



NT Infrastructure Plan and Pipeline **2023**

DARWIN, PALMERSTON AND LITCHFIELD



Acknowledgement of Country

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

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



Above: Palmerston at night. Credit: City of Palmerston.

Cover: Sunset over Darwin Waterfront. Credit: Tourism NT.



Darwin, Palmerston and Litchfield

The Larrakia people are the Traditional Owners and custodians of the region. Darwin, Palmerston and Litchfield have significant and fascinating histories from its dream time to European settlement, the region’s involvement in World War II and the devastation and rebuilding of the city after Cyclone Tracy in 1974.

The Darwin, Palmerston and Litchfield region:

- > is the fastest growing region in the Northern Territory with a growing population of nearly 150 000
- > has a naturally deep-water port covering a total of 3230 square kilometres and strategically positioned as Australia’s closest port to Asia
- > has the potential to be Australia’s digital gateway to Asia
- > Palmerston, a place for people, is the fastest growing Local Government Area in the Northern Territory
- > is central to the port, rail and international airport logistics infrastructure.

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Major industries and growth sectors in Darwin



Construction



Defence

The Traditional Owners of the region are the Larrakia (saltwater) people. Darwin, located in the tropical north of Australia, is a coastal city overlooking the picturesque Arafura Sea. Darwin is the Territory's capital city and is the main population and administrative centre. It is the closest Australian capital city to Asia and is known as Australia's gateway to Asia.

Darwin is home to a population of approximately 86 000 people who live in the city and its surrounding suburbs. Darwin has a young population with a median age of 34.7 and is known for being home to a young, diverse and multicultural population.

Major industries include defence, tourism, education and training, public administration and safety and health care. Darwin is the main service and supply centre for industries including mining, offshore oil and gas, tourism, pastoral and horticultural industries.

Darwin is a key gateway to the Territory's regional centres and tourist attractions. Tourists have an array of options for travel to and from Darwin including the Ghan tourist passenger service, domestic or international flights via Darwin International Airport, cruise ships from Australian or international ports and several key highways linking Darwin to the rest of Australia.

Domestic and international tourists are attracted to the region to enjoy the city's offerings, diverse multicultural experiences, markets and festivals, and to embark on adventures to world-renowned tourist attractions including Kakadu and Litchfield National Parks.

The Northern Territory is a critical defence and national security hub for the Australian Defence Force. Defence facilities located near Darwin city include the Larrakeyah Defence Precinct and HMAS Coonawarra and Defence Establishment Berrimah. The tri-service Defence facilities directly support Australian Defence Force operations and training. HMAS Coonawarra is the home port and support establishment for most of the Royal Australian Navy's patrol boats and 2 army landing craft.

Darwin hosts several Defence exercises including Exercise Pitch Black – a biennial multinational air warfare exercise hosted by the Royal Australian Air Force (RAAF). Making use of RAAF Base Darwin and RAAF Base Tindal, Exercise Pitch Black takes place in the Territory's vast northern airspace.

The Northern Territory Government supports and facilitates projects that enhance Defence capabilities in the north, including developing the Darwin Ship Lift Facility and Marine Industry Park.

Darwin's position between Asia and Australia's southern cities makes it an attractive export hub. Darwin Port – a natural deep water port with a multi-cargo handling facility – together with Aurizon's rail connection provides a multimodal freight facility to service the mining, resources and agribusiness sectors.

The Northern Territory Government is working to bring new life and vibrancy to Darwin. The Darwin City Deal is a 10-year plan to grow Darwin as a vibrant and liveable tropical capital city, supported by a growing population and diverse economy.

The revitalisation of Civic and State Square is included within the City Deal to transform the precinct into a gateway for visitors with a centrally located gathering place, tropical gardens and expansive lawns. Civic and State Square will physically connect Darwin Harbour and the city.



Retail



Tourism



Health



Digital

The Northern Territory Art Gallery, which is currently under construction, will enable the Northern Territory to showcase its extensive art collection and host prestigious Australian and international exhibitions.

The new Charles Darwin University city campus is the cornerstone of the Education and Community Precinct and will offer public spaces for use and learning and education opportunities. The precinct, which is currently under construction, will improve Darwin's international competitiveness in the tertiary education sector.

Challenges and opportunities

- Positioning Darwin as the capital of northern Australia and as a vibrant and liveable tropical capital city.
- Growing Darwin's population and diversifying the economy through key development projects and enabling infrastructure.
- Capitalising on Darwin's strategic geographic location for tourism, trade and defence.
- Ensuring social infrastructure aligns with community expectations and population demands are considered such as increasing housing supply to meet current and future industry demands.
- Ensuring major projects have investigated and considered cultural protocols and sites of significance during initial stages of project development to avoid risks and delays.
- Developing the workforce skills to capitalise on the region's economic development opportunities.



Above: Friends at the Deckchair cinema. Credit: Tourism NT.

Major industries and growth sectors in Palmerston and Litchfield



Construction



Defence



Retail

The Palmerston and Litchfield region combines the Territory's youngest city with the engine room of future population growth within the Greater Darwin area.

Both Palmerston and Litchfield are growing vibrant regional hubs. Located 20 kilometres from Darwin, Palmerston is the second largest city in the Territory and acts as a regional centre for residents of Litchfield.

Palmerston and Litchfield are home to a population of approximately 63 000 people. Palmerston has a young population of families with a median age of 31.1 years and families nurturing children make up 58% of all households.

The Larrakia people are the Traditional Owners and custodians of the Darwin region.

Bordered by two light industrial areas, Palmerston is central to key transport infrastructure including Darwin Port, Adelaide to Darwin Railway and the Stuart Highway – the spine of the Northern Territory.

Major industries in Palmerston and the Litchfield region include construction, aquaculture, horticulture, cattle and crocodile farming, defence, and liquefied natural gas and helium production.

Palmerston has a significant defence presence with Robertson Barracks, a major Australian Army base located 15 kilometres east of Darwin in Holtze. The Base supports the bulk of the US Marine Rotational Force Darwin during their annual 6 month deployments as part of the United States Force Posture Initiative.

Developing East Arm will further support Defence. The Darwin Ship Lift Facility will have the capacity to lift vessels such as the Australian Defence Force's new fleet of offshore patrol vessels. The ship lift will be the only marine servicing point between Cairns in Queensland and Perth in Western Australia.

The Darwin Ship Lift Facility and Marine Industry Park will not only support Defence, it will also support the logistics and freight sectors and aid future oil and gas activity in the Territory.

Tourism plays an important role in the region's economy. Bounded by Van Diemen Gulf and the Timor Sea in the north, the Adelaide River in the east and Coomalie area in the south, Litchfield is a broad rural area known for its parks, rivers and wildlife. Berry Springs is the northern gateway to the spectacular waterfalls of Litchfield National Park and the eastern gateway to Dundee Beach, Wagait Beach and Mandorah.

Agribusiness is also a key sector in the region. With its lush landscape, expansive rivers, access to fresh water and wide, open spaces, the Litchfield region is a natural location for expanding aquaculture industries.

The Northern Territory Government is working with industry and the Australian Government to transform Middle Arm into a sustainable 'development ready' industrial precinct. Preserving the environment, including Darwin Harbour, for generations to come is an important part of meeting the sustainability objectives of the Middle Arm Sustainable Development Precinct (the Precinct).

The Precinct is proposed across approximately 1500 hectares of industrial land and will:

- capitalise on the Northern Territory's strategic location and excellent solar resources
- play a pivotal role in growing the Northern Territory's economy
- be designed to attract industries reflective of the Northern Territory's future economy including hydrogen, carbon capture, advanced manufacturing and minerals processing
- drive industry diversification, exports, job creation and population growth.

Palmerston and Litchfield are the engine room of future population growth for the greater Darwin region. With room to grow, the region is becoming one of the fastest growing areas in the Northern Territory.



This growth provides enormous opportunities to boost population but also poses a challenge to protect the region's lifestyle, resources and precious natural environment. Infrastructure and land use planning are being fast tracked in major urban development zones, particularly in the areas of Holtze and Kowandi. The Territory Government is fast tracking the development of 5000 new residential lots at Holtze and Kowandi as part of its economic recovery plan and to accommodate future population growth. Holtze and Kowandi will be developed in stages with the first titles to be issued in 2024.

Challenges and opportunities

- Balancing urban population growth and industrial development with rural lifestyle, cultural heritage and natural environment.
- Increase housing supply to meet current and future industry demands. Availability of housing is critical in growing new industry and supporting existing private sector employers to grow or diversify.
- Facilitating land use for strategic importance such as defence, major industry, utilities and environmental significance.
- Developing new and growth industry sectors including agribusiness such as crocodile farming and resources such as natural gas and solar.
- Developing the workforce skills to capitalise on the region's economic development opportunities.



