



Charles Darwin University

A call to action for the next
Northern Territory Government





**CHARLES
DARWIN
UNIVERSITY**



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Vice-Chancellor's Foreword

We are a deeply connected university and are very proud to work in partnership with First Nations peoples, our communities, industry and government.

These partnerships allow Charles Darwin University (CDU) to be the Territory's leading force in higher education and TAFE delivery.

By delivering this call to action, we are showcasing one of our values - we are being courageous. We know these asks are courageous and we know they will require planning, commitment and partnering.

But we also know, delivering on these proposals will show that we are investing in the future prosperity of the Territory.

This call to action provides a roadmap drawing on our place and our people. It includes practical ideas – from major infrastructure revitalisation, to effective policy changes. It includes changes that we believe will support the liveability of the Northern Territory (NT) by investing in education, training and research.

Maintaining strong connection and aligned strategic priorities with the next Northern Territory Government (NTG) will deliver positive outcomes for the Territory.

Professor Scott Bowman AO
Vice-Chancellor and President



Introduction

The next Northern Territory Government has an opportunity to put education, training and research at the centre of the NT's future. The purpose of this document is to set out a series of priorities that a future Government for the NT could adopt at the 2024 NT election for delivery in the next term of Government.

CDU's vision under our Strategic Plan, 2021-2026 is to be Australia's most connected university by being courageous and making a difference in the NT, Australia and beyond.

In advancing our Strategic Plan, CDU will always be the Territory's University – best positioned to support the training, degree education and research needs of the NT and its people.

Being a dual sector university, CDU has fought for the equal recognition and value placed on vocational and degree education. We meet needs of Territorians through campuses in Darwin, Alice Springs, Palmerston and Katherine and in study centres in Nhulunbuy and Tennant Creek. CDU has a proud history of delivering on country in some of the NT's most remote locations, bringing training to communities who need it in places such as Galiwin'ku, Maningrida, Borroloola, Wadeye and Hermannsburg.

At the heart of CDU is to engage First Nations students and support their attainment of vocational and higher education. The NT spans approximately one sixth of Australia's landmass and yet is home to just one per cent of the population, of whom 30 per cent are First Nations peoples.

The NT can be at the forefront of national prosperity and CDU looks forward to working with the next NT Government.

Summary

CDU asks the next NT Government to support CDU's contribution to six key areas:

Education that underpins economic growth

- Ongoing funding to embed the success of the Remote Aboriginal Teacher Education Program
- Scholarships to keep high school graduates in the Northern Territory
- A new place-based TAFE funding model for remote areas
- A review of VET in schools

Engagement in Science as a catalyst

- A Chief Scientist for the NT
- The Radicle Centre for school student engagement
- An NT entrant in the 2025 Solar Car Challenge
- A strategic environmental plan for the Greater Darwin Region

First Nations leadership

- Expanding the Bidjipidji Program and First Nations Pre-Programs
- Creating a Traditional Uses Forest focused on native bush food and medicinal plants in Katherine

CDU as an enabler of high-priority economic opportunity

- CDU as a Research Partner of choice
- A pilot plant for Northern Australian Food Technology and innovation
- A Centre of Excellence for Energy Transition
- An Advanced Manufacturing Training Centre

CDU's role in promoting liveability in the Territory

- The CDU Menzies School of Medicine
- Rural placement scholarships for allied health students in the NT
- Providing support for Defence family members to study or train at CDU

Infrastructure to meet a growing economy and activated population

- A CDU campus in Alice Springs CBD
- Remote delivery trailers to mobilise TAFE delivery
- A Trades Training Centre on the Katherine Rural Campus
- Unlocking student accommodation in Darwin CBD

Education and training that underpins economic growth

The NT education context

Investing in education has an intergenerational impact and benefits everyone.

