

Nationally significant projects, programs and proposals

With private investment and partnership between the Australian and Northern Territory governments, industry and the community, the Territory has opportunities to grow its economy and contribute to the national agenda.

The number of nationally significant projects in the Territory is increasing with opportunities that will see future investment in renewable energy exports, critical minerals processing and export, agribusiness and tourism enterprises, and onshore and offshore gas developments.

Australian Infrastructure Plan

In 2021, Infrastructure Australia released the Australian Infrastructure Plan with a vision for *“Infrastructure that improves the sustainability of the country’s economic, social, environmental and governance settings, builds quality of life for all Australians and is resilient to shocks and emerging stresses.”* As part of the Australian Infrastructure Plan 2021, Infrastructure Australia identified 9 areas of reform to achieve the vision:

Place-based outcomes for communities	Sustainability and resilience	Industry productivity and innovation
Transport – delivering an integrated network	Energy – enabling an affordable transition to net zero	Water – prioritising safety and security
Telecommunications and digital – ensuring equity in an era of accelerating digitisation	Social infrastructure – supporting economic prosperity and quality of life	Waste – accelerating Australia’s transition to a circular economy

The Northern Territory’s Infrastructure Framework aligns with these reform agendas, which streamlines business case development to include significant Territory projects on the Australian Infrastructure Priority List.



Above: NT rail line. Credit: Department of Infrastructure, Planning and Logistics.



Above: Carpentaria Highway. Credit: Department of Infrastructure, Planning and Logistics.

Infrastructure Australia's Infrastructure Priority List Assessment Framework

Infrastructure proposals that require \$250 million or more of Australian Government funding are required to be submitted to Infrastructure Australia for assessment.

The Infrastructure Priority List Assessment Framework is designed to help proponents develop high quality infrastructure proposals to submit to Infrastructure Australia. It provides a national standard for best practice infrastructure development and explains Infrastructure Australia's requirements and process for assessing proposals.

While Infrastructure Australia uses a cost-benefit analysis, it also considers strategic, social and deliverability benefits that assists the Northern Territory where projects in regional and remote areas can be difficult to justify on economic merit alone due to population scale and a lack of data. Proposals can be assessed more holistically, which means that Infrastructure Australia can support proposals where the benefit cost ratio is less than one (subject to strength of other evidence). Consideration will be given to non-economic benefits including unquantified quality of life benefits and equity and distributional effects.

The assessment framework is divided into an overview and 4 main volumes, reflecting the 4 stages of project development and submission and is supported by detailed technical guidelines.

The 4 key stages for Northern Territory proposals are:

Stage 1 – Potential Investment Options – Clearly identify the problems seeking to be solved and the opportunities seeking to be realised

Stage 2 – Potential Investment Options – identify, analyse and filter options to respond to the problems and opportunities identified in Stage 1

Stage 3 – Investment Ready Proposal – undertake a detailed assessment of options that respond to problems and opportunities identified in Stage 1 and Stage 2, and document the business/economic case for an infrastructure proposal, demonstrating options have been assessed in detail to identify a preferred option based on merit. This includes a cost benefit analysis

Stage 4 – Post project delivery review.

The Australian Infrastructure Priority List is a list of prioritised nationally significant projects that are seeking investment. Every proposal on the priority list is expected to contribute to national productivity or to be otherwise socially beneficial within the next 15 years. The priority list provides decision makers with advice and guidance on specific infrastructure investments that will underpin Australia's continued prosperity.

The current Territory projects listed on the Priority List and their relative stages are shown in the next table. One new project was included in 2023.

Current Territory projects listed on the Infrastructure Priority List

NT Project	Submitted by	Stage 1 Early Stage Proposal	Stage 2 Investment Options	Stage 3 Investment Ready
Northern Territory freight rail and logistics capacity improvements	Territory Government	✓		
Darwin region water supply infrastructure upgrades (AROWS)	Territory Government			✓
Enabling infrastructure for developing the Beetaloo Sub-basin	Territory Government	✓		
Common user infrastructure at the Middle Arm Precinct	Territory Government		✓	
Northern Territory remote community power generation program	Territory Government	✓		
Australia-Asia Power Link	SunCable			✓

The aim of the nationally significant projects, programs and proposals section of the NT Infrastructure Plan and Pipeline is to identify and articulate the infrastructure investments that will impact the national economy or achieve national policy objectives and outcomes. Infrastructure Australia assesses all proposals against 3 criteria:

- ✓ Strategic Fit – is there a clear rationale for the proposal?
- ✓ Societal Impact – what is the value of the proposal to society and the economy?
- ✓ Deliverability – can the proposal be successfully delivered?

1 Central Arnhem Road upgrade

The Central Arnhem Road is a critical piece of infrastructure that enables social and economic development in the East Arnhem region and the Northern Territory.



Transport and Logistics



Tourism

The Central Arnhem Road is located predominantly on Aboriginal land, it spans 685 kilometres including the Central Arnhem (645 kilometres), Dhupuma Road (17.3 kilometres) and Melville Bay Road (23.2 kilometres).

The Central Arnhem Road links the Stuart Highway (national network) to Nhulunbuy and communities in East Arnhem Land, connecting over 12 000 residents and supporting multiple industries including agriculture, tourism and mining.

Nhulunbuy remains the only large regional centre in the Northern Territory not connected to the National Highway network via a sealed road. The road quality is poor, with over 568 kilometres (88%) of the road unsealed. Road users experience frequent restrictions or closures throughout the wet season from December to May each year. Although 77 kilometres (12%) is sealed, the majority of this seal is narrow and only 4 metres wide (old Beef Road standard).

Upgrading and sealing the Central Arnhem Road will further help unlock the economic potential of the region and open a range of new long term economic and social opportunities. This will be achieved through reduced transit times, improved reliability of supply chains, safer road conditions and overall improved accessibility to and in the region. It will contribute to Closing the Gap by improving access to health and educational services, facilitating social and cultural connections and reducing barriers to development, including operating costs for business.

Additional benefits to sealing the Central Arnhem Road include:

- increased liveability
- economic development
- increased tourism and trade
- land tenure
- access to gravel
- access to water
- Aboriginal employment.

Although not included on the National Infrastructure Priority List, the Australian Government committed \$180 million in its 2019-20 Budget to upgrade the Central Arnhem Road. This funding is matched by a 20% co-contribution of \$45 million from the Northern Territory Government. The Northern Territory Government also invested a further \$5 million to upgrade approximately 4 kilometres near Bulman, taking the initial funding to \$230 million to upgrade the Central Arnhem Road over 10 years.

The Australian Government committed a further \$100 million in its 2023-24 Budget, with the Territory co-contributing \$25 million. This brings the total current funding program to \$355 million.

To date, a total of 24.7 kilometres has been upgraded for sections near Beswick, Goyder and Bulman.



Above: Central Arnhem Road. Credit: Tourism NT and Aaron Avila.

2 Darwin region water supply infrastructure upgrades – Adelaide River Off-Stream Water Storage (AROWS)

As the Territory grows, having enough water for the future is critical for people, agriculture and industry. In the Darwin region we are facing challenges because our supply system is operating at its capacity.



Water

New water supply infrastructure is needed to help our population grow in the Territory and to meet our goal of becoming a \$40 billion economy by 2030. Having access to reliable water will help sustain our lifestyle, expand agribusiness and industry development and provide economic growth opportunities for the Territory.

The Adelaide River Off-stream Water Storage (AROWS) project is the Northern Territory Government's long term solution to supply more water to the Darwin region.

Located north of Lake Bennett, the project will take advantage of a naturally occurring basin next to the Adelaide River created by a ridge formation that can hold water. Two main containment barriers will be constructed at low points of the basin so that water can be stored within the basin.

As an off-stream storage, AROWS does not require infrastructure to be built across the Adelaide River, reducing its impacts compared to an in-stream dam. Adelaide River will supply AROWS with water via a controlled pump system during Darwin's wettest months. Water will then be pumped from the

AROWS basin, stored, and then piped to the new Strauss Water Treatment Plant. A new pipeline will be installed adjacent to Stuart Highway to transfer water to the Darwin region.

A rigorous 3 to 4 year planning and approvals phase is underway before a commitment can be made to construct and commission the AROWS project by 2031. The Australian Government, through the National Water Grid Fund, has committed \$18 million to support development activities for the AROWS project, such as environmental assessment and design and engineering.

The Northern Territory Government awarded a \$2.4 million tender to undertake the necessary scientific, stakeholder and regulatory processes required to deliver an Environmental Impact Statement for the project.

The Northern Territory Government is releasing a tender to market, seeking a lead engineering consultant to undertake engineering and design work, and produce a Concept Design report for the project.



3 Darwin Ship Lift Facility

The defence industry is a key stakeholder and potential future user of the ship lift facility to support naval operations in northern Australia.



Marine



Defence

The Territory Government is building the largest ship lift in Northern Australia. The Darwin Ship Lift Facility will enable the maintenance and servicing of Defence and Australian Border Force vessels, along with commercial and private vessels, including from the oil, gas and marine industries.

The Darwin Ship Lift Facility will be a common user facility that will enable vessel owners to choose and manage their own service and maintenance providers. This will enable multiple providers to operate concurrently at the facility. The common user ship lift facility will include:

- a ship lift 26 metres wide, 103 metres long
- lifting capability of 5500 tonnes
- wet berths (wharves)
- additional hardstand area for ship repair and maintenance works.

The ship lift will operate on a commercial basis. There will be a legislated open access regime to ensure fair and equal use for all customers. The independent Utilities Commission will oversee pricing and access.

The Darwin Ship Lift project has progressed early works, design and procurements. The head contract to build the ship lift has been awarded to Clough-BMD Joint Venture.

The ship lift is anticipated to be operational by early 2025 with the remaining works for the overall facility completed in 2025–26.

The Territory Government has awarded a design consultancy contract to progress the design and the construction of the ship lift, which will begin this year.

The ship lift will support more than 100 direct jobs during construction and 400 ongoing jobs as Darwin takes its place as a new maritime hub servicing Defence, Australian Border Force, and oil, gas and marine industries across the entire region.



Above: Darwin Ship Lift Facility concept. Credit: Department of Infrastructure, Planning and Logistics.

4 5 6 7 Digital industries

Connectivity in northern Australia will be faster and more reliable and resilient following the launch of Darwin's first ever direct connection to the global network of high-capacity subsea telecommunications cables.



Digital



Education



Health



Lifestyle

Vocus' Darwin-Jakarta-Singapore Cable (DJSC) system is a major leap forward in Australia's global connectivity, bridging the digital divide and unlocking new opportunities for growth, innovation and development in the Northern Territory.

The 7700 kilometres DJCS cable system was completed following deployment of a final 1000 kilometre cable, which linked Vocus' existing North-West Cable System, running from Port Hedland to Darwin, to its Perth-based Australia-Singapore Cable – resulting in the first international submarine cable connection into Darwin.

The cable was supported by a \$7.9 million investment from the Northern Territory Government as part of its Terabit Territory strategy.

The project is a significant milestone towards Darwin becoming a major digital hub for the region. It will provide substantial direct and indirect benefits for northern Australia by supporting the connectivity needs of local businesses and communities with more reliable communications. This will benefit a wide range of stakeholders from remote Indigenous communities through to resource operators in the Pilbara by providing low-latency connectivity directly into Asia and enable locals to connect on a global scale.

The cable will also enhance the resilience and security of Australia's international cable network, ensuring uninterrupted and reliable connectivity, including during natural disaster and faults on other cables. This will provide businesses, governments, and individuals with greater confidence and assurance that their communication needs will be met – even in challenging circumstances.