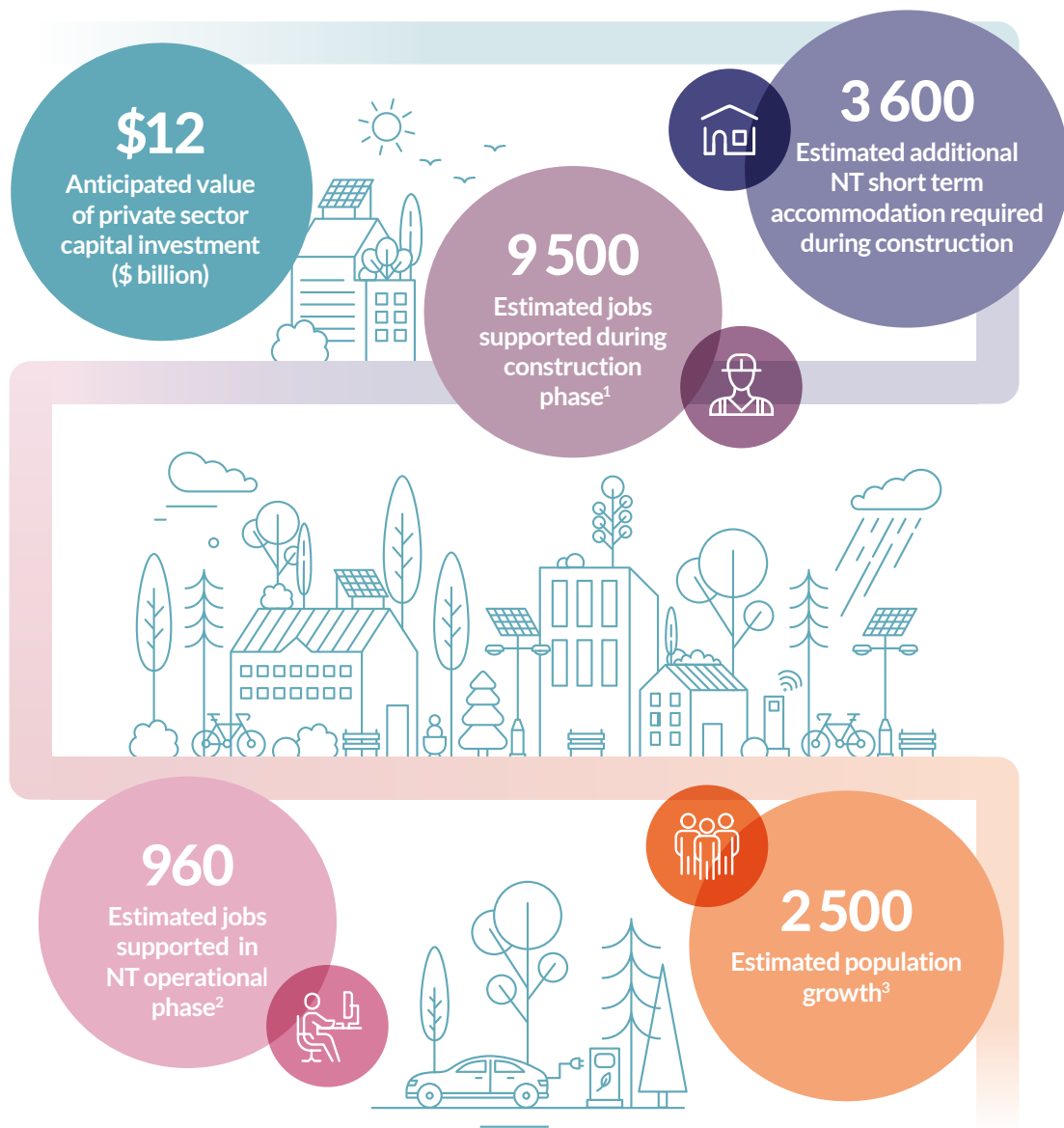
Above: Zuccoli Community Dog Park. Credit: City of Palmerston.

Investment portfolio

The total Darwin, Palmerston and Litchfield 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 Darwin, Palmerston and Litchfield region, subsequent jobs, accommodation needs and population growth.

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

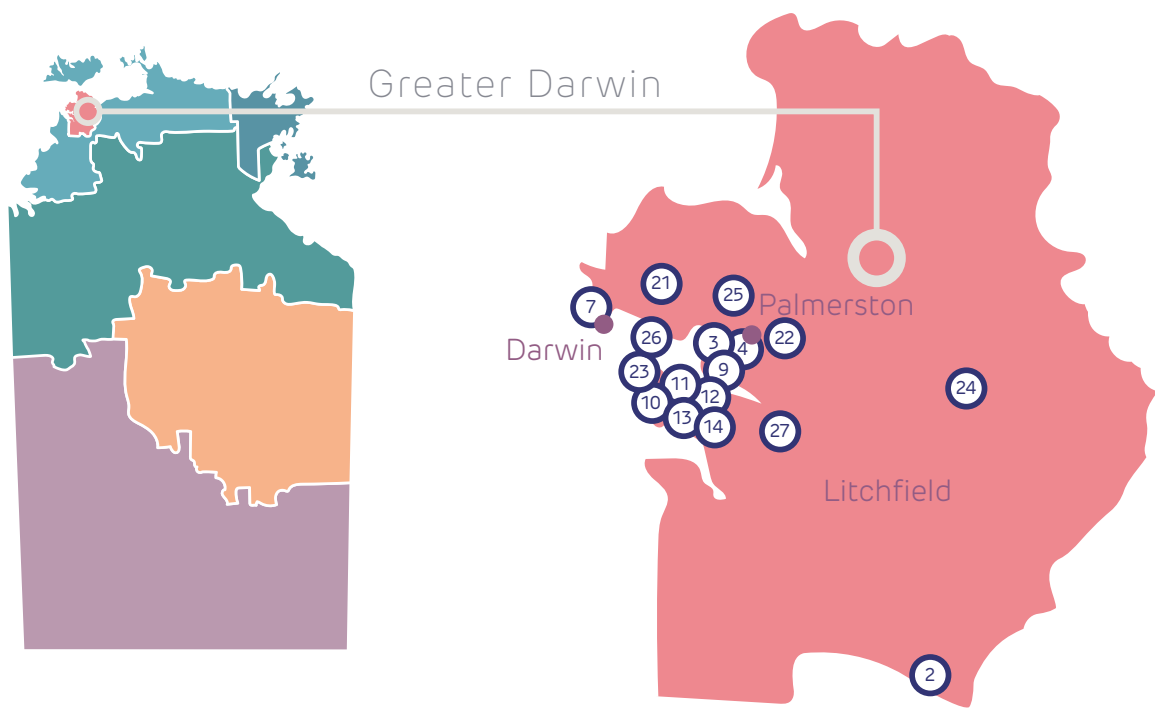


Note 1: Includes direct and indirect where provided by proponents

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

● Town/city

① Project

Locations are indicative

TERRITORY-WIDE PROJECTS

④ DCI data centres

⑤ Inlingo Network Unite

⑥ HyperOne

⑦ NEXTDC

①⑥ Northern Territory freight and logistics capacity improvements (regional logistics hubs)

①⑦ Northern Territory remote community power generation program

②⑩ Aurizon – Railway service expansion

Nationally significant

The following projects, programs and proposals identify and articulate the infrastructure investment that will impact the national economy or achieve national policy objectives and outcomes.



Water

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



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.

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.

Darwin Ship Lift Facility 3



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

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:

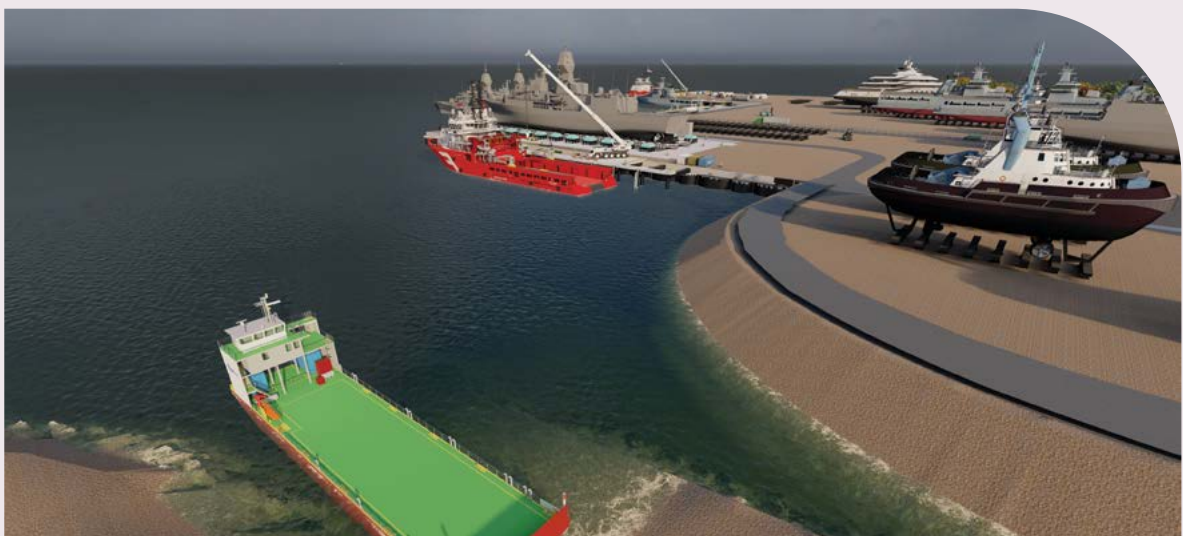
- a ship lift 26 metres wide, 103 metres long
- lifting capability of 5500 tonnes
- wet berths (wharves)
- additional hardstand area for ship repair and maintenance works.

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.

Digital industries

4 5 6 7

Digital

Education

Health

Lifestyle



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.

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 40×400 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.”

Marine Industry Park 9



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.

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.



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

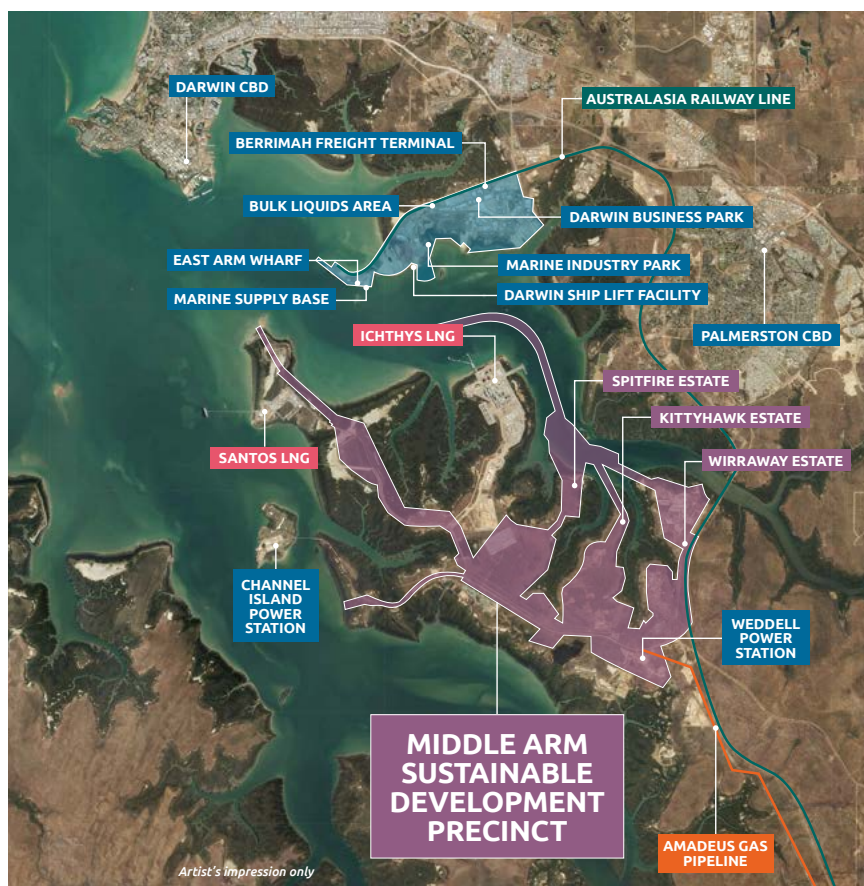
- circular economy principles including reusing waste streams (such as using waste as a feedstock) and carbon capture
- efficient use of infrastructure.

