#### INFRASTRUCTURE NT

# Middle Arm Update

April 2024 - Senate Inquiry





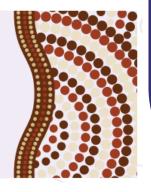




#### **Acknowledgement of Country**

Infrastructure NT acknowledges the Traditional Owners and Custodians across the Nation and their connection to country.

We pay our respects to their communities and Elders – past, present and emerging.



### Government's Vision

#### A growth agenda

There are three key elements that will influence the ability to achieve the NT Government's vision:

- The **industry sectors** that will grow our economy, and subsequently our population
- The enabling infrastructure ecosystems to support this growth
- Cross cutting infrastructure investment objectives

Gross State Product



\$40 billion economy by 2030

Economic base



Diversifying our sectors and markets

Sustainable



Net zero economy by 2050

Employment



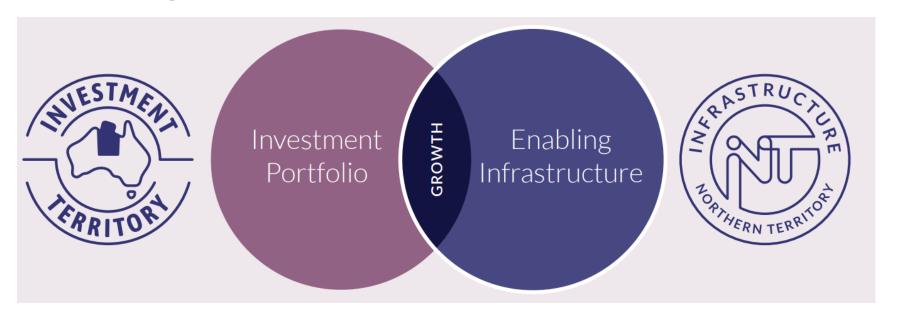
Creating 35 000 more jobs

Population



Boosting our population beyond 300 000

# **Planning for Growth**



#### Who we are



- Undertake strategic infrastructure planning and development which coordinates and aligns infrastructure needs with economic and population growth
- Support the work of the Investment and Major Projects Commissioners through the planning and delivery of NT Government economic enabling infrastructure
- Represent and advocate for the Territory's interests nationally
- Work closely with Infrastructure Australia on business case development for nationally significant infrastructure projects

#### Ministerial Portfolio

Minister for Territory Development - The Hon Eva Lawler MLA

#### Who we are



#### **Project delivery**

- Adelaide River Off-stream Water Storage
- Civic and State Square Precinct
- Darwin Ship Lift Facility
- Frances Bay Mooring Basin
- Gove Port Development
- Gunyangara (Gove Port) Tourism Precinct
- Mandorah Marine Facilities
- Manton Dam Return to Service
- Middle Arm Sustainable Development Precinct
- Regional Logistics Hubs
- > Tennant Creek to Darwin Infrastructure Corridor





#### The Precinct

A master planning industrial precinct to establish a low emissions/renewable energy and manufacturing hub.

Sustainable outcomes and environmental protection of Darwin Harbour and surrounds are at the core of planning for the Middle Arm Sustainable Development Precinct.

Target industries include low emission hydrocarbons, green hydrogen, advanced manufacturing, carbon capture and storage and minerals processing.



Precinct development >1500 ha



Marine terminal + MOF



Rail access



**Product & feedstock corridors** 



- Renewable power & water



Carbon capture infrastructure

# Key actions underway

- Business Case Development and Assessment
- Strategic Environmental Assessment
- Cultural Consultative Committee
- Planning for delivery
- Continuing to work with Proponents

#### **Cultural Consultative Committee**

- A Cultural Consultative Committee has been established.
- Representatives from Larrakia Development Corporation, Larrakia Nation, Gwalwa

Daraniki Association and Northern Land Council are part of the Committee.

#### **Cultural Consultative Committee**

- The Cultural Consultative Committee outputs will include:
  - An independent review of the cultural heritage and environmental work undertaken to date.
  - A Cultural Heritage Survey and Cultural Heritage Management Plan.
- The work will be integrated into the delivery and design of the precinct.



# Strategic Environmental Assessment

A Strategic Environmental assessment of the Precinct will provide:

- greater upfront certainty for developers, while also delivering better environmental outcomes for the significant environmental values in the Middle Arm Precinct and the broader Darwin Harbour
- clear environmental commitments, targets and thresholds
- greater certainty for environmental outcomes the scope and scale of development under the program is clear







#### **Environmental Studies**

- · Air, Land & Sea
- Sustainability





Infrastructure Masterplan



Strategic **Environmental** Assessment



**Business Case** 



#### **Industry Planning**

- Industrial ecology
- · Precinct sustainability
- Shared infrastructure



#### Land Development

- · Road & Rail
- · Product corridors

Sewerage & drains



#### Marine Development

- Shipping channel
- · Causeway & Wharf design
- Swing basin

Stage Deliverables

Stage Deliverables

Combined









### - First of its kind in the Northern Territory

The Infrastructure Sustainability Council (ISC) is a member-based, not-for-profit peak body operating in Australia and New Zealand with the purpose of enabling sustainability outcomes in infrastructure.

- Infrastructure Sustainability (IS) rating scheme for planning, design, construction and operations of infrastructure assets
- Independent verification
- Recognition and rewarding best practice
- It's about doing things "Better"!