The launch of the Darwin-Jakarta-Singapore Cable will deliver 40 terabits per second of internet capacity between Australia and Asia and pave the way for new data centres in Darwin to put us on the map as a key digital hub.

Further large scale networks are in development.

HyperOne's \$1.5 billion data super highway will be Australia's first hyper scale national fibre network, currently proposed to incorporate 3 routes connecting Darwin to:

- Adelaide, stage 1, (through the spine of the Northern Territory)
- Brisbane (along the Barkly Highway via Townsville)
- Perth (via a subsea connection).

HyperOne's planned network, once complete, will comprise over 20 000 kilometres of new high speed fibre cable across Australia including approximately 2200 kilometres through the Territory, capable of carrying over 10 000 terabits per second.

Hawaiki Nui is a 26 000 kilometre submarine cable connecting New Zealand, Australia, Indonesia, Singapore and the United States.

With a design capacity of 240 terabits, the Spatial Division Multiplexing (SDM) cable system will include up to 20 fibre pairs and link Singapore, Jakarta, Darwin, eastern Australia, the South Island of New Zealand, Hawaii and Los Angeles. The cable is intended to be ready for service in 2027.



Inligo Network Asia Connect (ACC-1) Cable 1 is a privately funded international subsea cable connecting Darwin to South East Asia (Singapore, Medan, Jakarta, Makassar, Dili, Manado and Guam), Japan and the United States. The ACC-1 Cable has 16 fibre pairs with a combined capacity of circa 256 terabits per second. The network will support a minimum of 40x400 gigabit per second wavelengths per fibre pair. This new system will provide an alternate, low latency, high capacity transmission service path between customers in Sydney, Canberra, Melbourne, Adelaide and Darwin with connections into South East Asia and the north Pacific, all delivered on a unified optical platform across the terrestrial and subsea cable systems.

Inligo Network Unite Cable System (Unite) is a private terrestrial fibre network, which will provide additional links:

- Phase 1 is a new link between Darwin and Adelaide
- Phase 2 will extend links from Adelaide to Melbourne, Canberra and Sydney
- Possible subsequent phases are a branch connecting to Papua New Guinea (with potential opportunities to connect Nhulunbuy and Groote Eylandt).

Unite will connect directly into Inligo's ACC-1 Cable system.

The total integration between the international ACC-1 Cable system and the domestic Unite terrestrial system will provide customers seamless connectivity between Darwin, South East Asia, Japan and the United States while also enabling connectivity to the southern capitals, all on the one, fully integrated platform. This functionality will provide Darwin based data centre operators and their customers the shortest routes available into South East Asia and southern Australia, opening up new industries supported by the leading edge connectivity provided by ACC-1 and Unite.

NEXTDC will construct its \$80 million premium grade (D1) data centre in the Darwin CBD. This centre is the key enabler of the Territory Government's Digital Territory Strategy that is aimed at positioning Darwin as a highly competitive location to maximise growth and investment in the local digital economy.

DCI is developing a TIER-Ready III, secure cloud edge data centre, called DRW01, able to support an IT load of up to 10 megawatt with the initial development on a 2.7 hectare site in the Darwin, Palmerston and Litchfield region with an option to expand to 5 hectares. DCI recognises the Northern Territory's position as the digital gateway to Australia's forward-facing defence and space industries, as well as Asia to the north. Darwin is a strategic location in Australia and has already created a digital ecosystem with key elements such as a renewable energy, international and Australia-wide network connectivity.

“All digital highways lead into or through Darwin and that will equal jobs of the future, while growing our digital industry. Driving digital investment in the Territory will open the door to new opportunities for advanced manufacturing, data-centres and cloud-based computing services for Territorians and investors.”



Above: Wutunugurra communications tower. Credit: Telstra.

8 Enabling infrastructure for developing the Beetaloo Sub-basin

The Beetaloo Sub-basin is one of the most prospective areas for shale gas and liquids in Australia.



Resources



Transport and Logistics

Beetaloo onshore gas has the potential to be one of the lowest cost gas sources in the country. It could reduce Australia's dependency on petroleum product imports, facilitate downstream processing and manufacturing industries in the Northern Territory and potentially support energy security and provide gas to the east coast gas market.

Developing the Beetaloo basin will require public and private investment in new infrastructure to get gas to market. This will include pipelines and additional compression facilities to increase existing pipeline capacity, waste and waste-water treatment facilities, upgrades to roads and an aerodrome.

Supporting infrastructure will also include road, rail aviation and utility infrastructure that could also benefit other users in the region.

We have over 500 trillion cubic feet of gas in place in one layer of the Beetaloo Sub-basin, which is currently being appraised.

The Beetaloo Sub-basin is situated in a very remote and sparsely populated area of the Territory which has a very low standard of infrastructure, with little capacity to support new industry development and provide reliable supply chains to market.

Early infrastructure investment is required to capture the potential for the Beetaloo Sub-basin to be a new globally significant gas resource. This infrastructure investment will target supporting a multi-user environment, not only for the development of the basin but also for potential downstream manufacturing in northern Australia and other industries in the Territory.

The public road network within the Beetaloo Sub-basin consists of the Stuart Highway, Carpentaria Highway, Buchanan Highway, Western Creek Road and Gorrie Dry Creek Road.

The Australian and Northern Territory governments have jointly committed \$367 million to plan and deliver priority road upgrades throughout the Beetaloo Sub-basin. The road upgrade projects will provide crucial enabling infrastructure for the growing gas sector and support existing road users, industry and communities by providing more reliable transport and freight links. This in turn will improve safety and travel times, reduce vehicle operating costs and improve flood immunity to increase year round access.

The Northern Territory Government is currently upgrading the Carpentaria Highway, which will be a key road that services the Beetaloo Sub-basin as it moves through exploration, appraisal and development.

Investment in road upgrades will unlock significant job creation and economic potential for the Northern Territory.



Above: Workers camp for Carpentaria Highway.
Credit: Exact Contracting.

○ Marine Industry Park

The Marine Industry Park is strategically located on premium waterfront land at East Arm with connections to road, rail and sea transport and other supporting infrastructure.



Land



Marine

The Marine Industry Park is 16 kilometres by road from Darwin CBD and adjoins East Arm Wharf. It provides opportunities to enhance support for the marine and offshore industries, complementing services already available within the region.

Centrally positioned on Australia's northern coastline, the Marine Industry Park is the only significant vessel servicing point between Cairns in Queensland and Perth in Western Australia. Located within Darwin's deep water harbour, the Marine Industry Park provides a new opportunity to effectively service vessels operating across northern Australia and the Indo-Pacific region.

The first stage of the Marine Industry Park included an all tide barge ramp that is an accredited first point of entry for the Darwin Port. This is supported by 9 hectares of secured hardstand with 24-hour access for storage and fabrication activities. The barge ramp and hardstand are available for use on a commercial basis. Stage 2 of the Marine Industry Park will comprise a further 4 hectares of land for marine maintenance workshops and supporting services.

Establishing vessel maintenance workshops on serviced lots within the Marine Industry Park is an essential component to fulfil the economic activity and job creation opportunities expected to be enabled by the Darwin Ship Lift Facility.

The Darwin Ship Lift Facility will provide the capability to undertake major maintenance of Defence, Australian Border Force and commercial vessels, including from the oil, gas and marine sectors.

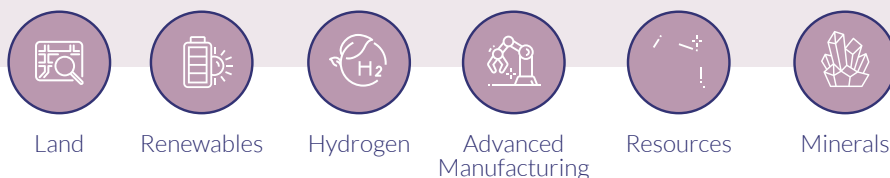
Once operational, the Darwin Ship Lift Facility will be a catalyst for developing a marine maintenance and servicing industry. It will create 100 direct jobs during construction and it is anticipated approximately 400 ongoing full time jobs will be created in the marine services industry during the operational phase.



Above: Stage 1 Marine Industry Park.

10 11 12 13 14 Middle Arm Sustainable Development Precinct

The Middle Arm Sustainable Development Precinct will provide a strategic, sustainable and high-tech blueprint for the future of Australian industrial hubs.



The Middle Arm Sustainable Development Precinct (the Precinct) is strategically located at the intersection of key existing enabling elements such as water, gas, power, rail and road infrastructure, with potential for deep water export port facilities.

It is home to a globally significant liquefied natural gas (LNG) export hub with the Darwin LNG and Ichthys LNG projects supplying over 10% of Japan’s annual global gas imports.

The Precinct represents an ambitious and transformative project aimed at establishing a globally competitive and sustainable industrial precinct. With a primary focus on low emission hydrocarbons, renewable hydrogen, carbon capture, use and storage, advanced manufacturing and minerals processing, this visionary endeavour is aligned with the Australian Government’s commitments to sustainability, decarbonisation and fostering economic growth.

Sustainable outcomes and protecting Darwin Harbour’s environmental values are at the core of planning for the Precinct.

The essential elements and opportunities of a sustainable development precinct as it relates to Middle Arm include:

- maximising renewable energy use
- maximising economic outcomes while minimising environmental and social impacts
- efficient water use including reuse where possible

- circular economy principles including reusing waste streams (such as using waste as a feedstock) and carbon capture
- efficient use of infrastructure.

The Northern Territory Government is committed to meaningful engagement, led by Traditional Owners and in consultation with all stakeholders, to inform the design, delivery and management of the Precinct, ensuring preservation of values associated with the site and providing the potential for economic opportunities into the future.

The Strategic Environmental Assessment of the Precinct is a first for the Northern Territory and is aimed to deliver certainty for both business and community, outlining the types of development activity approved to occur, and the conditions under which they may operate. The community has an opportunity to provide feedback to inform decisions on proposed activities throughout the life of the project, including the next formal feedback point, which is the public exhibition of the draft Environmental Impact Statement (EIS).

In 2023, the Common User Infrastructure at the Middle Arm Precinct Stage 2 Business Case was provided to and accepted by Infrastructure Australia. Work is underway to develop the Stage 3 Business Case.

The Precinct is a key economic enabler that leverages the Northern Territory’s significant endowment of natural resources and strategic minerals. Growth in the downstream gas processing industry in Darwin will bring broader and deeper benefits for the national economy and contribute to Australia’s energy security.



The Northern Territory can use these abundant resources to manufacture on an international scale, competing with other countries for both high volume and high value commodity markets.

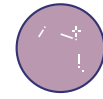
The Precinct will also provide the opportunity to capitalise on the Northern Territory's proximity to large Asian markets.

The Precinct is attracting significant interest and will enable the development of an interconnected hydrogen industry and utilise carbon capture to accelerate low emission industry development. In June 2023, the Northern Territory Government took the next big step towards developing the Precinct as a new clean energy, investment and jobs powerhouse.

To give interested companies certainty as they develop projects at the Precinct the Territory Government provided 5 proponents a commitment 'not to deal' over specific parcels of land. These commitments mean that their preferred sites in the Precinct will be set aside for up to 12 months to provide each proponent confidence and certainty to continue developing their proposals.

These companies will now progress their facility designs, engineering work and pre-feasibility studies and environmental approvals. They will be required to comply with all conditions set by the NT Environment Protection Authority as part of the Strategic Environmental Assessment process for the Precinct which is currently underway.