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.

Resources Advanced Manufacturing

Avenira Limited's Lithium Cathode Battery Manufacturing Project 10

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.

Renewables Hydrogen

Fortescue Green Hydrogen Hub 11

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 Resources Limited 12

Resources

Electricity



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.

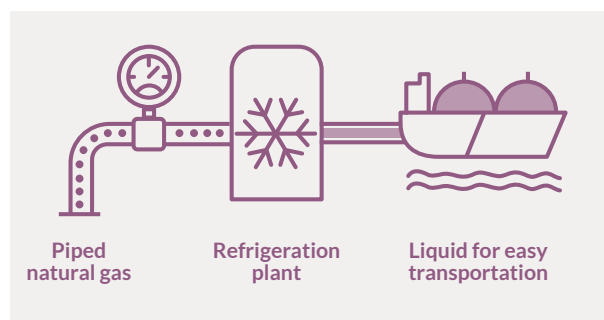
To support Tamboran's vision to developing the Beetaloo Basin, the company has entered into several strategic partnerships and agreements with major international energy corporations and infrastructure companies.

- 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.

Tivan Limited ¹³

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.

Resources Electricity Renewables Hydrogen

Total Eren Australia H2 ¹⁴

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

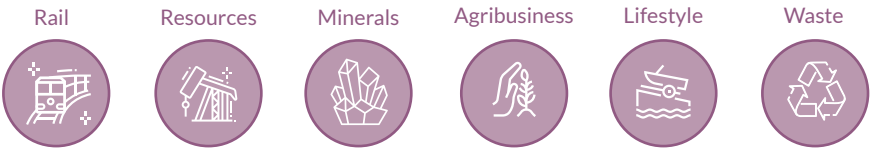
Carbon capture, utilisation and storage (CCUS) is a proven process that captures carbon dioxide emissions, preventing entry into the atmosphere. CCUS is a critical emissions reduction technology that supports clean energy transitions.

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.

Northern Territory freight rail and logistics capacity improvements (Regional logistics hubs) 16



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.

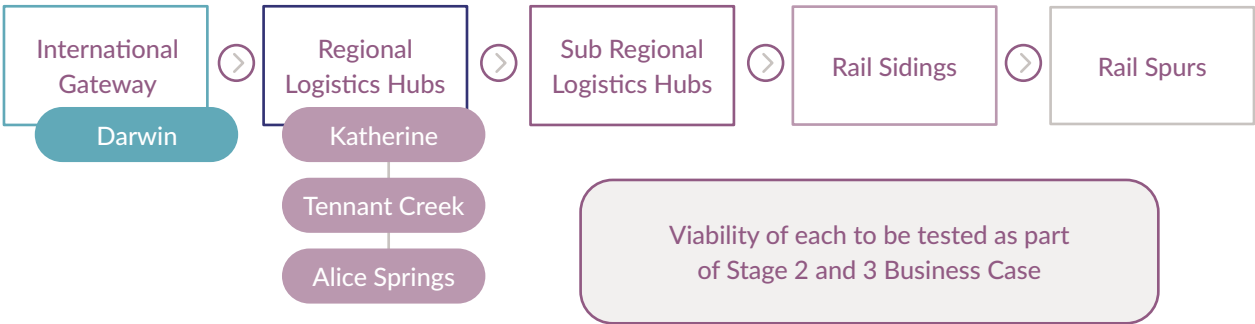
The Northern Territory Government is implementing actions to ensure logistics support rather than constrain industry and economic growth.

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



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



SunCable – the Australia-Asia Power Link 18

Renewables



Solar



Major Project



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.

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.

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 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
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

The following projects and proposals identify and articulate the infrastructure investment that will have a Territory-wide impact including an impact on the Darwin, Palmerston and Litchfield region.

Transport and
Logistics

Rail

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)
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
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
Rail passing loops	•	Enable economic development by improving supply chains, processing and transport	0-10
Tennant Creek to Darwin common user infrastructure corridor	•	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

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

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

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Territory Parks two-wheel drive access improvements	•	Value, preserve and expand access to parks, increase visitation opportunities and visitor experience	0-15
Territory Parks water security projects	•	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

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	13.0	15.0	•	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
Information communications technology (ICT) cabling upgrades in schools	8.0	1.0			Enable connectivity and create digital opportunity
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

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	
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
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
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

Regionally significant

The following projects, proposals and programs identify and articulate the infrastructure investment that will have an impact on the Darwin, Palmerston and Litchfield region.

Advanced
Manufacturing

Transport and
Logistics

Amphibian ALBATROSS G-111T Aircraft Manufacturing 21



Amphibian Aerospace Industries (AAI) intends to set up an Amphibian ALBATROSS G-111T aircraft manufacturing facility in Darwin. Amphibian Aerospace Industries will become Australia's first manufacturer and exporter of the aircraft, which can take off and touch down from land, snow, ice and water.

Whether it is connecting communities on islands, rivers or lakes to major transport hubs, delivering people or important supplies to shipping, responding to emergencies at sea, or delivering aid following natural disasters where other infrastructure has been damaged, the aircraft will provide valuable capacity and speed in a cost effective manner.

Tourism

Lifestyle

Civic and State Square Precinct Revitalisation 7



Revitalising the Civic and State Square precinct in the Darwin CBD will activate a welcoming green central gathering place of the city, befitting of northern Australia's capital.

This will integrate public parkland with the Territory's state buildings including Parliament and Government House and Supreme Court, as well as Darwin's CBD, the Darwin Waterfront (a premier lifestyle precinct), and heritage features and buildings within Darwin city.

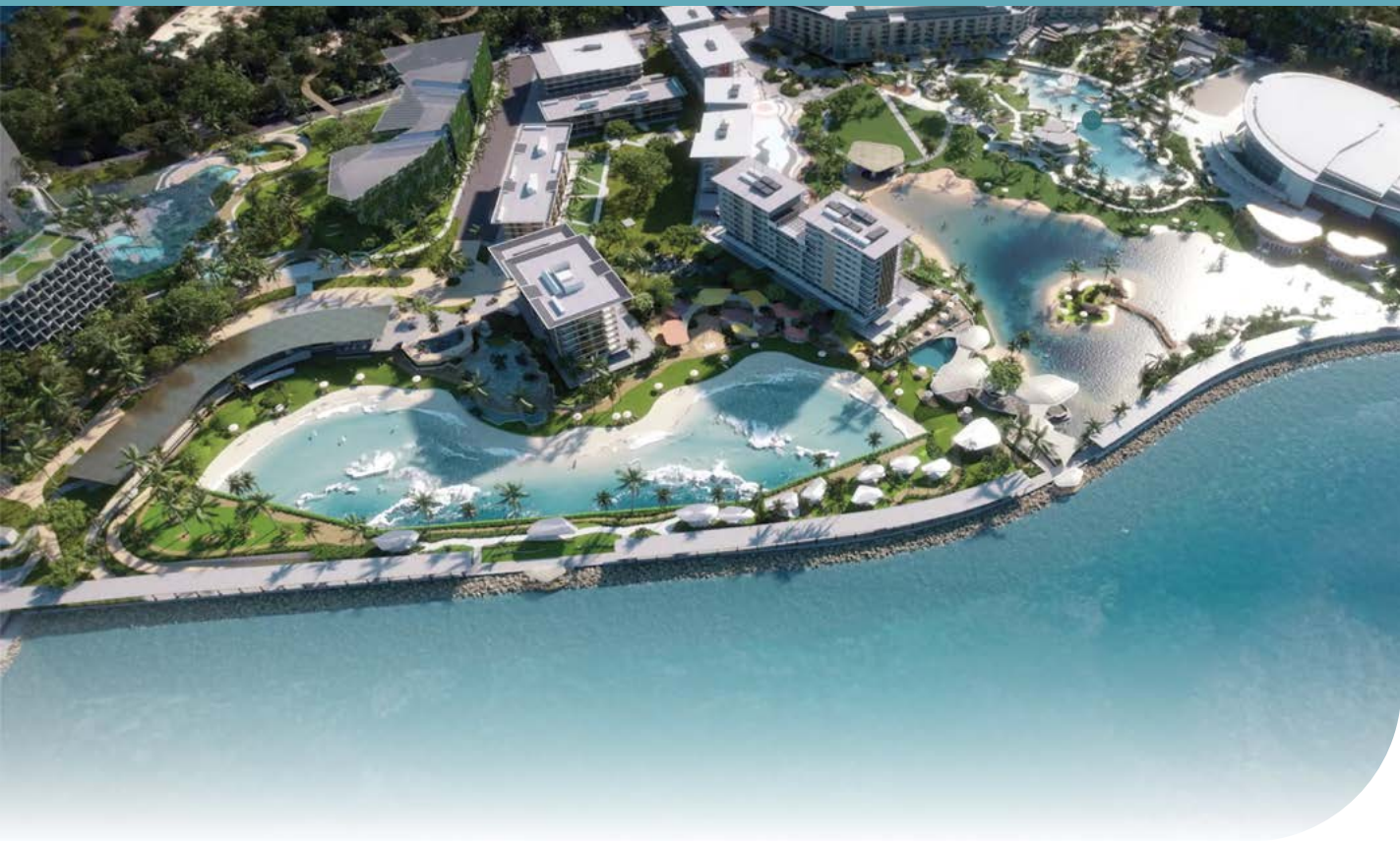
The next stages include constructing the Northern Territory Art Gallery, an iconic and contemporary art gallery, along with completing a detailed critique of the master plan and detailed design for the remainder of the precinct. Liberty Square is under construction in 2023 to beautify the forecourts of Parliament House and the Supreme Court and will include an 8 bay,

short-stay car park for the Supreme Court. Liberty Square is being redeveloped as a reflective, open green space to complement the prominent civic buildings in the area.