A critical lever to improving our vocational and degree students' success is investing first in school education systems. Many of the challenges CDU students face are related to historical

disadvantage, our location and the sparse population base. Data shows that NT school students have the lowest or near- lowest levels of literacy and numeracy in Australia, compounded by remoteness.

CDU supports the current NT Government's approach to review and improve school education through a two-step process: first primary school, and then secondary school. These reviews will be critical to any considerations for future bilateral agreements with the Commonwealth in the National School Reform Agreement from 2025.

In August 2024, the NT Government will need to secure a fair share of funding for our schools through the National School Reform Agreement from 2025. Any per-population base for this Agreement is likely to be inadequate, and would perpetuate the assumption that a per-population basis of funding is the best starting point for school funding in the NT.

Initial Teacher Education at CDU

CDU graduates around 200 teachers each year from Initial Teacher Education (ITE) Programs – early childhood, primary and secondary teachers. With a proudly Territory-relevant experience for all our ITE students, this consistent pipeline of graduate teachers serves the needs of Territory schools across government and non-government systems.

Strong support from the NT Government would allow more students to undertake their ITE training here, resulting in more local graduate teachers ready to train in NT schools. The next NT Government should ensure any incentives to teach in the Territory are matched by incentives to study and train locally.

CDU contributes not just to the pool of teacher graduates, but also to teacher assistants, and Aboriginal teacher assistants, a vocational qualification critical to supporting effective classrooms and student learning; and early childhood educators.

Ongoing funding to embed the success of the Remote Aboriginal Teacher Education Program

Recognising and training remote teachers has a ripple effect in communities. A critical program run at CDU is the Remote Aboriginal Teacher Education (RATE) Program. It establishes a partnership between NTG and CDU to support capacity building of First Nations educators in remote education settings at every step of their careers, while creating opportunities for those who aspire to become qualified teachers. The current partnership expires on 30 June 2024 and discussions will commence shortly to continue the partnership with long term funding.



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of their careers**
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RATE partners with schools in remote communities to support the progression of teacher assistants, and then creating a pathway for those students to build their skills through degree education into becoming qualified teachers.

Following its reinvigoration in 2021, RATE has proven its maturity with more than 20 students in seven sites in 2023 at various stages of their paths to complete a Bachelor of Education. On International Teachers Day in October 2023, two RATE students were recognised at the Teaching in the Territory Excellence Awards.

Whilst not specifically mentioned in the public release of the NT Department of Education Review into Secondary Education. It is hoped that the RATE Program will support the pathways to strengthen schools in remote and very remote locations.

1. CDU asks for ongoing funding for the RATE program to provide a consistent and secure pipeline of Remote Teacher Assistants and qualified teachers into the future.

Scholarships to keep high school graduates in the Northern Territory



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The NT suffers from a school leaver exodus, with most high school graduates with ambition to study a degree moving interstate. Around 160 NT school leavers come to CDU directly from school and we want to see this number grow. This is good for the Territory because when students study here they are more likely to stay here as professionals.

Local business and industry also benefit, with students undertaking placements and internships and building connections before they graduate. This is one of the reasons why CDU is ranked number two nationally for graduate employment outcomes.

An existing NT Higher Education Scholarship currently rewards 20 students who score more than 85 on their Australian Tertiary Admissions Ranking (ATAR) with a \$5,000 scholarship.

While CDU would like to see further incentives for high school graduates from the NT to study a degree with us, we acknowledge student choice is paramount. The Commonwealth Government's Tertiary Access Payment of \$5,000 is already available for NT students who move interstate for university. So as not to duplicate effort, the NT's scholarship funding should be exclusively for students remaining in the Territory to study. Scholarships could be better targeted to professions-in-need in the Territory with study paths through CDU.

2. CDU asks for a policy change to the NT Higher Education Scholarship to be awarded only to students studying at CDU and for the scholarships to target professions-in-need, rather than ATAR score.