# Naste to By-Products outputs to Inputs Minerals processing Sainutseturen 8 28. Low emission gas processing

# Industrial ecology approach

**Shared infrastructure** 

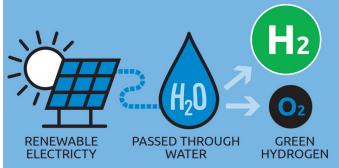






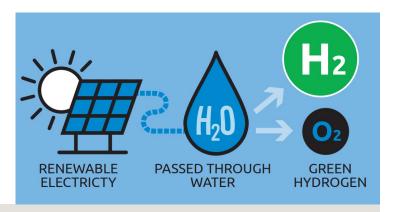


Renewable energy: a global independent power producer, is proposing to develop a green hydrogen production facility using solar energy with the capability of producing more than 80,000 tonnes of renewables-based hydrogen per annum for domestic and export potential.



#### **✓** Fortescue Future Industries (FFI)

Renewable energy: the global green energy company, is proposing to develop a green hydrogen hub, comprised of green hydrogen and green ammonia production and export facilities.



### **Tivan**

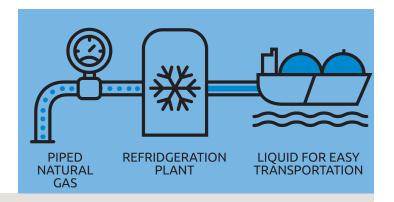
Critical minerals: is proposing to produce vanadium oxides through application of innovative downstream processing technology using feedstock sourced from Tivan's Speewah and Mount Peake Projects; titanium dioxide and iron oxide also produced as by-products. Tivan is also working to facilitate an industrialisation pathway for vanadium redox flow batteries.



Critical minerals: is proposing a lithium-ferro-phosphate (LFP) cathode manufacturing facility, which will manufacture pre cursor battery cathode materials from critical minerals, including phosphate sourced from the Wonarah Project in the Northern Territory.

### **⊘** Tamboran

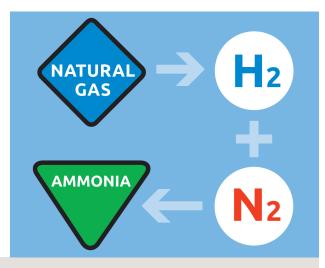
Natural gas: a lower CO2 emissions liquefied natural gas (LNG) export facility. Gas from this export facility will play an important role in the decarbonisation plans of our neighbours and trading partners in Asia and beyond.



Memorandum of Understanding

#### Larrakia Energy, KOMIPO, Progressive Green Solutions

Large Indigenous owned solar farm to power a green ammonia project.



# Key infrastructure enablers

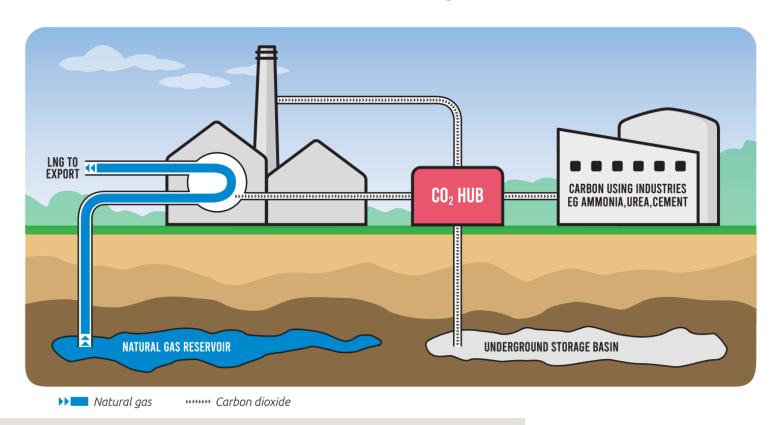
- Marine infrastructure
- Transport network upgrades
- Renewable industrial scale energy
- Workers accommodation, land supply, transport
- Carbon Capture and Storage



# **Modular Transfer**



# **Carbon Capture and Storage**



#### **Timelines**

#### Middle Arm Sustainable Development Precinct Timeline

#### MID 2022

- Precinct planning and concept design commences
- Baseline environmental studies commence
- Engagement commences to inform the draft Environmental Impact Statement

#### **LATE 2022**

 Commence Strategic Environmental Assessment (this includes the MASDP\* Program and draft Environmental Impact Statement)

#### **LATE 2023**

 Strategic Environmental Assessment submission for Commonwealth adequacy review

#### **LATE 2024**

- MASDP Program and draft Environmental Impact Statement goes on public exhibition for 60 business days (seeking feedback – for NT and Commonwealth regulators)
- Commence supplementary Environmental Impact Statement to address feedback

#### **EARLY 2025**

 Supplementary Environmental Impact Statement goes on public exhibition for 15 business days (seeking feedback – for NT and Commonwealth regulators)

#### SUBJECT TO APPROVALS

#### FROM 2026

- Proponents (including DIPL) prepare approval notice applications to construct and operate in the Precinct
- DIPL to submit approval notice applications with NT Environment Protection Authority for approval
- Construction of enabling infrastructure



\* Middle Arm Sustainable Development Precinct

 $Detailed\ design\ activities\ are\ subject\ to\ progression\ of\ the\ environmental\ approval\ processes\ and\ procurement\ strategy.$ 

# For more information

# middlearmprecinct.nt.gov.au