The precinct will include sheltered pedestrian walkways connecting the precinct and surrounding areas, Aboriginal artwork to celebrate the city's rich cultural history, lush shading and landscaping and water features.

The vision for the redeveloped Civic and State Square precinct is to become an interconnected tropical public space within the city with promenades and walkways. It will include spaces for events, festivals, gatherings and displays.

The Civic and State Square precinct revitalisation will highlight the important links to the harbour and foreshore, with the diverse culture and history of the Territory.



Above: Concept of Darwin Waterfront development. Credit: Darwin Waterfront Corporation.

Darwin Waterfront Development 7

Tourism



Lifestyle



Housing



The Darwin Waterfront precinct is located on approximately 25 hectares of harbour-side land adjacent to the Darwin CBD. The precinct includes the Darwin Convention Centre, hotels, residential buildings, restaurants, cafés, bars, retail outlets, open public space parklands, a wharf, cruise ship terminal, a wave lagoon, and a number of car parking areas including a multi-storey car park.

The Darwin Waterfront directly employs hundreds of Territorians and supports the creation of jobs throughout the Territory by providing accommodation and attractions for tourists, business conferences and residents.

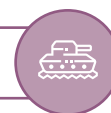
The Waterfront is a very popular precinct in Darwin, attracting an average of 1.1 million visitors each year over the past 5 years. Given proximity to the Darwin CBD, and a spectacular natural

environment including the Darwin Harbour and tropical vegetation, the Waterfront is an inviting precinct for residents and visitors alike.

By refreshing and expanding the existing infrastructure delivered through the precinct, a proposed redevelopment will incorporate a lagoon pool, surf park and integrated hotel development, will significantly enhance liveability, attract private sector investment and contribute to the Northern Territory's economy.

The project will support direct job creation, including 414 jobs during construction, increased employment outcomes during operation and business opportunities for retailers, tour operators and hospitality providers operating in the precinct.

Defence strategic capital works 7



Defence is undertaking a significant infrastructure investment program across the Northern Territory, which is seeing much of the estate being modernised to support new platforms, programs and training initiatives in the region. The majority of these major projects are delivered by Defence's Capital Facilities and Infrastructure Division, the Estate Works Program and the United States Force Posture Initiative (USFPI) Infrastructure Program. Some projects are also delivered through the US Department of Defence procurement system.

The following Defence projects are taking place across the region:

- Larrakeyah Defence Precinct redevelopment
- Facilities to Support Naval Operations in the North
- Robertson Barracks Base Improvements
- National Airfields Capital Works
- AIR7000 Phase 2B Maritime Patrol Aircraft Replacement Facilities (Darwin)
- US Bulk Fuel Storage Facility, East Arm
- USFPI Robertson Close Training Area (in the Top End region there are also Mt Bunday and Kangaroo Flats Training Areas).

The Larrakeyah Defence Precinct, comprising Larrakeyah Barracks and HMAS Coonawarra, is located approximately 2 kilometres west of Darwin central business district.

The Larrakeyah Barracks Redevelopment project and Facilities to Support Naval Operations in the North project are being jointly delivered under the Larrakeyah Defence Precinct Redevelopment Program. Construction commenced mid-2018 and works are expected to be completed in early 2024. This project addresses significant condition, capacity and compliance issues, and provides for future growth, as well as providing a new 250 metre wharf and additional fuel storage to support naval operations in the north.

Robertson Barracks base is a major Australian Army base located at Holtze, 15 kilometres east of Darwin. The base is home to the Army's 1st Brigade, hosting a significant number of living, working and training facilities. The Robertson Barracks Base improvements project aims to provide essential upgrades to facilities and infrastructure at Robertson Barracks to meet the projected demands of the Australian Defence Force and partners. Construction work is expected to commence at the end of 2023.

The National Airfield capital works will provide major maintenance of aircraft pavements, airfield lighting and related airfield drainage at RAAF Base Darwin. A mid-term refresh program for RAAF Base Darwin will be delivered between 2024 and 2027.

Holtze and Kowandi Residential Land Release 22

Land



Lifestyle



Housing



Planning is underway for new greenfield lots in Holtze. The site, zoned FD (future development), is approximately 46.5 hectares of Crown land within the Litchfield municipality. It is located adjacent to the Palmerston Regional Hospital and within proximity to existing social and commercial infrastructure, including the Palmerston CBD, Yarrowonga commercial precinct and Howard Springs community facilities.

The Northern Territory Government provided \$44 million over 2 years in Budget 2022–23 for the design and construction of enabling infrastructure to support the release of land at Holtze. This includes sewer and water networks,

power augmentation, extension of Linco Road and stormwater management.

The Department continues to progress joint planning for the development of Kowandi in conjunction with the Australian Government Department of Defence. Further land investigations and infrastructure planning is underway to support future development in Greater Holtze including the Australian Government's Kowandi site. Infrastructure will be designed to include capacity to support the development of the Kowandi site in accordance with the draft Greater Holtze Area Plan.

INPEX – Ichthys LNG onshore processing facility 23

Resources



Advance
Manufacturing



Marine



Ichthys Liquefied Natural Gas (LNG) onshore processing facilities at Bladin Point near Darwin cools gas from the Ichthys Field and transforms it into liquid for transport. The gas arrives in Darwin via an 890 kilometre gas export pipeline – the longest subsea pipeline in the southern hemisphere and the fifth longest on the planet.

Ichthys LNG's onshore processing facilities include two LNG processing trains, liquefied petroleum gas (LPG) and condensate plants, product storage tanks, a combined cycle power plant, administration facilities, utilities and 2 product load out jetties.

INPEX has committed to long term LNG expansion plans in the Territory. The company aims to further increase the current LNG production capacity by 2024 with a view to expand the Ichthys onshore production plant in about 2030.

INPEX has confirmed plans for a carbon capture storage facility and a plan to build a 10 000 cubic metre scale methanation plant in Australia.

Lambells Lagoon Agricultural Precinct 24



The proposed Lambells Lagoon Agribusiness Precinct was identified as part of the Adelaide River Off-stream Water Storage (AROWS) detailed business case.

AROWS has the potential to expand agribusiness development in the greater Darwin region, which is currently water-constrained. Water supplied from AROWS could unlock about 2 000 hectares of agricultural land for development.

Given its proximity to the future AROWS infrastructure, Lambells Lagoon was identified as an ideal location for an agribusiness precinct, including greenfield development and brownfield expansion in the region.

Lambells Lagoon is a rural suburban area located about 30 kilometres south of Palmerston and

50 kilometres south of Darwin in the Litchfield Municipality. There is land identified as suitable for high-value agricultural and horticultural activity. Existing horticulture in the area includes mangoes, melons, bananas, pineapples, pumpkins and plant nurseries.

A preliminary business case assessment of the proposed Lambells Lagoon Agribusiness Precinct has been completed and a detailed business case process, including stakeholder consultation, will be completed in the second half of 2023. This process will ensure there is detailed understanding of the commercial and economic viability of the opportunity and confirm the suitable arrangements for facilitating its development.

Larrakia Cultural Centre 7



The Larrakia Cultural Centre will be a place for Larrakia people to share, celebrate and showcase Larrakia country, language, culture and knowledge with the world.

This is a project led by the Larrakia Development Corporation and will be built at the feet of the Larrakia sacred site at Stokes Hill, overlooking Darwin Harbour.

The site is freehold and will be held in trust for all Larrakia. Demolition works have now been completed and construction is anticipated to begin by late 2023.

The development of the Larrakia Cultural Centre is made possible by the Aboriginals Benefit Account, Australian Government and the Northern Territory Government.



Above: Concept of the Larrakia Cultural Centre. Credit: Rossi Architects in collaboration with Susan Dugdale & Associates.

QRZ – Bowerlee Village Development 25



QRZ is planning a mixed-use development that will include an educational precinct, residential precinct, community precinct and a retail precinct on a 46-acre lot in Berrimah. The Bowerlee Village Development is strategically located just 8 minutes from the Darwin International Airport, 12 minutes from the Darwin CBD and 9 minutes from Casuarina and Palmerston.

The educational precinct will consist of a primary and secondary school, childcare centre, swimming school, sports facilities, international student accommodation and a vocational educational institute. The Australian International Islamic College is already established within the precinct with its primary school campus and is now in the process of establishing its secondary school campus. The College will promote Darwin as a choice destination among Indonesian, Malaysian and Indian students for primary, secondary and tertiary education. Stage 2 expansion of the educational precinct, including the international education program, is expected to occur once the Berrimah North infrastructure headworks are complete.

The Bowerlee Estates residential precinct will consist of 76 residential lots.

QRZ is at the final stage of lodging the development application with the Development Consent Authority. Construction is expected to commence following Consent Authority approval and after the construction of the Berrimah North infrastructure headworks.

The community precinct will include a community hall and public park. The park will be constructed at the same time as the residential lots. The retail precinct will include a medical centre, office suites and opportunity for independent and big box retail stores. The project is currently at the conceptual and investigation phase and will be finalised once the Berrimah North sewer servicing strategy is developed.

This mixed use development has an estimated value of \$150 million.

Strategic Oil Reserve Darwin – Crowley 26



Work is nearing completion on a \$270 million bulk fuel storage facility (BFSF) at East Arm in support of the United States Defence Force. The facility is adjacent to the Darwin Port and next to the existing 174 million litre Vopak commercial fuel storage facility.

The East Arm BFSF will be able to store 300 million litres of aviation grade JP-5 turbine fuel and commercial grade Jet A-1 fuel to support American defence activities in the Territory and Indo-Pacific region.

The facility will be a forward-deployed strategic storage facility with a pipeline and marine loading arms. Fuel will be moved in and out to vessels at the port and transported to RAAF Base Darwin and RAAF Base Tindal near Katherine.

Approximately 400 jobs have been created during construction of the facility.

The facility will provide about 10 ongoing jobs when operational in early 2024.