The NT Training Context

The VET National Data Asset demonstrates the positive impact of undertaking VET training across a range of student outcomes. In economic terms, it shows the median income uplift nationally for those completing a VET course was \$10,285 in 2018-19, and for First Nations people the median income uplift was even higher at \$12,198.¹

1 Jobs and Skills Australia, 'VET National Data Asset (VNDA): VET Student Outcomes – Top 100 courses', November 2023, at 8, accessed at <https://www.jobsandskills.gov.au/data/vet-national-data-asset-vnda>

The VET National Data Asset also shows that VET completion plays an important role in the progression of lifelong learning, with 15.7 per cent of students commencing further VET studies, and 6.7 per cent to higher education.²

Given strong employment outcomes from VET nationally, but especially in the Territory and for First Nations, vocational education and training should be supercharged in future NT Government budgets.

The role of CDU TAFE

The Territory's largest provider of VET training is CDU TAFE. Unlike private providers, CDU is established under an Act of Parliament (Charles Darwin University Act 2003); is bound to provide technical and vocational training under that Act; and is not-for-profit. CDU receives operational base funding from NTG and is obliged to work with government to respond to skills needs.

In practical terms, this leads CDU to make a range of non-commercial decisions, where they are in the interests of the NT and training its people. In exceptionally thin markets this also allows CDU to operate as a backbone of infrastructure, bolstered by our dual service with degree education.

The purpose-driven role of CDU allows us to work with NTG to ensure our education delivery align with government's skills and workforce planning. The partnership is an asset to the Territory and should continue to be recognised.

A new place-based TAFE funding model for remote areas

It's important to acknowledge the NT has in place significant regional and remote loadings – applied on a per student basis. Even with these loadings, the participation of students in remote settings is incredibly unpredictable. There remain barriers to remote delivery that can be improved. The current funding model is based on a per-student per-hour funding model, which limits innovation and remote delivery that would be otherwise available.

An alternative approach would be to run a place-based TAFE funding model for training in remote areas, regardless of the student cohort size. This is how CDU TAFE currently scopes work for non-government contracts. With appropriate design and oversight, more vocational education could be delivered in remote settings.

3. CDU asks for a new place-based TAFE funding model for remote areas.

A Review of VET in schools

It is CDU's view that the next NT Government should review its VET in schools program.

For many students, a successful VET experience starts at school. CDU undertake extensive VET delivery in schools through CDU TAFE. Across the last five years, on average, 1,122 students (by headcount) studied a VET in school course, with more than 30 per cent of those students being First Nations. In 2022, CDU taught VET in schools to students from 48 different middle or senior schools.

Despite strong take-up of VET in NT secondary schools, the VET in schools model was not a major focus of the 2023 NT Review of Secondary Education and could benefit from further analysis.

In CDU's submission to the NT Review of Secondary Education, CDU recommended that a stronger focus on incorporating vocational pathways in schools could improve transitions into further education and training. CDU also recommended addressing funding models for VET in schools to adopt a cost of delivery approach and consider innovation to deliver numeracy, literacy and digital literacy to students.



² Jobs and Skills Australia, 'VET National Data Asset (VNDA): VET Student Outcomes – Top 100 courses', November 2023, at 23, accessed at <https://www.jobsandskills.gov.au/data/vet-national-data-asset-vnda>.

As with remote delivery more broadly, the current funding model for VET in schools is restricted to a per-student per-hour funding model, which limits innovation and remote delivery that would be otherwise available. There are regional loadings for identified 'Regional' locations (25%) and 'Remote' locations (80%) There are no additional 'Learner Support' provisions and no access to Away From Base Funding, meaning it is not financially viable to provide training for small school cohorts in remote areas, particularly where English literacy and numeracy barriers apply

An alternative approach would be to run a place-based TAFE funding model in remote areas, regardless of the student cohort size. This is particularly important, where the discrepancy between enrolled and attending school students can also vary. With appropriate design and funding models, more VET-in-schools could be delivered in remote settings.