10 Avenira Limited's Lithium Cathode Battery Manufacturing Project



Resources

Advanced
Manufacturing

In September 2023, Avenira executed 2 agreements with its technology partner Advanced Lithium Electrochemistry Ltd ('ALEEES') granting Avenira the right to use ALEEES intellectual property for the manufacture and distribution of Lithium Ferro Phosphate (LFP) active cathode material.

These formal agreements follow the signing of a non-binding memorandum of understanding with the Northern Territory Government and ALEEES in September 2022 to work together to develop and operate the Territory's first battery cathode manufacturing project at the Middle Arm Sustainable Development Precinct.

ALEEES is a global leading supplier of high-end cathode materials and one of only 2 producers of battery-grade lithium iron-phosphate (LFP) cathode active material outside of mainland China. They have partnered with Avenira to develop a new facility to meet expected orders from electric vehicle and stationary storage battery suppliers.

In June 2023, Avenira received a commitment to a 9 hectare site at the Middle Arm Sustainable Development Precinct to develop and operate the Territory's first battery cathode manufacturing project. Avenira consider the precinct well suited

to LFP manufacturing with proximity to key logistics infrastructure for access to raw materials and to planned renewables for low emission energy.

The LFP plant will initially import all feedstock to produce an initial 10 000 tonnes, increasing to 30 000 tonnes per annum (tpa) of precursor battery cathode material exported to battery cell manufacturers in Japan, Korea and Malaysia. It is estimated the LFP plant will initially create 100 jobs, growing to 300 jobs and generating up to \$1.5 billion average annual revenue to the Territory economy.

The proposed second stage of the project will increase capacity to 100 000 tpa and include a plant to convert yellow phosphorous metal to thermal phosphoric acid. The yellow phosphorous metal will be sourced exclusively from Avenira's Wonarah phosphate project once upstream development is complete.

11 Fortescue Green Hydrogen Hub



Renewables



Hydrogen

Fortescue is a global metals and green energy company focused on developing a green hydrogen hub, comprised of green hydrogen and green ammonia production and export facilities at the Middle Arm Sustainable Development Precinct.

Green hydrogen is a zero-carbon fuel that, when used, produces primarily water. It is a practical and implementable solution that can help revolutionise the way we power our planet and help to decarbonise heavy industry and create jobs globally.

Fortescue is planning to use green hydrogen to power hydrogen fuel-cell electric vehicles and to decarbonise the company's mining fleet including light vehicles, trucks, trains and drill rigs.

Green hydrogen can also be used for a number of other purposes, including to create synthetic aviation fuels to replace aviation kerosene or as hydrogen in fuel-cells, replace fossil fuel based hydrogen in industrial processes, make it into green ammonia for use as fuel for shipping and rail and to create green fertilisers for the agriculture industry.

Tamboran is an ASX listed (TBN) natural gas company with a vision of supporting the energy transition in Australia and the Asia-Pacific region by developing low reservoir CO₂ unconventional gas resources in the Northern Territory.

Tamboran's pure focus is the Beetaloo/McArthur Basin in the Northern Territory. Tamboran is one of the largest acreage holders in the Territory with an estimated 1.9 million net prospective acres in the Beetaloo Sub-basin, held through 100% owned properties and two joint ventures – one with Santos and the other with Falcon Oil & Gas and Daly Waters Energy LP (Sheffield).

The Beetaloo Sub-basin is located approximately 600 kilometres south of Darwin, which has the potential to grow into a major industrial hub linked to the Beetaloo via key infrastructure such as roads, gas pipelines and rail.

Tamboran and its joint venture partners are proposing a staged development of the Beetaloo Sub-basin. Stage 1 will involve supplying natural gas into the NT gas market, with first gas expected in early 2026. Stage 2 will supply gas into Australia's east coast gas market, and Stage 3 will deliver LNG to our regional trading partners via a new LNG export facility located in Darwin.

In May 2023, the Northern Territory Government provided Tamboran 12 months exclusivity over 170 hectares (420 acres) of land within the Middle Arm Sustainable Development Precinct (Middle Arm) for a proposed LNG development, Northern Territory LNG (NTLNG).

Gas from Tamboran's proposed NTLNG facility will play an important role in the decarbonisation plans of our trading partners in Asia and beyond.

To support Tamboran's vision to developing the Beetaloo Basin, the company has entered into several strategic partnerships and agreements with major international energy corporations and infrastructure companies.

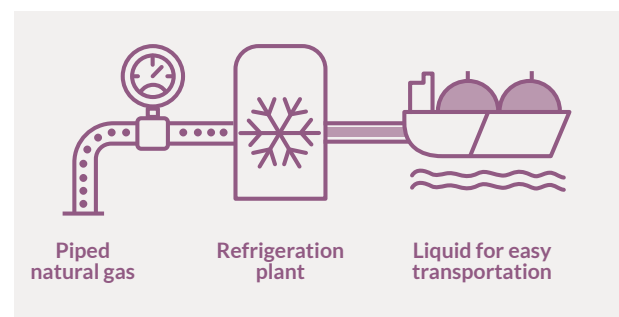
- In April 2023, Tamboran welcomed the arrival of Helmerich & Payne's super-spec FlexRig® Flex Rig 3 in Australia from the United States and the new rig has already delivered significant improvements in drilling efficiency. H&P has invested directly into Tamboran and is a significant shareholder. The rig allows Tamboran to drill longer horizontal sections within the

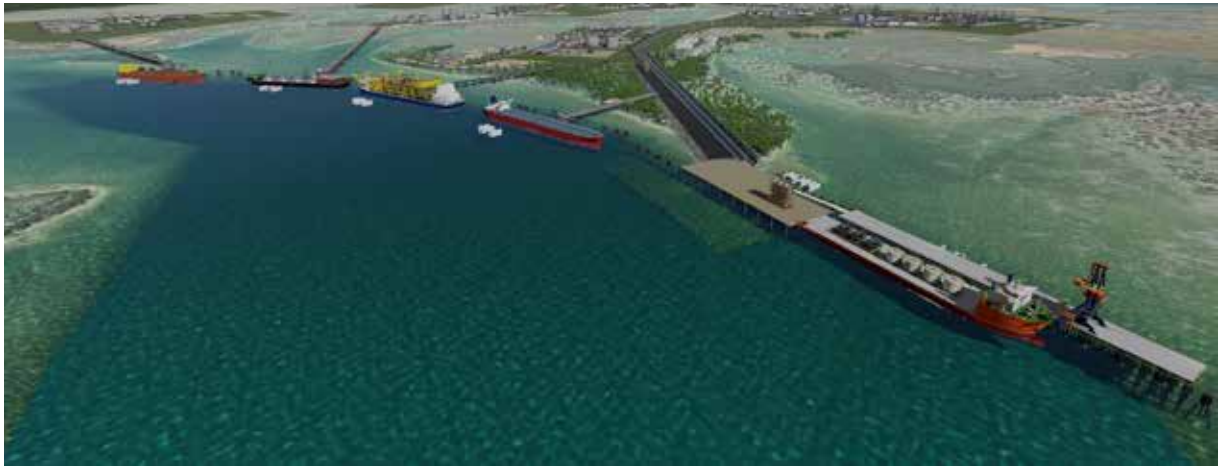
shale, which is expected to reduce Tamboran's environmental footprint in the basin.

- Tamboran has selected APA Group as its preferred transmission pipeline partner for its Beetaloo Sub-basin development, with the intent of connecting the Beetaloo to Australia's east coast gas market and the proposed NTLNG development.
- Tamboran has signed six non-binding Letters of Intent with Australia's largest gas and energy retailers for 220 – 320 petajoules per annum for up to 10 – 15 years into Australia's east coast gas market.
- Tamboran has entered into two non-binding memorandums of understanding with BP Singapore and Shell Eastern Trading regarding the potential purchase of 4.4 million tons of LNG from NTLNG. Tamboran is targeting formal execution of the LNG Sale and Purchase Agreements in 2025.

Important to the overall integrated development, Tamboran aspires to deliver a Net Zero Scope 1 and 2 project at the commencement of commercial production through the integration of renewable energy, carbon capture and storage, and carbon offsets.

Low Co₂ energy transition





Above: Middle Arm Sustainable Development Precinct concept. Credit: Department of Infrastructure, Planning and Logistics.

13 Tivan Limited



Resources



Minerals



Advanced
Manufacturing



Renewables



Hydrogen

In January 2023, Tivan Limited changed its name from TNG Limited and has since announced it is relocating its corporate headquarters to Darwin.

In February 2023, Tivan acquired the Speewah Vanadium Titanium-Iron Project near Wyndham, WA, and announced its plans to construct the TIVAN Processing Facility at the Precinct. Tivan is proposing to produce vanadium oxides at Speewah in support of the development of a large-scale renewable value chain across northern Australia.

As part of its revised development pathway, Tivan is committed to 2 near term initiatives in Darwin, each involving advanced renewables technologies:

A large-scale Vanadium Electrolyte Facility, with phased-in capacity of 500 megawatt-hours per year (MWh/yr), to be located at the Middle Arm Sustainable Development Precinct. This initiative was announced on 31 October 2023, in conjunction with an agreement with Larrakia Energy to provide up to 30MW of solar energy to power the facility.

A Pilot Plant, developed in conjunction with CSIRO, for the TIVAN+ critical minerals processing technology, provisionally located at East Arm, in cooperation with Investment Territory and Land Development Corporation.

The TIVAN+ technology is capable of processing hard rock vanadium ore bodies to produce 3 commercial grade products: vanadium, titanium and iron.

In April 2023, Tivan entered into a letter of intent with SunCable for the potential provision of 200-300MW of dispatchable renewable energy to the planned TIVAN Processing Facility.

In May 2023, Tivan entered into a memorandum of understanding with Charles Darwin University to further collaborative pathways in critical minerals and renewable energy.

In October 2023, Tivan retained Hatch for an engineering review of its development pathway, in advance of an expected pre-feasibility study to be completed in 2024.

Tivan is also actively exploring the Sandover Project, located near Ti Tree in Central Australia. In October 2023 Tivan announced that targets had been identified in copper and lithium, confirming a next phase of exploration, ahead of a potential drilling program in 2024.

14 Total Eren Australia H2



Resources



Electricity



Renewables



Hydrogen

Total Eren Australia H2 (TEH2) is a joint venture between Total Energies and Eren Groupe focused on the development, investment and ownership of global renewable hydrogen (H2) projects. Total Energies is a leading multi-energy company with a presence across 130 countries and revenue exceeding USD \$263 billion in 2022.

Eren Groupe is dedicated to natural resources efficiency with a strong track record in renewable energy development and investment. Since 2020, TEH2 launched pioneering green hydrogen projects in North Africa, Latin America and Australia.

TEH2 is developing the Darwin H2 Hub, which is a proposed renewable green hydrogen production facility located at the Middle Arm Sustainable Development Precinct with an associated solar farm and transmission assets. The initiative will produce approximately 75 000 tonnes of green hydrogen a year and other decarbonised products such as green ammonia and e-methanol. Development commenced in 2021 and the Darwin H2 Hub will contribute to the Territory's energy transition and enable domestic and international companies to move towards sustainability and decarbonisation.

The Northern Territory Government signed a Memorandum of Understanding in August 2022 to fast-track the proposed Darwin H2 Hub. Significant environmental and technical studies are currently underway.

TEH2 anticipates that the Darwin H2 Hub will deliver approximately 800 jobs during construction and 175 ongoing operational jobs.

TEH2 identified early in the process that the Precinct is a suitable location for hydrogen processing and export with the company values aligning with the vision for the Precinct.