Renewables

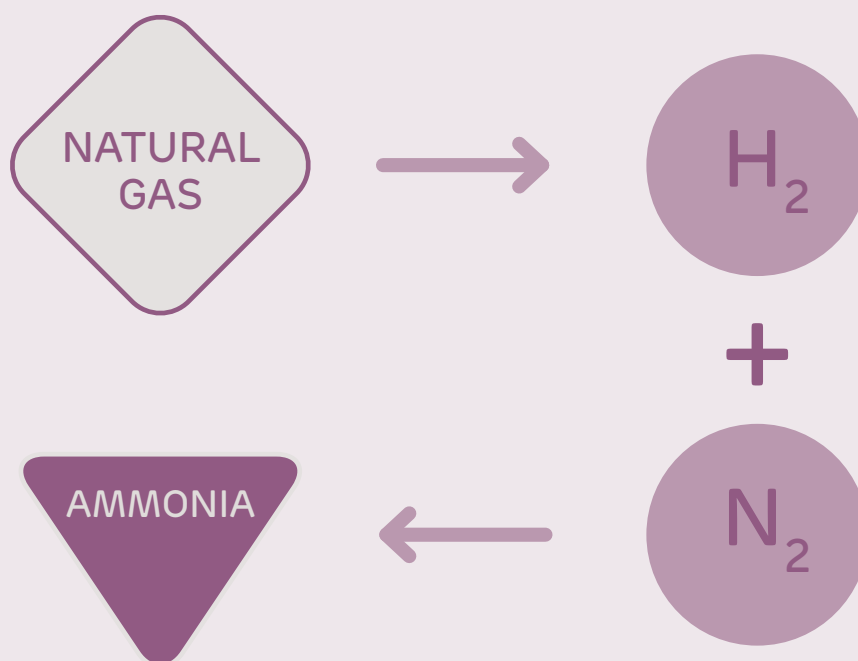
Solar

The Green Energy Project (Larrakia Energy and Korea Midland Power Co.) ⁽²⁷⁾



Larrakia Energy is a Territory company majority owned and managed by the Larrakia Development Corporation (LDC) with minority ownership and technology advice from Western Australia based renewable energy company, Progressive Green Solutions Pty Ltd (PGS). Larrakia Energy and Korea Midland Power Co. announced a Memorandum of Understanding with the Northern Territory Government in August 2023. The 2 year agreement strengthens local and international ties and formalises the relationship with the Northern Territory to complement the proponent's own expertise in renewable energy, project development and financing.

The Green Energy Project includes the scoping, construction and operation of a solar farm and a battery energy storage system (BESS) in the Greater Darwin Area in close proximity to the Middle Arm Sustainable Development Precinct. The facility is to be developed over 2 stages, generating significant employment for the Territory during its construction and operational phases and contributing to the Territory's decarbonisation objectives.



Enabling infrastructure plan

The enabling infrastructure plan for the Darwin, Palmerston and Litchfield 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)
Abala Road revitalisation	10	Enhance liveability by improving access to sports facilities	10-15
Across the region increase local court capacity	5	Strengthen equitable access by improving infrastructure to support judicial services	0-10
Across the region public housing new builds	5	Provide safe, secure and affordable housing for people on low incomes	0-15
Across the region stormwater upgrades and reconstruction	6	Improve community safety and reduce the damage, disruption and costs associated with major flood events	0-5
Amy Johnson Avenue begin progressive duplication	28	Provide commuters with an alternative connector from the northern suburbs to Darwin CBD	5-10
Arnhem Highway duplication Stuart Highway to Kostka Road	60	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5
Avenira Lithium iron-phosphate (LFP) manufacturing plant Stage 1a	•	Meet global demand for critical minerals used for new and emerging technologies	0-5
Avenira Lithium iron-phosphate (LFP) manufacturing plant Stage 1b	•	Meet global demand for critical minerals used for new and emerging technologies	0-5
Avenira Lithium iron-phosphate (LFP) manufacturing plant Stage 2	•	Meet global demand for critical minerals used for new and emerging technologies	5-10
Avenira Thermal Phosphoric Acid Plant	•	Meet global demand for critical minerals used for new and emerging technologies	5-10
Bagot Road capacity improvements and upgrades	26	Increase road capacity, safety, support accessibility, connectivity and amenity	5-10
Berrimah Business Park showroom developments	60	Increase availability of quality commercial premises	0-5
Berrimah Defence Establishment redevelopment*	380	Enhance infrastructure to support defence operations	0-10

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

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

* subject to parliamentary approvals.

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Berrimah Industrial Estate warehouse developments	100	Increase availability of quality light industrial premises	0-10
Berrimah Road duplication Export Drive to Darwin Port	80	Improve network capacity and safety for increased traffic into the port	0-10
Berrimah Road duplication Stuart Highway to Marlow Road	70	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5
Berry Springs Nature Park upgrade and refresh swimming entry, including limited mobility access	1	Value, preserve and expand access to parks, increase visitation opportunities and visitor experience	0-10
Bushfires NT headquarters final stage	4	Provide for effective emergency response and improve community safety	0-15
Casuarina Education and Training Unit refit Cascom 2B	1	Improve Territory Families, Housing and community services	0-5
Channel Island Power Station de-mineralised water system	1	Asset renewal to support growth, compliance and improve service efficiency	0-5
Chin Quan Avenue upgrades	2	Enhance infrastructure to support accessibility, connectivity, safety and amenity	10-15
Chung Wah Terrace duplicate Lambrick Avenue to Elrundie Avenue	51	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
City of Darwin Movement Strategy wayfinding, pedestrian, cycling and micro-mobility infrastructure, upgrade local intersections	2	Make it easier for people to move around the city and suburbs, reducing the impact of transport on the environment	0-5
Collection storage expansion for Northern Territory Government collecting institutions (museums, galleries and archives)	55	Preservation, protection and accessibility of collections	10-15
Commercial data centre park, including electrical network upgrades and communications network upgrades	•	Enabling digital Territory and creating digital opportunity	0-5
Communications network upgrades to provide terabit transmission to southern states	18	Enabling connectivity and creating digital equality	0-5
Connected pathways	6	Strengthen a healthy, active lifestyle by improving connectivity and walkability	0-10
Coolalinga sewer	17	Support population growth by improving access to water treatment systems	0-5
Cox Peninsula Road future upgrades	15	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Darwin and Palmerston renal services expansion Home Therapies Unit	7	Strengthen liveability by improving infrastructure to support renal health services	0-10
Darwin CBD high quality office development	50	Support contemporary work practices and environments to attract and retain people	0-5
Darwin CBD Sports Stadium and Entertainment Precinct	500	Develop state-of-the-art stadium facilities to grow AFL and entertainment opportunities	5-10
Darwin CBD student accommodation facilities	•	Support economic development through growth of the international education market and support international visitation	0-10
Darwin Civic Centre redevelopment	60	Enhance infrastructure to support accessibility, connectivity, safety and amenity	0-5
Darwin Correctional Centre expand facility and additional facilities for prisoners	•	Meet community expectation through additional correctional infrastructure	0-5
Darwin Cruise Terminal and wharf upgrades	•	Support growth in tourism, visitor and corporate travel markets	5-10
Darwin H2 Hub	5000	Support the Territory's Energy Transition while enabling domestic and international companies to move towards decarbonisation and sustainable industry	5-10
Darwin High School refurbish Block A (classrooms)	11	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	0-15
Darwin High School refurbish Block B (music and arts)	11	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	0-10
Darwin International Airport 2017 Master Plan Darwin Airport Central warehousing/logistics precinct	•	Respond to growth in the aviation export sector	5-10
Darwin International Airport 2017 Master Plan future growth of Darwin Airport Central light industrial complex	•	Respond to growth in the aviation export sector	5-10
Darwin International Airport 2017 Master Plan multi-level car park	•	Improve airport services to support accessibility, visitor growth and tourism	15+
Darwin International Airport 2017 Master Plan taxiway system enhancements	•	Respond to growth in the aviation sector	5-10
Darwin International Airport 2017 Master Plan terminal expansion	•	Improve airport services to support accessibility, visitor growth and tourism	15+
Darwin International Airport aerobridge major refurbishment/replacement (bays 1 and 5)	•	Improve airport infrastructure to support aviation safety and growth	0-5

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Darwin International Airport baggage system design and upgrades, including back of house storage area	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport battery energy storage systems	•	Support net zero strategy and improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport chiller replacement project	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport duplication of eastern escalator	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport HV program	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport main switch room replacement	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport new access for international terminal (new canopy, central escalator, travelators and international departure processing)	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport new baggage reclaim replace/re-orientate existing carousel 3	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin International Airport water infrastructure upgrades	•	Improve airport infrastructure to support aviation safety and growth	0-5
Darwin new vertical school in CBD	45	Contemporary educational infrastructure to support growth in population and student enrolments	15+
Darwin rural area agribusiness development	•	Enable agribusiness economic growth and opportunities	0-10
Darwin Seafood Processing Facility	10	Enable economic development and diversification of the seafood industry	0-10
Darwin Supreme Court refresh	10	Strengthen equitable access by improving infrastructure to support judicial services	5-10
Darwin Visitor Information Centre upgrade	•	Enhance the visitor experience, support new and existing tourism businesses, provide visitor information and increase visitor spend and dispersal	0-10
Darwin Waterfront central precinct development – commercial surf park – tropical lagoon – waterfront pools	267	Master planned vision for Darwin's central water attraction catering to both residents and visitors	0-5

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Darwin Waterfront northern precinct development – residential hub – connect foreshore walk	250	Unlock future expansion towards Frances Bay and beyond the Waterfront	0-10
Darwin Waterfront southern precinct development – superyacht facility – mixed use development – tourism development	•	Improve the economic diversity of the Waterfront precinct	0-5
Darwin/Palmerston Passenger Rail Terminal	•	Enable economic development by improving passenger rail transport	0-5
Darwin-Katherine electricity grid generation augmentation (phase 4)	102	Asset renewal to support growth, compliance and improve service efficiency	0-10
Dinah Beach Road upgrade to urban cross section	6	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5
Driver community hub (Family Resource Centre) reconstruction	3	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-5
Driver Primary School administration building additions	2	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	0-15
Durack Primary School administration building additions	1	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	5-10
Elizabeth Valley Road bridging Elizabeth River	1	Improve all weather access to support accessibility, growth and community safety	5-10
Export Drive improve flood immunity	5	Improve safety and access associated with flooding	5-10
Fannie Bay Gaol visitor centre and arts hub	10	Grow a creative and innovative community, expand tourism opportunities to develop the economy and increase liveability	10-15
Farrar West residential subdivision	50	Enable economic development and population growth by increasing land availability	0-5
Farrar West residential subdivision headworks	12	Enable economic development and population growth by increasing land availability	0-5
Fortescue Middle Arm Green Hydrogen Hub	•	Decarbonise heavy industry and create jobs	0-10
Frances Bay Marine Precinct development	•	Support economic development within the precinct and support the commercial fishing and boating industries	0-15
Freds Pass Sports and Recreation Reserve	•	Enhance liveability by improving recreation facilities	0-5