Disengaged school students

CDU acknowledges the challenge of engaging students in VET in schools who are otherwise disengaged from schooling. For this reason, some of the best engagement occurs away from the school and school system. For example, industry or interest-focused courses could be used to engage young people, with a dual benefit of delivering numeracy, literacy and digital literacy to students.

Literacy and numeracy

For VET in schools, additional literacy and numeracy support lies with the secondary school, but generally does not provide great value to student cohorts as a whole. Support is only provided to individual students where NT Department of Education funding has been approved. Even where additional support is effectively delivered, the expectation on relatively short and intensive periods to bridge years of lost learning is unreasonable.

4. CDU asks for the next NT Government to initiate a review of VET in schools that includes consideration of remote delivery models, effective engagement, and literacy and numeracy support.



Fee-free TAFE

The implementation of Fee-free TAFE under the new National Skills Agreement has allowed for students to study their vocational qualifications without any out-of-pocket costs. CDU has worked with the NT Government to refine Fee-free TAFE scope for 2024 in areas of high priority, and also for target cohorts.

Now that this model is embedded, there are opportunities to expand or direct fee-free places in years to come to areas of skills need. For example, to meet the need for registered nurses, especially in aged care settings, new Fee-free TAFE places could be extended to Diploma of Nursing students, anticipated to be available in 2025. Additionally, direct investment in the vocational workforce by inclusion of Certificate IV Training and Assessment as a Fee Free TAFE course would provide an ongoing base of suitably qualified vocational teachers well into the future.

Engagement in Science as a catalyst

It is clear that increased scientific research and development will be required across a broad scope of activity in the NT including in health, advanced manufacturing, renewable energy, critical mineral development, space technology, food production and environmental management. These areas will underpin major expected economic growth areas in health services, Defence, mining, space and agribusiness.

The 2020 Territory Economic Reconstruction Commission's Report acknowledged that accelerating the uptake of skills in the areas of Science, Technology, Engineering, Arts and Mathematics (STEAM) would be needed as an incubator for jobs of the future and to capture innovative industry opportunities.

A Chief Scientist for the NT

A Chief Scientist is a senior scientific adviser, generally an individual with an established and recognised international reputation in science and research. A Chief Scientist's role involves providing strategic guidance and expert advice on scientific matters; promoting scientific research and development; and facilitating the integration of scientific knowledge into policy and decision-making processes. A Chief Scientist's role is often also as a public ambassador for science and can support the profile of science within government, industry and the broader community.

Most Australian jurisdictions have appointed a Chief Scientist or Lead Scientist (apart from the ACT and Tasmania). The Forum of Australian Chief Scientists is currently represented in the NT by the Department of Industry, Tourism and Trade. In addition, the Territory Science Forum was established in 2022 to enhance engagement between scientists in the public, private, and academic sectors active in the NT. CDU commends this initiative.

However, as part of the NT's role in scientific leadership, CDU would like to see a stronger voice for the region in national science decisions. For this reason, CDU recommends the appointment of the NT Chief Scientist to support the development of national science infrastructure. CDU recommend that a role be created to facilitate a networked approach with the seniority and expertise to advise across government independently while identifying opportunities for growth.

The University is willing, through the CDU-NT Government Partnership Agreement, to provide appropriate in-kind support, such as accommodation at CDU or a complementary partial appointment if the role is not full-time.

5. CDU asks for the next NT Government to establish a Chief Scientist for the NT and offers to provide in-kind support, as appropriate, through the CDU-NTG Partnership Agreement.

School engagement in Science

CDU is proud of its strengths in science – both in teaching delivered through the Faculty of Science and Technology and through scientific research in areas of importance to the NT and its people.

Science literacy is a key area of need. The latest (2018) National Assessment Program for Science Literacy Performance had just 37 per cent of NT school students "at or above proficiency standards" in Year 6. The next lowest state, at 54 per cent, was NSW. It is a similar story for the 2022 National Assessment Program on information and communication technologies.³



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3 See Productivity Commission Education Tables 4A.45 and 4A.48 accessed at <https://www.pc.gov.au/ongoing/report-on-government-services/2023/child-care-education-and-training>.