Carbon capture, utilisation and storage at Middle Arm

Carbon capture, utilisation and storage (CCUS) is a proven process that captures carbon dioxide emissions, preventing entry into the atmosphere. CCUS is a critical emissions reduction technology that supports clean energy transitions.

Carbon captured and transported to the proposed hub at Middle Arm will either be stored or used. Storage at the Precinct would entail carbon being sent via a pipeline to geological storage outside of Darwin.

There will also be opportunity for industries to utilise carbon captured at Middle Arm to produce other valuable products. An example of carbon being utilised, or reused, is to make urea, a common fertiliser.

Another example is cement where manufacturers are developing technologies to inject carbon into their manufacturing process. This improves product performance and offsets emissions.

15 National Aboriginal Art Gallery

The National Aboriginal Art Gallery project is an exciting and transformative endeavour to create a world-class destination celebrating the artistic traditions and cultural expressions of Australia's Aboriginal and Torres Strait Islander peoples. It will be a space that honours the stories and truth-telling of First Nations people nationally.



Tourism



Lifestyle

The National Aboriginal Art Gallery continues to progress, with the Territory Government acquiring Anzac Oval and the design well advanced. The gallery is part of the Anzac Hill precinct, which includes a new Tourism Central Australia visitor information centre, realigning Schwarz Crescent and landscaping, featuring the Kwatye (water) play initiative.

The Northern Territory Government has committed approximately \$69 million to deliver the precinct, and the Australian Government has committed a further \$80 million to support the gallery.

The gallery will be First Nations led and governed, and include:

- expansive public spaces
- public amphitheatre green space
- healing gardens protecting sacred sites
- Kwatye (water) play

- cultural welcoming circle
- an event space and café
- a 4 level atrium.

The gallery is a project of national significance and will position Central Australia as a key destination for cultural tourism. Construction is expected to commence in 2024 and be completed in 2027.

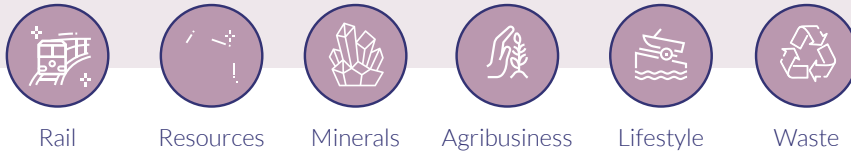
The National Aboriginal Art Gallery will generate economic benefits for the community with up to 260 full time jobs created during construction and once operational, is expected to attract visitors from around Australia and the world.



Above: Concept of National Aboriginal Art Gallery. Credit: BVN Architectural and, Susan Dugdale & Associates.

○ Northern Territory freight rail and logistics capacity improvements (Regional logistics hubs)

Logistics and supply chains are fundamental to supporting the viability of projects key to the Northern Territory’s economic growth. They also have significant employment and investment impacts in local communities.



Community resilience and social benefits will result from improved local supply chains for consumer and essential goods. This will support the living standards in remote and regional towns needed to support growth and the delivery of private projects.

Improving rail efficiency and intermodal capacity in supply chains will support the NT Government’s objective to achieve a \$40 billion economy by 2030 by developing mining, agriculture and energy projects.

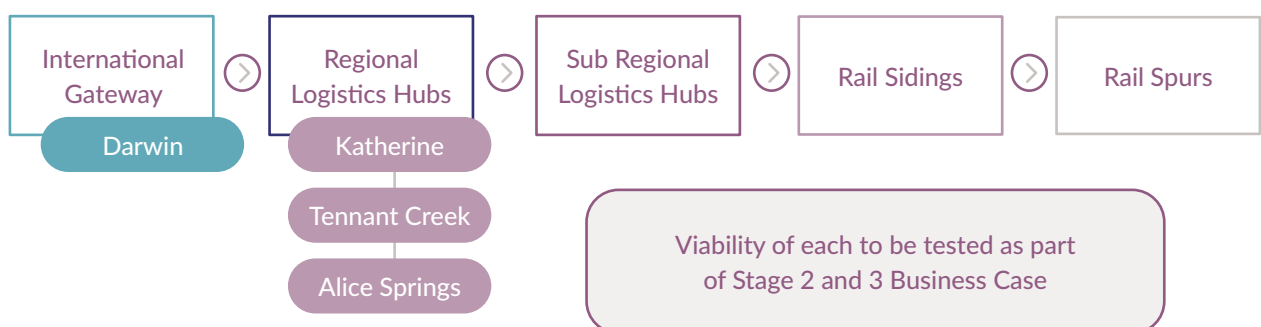
The Northern Territory Government is implementing actions to ensure logistics support rather than constrain industry and economic growth.

The Northern Territory Government has established a solid evidence base of demand for freight and supply chain capacity across agribusiness, minerals and energy, manufacturing, defence, digital and social sectors and is working with the Australian Government and the private sector to meet this demand.

Increases in capacity of port, rail, road, storage and warehousing will be needed to facilitate the growing freight task.

In the Northern Territory’s larger communities across the main freight corridor, regional logistics hubs will be developed to consolidate, store and transfer freight between road and rail networks between project and port. These regional logistics hubs will include:

- community distribution facilities to increase resilience in supply chains to distribute food and essential supplies across remote Northern Territory
- skills training facilities to provide real employment opportunities in these communities
- waste recycling facilities, which are essential to enabling a circular economy across the Northern Territory
- strategic staging facilities to enable laydown areas at strategic sites and more capacity and flexibility across the National Land Transport Network
- fuel facilities to enable hub and spoke logistics arrangements to reduce constraints on the road transport industry.



These regional logistics hubs will create the focal points for an increasingly efficient and resilient supply chain to foster a range of benefits.

- **Economy:** every project and development across the Northern Territory relies on transport of goods for construction, production and trade. The time and cost efficiency of this transport flows through to every sector of the economy.
- **Community:** a resilient transport network results in less frequent and less impactful disruption of supply chains. Increasing the proportion of freight that can travel by rail reduces the interface between private road users and heavy freight vehicles.
- **Environment:** reducing the distance freight travels and utilising the optimal freight mode contributes to reducing greenhouse gas emissions.

The Australian Government committed \$440 million in October 2022 in planned equity to support the delivery of the network of regional logistics hubs. The Northern Territory and Australian governments recognise the significant opportunity to grow the freight catchment area and increase the proportion of freight transported internationally via Darwin.

The Northern Territory freight rail and logistics capacity improvements Early Stage Proposal (Stage 1) Business Case was provided to and accepted by Infrastructure Australia in 2023 for inclusion on the Australian Infrastructure Priority List. Work is underway to develop the Potential Investment Options (Stage 2) Business Case.

The estimated total investment proposed from projects in mining, minerals and energy industries across the Northern Territory is over \$38 billion. This investment is estimated to support more than 6 000 construction jobs. Much of the investment and employment increase will occur in remote and very remote regions with higher proportions of First Nations people.



Above: Railway crossing. Credit: Department of Infrastructure, Planning and Logistics.

NORTHERN TERRITORY REGIONAL LOGISTICS HUBS

KEY

- Regional Logistics Hubs
- Sub Regional Logistics Hubs
- Rail Sidings
- Rail Spurs
- Highways
- - - - - Rail Line
- · - · - · Rail Spur being considered

Disclaimer: This map is to be used as a guide only.



Northern Territory remote community power generation program



The Northern Territory Government, through the Power and Water Corporation's not-for-profit subsidiary Indigenous Essential Services (IES), provides electricity to 72 remote communities and 66 outstations across the Northern Territory.



Renewables



Solar



Lifestyle

Power and Water delivers these services through the Department of Territory Families, Housing and Communities on behalf of the Northern Territory Government. This network includes 9093 customer connections across 51 power stations.

Diesel engines are the main technology used to generate electricity for regional and remote communities, with about 25 million litres of diesel used each year.

With the operating costs of transporting diesel to remote communities continuing to increase, the Office of Sustainable Energy is working on strategies to deliver 70% renewable energy penetration to all 72 remote communities.

As the largest isolated off-grid solar program in remote communities, the Solar Energy Transformation Program (SETuP) is a world-first.

Delivery of this strategy is also an action under the Territory Government's Climate Change Response and a recommendation of the Territory Economic Reconstruction Commission to transition Indigenous Essential Service communities to renewable-based systems by 2030.

The strategy builds on the success of the Solar Energy Transformation Program (SETuP). The \$60 million program is co-funded by the Territory Government and the Australian Renewable Energy Agency (ARENA) and delivered 10 megawatts of solar generation to 25 remote communities.

Planning activities are underway to facilitate external investment in renewable remote power systems in communities to maximise opportunities for local industries, create jobs for Territorians and strengthen local skills and expertise.

The Northern Territory Government is progressing detailed analysis of each community to map the optimal renewables development pathway, considering existing energy assets, community aspirations, electricity demand profiles and forecast growth.

In addition to the community focused detailed analysis, the project will identify available land for solar development in each community. It will also include pilot projects and studies to facilitate greater levels of distributed energy supplies and emerging technologies, such as hydrogen and microgrids.

SunCable – the Australia-Asia Power Link



SunCable is developing the Australia-Asia Power Link (AAPowerLink), a world-leading project harnessing Australia’s abundant land and solar energy. AAPowerLink will be one of the world’s largest solar farms and battery systems, which will harness solar energy from the Barkly region in the Northern Territory, for 24/7 dispatch to Darwin and Singapore via a 5000 kilometre high voltage direct current (HVDC) transmission system.



Renewables



Solar

SunCable’s energy projects will position the Northern Territory as a world leader in intercontinental transmission of renewable electricity. The AAPowerLink will stimulate the growth of a renewable infrastructure industry in the Northern Territory.

The AAPowerLink will initially provide 800 megawatts (MW) of electrical capacity to the Darwin region and will facilitate the electrification of new and existing industries, supporting large-scale economic development, while reducing greenhouse gas emissions.

The AAPowerLink is a \$35 billion project that will deliver significant strategic, economic and social benefits to the regions in which it will operate.

It has the potential to create thousands of jobs, opportunities for local businesses and suppliers, as well as innovation and investment in Australia, Singapore and Indonesia.

Benefits include an estimated \$8 billion in investment in Australia during the 4 year construction period, with most of that spent in the Northern Territory and an estimated 1750 direct construction jobs and approximately 350 long term operational jobs for the 70 year life of the project.

19 Tanami Road upgrade

Reliable road connections support the movement of freight for existing and emerging economic activities such as mining, agriculture, tourism and defence. For remote parts of the Northern Territory, reliable road connections also improve a range of social indicators such as employment, health and education outcomes.



Resources



Agribusiness



Lifestyle



Tourism



Defence

The Tanami Road is a 1014 kilometre direct link from Halls Creek, Western Australia to the north of Alice Springs in the Northern Territory. The road condition along the 703 kilometre Northern Territory section of Tanami Road, from the Stuart Highway turn off 19 kilometres north of Alice Springs to the Western Australia border, comprises 330 kilometres of sealed and 373 kilometres of unsealed road.

Under the current conditions, the Tanami Road is closed or restricted to all traffic for long periods during the wet season – up to 60 days per year in some sections. This limits mobility and access to communities along the Tanami Road and prevents inter-regional tourist and freight traffic from using the Tanami Road all year round.

Sections of the road are closed to heavy vehicle traffic for longer periods. During these seasonal events, there are safety issues for road users due to poor road geometry, excessive corrugations and poor visibility as a result of dust.




