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Gardens Oval multi-sport precinct upgrades	5	Common user facilities to maximise a healthy, active lifestyle by improving recreation opportunities	0-5
Girraween Primary School new 4-classroom block	3	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	0-10
Girraween Road duplication from Stuart Highway to Anglesey Road	30	Increase road capacity, safety, support accessibility, connectivity and amenity	15+
Greater Darwin new 60 bed residential aged care facility	•	Provide a variety of contemporary, affordable and sustainable housing options for older Territorians	0-5
Greater Darwin Regional Waste Management Facility	•	Support improved waste management and recycling processes	5-10
Greater Holtze Area Plan educational facilities	•	Contemporary educational infrastructure to support growth in population and student enrolments	0-10
Hicks Road extension both ends, including bridging of wet areas	25	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
Hidden Valley disability access at turn 6	•	Enhance community engagement by improving facilities	0-5
Hidden Valley implement Master Plan	•	Enhance community engagement by improving access to facilities	0-10
Hockey NT upgrade to surface	2	Enhance liveability by improving sports facilities	5-10
Howard Springs Volunteer Fire Brigade construct new station	3	Strengthen emergency support services in rural communities	0-15
Humpty Doo Volunteer Fire Brigade construct station and sheds	5	Strengthen emergency support services in rural communities	0-15
Koolpinya Volunteer Fire Brigade construct station and sheds	5	Strengthen emergency support services in rural communities	0-15
Kowandi infrastructure headworks to support residential land release	240	Enable economic development and population growth by increasing land availability	5-10
Lake Alexander upgrade road pavements, playgrounds, lighting and facilities	7	Enhance infrastructure to support accessibility, connectivity, safety and amenity	5-10
Lambrick Avenue Duplication Stuart Highway to Zuccoli Parade	30	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5
Lambrick Avenue duplication Zuccoli Parade to Roystonea Avenue	40	Increase road capacity, safety, support accessibility, connectivity and amenity	5-10

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Lameroo Beach Precinct	140	Enhance lifestyle options, provide employment opportunities, and enhanced visitor experience	5-10
Larrakeyah multi dwelling development	•	Provide innovative medium density housing options and create a safe and vibrant place for people to enjoy	0-10
Larrakeyah Primary School 4 new classrooms	5	Contemporary educational infrastructure to support growth in population and student enrolments	5-10
Larrakeyah Primary School preschool redevelopment	5	Master planned infrastructure to provide contemporary educational facilities to support growth in early years learning enrolments	0-5
Larrakia Nation headquarters, with Larrakia Community Centre	•	Provide headquarters and community centre for Larrakia Nation and its people	0-5
Letchford Road floodway upgrade	1	Support connectivity and improve all weather access to improve community safety, accessibility and support future growth	0-5
Litchfield 'Gateway to Kakadu' tourist information centre	•	Strengthening a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	5-10
Litchfield Aquatic Centre 50 metre swimming pool and associated facilities (children's pool, hydro-therapy area)	•	Enhance liveability by improving recreation facilities	5-10
Litchfield community building with room for classes (arts, yoga, kids' karate)	•	Enhance liveability by improving recreation facilities	5-10
Litchfield dumping station for recreational vehicles and caravans	•	Enhance liveability by improving council facilities	5-10
Litchfield exhibition pavillion	6	Enhance liveability by improving recreation facilities	0-5
Litchfield municipality drainage and erosion mitigation	•	Improve community safety and reduce the damage, disruption and costs associated with major flood events	0-15
Litchfield municipality soccer change rooms	1	Enhance liveability by improving recreation facilities	0-5
Madsen Road construction between Hicks Road and Howard Springs Road	20	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
Manunda Terrace School basketball court upgrades	1	Contemporary educational infrastructure to support student engagement	0-5
Marine Industry Park	27	Support the development of local industry and create a sustainable economy	0-5
Marlow Lagoon Recreation Reserve Master Plan/recreation precinct	•	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-10

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Marrara Sporting Precinct implement Master Plan	•	Enhance liveability by improving sports facilities	0-10
McMillans Road duplication Vanderlin Drive to Stuart Highway	•	Increase road capacity, safety, support accessibility, connectivity and amenity	5-10
McMinn Street duplication from Daly Street to Bennett Street	70	Provide capacity improvements for Darwin CBD circulation and relieve congestion	5-10
Mickett Creek implement Master Plan	10	Enhance liveability by improving recreation facilities	0-5
Middle Arm fire response and training facility	20	Support the continued delivery of quality fire and emergency services	0-10
Middle Arm Sustainable Development Precinct industrial land	300	Support the establishment of large strategic industries for downstream gas processing, mineral processing, renewable energy and related developments	0-5
Middle Arm Sustainable Development Precinct roads and rail	200	Support the establishment of large strategic industries for downstream gas processing, mineral processing, renewable energy and related developments	0-5
Mimik-Ga (Henbury Avenue) early intervention hub upgrades	5	Master planned infrastructure to provide contemporary early years educational facilities to support students with additional needs	0-10
Mindil Beach upgrade and redevelopment	8	Enhance the amenity of the area and recognise the cultural significance of the area	0-10
Mitchell Creek tourist trail/conservation reserve	•	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-10
Moil Primary School relocate preschool and refurbish administration building	6	Master planned infrastructure to provide contemporary early years educational facilities to support growth in population and student enrolments	0-10
Moulden community hub	4	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-10
Moulden Davoren Circuit and Bonson Terrace housing redevelopments	•	Improve the sustainability of the social and affordable housing system	0-5
Muirhead North new preschool and primary school for 450 enrolments	50	Contemporary educational infrastructure to support growth in population and student enrolments	0-10
Museum and Art Gallery of the Northern Territory (MAGNT) air-conditioning upgrade	•	Value, preserve and expand historic, cultural meeting places, increase visitation opportunities and user experience	0-10
Museum and Art Gallery of the Northern Territory (MAGNT) Bullocky Point Master Plan infrastructure outcomes	•	Master planned infrastructure to support visitor and tourism growth	0-15

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
New local and international joint Asia Pacific Emergency Response Training Complex	25	Support the continued delivery of quality emergency response services	10-15
New Water Police Complex	40	Support the continued delivery of quality emergency response services	10-15
Nightcliff Beach redevelopment	8	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	5-10
Nightcliff Jetty replacement	25	Replace ageing infrastructure to improve recreational opportunities and enhance visitor experience	0-10
Nightcliff Middle School upgrade home economics and canteen, traffic calming and grounds	3	Upgrade ageing infrastructure to support the continued delivery of quality education	0-15
Nightcliff Middle School upgrade science lab	2	Upgrade ageing infrastructure to support the continued delivery of quality education	0-10
Nightcliff Oval Master Plan full playing surface refurbishment and facilities upgrades	3	Master planned infrastructure to support growth in sport involvement	0-5
Nightcliff Oval Master Plan new car parking and seating with shade	2	Master planned infrastructure to support growth in sport involvement	0-5
Northcrest new preschool and primary school for 500 enrolments	50	Contemporary educational infrastructure to support growth in population and student enrolments	15+
Northern suburbs additional classrooms	5	Contemporary educational infrastructure to support growth in population and student enrolments	0-10
Old Bynoe Road bridging Darwin River	4	Improve all weather access to support accessibility, growth and community safety	10-15
Old Bynoe Road bridging Fly Creek	4	Improve all weather access to support accessibility, growth and community safety	10-15
Palmerston and the rural area school infrastructure to support students with additional needs	21	Contemporary educational infrastructure to support students with additional needs	0-5
Palmerston College Rosebery campus staff development centre	2	Master planned infrastructure to provide contemporary educational facilities to support growth in population and student enrolments	0-15
Palmerston expand oral health services	2	Strengthen liveability by improving infrastructure to support oral health services	0-10
Palmerston Health Precinct refurbish Super Clinic	4	Strengthen liveability by improving infrastructure to support health services	0-5
Palmerston mixed use hub	•	Increase access to a variety of housing options	5-10







Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Palmerston new ambulance complex	7	Strengthen liveability by improving infrastructure for health support services	5-10
Palmerston new ferry pontoon boarding point	23	Support economic development by improving all weather access and goods handling facilities	15+
Palmerston renal services 30 bed renal patient accommodation unit	18	Strengthen liveability by improving infrastructure to support renal health services	5-10
Parap Village implement Master Plan	14	Enhance infrastructure to support accessibility, connectivity, safety and amenity	0-10
Peter McAulay Centre new exhibits/ property storage facility	7	Support the continued delivery of quality police services	10-15
Pinelands Industrial Precinct access stage 2	27	Provide better heavy vehicle access into Pinelands Industrial Precinct	0-10
Progress Drive/Nightcliff Road upgrade to dual lane roundabout	2	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
Public places activation and creative industries 5 year plan implementation	5	Strengthen a healthy, active lifestyle by improving connectivity and walkability	0-10
Regional creative industries hub	•	Grow businesses and develop supply chains in the creative industries	10-15
Regional indoor basketball facility	40	Enhance community engagement by improving facilities	0-5
Rockland Drive and Florey Avenue intersection upgrade	•	Improve access and increase safety	0-5
Royal Darwin Hospital upgrades	•	Strengthen liveability by improving infrastructure to support health services	0-15
Roystonea Avenue complete road to Elrundie Avenue	25	Provide increased north-south capacity to cater for residential development	10-15
Roystonea Avenue duplication Lambrick Avenue to Owston Avenue	25	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
Roystonea Avenue duplication Terry Drive to Lambrick Avenue	25	Increase road capacity, safety, support accessibility, connectivity and amenity	0-5
Shoal Bay Waste Management Facility stage 2 phase 1 south western expansion	6	Support improved waste management and recycling processes	0-5
Shoal Bay Waste Management Facility stage 2 phase 2 north eastern expansion	6	Support improved waste management and recycling processes	10-15