A diminishing pool of STEM-ready and STEM-engaged university entrants has led CDU to reach back into the school system and look for ways to collaborate with schools to set up students for future success in STEM careers. For example, CDU currently partner with InspireNT, a school-based science engagement program.

If we want to see high-quality jobs of the future developed in the Territory, and for NT students to be filling them, we need to do more.

The Radicle Centre for school student engagement

CDU's STEM outreach team has identified a need for a centre championing Northern Territory-based Science and Technology learning pathways, and the societal impact of STEM. Local industry is eager to support our STEM programs to address the current shortage of workers.

CDU proposes a Radicle [noun: embryonic root of the plant, which develops into the future root of the plant] Centre which would feature interactive STEM exhibits, dedicated spaces for First Nations STEM initiatives and NT women in STEM. Modelled on successful centres interstate such as SciTECH in Perth or Questacon in Canberra, a built environment would be open to the public to offer workshops and interactive opportunities for young people, while a small mobile unit would be used for remote outreach.

CDU offers to house this learning hub in the new Darwin CBD campus, Danala the Education and Community Precinct, providing opportunity to open the centre as a tourism and community asset.

6. CDU asks for funding to establish the Radicle Centre for Science and Technology Engagement and Pathways and offers to provide in-kind support including space in its new Darwin CBD Campus.

Investment in an NT entrant to the Solar Car Challenge

The Darwin to Adelaide Solar Car Challenge is an endurance race for solar-powered vehicles, first run in 1987. The challenge involves teams designing, building, and racing solar-powered cars across 3,000 kilometers from Darwin to Adelaide. The race tests the capabilities of the vehicles and the skills of the teams in navigating varying terrain and weather conditions while relying solely on solar energy as a power source.

CDU has proudly entered the challenge several times but not since 2006. Participation provided engagement for students and a platform for innovation. CDU proposes a partnership with the NT Government to look at new opportunities to ensure there is an NT-based entrant in the next Solar Car Challenge in 2025.

7. CDU asks for the next NT Government to commit to an NT entrant in the Solar Car Challenge and offers to partner with the NT Government.

A strategic environmental plan for the Greater Darwin region

For an urban area, the Greater Darwin region is of unusually high importance for biodiversity conservation. The region is a haven for species that have declined, even in our World Heritage-listed National Parks. The environmental condition of Greater Darwin underpins the amenity and recreation of Darwin's population.

In recent years, the NT has seen an increasing level of polarisation in our society around major economic developments and their impacts on environmental and cultural values, leading to a loss of trust and 'social licence' associated with development initiatives.

We suggest a new approach to regional planning for economic development, environmental, cultural and social values, focussing initially on the Greater Darwin region. This would draw on science and feature participatory planning methods including First Nations, community, industry and government stakeholders.

8. CDU asks that the NT Government commit to a review of regional planning, which includes a strong element of scientific advice, and embeds preliminary consultation with First Nations, community, industry and government stakeholders.





First Nations Leadership

CDU is a leader in working with First Nations knowledges. Currently, we have around \$15 million of active externally funded research projects in the NT that partner with First Nations peoples. This equates to around 10 per cent of our current active projects. However, many research projects particularly within health, education and environment, also involve informal partnerships with remote First Nations communities.

As the university 'of' and 'for' the Territory, we are ideally placed to genuinely engage with First Nations peoples, and to take seriously the potential of First Nations knowledge and science for future research in Australia. Our Deputy Vice-Chancellor First Nations Leadership, Professor Reuben Bolt, has recently been appointed to the National Science and Technology Council to provide advice to the Chair, the Hon Anthony Albanese MP, Prime Minister on elevating and investing in First Nations knowledges and knowledge systems.