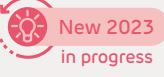
Although not included on the National Infrastructure Priority List, the Australian Government committed to upgrade the Tanami Road as it is strategically important to the Northern Territory and Western Australia. It is also recognised as being nationally significant, due to its importance to developing northern Australia. The Australian and Northern Territory governments have committed \$262.5 million on an 80:20 co-funding basis to upgrade the Tanami Road within the Northern Territory under the current Roads of Strategic Importance (Alice Springs to Halls Creek) program. The Western Australian Government has also received funding for its portion of the road.

The October 2022 Federal Budget committed \$350 million of additional Australian Government funding on the same 80:20 basis, to continue upgrading the Tanami Road and the Central Arnhem Road. The funding split allocates \$250 million to the Tanami Road and \$100 million to the Central Arnhem Road.



Implementation pathway

The suggested implementation pathway are actions that can be taken to respond to anticipated economic and population growth challenges and opportunities.

Implementation pathway	Prioritisation action	Progress
Nationally significant projects, programs and proposals		
Progress Stage 2 submission (Potential Investment Options) to Infrastructure Australia for enabling infrastructure to develop the Beetaloo Sub-basin (as all road upgrades are now funded, this will be for the remaining infrastructure required)	 Reform	 In progress
Progress Stage 2 submission (Potential Investment Options) to Infrastructure Australia for common user infrastructure at the Middle Arm Sustainable Development Precinct	 Reform	 Achieved
Progress Stage 3 submission (Investment Ready Proposal) to Infrastructure Australia for common user infrastructure at the Middle Arm Sustainable Development Precinct	 Reform	 In progress
Submit Stage 1 submission (Early Stage Proposal) to Infrastructure Australia for Northern Territory freight rail and logistics capacity improvements	 Reform	 Achieved
Progress Stage 2 submission (Potential Investment Options) and Stage 3 submission (Investment Ready Proposal) to Infrastructure Australia for Northern Territory freight rail and logistics capacity improvements	 Reform	 In progress
Submit Stage 1 submission (Early Stage Proposal) to Infrastructure Australia for the Marine Industry Park	 Reform	 In progress
Submit Stage 1 submission (Early Stage Proposal) to Infrastructure Australia for Central Arnhem Road	 Reform	 In progress
Remove and strengthen the Infrastructure Australia Priority List proposal "Enabling infrastructure and essential services for remote Northern Territory communities in Wadeye, Tiwi Islands, Jabiru"	 Reform	 Achieved
Accelerate planning for and delivery of residential, commercial and industrial land	 Reform	 In progress
Support job creation and business growth across the economy through developing waste recycling facilities in the network of regional logistics hubs, reducing the reliance on interstate waste processing and waste going to landfill	 New	 New 2023 in progress

Territory-wide significant projects, programs and proposals

The Northern Territory holds the heart of the nation and is linked by a central spine to our northern capital of Darwin at the top of Australia. With a view to our Asian neighbours and bordered by 6 states, the Territory is in an enviable economic and environmental position.

The Territory's location and natural assets are our biggest opportunities as well as our biggest challenges.

The Territory is seen as one region but its size, physical remoteness, small population and 2 starkly different climates create a variety of challenges and opportunities.

Its natural landscapes are formed from tropical wet and dry seasons in the north and from winter through to summer in its desert centre.

The Stuart Highway and Adelaide to Darwin Railway link our centres from Alice Springs in the south to Tennant Creek, Pine Creek and Katherine in the north. Darwin sits on the edge of the Arafura Sea while our other coastal centre Nhulunbuy lies on the East Arnhem coast.

The Territory is one of the most linguistically diverse areas of the world with more than 100 different Aboriginal languages and dialects spoken, including Arrernte in Central Australia, Yolngu in Arnhem Land and Tiwi in Tiwi Islands near the Timor Sea, to name a few.

Each of the Territory's regions are distinct, including connection to travel and transport routes, local industry opportunities, infrastructure challenges, climate and environment, the people and areas they service, their natural landscape and man-made attractions.

Sustainable workforces, biosecurity, digital connectivity, water security, land tenure, housing availability and transport infrastructure gaps are common challenges across our regions.

Our opportunities include the history and culture embedded in our remote areas and regions. It is in the regions where population growth, improved lifestyle and culture and economic opportunity will spread as major projects create jobs and local business growth.

Our regions are the Territory's growth hubs and include:

- Darwin, Palmerston and Litchfield
- Top End
- Big Rivers
- Central Australia
- Barkly
- East Arnhem

This Plan and Pipeline explores the strengths, gaps and growth opportunities for our regions including major industries and growth sectors, challenges and opportunities and key infrastructure priorities.

Investment portfolio

The Territory-wide total investment portfolio has a direct impact on economic and population growth. It is important to understand the magnitude of economic and population growth to inform the enabling infrastructure plan.

Infrastructure NT has worked closely with Investment Territory to determine the total investment portfolio. This analysis determined the following total investments anticipated for the Territory-wide region, subsequent jobs, accommodation needs and population growth.

Analysis is based on Investment Territory 2022–2023 Progress and Outlook: May 2023



Note 1: Includes direct and indirect where provided by proponents

Note 2: Includes direct and indirect where provided by proponents in the NT only

Note 3: Based on 2.6 multiplier (ABS average persons per household NT regional)

Note: Numbers are approximate over 10 years. Further refined analysis is ongoing.

Aurizon – Railway service expansion 20

Aurizon, an Australian company with more than 150 years of rail experience, is the nation's largest rail freight business and transports about 250 million tonnes for customers each year. Aurizon brings its scale and capability to the Northern Territory and looks forward to contributing to the NT Government's goal of building a \$40 billion economy by 2030.

In mid-2022, Aurizon invested \$1.4 billion to acquire the One Rail business in the Northern Territory and South Australia, including the Tarcoola to Darwin rail corridor. This investment recognises the strategic value and potential of the business in serving rapidly growing markets for resources, agribusiness, renewable energy and general freight.

The 2240-kilometre Tarcoola to Darwin railway is a nationally significant corridor with direct connection to the Port of Darwin, the closest port to Australia's largest trading partners in Asia. Aurizon is committed to improving the efficiency and capacity of this corridor, with targeted investment to benefit existing customers and to boost the viability of adjacent agricultural, mineral and energy projects under development.

In the first 12 months of operation, Aurizon has committed investment of more than \$50 million in new assets for the region, as well as preparing plans to increase the number of services along the railway as we respond to increasing customer demand. This also includes the potential opportunity to construct additional passing loops on the rail corridor and to build additional capacity in the Darwin/Berrimah rail terminal at the port.

As well as supporting customer growth and development of regional projects, these investments have the flow-on benefits of increasing local employment and supporting local communities and business. More than 80% of Aurizon's nationwide workforce of 5800 employees live and work in regional communities.









Above: NT railway near Alice Springs. Credit: Department of Infrastructure, Planning and Logistics.

Enabling infrastructure plan

The enabling infrastructure plan for across the Territory lists the infrastructure proposals that are not yet funded, are in the planning phase and have been identified as enabling an outcome.

Proposals listed respond to economic and/or population growth or address the cross cutting objectives in the NT Infrastructure Strategy 2022 – 2030.

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Access road upgrades to barge landings and all-weather aerodromes	50	Improve all weather air and sea access to support accessibility, visitor growth and community safety	0-15
Across the Territory upgrade and new bores	•	Support improved water management	0-10
Aerodrome and airstrip upgrades	30	Support connectivity and improve all weather access to improve community safety, accessibility and support future growth	0-15
AFLNT facilities upgrade to support growth in girls and womens football	1	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	0-5
Barge landing upgrades	150	Support economic development by improving all weather access and goods handling facilities	0-15
Football ovals install lighting	4	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	0-5
Logistics Network continued expansion	•	Enable economic development by improving supply chains and transport	0-10
Mobile and/or broadband services	33	Enable connectivity and create digital opportunities	0-10
National highways bridge upgrades	40	Improve flood resilience and support accessibility, connectivity and amenity	0-10
Network of fast charging points for electric vehicles at key tourist and rural locations	5	Enable economic development and population growth through tourism led economy	0-10
Park facilities to enhance experience and access for visitors with limited mobility	•	Support accessibility, connectivity and amenity for all visitors	0-10
Public Transport upgrade bus stops	20	Support accessibility, connectivity and amenity for public transport passengers	0-15

Timeframe	
 0-5 Years	 0-10 Years
 5-10 Years	 10-15 Years
	 0-15 Years
	 15+ Years

• indicates value is either commercial in confidence or to be confirmed.

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Rail passing loops		<ul style="list-style-type: none"> Enable economic development by improving supply chains, processing and transport 	0-10
Remote Infrastructure Fund upgrade 40+ community facilities to support AFL	200	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	0-10
Tennant Creek to Darwin common user infrastructure corridor		<ul style="list-style-type: none"> Support the continued development of our regions by providing an infrastructure corridor to enable future services including gas, water, communications and other utilities 	0-5
Territory Parks develop new visitor hubs in the Top End, Savannah Gulf, Barkly and Central Australia regions		<ul style="list-style-type: none"> Value, preserve and expand access to parks, increase visitation opportunities and visitor experience 	0-15
Territory Parks two-wheel drive access improvements		<ul style="list-style-type: none"> Value, preserve and expand access to parks, increase visitation opportunities and visitor experience 	0-15
Territory Parks water security projects		<ul style="list-style-type: none"> Ensure water security to enable commercial opportunities 	0-10
Territory Schools air-conditioning mechanical and electrical upgrades	50	Upgrade ageing infrastructure to support the continued delivery of quality education	0-15
Upgrade roads to communities		<ul style="list-style-type: none"> Improve all weather access to support accessibility, growth and community safety 	0-15

Implementation pathway

The suggested implementation pathways outline actions that can be taken to respond to anticipated economic and population growth challenges and opportunities.

Implementation pathway	Prioritisation action	Progress
Territory-wide		
Plan for regional waste facilities	Reform	In progress
Develop options to ensure that entry level and affordable housing are in the market, including options to accelerate market participation by community housing providers	Reform	In progress
Complete Infrastructure Audit	Reform	Achieved

Infrastructure pipeline

The following is a list of committed Territory-wide projects, funded by either government or the private sector.

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Across all regions upgrade critical water tanks	15.2	1.5	6.0	•	Support population growth by improving access to quality water
Across all regions water main replacement	14.4	2.9	4.5	•	Support population growth by improving access to quality water
Across all regions water services minor works	33.0	26.4	32.4	•	Support population growth by improving access to quality water
Alice Springs to Darwin corridor (Stuart Highway) road safety improvements	62.3		50.0	•	Increase road capacity, safety, support accessibility, connectivity and amenity
Community Housing Provider housing projects	7.0	•			Provide safe, secure and affordable housing for people on low incomes
Community Housing Provider redevelopment projects	4.4	4.4			Provide safe, secure and affordable housing for people on low incomes
Darwin-Katherine Transmission Line (DKTL) secondary systems upgrade	9.0	6.0			Asset renewal to support growth, compliance and improve service efficiency
Digital Connectivity Program	7.5	•	•	•	Enabling connectivity and creating digital equality
Government Employee Housing Build Program	186.0	48.0	30.0	•	Provide Government employees with safe, secure and appropriate housing while performing duties in remote locations
Government managed Remote Women's Safe House upgrades and remote play equipment	1.4	1.0			Support vulnerable people by improving community service facilities
Homeland housing and infrastructure upgrade program	77.0	•	•	•	Capital grant to upgrade ageing infrastructure to support communities
Homeland Learning Centres infrastructure upgrades	1.0		1.0		Upgrade ageing infrastructure to support the continued delivery of quality education
Indigenous Essential Services asset replacement	84.0	21.0	21.0	•	Support remote communities by improving essential services efficiency

A lesser figure in the 2023-24 and 2024-25 columns than in the Total column indicates either previous year expenditure or expenditure in outer years.