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Snell Street extension to Tiger Brennan Drive	200	Increase road capacity, safety, support accessibility, connectivity and amenity	15+
Southport Mira Square meeting and play areas	1	Strengthen a healthy, active lifestyle by improving recreation and community facilities	0-10
Spencer Road floodway upgrade	1	Support connectivity and improve all weather access to improve community safety, accessibility and support future growth	5-10
Stokes Hill Wharf new retail infrastructure and rectification works	5	Improve the economic viability of the Waterfront precinct	0-10
Superyacht berthing facilities	•	Enable significant economic contribution by growing Darwin's maritime service and supply for the superyacht industry, with a view to expanding capability in time for the 2032 Olympics in Brisbane	0-5
The Narrows Shiers Street housing redevelopment	•	Improve the sustainability of the social and affordable housing system	0-5
Thorngate Road pavement upgrade	2	Road improvement to increase safety, support accessibility, connectivity and amenity	5-10
Tiger Brennan Drive intersection grade separations	•	Increase road capacity, safety, support accessibility, connectivity and amenity	10-15
Tivan Limited processing facility	•	Meet global demand for critical minerals	5-10
Tivan Limited Vanadium Electrolyte Facility	•	Produce electrolyte products to meet the specifications of major global vanadium battery manufacturers	0-5
Tivan+ critical mineral pilot plant	•	Process hard rock vanadium ore bodies to produce three commercial grade products: vanadium, titanium and iron	0-5
Trower Road capacity improvements and upgrades	20	Increase road capacity, safety, support accessibility, connectivity and amenity	5-10
Undergrounding power to schools and suburbs	•	Continue to build a resilient power network, against cyclones and monsoons, for businesses, schools and homes	0-10
Vanderlin Drive duplication McMillans Road to Stuart Highway	70	Provide north-south capacity improvement for access from the northern suburbs	0-5
Virginia Road bridge over Wells Creek	1	Increase road capacity, safety, support accessibility, connectivity and amenity	5-10
Virginia/Bees Creek Volunteer Fire Brigade construct new station	3	Strengthen emergency support services in rural communities	0-10

Proposals	Estimated Total \$m	Challenges/opportunities	Timeframe (Years)
Weddell Freeway	•	Improve access from the Darwin CBD to Noonamah, Berry Springs and Weddell, and connect to future strategic commercial and industrial land including Middle Arm Sustainable Development Precinct	0-15
Weddell Renewable Energy Hub stage 2	•	Enable economic development and population growth	5-10
Woodroffe community hub	4	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-10
Woodroffe oval upgrade to suit AFL	5	Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience	0-5
Zuccoli and Surrounds Community Hub stage 3 playground, basketball court and walking trails	3	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-5
Zuccoli and Surrounds Community Hub stage 4 community centre and library	12	Strengthen a healthy, active lifestyle by improving recreation opportunities and engage communities	0-5
Zuccoli Primary School 4 additional classrooms	3	Contemporary educational infrastructure to support growth in population and student enrolments	0-10

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
Darwin, Palmerston and Litchfield		
Accelerate planning for land release in Holtze and Kowandi	 Reform	 In progress
Progress the business/economic case for Darwin Waterfront development	 Reform	 In progress
Progress the business/economic case for Darwin City Stadium	 Reform	 In progress



Above: Wave Pool at Darwin Waterfront. Credit: Tourism NT.

Infrastructure pipeline

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

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Acacia Hills Regional Connectivity Program Round 2 – deploy one new Telstra macro cell mobile base station	0.9	•	•	•	Enabling connectivity and creating digital equality
Across the region power network and substation upgrades	84.0	1.6	3.5	•	Asset renewal to support growth, compliance and improve service efficiency
Across the region upgrade bus stops, install bus stop shelters, upgrade bus interchanges, <i>Disability Discrimination Act</i> (DDA) compliance upgrades	2.7	1.0	1.7		Increase road capacity, safety, support accessibility, connectivity and amenity
Airport Development Group diesel storage facility	•	•	•	•	Expanding Australia's diesel storage to boost long term fuel security
Archer Waste Management Facility refurbishment	1.8	1.8			Support improved waste management and recycling processes
Bagot Road capacity improvements at intersection	6.0			•	Increase road capacity, safety, support accessibility, connectivity and amenity
Bees Creek National Critical Care and Trauma Response Centre emergency training facility	3.7	2.3			Ensure the Territory has expertise to respond to a crisis
Berrimah Farm Northern Territory Government Research Precinct new Science Services Laboratory Building	21.3	16.1			Increase research capacity and capability in the Territory
Berrimah North infrastructure headworks to support development	43.0		8.8	•	Enable economic development and population growth by increasing land availability
Berry Springs child care centre	3.0		3.0		Contemporary educational infrastructure to support growth in early years learning enrolments
Bundilla Beach revitalisation	3.5		3.5	•	Reactivate Bundilla Beach reserve to enhance liveability and attract locals and tourists
Casuarina Coastal Reserve creek to creek trail surface upgrades	0.4	0.3			Improve facilities and visitor experience on hiking track
Casuarina Pool redevelopment	25.0	20.0			Enhance liveability by improving community facilities

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Channel Island Power Station administration building airconditioning repair	0.5	0.5			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station ammonia storage	0.2	0.2			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station Darwin to Katherine battery energy storage system C3 protection system upgrade	2.6	1.2			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station Darwin to Katherine battery energy storage system communications and SCADA upgrade	1.9	1.2			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station replace C1-C6 132kV cable	1.9	1.2			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station road works	0.3	0.3			Asset renewal to support growth, compliance and improve service efficiency
Channel Island Power Station TM2500 turbines (phase 2)	32.3	15.0	•	•	Asset renewal to support growth, compliance and improve service efficiency
Charles Darwin University Casuarina campus Better Health Futures building	25.8		25.8	•	Contemporary educational infrastructure to support growth in health education
Charles Darwin University Casuarina campus new trade training facility	10.0	10.0	•		Contemporary educational infrastructure to support growth in adult and vocational training
Charles Darwin University Casuarina campus optimisation	25.0	25.0	•		Enhance education services and facilities
Charles Darwin University Education and Community Precinct new city campus (City Deals)	225.0	100.0	•		Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
City of Darwin driveway program	0.7	0.2	0.2	•	Enhance infrastructure to support accessibility, connectivity, safety and amenity
City of Darwin irrigation infrastructure upgrades	2.0	0.2	0.2	•	Improve public open space amenity and maximise irrigation efficiency
City of Darwin pathway program	2.7	1.3	1.3	•	Enhance infrastructure to support accessibility, connectivity, safety and amenity
City of Darwin road resurfacing and renewal	6.0	2.2	2.2	•	Enhance infrastructure to support accessibility, connectivity, safety and amenity

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
City of Darwin street and public lighting	2.2	1.3	1.3	•	Enhance infrastructure to support accessibility, connectivity, safety and amenity
Civic and State Square Revitalisation stage 2 (includes City Deals) CBD Art Gallery, sheltered walkways, central shade structure and public art	159.5	33.0	55.0	•	Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Coolalinga commercial precinct traffic management	27.0		10.0	•	Improve safety and connectivity in and around the Coolalinga commercial precinct
Darwin Aboriginal and Islander Women's Shelter upgrades	1.5	1.5			Support vulnerable people by improving community service facilities
Darwin Correctional Centre fencing	4.0	4.0			Meet community expectation and needs through additional correctional infrastructure
Darwin Correctional Centre increase capacity	8.5	•			Meet community expectation and needs through additional correctional infrastructure
Darwin groundwater disinfection	10.0	0.7		•	Support population growth by improving access to quality water
Darwin International Airport Darwin Airport Central Osgood South "West Village" stage 3	•			•	Improve liveability through the provision of a variety of contemporary retail and commercial precinct options
Darwin International Airport HV cable replacement program	•	•			Improve airport infrastructure to support aviation safety and growth
Darwin International Airport Regular Public Transport (RPT) apron expansion	20.0	•	•		Improve airport infrastructure to support aviation safety and growth
Darwin International Airport upgrade of short stay car park to include shade structures	•	•			Improve airport services to support accessibility, visitor growth and tourism
Darwin Local Area Traffic Management program	0.8	0.8			Support improved waste management and recycling processes
Darwin Local Court fit out Northern Territory Civil and Administrative Tribunal (NTCAT)	2.6	2.5			Strengthen equitable access by improving infrastructure to support judicial services
Darwin Ship Lift Facility including ship lift, wet berths and additional hardstand area for ship repair and maintenance works	515.0	200.0	200.0	•	Provide a common user facility for the general maritime sector and Department of Defence

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Darwin Visitor Park	10.0		10.0	•	Provide safe, affordable and sustainable temporary housing options for Territorians
Darwin Waterfront hotel adjacent to the Darwin Convention Centre	85.0		•	•	Enable growth in high yield convention and corporate markets
Darwin Waterfront infrastructure upgrades	7.0	3.9			Master planned vision for Darwin's central water attraction catering to both residents and visitors
Darwin Youth Justice Centre development and fit out	•	•	•		Improve outcomes for young people in detention, their families and the community
Darwin-Katherine battery energy storage system 2 (phase 3)	35.0	•			Reduce the use of gas generators for the Darwin-Katherine system to meet Northern Territory renewables target of 50% by 2030
Darwin-Katherine energy storage system (phase 1)	45.0	•			Reduce the use of gas generators for the Darwin-Katherine system to meet Northern Territory renewables target of 50% by 2030
Dawn House women's shelter upgrades	6.1	6.1			Support vulnerable people by improving community service facilities
Dudley Point fishing platform	6.0	•	•		Enhance access to recreational fishing
East Arm Bulk Liquids Area Crowley Project Caymus – construct US bulk fuel storage facility	270.0	•			Strategic bilateral defence facility for fuel reserve storage
East Arm construct Wishart Zone Substation	6.4			•	Additional assets to support growth, compliance and improve service efficiency
East Arm storage and quarantine inspection shed	•	•			Increase capacity of exports
East Arm utilities upgrade	15.0	7.6	7.0		Increase capacity of the East Arm precinct
East Point new land based fishing platforms	4.6		4.6		Enhance liveability by improving access to recreation facilities
Fannie Bay, 7 Waratah Crescent residential redevelopment	3.8			•	Provide innovative medium density housing options and create a safe and vibrant place for people to enjoy
Fort Hill Wharf electrical infrastructure upgrades	•	•			Replace ageing infrastructure to improve visitor experience
Frances Bay Marine Facilities lock replacement and upgrade	20.8	13.1			Support economic growth and improve safety for the commercial boating and fishing industry
Gunn Point Emerging Agribusiness Precinct	6.3	6.1			Economic growth through the development of emerging industries in the agricultural sector