The Northern Institute

The Northern Institute was formed in 2010 through an innovative partnership between the NT Government and CDU to spearhead the provision of social and policy research informed by national, international, and local expertise in regional, remote and Indigenous issues. The Northern Institute has since become recognised as a flagship regional 'think tank' and as nationally leading in its engagement with Indigenous knowledges and Science, and its commitment to co-designed research.

The Northern Institute spans disciplines from anthropology, linguistics and education to demography, economics, and traditional land management. The Northern Institute prides itself above all on research for impact; delivering key, evidenced-based reports, policy and program evaluations, and community consultations.

Expanding the Bidjipidji Program and First Nations Pre-Programs

In 2023, the Bidjipidji School Camp was delivered for the third time. The six-day Camp engages First Nations senior high school students (Years 10 to 12) from regional and remote locations of the NT. It is a fully inclusive camp for the students to undertake a range of activities at CDU, including participation in the CDU Open Day in August. It builds aspiration for further vocational and degree education pathways and familiarises students with the university.

The program delivers dividends to the university too – ensuring staff are engaging with First Nations students of the future and adopting their insights. It is a unique program designed to cater for the needs of First Nations Territorians and costs are covered with funding made available to CDU through its Commonwealth Government university allocation. Thirty-five students participated in 2023.

CDU also delivers the First Nations Pre-Programs which target mature-aged students from across the Northern Territory and interstate. The program initially focused on the law, accounting and business disciplines, and was recently expanded to include STEM, health, engineering, teacher education, and arts and humanities.

The simple reality is that the cost of running these programs is much more expensive predominantly due to the travel costs associated with flying students to the CDU Casuarina students in Darwin, particularly for students residing in remote locations. CDU would like to see the NT Government partner to deliver Bidjipidji and the Pre-Programs by releasing in-kind support through employees and funding for travel.

9. CDU asks for the NT Government to partner to deliver Bidjipidji and the First Nations Pre-Programs by releasing employees and funding travel costs for participants.

Creating a Traditional Uses Forest focused on native bush food and medicinal plants in Katherine

A Traditional Uses Forest is described as a type of sustainable agriculture that mimics natural ecosystems, using plants that will work well together just like they would in nature. An underutilised former Research Orchard on the Katherine Rural Campus is the ideal location. The campus includes a fully operational cattle property and has around 100 beds of accommodation.

The forest establishment offers an opportunity to develop culturally appropriate community infrastructure. Its establishment would allow research and education in natural resource management, ecology, including soil biological health and biodiversity, agronomy, plant genetics, pest and disease management, irrigation and water use efficiency in native plantations. In addition, research could identify end-users native bush food products and commercialisation pathways to support First Nations native plant based businesses across northern Australia.

This proposal also opens opportunities for outdoor teaching and learning for First Nations students. Work beyond research includes processing, marketing, sales, microbusiness development and hospitality. Demand worldwide for Australian native plants has grown both in the food industry and traditional uses, with further opportunities for First Nations owned business in the supply chain of the \$21 million industry.



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10. CDU asks for the NT Government to fund a Traditional Uses Forest focused on bush food in Katherine.

CDU as an enabler of high-priority economic opportunity

The Northern Territory can be at the forefront of national prosperity.

We embrace the vitality and resilience of the Territory, which is the focus of the nation's most ambitious plans for future development – to unlock the vast potential of Northern Australia and to engage with our neighbours in the Asia Pacific. Due to our location, we are in an enviable position to contribute to the future prosperity of Northern Australia through innovative and impactful training, education and research.

Research and Innovation at CDU

CDU has established itself as an exciting and progressive research-intensive university with a regional focus that prioritises complex issues facing Northern Australia and the Asia-Pacific. Research institutes at CDU include the Research Institute for the Environment and Livelihoods, the Menzies School of Health Research, the Northern Institute, Energy and Resources Institute and their collaborative research networks, provide a strategic framework for research engagement.