• indicates value is either commercial in confidence or to be confirmed.

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Indigenous Essential Services capital improvements	21.0	7.0	7.0		Support remote communities by improving essential services efficiency
Indigenous Essential Services headworks to support development	70.0			•	Support population growth by increasing land availability
Information communications technology (ICT) cabling upgrades in schools	8.0	1.0			Enable connectivity and create digital opportunity
Infrastructure to support Territory Families, Housing and Communities remote services expansion	11.3	11.2			Improve outcomes for children and families
Mobile oral health dental unit replacement	0.7	0.7			Strengthen liveability by improving infrastructure to support oral health services
Planning works to support the development of land infrastructure planning, concept development and detailed design	41.0	4.0	4.0	•	Enable economic development and population growth by increasing land availability
Power Networks augmentation and capital projects	164.0	43.0	36.0	•	Asset renewal to support growth, compliance and improve service efficiency
Public Housing new builds	8.5	•			Provide safe, secure and affordable housing for people on low incomes
RAAF Base Darwin and Mt Bunday Training Area – National Airfields Works	351.0			•	Maintenance to maximise existing infrastructure
Rail upgrades to support growth	•	25.0	25.0	•	Maintenance to maximise existing supply chain and transport infrastructure
Regional Logistics Hubs	440.0	10.0	50.0	•	Enable economic development by improving supply chains and transport
Remote Women's Safe House upgrades managed by Non-Government Organisation (NGO)	1.6	•			Capital grants to support vulnerable people by improving community service facilities
Replace critical asset elements in various hospitals, remote health clinics, schools and police stations	20.0	•	•	•	Ensure a safe and healthy work environment and best practice in the delivery of government services
Road Safety Program, including intersection upgrades, improvements for pedestrian safety, street lighting, truck parking bays, rest areas	267.0	15.0	80.0	•	Support connectivity, regional development and safety by improving key arterial and secondary roads

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Roads to Recovery Program targeted local road upgrades	24.7	•	•		Enhance road infrastructure to support accessibility, connectivity, safety and amenity
Security enhancements to police facilities	9.0	2.0	2.0	•	Support the continued delivery of quality police services
Targeted road safety projects, local roads and community infrastructure shovel ready projects	67.5	20.0	7.6		Australian and Northern Territory governments supporting infrastructure construction jobs across the Territory
Territory Schools air-conditioning mechanical and electrical upgrades	4.0	2.0			Upgrade ageing infrastructure to support the continued delivery of quality education
Training areas and ranges – United States Force Posture Initiative	711.0	•	•	•	Upgrade infrastructure to enhance defence capability and operations

NT Infrastructure Audit

Reliable infrastructure is a vital part of maintaining and improving our quality of life. It provides us with the essential services we rely on, such as transport, energy, water and telecommunications, as well as social infrastructure such as hospitals and health centres, schools, policing and parks, and access to goods and services.

In 2022 and 2023, Infrastructure NT conducted a strategic audit of Territory infrastructure to provide an evidence base to guide future infrastructure investment decision making. The outcomes of the audit focus attention on the investments and reforms that will improve our living standards and local and national productivity.

The audit, as discussed in chapter 3, revealed several potential infrastructure needs. Where these needs were already in the planning phase, they have been included in the Enabling Infrastructure Plan or Infrastructure Pipeline tables in the regional sections of this document. The remaining Territory-wide audit items are listed below. These potential infrastructure needs could be considered for possible inclusion in the Plan and Pipeline over time as scoping, feasibility analysis and business case development determines viability. Industry, business and community stakeholders are encouraged to let Infrastructure NT know if they progress with planning and delivery of their ideas and proposals.



Transport and Logistics

- 1600 kilometre rail corridor east to west through Ti Tree (total Australian corridor 3700 kilometres)



Utilities

- Remote telecommunications and digital co-investment program
- Remote communities essential services infrastructure to support remote Aboriginal community development



Social Infrastructure

- Aged care facilities
- Asbestos management of unidentified asbestos prior to Northern Territory Government infrastructure development
- Child care centre upgrade program
- Education facilities to support Learning on Country
- Government and industry housing
- New and improved (shaded) recreational facilities



Above: Mary Ann Dam, Tennant Creek. Credit: Department of Territory Families, Housing and Communities.



Barkly

The Barkly is genuine outback Australia, a vast land of brilliant blue skies, iconic rock formations and strong Aboriginal heritage and cultures.

The Barkly region:

- > is known for its million acre cattle stations
- > is home to Tennant Creek, known as the site of the last gold rush in Australia during the 1930s
- > has one of the highest solar irradiance resources in the world.

Major industries and growth sectors in the Barkly



Resources



Agribusiness

The Barkly region is the second largest local government area in Australia with an area of approximately 323 000 square kilometres. The region stretches from the old Telegraph Station at Barrow Creek in the south to the historical droving township of Newcastle Waters in the north.

Tennant Creek and Elliott (the second largest urban centre for the region) service the region's homelands, pastoral stations, localities and communities that are spread across the large distances. Most of the region's population lives in the regional service centre of Tennant Creek, which is just over 1000 kilometres south of Darwin and 500 kilometres north of Alice Springs.

Despite its remote location, the region is well connected by road to Central Australia via the Stuart Highway and to Queensland by the Barkly Highway and to the rest of the Territory's regional centres by air and rail.

The Barkly Region is home to 10 Aboriginal language groups who are custodians of the region. Aboriginal people represent 66% of the region's population of 6025, with strong Aboriginal leadership and representation by land councils, Aboriginal Community Controlled Organisations, Traditional Owners and Registered Native Title Body Corporate groups. The Barkly region has a young population, with about 39% aged 24 years or younger.

The Barkly is a resource-rich region with comparative advantages for future economic growth in priority sectors such as mining, gas, agribusiness and tourism.

The Barkly region is known for its resources in particular its gold mining heritage. With its vast deposits of critical minerals and gold across the region, and others in the eastern Barkly region, this industry has the potential to contribute significantly to economic growth.

Renewable energy is an emerging industry in the region. The Barkly region receives one of the highest levels of solar radiation on the continent. There are opportunities to produce both solar energy and clean hydrogen in the region. The Territory's renewable potential has been recognised by SunCable's \$35 billion Australia-Asia Power Link project. AAPowerLink is a world first, transformational renewable energy project providing a pathway to a new export industry.

The Barkly Region has access to the key factors of production required for large scale agribusiness development including cattle and food production. Agribusiness in the region contributes \$159 million to the economy. An agribusiness hub is being developed in Tennant Creek to generate additional economic opportunities from the region's pastoral activity.

Compared to other regions, the Barkly is lesser known as a tourist destination, however it is important to the drive tourism sector. The Barkly is most frequently visited by travellers touring between regions of the Territory. Aboriginal cultural experiences include Nyinkka Nyunyu Art and Culture Centre, the Karlu Karlu (Devil's Marbles) and pioneering history is showcased at the Battery Hill Mining Centre. With its highly rated Aboriginal art and cultural centre and unique historical and heritage experiences, tourism and creative arts are emerging industries in the region.

In 2019, the Australian and Northern Territory governments and the Barkly Regional Council signed the Barkly Regional Deal. The implementation of initiatives under the \$84.7 million Barkly Regional Deal is well underway. The 10-year deal includes \$45.4 million from the Australian Government, \$30 million from the Territory Government and \$3 million from Barkly Regional Council. The deal is focused on working with Barkly communities and Aboriginal homelands to design and deliver a range



Construction



Tourism



Renewables

of initiatives that aim to improve the productivity and liveability of the Barkly region by stimulating economic growth, improving social outcomes and supporting local Aboriginal leadership.

The Deal includes transforming the Barkly Business Hub to deliver a 'one-stop-shop' to support local business and skills development. It also includes constructing the Barkly student boarding facility for secondary school children and the Barkly youth justice accommodation facility, which will provide an alternative to detention for young people in the region.

Challenges and opportunities

- Increase housing supply to meet current and future social and industry demands in the regions. Scarcity of housing is a significant barrier to attracting and growing new industry and supporting existing private sector employers to grow or diversify.
- Improve socio-economic equality to promote sustainable economic growth in the region.
- Improve access to social infrastructure in the communities to attract workers and visitors and to create equity within communities.
- Improve management of natural resources, including water, to cater for increased industry and development.
- Timely access to land to make the most of upcoming opportunities.
- Maintain and improve existing road transport routes to improve flood immunity and support industry projects located in remote areas including Barkly Tablelands and Western Davenport.
- Increased bandwidth and redundancy in the network are essential to ensure sufficient regional digital connectivity to support liveability and economic growth across a broad range of industries.



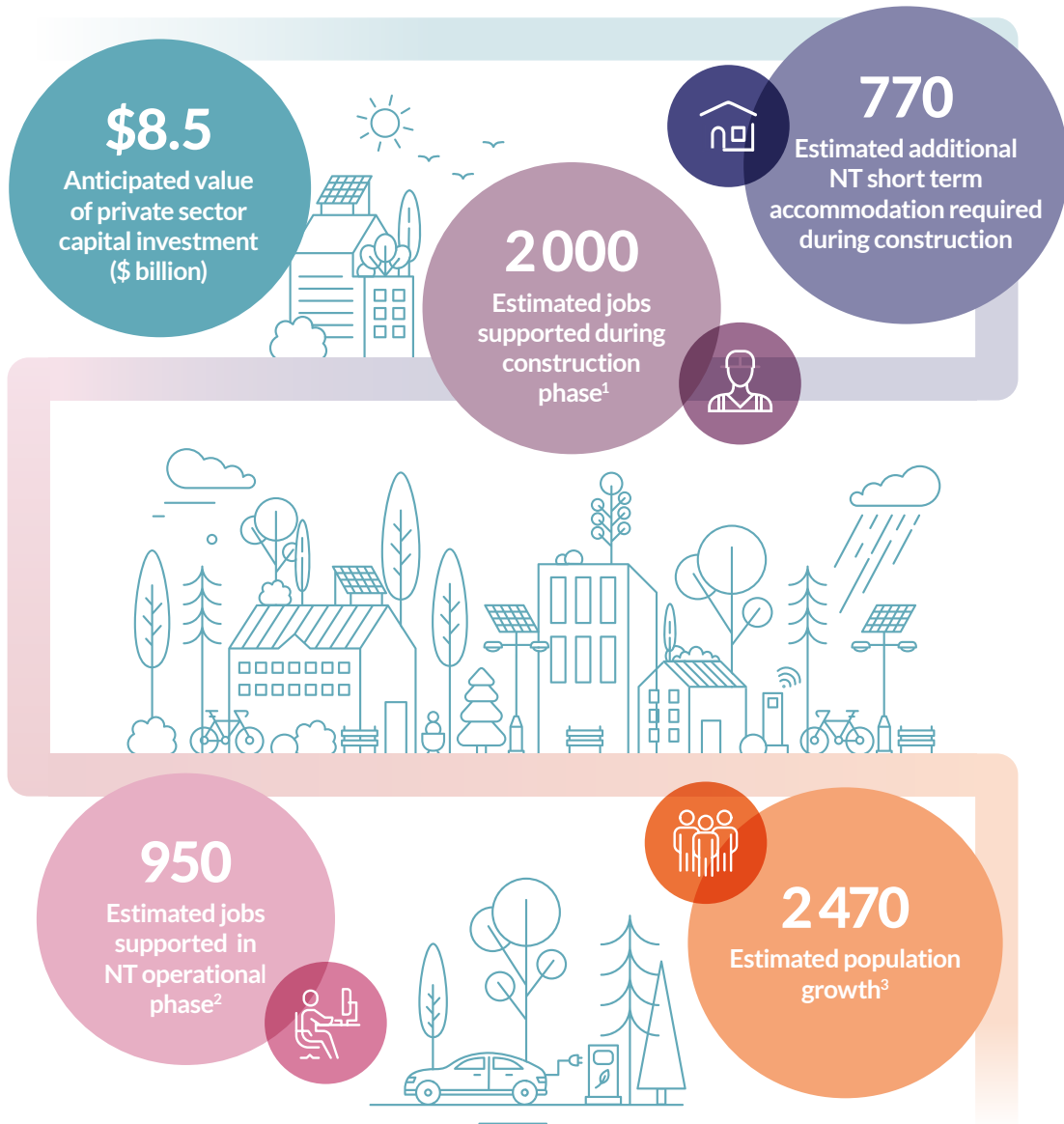
Above: Tennant Creek High School. Credit: Department of Territory Families, Housing and Communities.

