessment as required by the Infrastructure Australia assessment framework, or consultation with Larrakia Traditional Owners,
- Both Northern Territory and Commonwealth planning guidelines advise early engagement with First Nations people about development proposals on their Country, but senior Larrakia people have advised that this has not happened,
- Larrakia Traditional Owners cite concerns the Middle Arm could cause irreversible harm to cultural artefacts, rock art, and other natural and cultural values.

### Health Impacts of Middle Arm Petrochemicals

Gas and petrochemical production are closely associated with serious health risks, especially from air and water pollution and dangers caused by accidents.

ECNT engaged an expert, Dr Michael Petroni, to assess the air pollution and industrial accident risks of the scenario put forward by the NT Government. He found the proposed facilities at Middle Arm;

- May increase industrial fine particulate emissions by 513% in the region, resulting in \$75 million of additional health impacts, equivalent to 15 premature deaths per year,
- May increase the industrial cancer hazard in the region four-fold due to releases of formaldehyde, acetaldehyde, polycyclic aromatic compounds, and additional air toxins.

### Recharging the Territory - Positioning the NT for jobs & growth in a decarbonised world

ACF is conscious to put forward solutions to decarbonising the Australian economy. It's important for ACF to demonstrate what we are for, not only what we are against.

That's why in February this year, ACF and the ECNT commissioned Springmount Advisory to develop a plan for the reallocation of federal financial support in a plan that delivers superior jobs and economic outcomes, whilst delivering cost of living relief for Territorians and contributing to the decarbonisation of the territory economy.

In doing so we were conscious that Darwin has a history of boom-and-bust economic cycles and at times a large FIFO workforce, most recently due to the INPEX development. We note that the NT Chamber of Commerce has admitted that much of the Middle Arm Precinct workforce would be imported.

Report author, Tom Quinn is appearing before this inquiry so I won't duplicate the details here but *'Recharging the Territory – How the Northern Territory can create thousands of jobs, lower the cost of living, and*



*embrace the renewables revolution* outlines an alternate plan to redeploy federal money earmarked for Middle Arm involving;

1. Greater use of East Arm and its existing infrastructure bulk loading facilities, rail connection, common user infrastructure
2. Funding a Darwin big battery and new microgrid
3. Establishment of a Northern Australia Renewable Energy Training Centre of Excellence
4. Better resourcing TAFE, university skills and training
5. Doubling the number of homes in the Territory with solar
6. Delivering climate safe upgrades for every low-income household in the NT
7. Installing solar, insulation and air conditioning to every public housing property
8. Topping up Remote Housing Investment Package

This plan positions the NT to benefit from the Commonwealth's planned Future Made in Australia reforms and investments, utilising Darwin's existing deep port, skilled workforce, proximity to energy hungry Asian markets and world class renewable resources.

Gavan McFadzean

Program Manager - Climate & Energy  
Australian Conservation Foundation

Telephone. | Email. |  @AusConservation  
www.acf.org.au | Level 1, 60 Leicester Street Carlton VIC 3053