CDU's research outputs are independently evaluated as being well above world standards in areas of importance to Northern Australia. In 2023, Stanford University included 28 CDU scientists within the top two per cent of most influential scientists in the world.

The Times Higher Education World University Rankings list CDU within the top 400 universities internationally, with CDU research ranking at 348 globally. Within Australia, this places CDU 28th of 37 ranked universities, despite being one of the smallest. The Times Higher Education Impact Rankings, which assesses universities against the United Nations' Sustainable Development Goals, ranked CDU within the top 200 participating universities in the world.

CDU as the Research Partner of choice

The NT's current Buy Local Plan promotes local industry through preferential purchasing principles. As with other local industry, CDU benefits from the NT Government's purchasing power.

For research, which can also include consultancy work undertaken by the University, the NT Government has a streamlined procurement process under the CDU-NTG Partnership Agreement. However, CDU would like to see Research explicitly included into the Buy Local Plan – not just removing a barrier to local research engagement but encouraging it.

CDU partners with other universities and research bodies and has strong research links through the Northern Australia Universities Alliance. A preferential partner approach does not limit scope to seek research elsewhere but will allow the opportunity for CDU to first demonstrate its capabilities.

11. CDU asks for a policy change to the Buy Local Plan to explicitly include research.

A pilot plant for Northern Australian Food Technology and Innovation

The objective of this initiative is to progress Northern Australia's food manufacturing capabilities, and ultimately realise the full potential for an advanced food processing industry in Northern Australia. The Northern Australia Food Technology Innovation Project (NAFTI) was established in 2022 to investigate innovations in food processing and value-adding of agricultural produce in Northern Australia. It is focused exclusively on shelf-stable foods (long life foods that do not require refrigeration) using novel food processing technologies.

Availability of shelf-life foods mitigates the risks of long food supply chains in Northern Australia (3,000 – 4,000 km), otherwise vulnerable to a wide range of disruptions.

The Roadmap is the culmination of the first phase of the NAFTI project, funded with \$700,000 from the Commonwealth Government and supported by the NT Government and NT-based industry bodies. Now that the desktop-based research project has been completed, governments and industry are encouraged to consider future phases.

The Roadmap proposes as Phase Two the development of a Pilot Plant that could lower the barriers and risks to the establishment of a modern food processing sector in the NT. A Pilot Plant could include a small-scale food-grade facility, certifiable for food production, piloting multiple processing lines. For example, these lines could include red meat (e.g., beef and/or buffalo), produce (e.g., mangoes) and seafood (e.g., sea cucumber, fish).

12. CDU asks for the next NT Government to fund a Food Technology Pilot Plant.

A Centre of Excellence for Energy Transition

The NT Government's aspiration to increase the proportion of total electricity consumption from renewable sources from the current rate of 4 per cent to 50 per cent by 2030 is highly ambitious. To achieve even part of this ambition, there is a requirement for significant disruption and development of new renewable solutions.

CDU's existing facility for training, testing and research of energy grids in the NT, REMHART, at East Arm, along with existing partnerships with Power and Water Corporation, provide an ideal starting point to leverage further activity in renewable energy. CDU recently installed a hydrogen electrolyser and fuel cell system at the facility. This is the culmination of a significant upgrade of the REMHART facility which has resulted in a unique and flexible platform to study renewable energy systems, particularly small regional and remote grids, which are common throughout the NT.

CDU proposes to develop a Centre of Excellence for Energy Transition to accelerate the development of new knowledge and growth of the skilled workforce that will be critically important for the NT's renewable energy transition. At an approximate total cost of \$1.5 million per year, the Centre of Excellence could become an industry powerhouse for the NT, complementing the Middle Arm Industrial Precinct.