Investment portfolio

The total Barkly investment portfolio has a direct impact on economic and population growth. It is important to understand the magnitude of economic and population growth to inform the enabling infrastructure plan.

Infrastructure NT has worked closely with Investment Territory to determine the total investment portfolio. This analysis determined the following total investments anticipated for the Barkly region, subsequent jobs, accommodation needs and population growth.

Analysis is based on Investment Territory 2022-2023 Progress and Outlook: May 2023

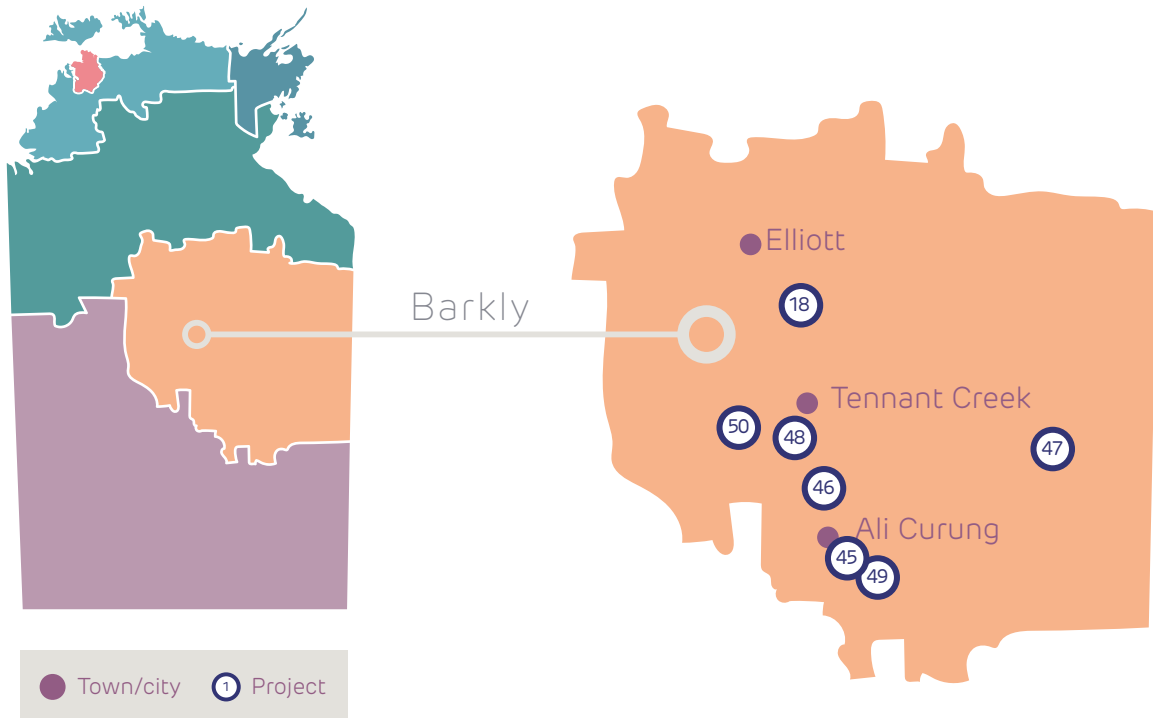


Note 1: Includes direct and indirect where provided by proponents

Note 2: Includes direct and indirect where provided by proponents in the NT only

Note 3: Based on 2.6 multiplier (ABS average persons per household NT regional)

Note: Numbers are approximate over 10 years. Further refined analysis is ongoing.



Key projects, programs and proposals

The following nationally significant project located in the Barkly region is detailed in Chapter 8.

- SunCable – the Australia-Asia Power Link.

Aboriginal Land Economic Development Agency (ALEDA) Project 45



The Aboriginal Land Economic Development Agency (ALEDA) Project is a pilot program to validate an economic development model for Aboriginal land. The project proposes to establish agribusiness developments at 6 sites located within the Mataranka (Sturt Plateau) and Ali Curung (southern Barkly) areas and

produce a range of crops. The 6 sites will be leased from Traditional Owners and then sub-leased to commercial farm operators to generate economic benefits for the Traditional Owners and employment opportunities for local Aboriginal people.

Ammaroo Ammonium Phosphate Fertiliser Project
– Verdant Minerals Ltd 46

Minerals

Agribusiness

Major Project



The Ammaroo Project is located approximately 200 kilometres south-east of Tennant Creek in the Northern Territory's Georgina Basin. The Ammaroo phosphate deposit was first discovered in 2011 and is now the largest Joint Ore Reserves Committee (JORC) compliant phosphate resource in Australia and one of the largest undeveloped phosphate resources in the world.

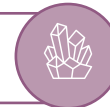
The project is a phosphate rock mine with processing of phosphate rock concentrate

that can be exported or feed an integrated ammonium phosphate production operation – open cut strip mining operations, with dry and wet beneficiation to produce phosphate rock concentrate. An integrated sulphuric acid and phosphoric acid plant would enable the phosphate rock concentrate to be locally processed into phosphoric acid and combined with small scale ammonia production and granulation to enable the integrated manufacture of approximately 1 million tonnes per annum of ammonium phosphate fertilisers.

Avenira Limited's Phosphate Rock Mine and Yellow Phosphorous Plant 47

Minerals

Agribusiness



The Wonarah phosphate project is located in the Barkly region, halfway between Three-ways and the Queensland border, adjacent to the Barkly Highway and Northern Gas Pipeline. Avenira recently signed a mining agreement with the Arruwurra Aboriginal Corporation, creating a strong framework to share in the economic and social benefits from the project on Arruwurra lands.

A Mining Management Plan (MMP) was recently approved by the Northern Territory Minister for Mining and Industry for a 5 000 tonnes per annum (tpa) test pit and the first stages of a 35 000 tpa direct shipping ore (DSO) operation. A MMP will soon be lodged to extend the duration of the DSO operation.

Mining rate and duration will depend on the prevailing and predicted economic conditions.

A second phase of the project is to build a yellow phosphorous plant at Wonarah to provide an efficient feedstock for the thermal phosphoric acid plant in Darwin and an export product.

Wonarah has existing Environmental Impact Statement approvals for a high rate of DSO production and operation of thermal furnaces streamlining the pathway to development and production.

Phosphate is traditionally used in agricultural fertiliser, and is increasingly in demand for use as a critical active material used within an electric vehicle battery or energy storage battery.

Rover Project – Castile Resources 48

The Rover Mineral Field, which contains the Rover 1 Mining Project, is 100% owned by Castile Resources Ltd (Castile) and is located approximately 75 kilometres south-west of Tennant Creek in the Northern Territory. A pre-feasibility study for the Rover 1 Mining Project, completed in December 2022, strongly supported the feasibility of the project.

The proposed development consists of an underground mine, accessing 3 loads (Jupiter,

Jupiter Deeps and the Western Zone) and a 500 000 tonnes per annum processing facility, producing 4 products – gold doré, copper (99%), cobalt (99%) and a high-grade coal washing magnetite (96.4%).

A bankable feasibility study has commenced and is expected to be completed in 2024.

Castile is concurrently progressing project approvals and licensing. Construction is expected to occur in 2025.

Singleton Farm project – Fortune Agribusiness Funds Management Pty Ltd 49

The proposed Singleton Farm involves 3300 hectares of annual and perennial crop production, accommodation for workers and supporting infrastructure. The project will provide significant expansion of the NT fruit and vegetable sector with benefit to the regions and communities through enhanced employment opportunities and wider economic benefits.

From construction through to production, Singleton Farm will create and sustain over 420 direct and indirect full time equivalent jobs, provide employment and training for local people and business opportunities for existing and new contractors and service providers.

A shortlist of 7 crop options have been identified including mandarin, table grape, dried grape, onions, avocado, muskmelon and jujube.

Tennant Creek Central Gold Mill – Tennant Mining 50

Tennant Mining is a gold and copper focused resource company with an exploration portfolio of tenements that includes the Tennant Creek Goldfield. Tennant Mining's suite of gold assets includes Nobles Nob and Juno, as well as Mauretania and Chariot, which are part of the Northern and Southern Project Areas respectively (joint ventures with Emmerson Resources). Tennant Mining is developing a

central processing plant at its Nobles Nob project site, located around 14 kilometres south-east of Tennant Creek to process ore from across other mine sites in the Tennant Creek region. In the medium term, Tennant Mining plans to develop its copper-gold Warrego asset near Tennant Creek to help meet the growing demand for copper, as the world transitions to a net zero carbon future.

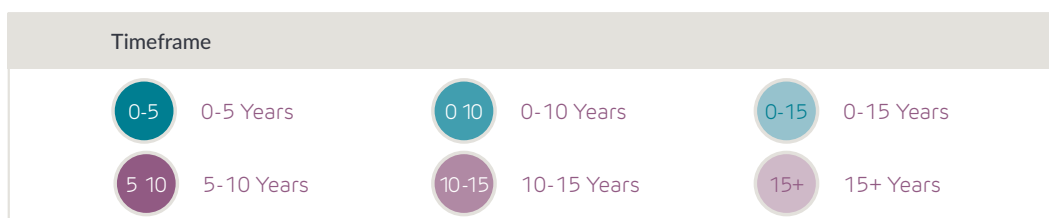
Enabling infrastructure plan

The enabling infrastructure plan for the Barkly region lists the infrastructure proposals that are not yet funded, are in the planning phase and have been identified as enabling an outcome.

Proposals listed respond to economic and/or population growth or address the cross cutting objectives in the NT Infrastructure Strategy 2022 – 2030.

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Across the region additional health staff accommodation	•	Strengthen liveability by improving infrastructure to support health services	0-10
Across the region new or refurbished health clinics	•	Strengthen liveability by improving infrastructure to support health services	0-15
Across the region new remote health education facilities	•	Strengthen liveability by improving infrastructure to support health education services	0-15
Across the region Remote School Renewal Program	•	Upgrade ageing infrastructure to support the continued delivery of quality education	0-10
Alekarenge School new early years pre-school incorporating a Families as First Teachers space and new administration building	7	Strengthen early years learning and engagement of students and parents	0-5
Ali Curung new police complex including housing and Emergency Services (NTES)/ NT Fire and Rescue Service (NTFRS) storage structure	21	Support the continued delivery of quality police services in remote communities	0-10
Ali Curung refurbish council staff housing, visitor accommodation and depot shed	1	Support council operations by providing housing for local government employees in remote communities	0-5
Ali Curung upgrade football field	1	Enhanced liveability through improved community recreation facilities	0-5
Alpurrurulam ablutions, BBQ, fencing and playground with shade	1	Enhanced liveability through improved community facilities	0-5
Alpurrurulam install critical drinking water infrastructure	6	Support population growth by improving access to quality water treatment systems	0-5
Alpurrurulam new police complex	19	Support the continued delivery of quality police services in remote communities	0-5

• indicates value is either commercial in confidence or to be confirmed.




Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Alpurrurulam School replace classrooms	2	Upgrade ageing infrastructure to support the continued delivery of quality education	0-10
Alpurrurulam short term safe house	1	Support vulnerable people by improving community service facilities	0-5
Ampilatwatja cemetery fencing, council workshop and depot upgrade	1	Support council operations	0-5
Ampilatwatja new sport and recreation building	1	Enhanced liveability through improved community recreation facilities	0-5
Ampilatwatja upgrade sewer network	8	Improve liveability through the provision of adequate water systems	0-5
Ampilatwatja water park and BMX track	1	Enhanced liveability through improved community recreation facilities	0-5
Arlparra upgrade football oval	1	Enhanced liveability through improved community recreation facilities	0-5
Austral Downs Road upgrade selected sections	15	Increase road capacity, safety, support accessibility, connectivity and amenity	0-15
Barkly Stock Route improve road standard	25	Support economic development of the cattle industry	0-10
Canteen Creek new dental clinic within health centre	1	Strengthen liveability by improving infrastructure to support oral health services	0-5
Elliott council staff housing	1	Support council operations by providing housing for local government employees in remote communities	0-5
Elliott Jim Rennie Reserve Master Plan	3	Enhanced liveability through improved community facilities	0-5
Elliott new police complex	19	Support the continued delivery of quality police services in remote communities	0-5
Elliott police housing	2	Support the continued delivery of quality police services in remote communities	0-5
Elliott regional town development residential and commercial/industrial land release	20	Enable economic development and population growth by increasing land availability	0-5
Elliott School integrated early learning facility	3	Upgrade ageing infrastructure to support the continued delivery of quality education	0-10
Epenarra/Kurundi Road upgrade selected sections	10	Enhanced liveability through improved roads	0-15

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Karlu Karlu (Devil's Marbles) upgrade campground and overnight visitor amenities	12	Value, preserve and expand access to parks, increase visitation opportunities and visitor experience	0-10
Kunjarra/The Pebbles seal access from Stuart Highway	9	Improve accessibility, supporting the tourism industry	5-10
Sandover Highway sealing selected sections	22	Support community access and the cattle industry	0-10
Tablelands Highway continue widening the seal from one lane to 2 lanes in conjunction with pavement rehabilitation works	80	Support economic development of the cattle industry	0-15
Tennant Creek Airport workers accommodation	•	Improve airport services to support accessibility, visitor growth and tourism	0-5
Tennant Creek animal management facility	1	Support council operations, community services, generate local jobs and skills training	0-5
Tennant Creek council staff housing	2	Support council operations by providing housing for local government employees in remote communities	0-5
Tennant Creek Court House upgrades	5	Strengthen equitable access by improving infrastructure to support judicial services	0-10
Tennant Creek High School STEAM (science, technology, engineering and mathematics) centre	8	Contemporary educational infrastructure to support growth in population and student enrolments	0-5
Tennant Creek Hospital upgrades	•	Strengthen liveability by improving infrastructure to support health services	0-15
Tennant Creek Lake Mary Ann caravan park development	3	Enhanced liveability through improved community facilities	0-5
Tennant Creek new emergency service facility including visiting officer quarters	7	Support the continued delivery of quality police services in remote communities	0-15
Tennant Creek Power Station battery energy storage system	5	Asset renewal to support growth, compliance and improve service efficiency	0-5
Tennant Creek Primary School install lift for accessibility	1	Contemporary educational infrastructure to support students with additional needs	0-5
Tennant Creek Primary School replace early years classroom block	4	Contemporary educational infrastructure to strengthen early years learning and engagement of students	0-10

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Tennant Creek Speedway upgrades	3	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	0-15
Tennant Creek visitor accommodation	•	Support industries of the future, increase and enhance services and job opportunities for remote communities	0-10
Wonarah Trial Pit	•	Meet global demand for critical minerals used for new and emerging technologies	0-5
Wonarah Direct Shipping Ore (DSO) Operation	•	Meet global demand for critical minerals used for new and emerging technologies	0-5
Wonarah Yellow Phosphorous Plant	•	Meet global demand for critical minerals used for new and emerging technologies	5-10
Wutunugurra (Epenarra) new dental clinic within health centres	1	Strengthen liveability by improving infrastructure to support oral health services	0-10
Wutunugurra football oval ablution block	1	Enhanced liveability through improved community facilities	0-5
Wutunugurra new women's centre	1	Support vulnerable people by improving community service facilities	0-5

Implementation pathway

The suggested implementation pathways outline actions that can be taken to respond to anticipated economic and population growth challenges and opportunities.

Implementation pathway	Prioritisation action	Progress
Barkly		
Continue to progress planning of the Mount Isa to Tennant Creek rail link	 Reform	 In progress
Undertake infrastructure planning to enable major private sector projects	 Reform	 In progress

Infrastructure pipeline

The following is a list of committed projects, funded by either government or the private sector, for the Barkly region.

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Across the region HomeBuild new homes	38.5	8.3	3.5	•	Reduce overcrowding and improve health outcomes while providing employment and training opportunities for local Aboriginal people
Across the region residential infill lots, design and construct power and water infrastructure, upgrades and network extensions to service nominated infill lots	7.7	0.2	0.2	•	Enable economic development and population growth through expanded utilities networks for new land development
Across the region residential subdivision planning, design and construction	2.0	0.2			Enable economic development and population growth through expanded utilities networks for new land development
Across the region Room to Breathe home extensions	8.8			•	Reduce overcrowding and improve health outcomes while providing employment and training opportunities for local Aboriginal people
Ali Curung Aerodrome seal and line mark airstrip	2.5		2.4		Support connectivity and improve all weather access to improve community safety and to support future growth
Ali Curung child and family centre (Starting Early for a Better Future)	0.5	•			Strengthen early years learning and engagement of students and parents
Alyawarre Arlparra Utopia ranger hub including office, shed, visiting staff accommodation, staff accommodation, meeting space, ablutions block	2.1	2.1	•		Enhanced liveability through improved Central Land Council services to remote Aboriginal communities
Ampilatwatja refurbish basketball court	0.4	•			Enhanced liveability through improved community facilities
Barkly youth work camp	3.6	3.1			Improve outcomes for young people in detention, their families and the community
Government Employee Housing	•	•			Increase housing options for Government employees in regional areas in partnership with private sector through the Barkly Regional Deal
Murray Downs School upgrade ablutions	0.5	•			Upgrade ageing infrastructure to support the continued delivery of quality education

Project	Estimated \$m			Outer Years	Challenges/opportunities
	Total	2023-24	2024-25		
New weather radar	15.0	•			Improve road and air travel safety and support agricultural, pastoral, transport and mining industries through the Barkly Regional Deal
Purkiss Sporting Reserve upgrades	7.9	3.0			Improve amenity for sporting participants and attendees
Tennant Creek Airport enabling infrastructure for new patient transfer facility including taxiway and apron extension	•	•			Improve airport facilities to support accessibility to health services
Tennant Creek High School student boarding accommodation	16.0		16.0	•	Contemporary educational infrastructure to support rural and remote students through the Barkly Regional Deal
Tennant Creek Hospital staff accommodation	3.2	3.2			Strengthen liveability by improving infrastructure to support health services
Tennant Creek industrial land release	10.0	9.7			Enable economic development and population growth by increasing land availability
Tennant Creek new bike path with lighting	2.0	•			Enhanced liveability through improved community facilities
Tennant Creek new watch house	11.5		11.5	•	Support the continued delivery of quality police services in remote communities through the Barkly Regional Deal
Tennant Creek Nyinkka Nyunyu Art and Culture Centre	10.0	7.0			Value, preserve and expand art and cultural places, through the Arts Trail Gallery Extension Program
Tennant Creek residential land release	5.0		5.0	•	Enable economic development and population growth
Tennant Creek to Townsville corridor	85.6		40.0	•	Roads of Strategic Importance - economic enabler and key national freight route between the Territory and Queensland
Tennant Creek visitor experiences including gold rush and ore mining interpretive displays	4.4	3.4			Value, preserve and expand historic and cultural places, increase visitation opportunities and visitor experience
Tennant Creek visitor park	9.7		9.7	•	Provide safe, affordable and sustainable temporary housing options for mobile Territorians through the Barkly Regional Deal
Tennant Creek weighbridge and office at landfill site	0.4	•			Support council operations and community services

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Tennant Creek, 7 and 9 Noble Street construct 8 2-bedroom townhouses	3.0	3.0			Provide a variety of contemporary residential options
Utopia Art Centre upgrade	2.8	2.8	•		Community led response to improve economic development and liveability through the Aboriginal Benefits Account
Utopia Footy Oval new surface, baseball diamond, male and female change rooms, viewing stands, electronic score board and siren	8.5	•	•	•	Community led response to improve community engagement, amenity and liveability through the Aboriginal Benefits Account
Utopia Homelands projects	1.2	1.2	•		Community led response to improve community engagement, amenity and liveability through the Aboriginal Benefits Account
Warrego Tailings Project reprocessing of old tailings dams to produce magnetite concentrate	48.0	48.0			Meet global demand for minerals



Above: Tennant Creek. Credit: Department of Territory Families, Housing and Communities.

NT Infrastructure Audit

Reliable infrastructure is a vital part of maintaining and improving our quality of life. It provides us with essential services we rely on like transport, energy, water and telecommunications, as well as social infrastructure such as hospitals and health centres, schools, policing and parks and access to goods and services.

In 2022 and 2023, Infrastructure NT conducted a strategic audit of Territory infrastructure to provide an evidence base to guide future infrastructure investment decision making. The outcomes of the audit focus attention on the investments and reforms that will improve our living standards and local and national productivity.



Transport and Logistics

- Tennant Creek recycling plant



Land

- Tennant Creek headworks upgrades and expansion

The audit, as discussed in chapter 3, revealed a number of potential infrastructure needs. Where these needs were already in the planning phase, they have been included in the Enabling Infrastructure Plan or Infrastructure Pipeline tables in the regional sections of this document. The remaining Barkly region audit items are listed below. These potential infrastructure needs are for projects that could be considered for possible inclusion in the Plan and Pipeline over time as scoping, feasibility analysis and business case development determines viability. Industry, business and community stakeholders are encouraged to let Infrastructure NT know if they progress with planning and delivery of those needs and proposals.



Social Infrastructure

- Across the region community controlled early childhood facilities
- Across the region community controlled health facilities
- Across the region community controlled housing
- Ali Curung sport and recreation hall and upgrade football field
- Alpururulam skate park, playground with shade, basketball court and play equipment
- Ampilatwatja ablution block, basketball court enclosure, refurbish basketball court, BMX track and water park
- Ampilatwatja art centre and meeting place
- Arlparra artists hub and gallery
- Elliott shaded recreation facilities and ablutions
- Purkiss Reserve sporting upgrades
- Tennant Creek construct Staunton oval, walking path and bowling club green
- Tennant Creek government and industry housing
- Tennant Creek sports hub facility
- Tennant Creek Hospital renewal
- Tennant Creek Ranger hub
- Tennant Creek wave pool
- Utopia oval upgrades, score board, change rooms, lights and softball upgrades
- Vocational Education and Training facilities in schools