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Holtze infrastructure headworks to support residential land release	44.0	23.0	21.0	•	Enable economic development and population growth by increasing land availability
Hudson Creek trunk sewer	0.3			•	Support population growth by improving access to water treatment systems
Hughes Airfield maintain and seal airstrip	1.2	1.1			Provide effective emergency aerial response and improve community safety
Humpty Doo Barramundi farm expansion	60.0			•	Further develop and expand the fisheries export industry supported by the Northern Australia Infrastructure Facility (NAIF)
Jingili Primary School replace roof	3.0	3.0	•		Replace ageing infrastructure to support the continued delivery of quality education
Kowandi infrastructure planning to support residential land release	1.0	1.0			Enable economic development and population growth by increasing land availability
Kulaluk (Coconut Grove) flood mitigation	13.2	13.0	•		Improve safety and reduce the damage, disruption and costs associated with major flood events
Larrakeyah Defence Precinct Redevelopment Program infrastructure enhancements including NORFORCE redevelopment, a new wharf and in-ground services	601.0	150.0	150.0		Enhance infrastructure to support defence operations
Larrakia Cultural Centre	56.0	•	•		Value, preserve and celebrate Larrakia culture, improving tourism opportunities and experience
Leanyer Sanderson Waste Stabilisation Ponds long term augmentation	20.0		20.0	•	Support population growth by improving access to water treatment systems
Lee Point new Defence housing	•		•	•	Provide supportive housing for defence personnel and their families
Lee Point Defence Housing Australia (DHA) master-planned community	•	•	•	•	Defence Housing Australia commitment to enable economic development and population growth by increasing land availability
Lee Point Road duplication	3.0	•			Enhance infrastructure to support accessibility, connectivity, safety and amenity
Litchfield municipality road re-sealing	8.0	0.9	0.9	•	Increase road capacity, safety, support accessibility, connectivity and amenity
Marrara fire station grass fire unit storage	0.2	0.1			Strengthen emergency support services in remote communities

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Middle Arm Sustainable Development Precinct marine infrastructure	1,500.0	14.0	200.0	•	Support the establishment of large strategic industries for downstream gas processing, mineral processing, renewable energy and related developments
Middle Point Regional Connectivity Program Round 2 – deploy one new Telstra macro cell base station	1.0	•	•	•	Enabling connectivity and creating digital equality
Millner child care centre	5.0	5.0	•		Contemporary early educational infrastructure to support growth in population and child care enrolments
Moil Primary School replace roof	3.0	3.0	•		Replace ageing infrastructure to support the continued delivery of quality education
Nakara Primary School refurbish ablutions	0.9	•			Upgrade ageing infrastructure to support the continued delivery of quality education
Navy Capability Infrastructure Sub-program - Offshore Patrol Vessel (OPV) Facilities (SEA 1180 Phase 1)	270.0	•	•	•	Enhance defence capability to handle larger vessels
Northcrest Berrimah – headworks – new residential subdivision – neighbourhood centre	•	•	•	•	Enable economic development and population growth
Northcrest – Northern Land Council (NLC) office precinct – in stages	24.5		•	•	Support NLC to consult with Traditional Owners and other Aboriginal and Torres Strait Islander peoples
NT Archives Centre refit work areas	0.7	0.5			Value, preserve and expand historic and cultural places, increase visitation opportunities and visitor experience
NT Archives Centre upgrade to compactus shelving	1.0		•		Value, preserve and expand historic and cultural places, increase visitation opportunities and visitor experience
NT Library move to the Education and Community Precinct	7.0	•			Value, preserve and expand historic and cultural places, increase visitation opportunities and visitor experience
Palmerston convert old fire station into a training centre	2.3		2.3		Support the continued delivery of quality police, fire and emergency services
Palmerston SWELL (Swimming, Wellness, Events, Leisure, Lifestyle) Master Plan – refurbish swimming pool, aquatic adventure play area, basketball half court and shaded areas	19.4	15.0			Strengthen a healthy, active lifestyle by improving recreation opportunities and enhance visitor experience
Parap Primary School preschool	9.6		9.6		Replace ageing infrastructure to support the continued delivery of quality education

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Pinelands Industrial Precinct heavy vehicle access	6.0			•	Provide better heavy vehicle access into Pinelands Industrial Precinct
Public Housing new builds	•	•			Provide safe, secure and affordable housing for people on low incomes
RAAF Base Darwin and Darwin International Airport main runway resurfacing project	200.0	•	•		Support military and civilian air traffic into the Northern Territory to at least 2040
RAAF Base Darwin bulk fuel storage, pump houses, filtering and control room as part of the United States Force Posture Initiative	114.0	•	•		Enhance facilities for US Air Force operations at RAAF Base Darwin
RAAF Base Darwin US Defence Force operations facility	38.0			•	Enhance facilities for US Air Force operations at RAAF Base Darwin
RAAF Base Darwin mid-term refresh	203.0		100.0	•	Upgrade infrastructure to enhance defence capability and operations
Richardson Park Redevelopment access road extension, community recreation facility	12.3	6.4			Strengthen a healthy, active lifestyle by improving recreation opportunities and enhancing visitor experience
Royal Darwin Hospital 32 bed modular multi-purpose facility	25.0		25.0	•	Strengthen liveability by improving infrastructure to support health services
Royal Darwin Hospital entrance road upgrade	0.5	0.5			Strengthen liveability by improving access to health services
Royal Darwin Hospital main ward block concrete spalling repairs	4.7	3.0			Strengthen liveability by improving infrastructure to support health services
Royal Darwin Hospital new forensic mortuary, pathology and bereavement facility	23.7		23.7	•	Strengthen liveability with culturally appropriate infrastructure to support health services
Royal Darwin Hospital new mental health inpatient unit	60.0	30.0	30.0		Improve mental health services and increase number of beds available
Shoal Bay Waste Management Facility new leachate pond	8.0	8.0			Support improved waste management and recycling processes
Shoal Bay Waste Management Facility stage 7 cell	9.0		9.0	•	Support improved waste management and recycling processes
Smith Street greening and cooling	3.0	3.0			Unlock business and industry development opportunities and create a safe and vibrant place for people to enjoy
Stokes Hill Wharf upgrades	1.0	1.0			Improve the economic viability of the Waterfront precinct

Project	Estimated \$m				Challenges/opportunities
	Total	2023-24	2024-25	Outer Years	
Territory Wildlife Park green energy solutions	2.0	0.9			Increase renewable energy to meet Northern Territory renewables target of 50% by 2030
The Heights Durack staged subdivision	160.0	•	•	•	Enable economic development and population growth
The Narrows Shiers Street demolition of public housing complex	14.0	14.0	•		Provide a variety of safe, secure and appropriate housing options
Tiger Brennan Drive overpass at Berrimah Road	169.0	80.0	46.2		Increase road capacity, safety, support accessibility, connectivity and amenity
Trevor Horman Zone Substation	41.0	19.0	2.0		Asset renewal to support growth, compliance and improve service efficiency
Undergrounding power to schools and suburbs	60.0	10.0	10.0	•	Continue to build a resilient power network, against cyclones and monsoons, for businesses, schools and homes
Weddell Industrial Hub infrastructure planning to support development	1.0		1.0	•	Enable economic development and population growth by increasing land availability
Weddell Renewable Energy Hub stage 1 infrastructure headworks	10.0	5.0	5.0		Enable economic development and population growth
Zuccoli and Surrounds Community Hub stage 2 pump track and skate park	0.8		0.8		Strengthen a healthy, active lifestyle by improving recreation opportunities and engaged communities
Zuccoli Aspire stage 3, 4 and 5 residential subdivision with 1180 lots and neighbourhood centre	150.0	20.0	•		Enable economic development and population growth by increasing land availability
Zuccoli Mitchell Creek Green stage 2 residential subdivision	•	•			Enable economic development and population growth by increasing land availability
Zuccoli Village stage 1 residential subdivision with 800 lots	•	8.0	8.0	•	Enable economic development and population growth by increasing land availability

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.

The audit revealed several potential infrastructure needs for the Darwin, Palmerston and Litchfield region. Where these needs were already in the planning phase, they have been included in the Enabling Infrastructure Plan or Infrastructure Pipeline tables in this document. The remaining Darwin, Palmerston and Litchfield region 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 those needs and proposals.



Transport and Logistics

- Anzac Parade seal remaining 3 kilometres of road
- Darwin Aquaculture Centre expansion
- East Arm bulk materials storage shed
- Litchfield area bike paths to schools
- Marine Supply Base construct alternate access road



Utilities

- East Arm duplicate water supply
- East Arm sewer system upgrade
- Hidden Valley Sustainable Water centralised water treatment and recycling plant
- Holtze/Kowandi zone substation
- Humpty Doo 22kV power line upgrade
- NBN expansion
- Palmerston solar farm
- Waste to fertiliser infrastructure
- Wishart construct pump station



Social Infrastructure

- Affordable housing options
- Campervan facilities to support self-drive market
- Cullen Bay multi-storey car park
- Cultural Park of Relevance
- Darwin's Sunset Boulevard Ocean Boardwalk
- Fisherman's Wharf covered unload area
- Holtze early learning to senior education facilities
- Holtze recreation facilities
- Marine Training Centre
- Palmerston regional recreation lake
- Tracy Village sporting hub redevelopment
- Waterfront to Waterfront connections between the City CBD, Cullen Bay and Darwin's Waterfront
- Youth infrastructure upgrades



Land

- Redevelop aged infrastructure sites inner suburbs

The Darwin, Palmerston and
Litchfield region is one of 6 regions
in the Northern Territory.

To download the full NT Infrastructure Plan and Pipeline
or the NT Infrastructure Audit visit

<https://infrastructure.nt.gov.au>





Above: Barramundi Adventures, Berry Springs. Credit: Tourism Australia.



About Infrastructure NT

Infrastructure NT is the Northern Territory's infrastructure body. Infrastructure NT undertakes strategic infrastructure planning and development that co-ordinates and aligns infrastructure needs with economic and population growth.

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