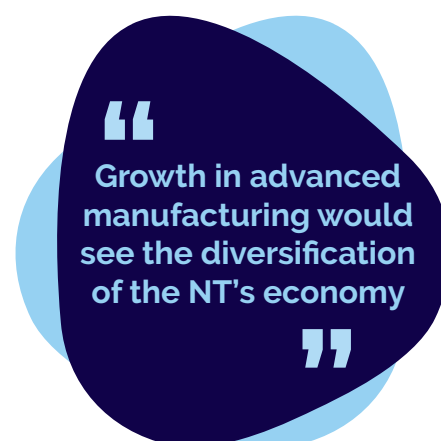
13. CDU asks for the next NT Government to partially fund, along with industry, a Centre of Excellence for Energy Transition.

An Advanced Manufacturing Training Centre

The Commonwealth Government's Critical Minerals Strategy 2023-2030 is underpinned by economic analysis that shows a concerted government effort on both building downstream processing capability and securing a greater share of international trade and investment would see the potential to achieve an additional \$139.7 billion uplift in GDP. Harnessing the NT as an optimal home of advanced manufacturing in Australia is envisaged by the NT Mineral Development Taskforce implementation plan to 2026. Growth in advanced manufacturing would also see the diversification of the NT's economy.

In an era where manufacturing is increasingly driven by technology, the need for a highly skilled workforce is paramount. This involves not just technical skills related to advanced manufacturing processes but also material science, business, innovation and design-thinking.

CDU seek to develop an Advanced Manufacturing Training Centre, bringing together these skills to create a steady pipeline of skilled talent. It would draw on the success of current Advanced Manufacturing Alliance with SPEE3D and identify new innovation to be commercialised.



14. CDU asks for the next NT Government to partially fund, along with industry, an Advanced Manufacturing Training Centre.

Promoting the NT as an education destination

CDU supports the NT Government's goal to increase the number of international students studying in the NT to 10,000 by 2030.

International students generate revenue into the NT, provide critical labour while they are studying, and contribute to a vibrant and multicultural community. Additionally, international graduates with post study work rights have the potential to contribute to areas of critical skills shortages in fields such as aged care, nursing and teaching.

Education and training is the sixth largest contributor to the NT economy, around 1.5 times that of tourism. However, Study NT's budget is extremely modest given the direct revenue potential of international education for the Northern Territory. Additional promotion of the Northern Territory as a study destination would provide a critical economic bolster for the Territory.

15. CDU asks for the next NT Government to increase the budget for Study NT in line with the realised economic contribution of international education.

CDU's role in promoting the liveability of the NT

Access to high quality health and education are key to the liveability of the Territory.

CDU offers training to the NT health workforce across vocational training (e.g., healthcare assistants, aged care workers); degree education (e.g., nursing, paramedicine, allied health); and high-impact research.

CDU's Faculty of Health is critical to the supply of well-trained, locally engaged health professionals. CDU work closely with the NT Department of Health on course design, clinical training, and placements. Of our total degree education students, around 50 per cent are in the Faculty of Health. Over 1,100 health students graduated in 2022 with more than 300 of these new health professionals in the NT.

Importantly, all students undertake health curriculum designed for the NT. Students work with First Nations peoples and in rural and remote settings; and all simulation is designed to ensure students can hit the ground running in our complex environment. Over the past seven years, the number of First Nations students has increased by over 200 per cent in conjunction with stronger pathway entry points and better student supports and scaffolding. We continue to collaborate with Aboriginal Community Controlled Health Organisations to further strengthen our programs and support.

CDU has continued to identify and expand into new health courses, specifically in allied health. We have introduced in the past five years new courses in occupational therapy, dietetics, nutrition, speech pathology, aeromedical retrieval, audiology, paramedicine and physiotherapy.

The CDU Menzies School of Medicine

A key priority for CDU is the development of a complete undergraduate medical program through the CDU Menzies School of Medicine. A CDU undergraduate program will complement the existing NT Medical Program which is a partnership between CDU and Flinders University. Students can currently complete two years of a CDU clinical sciences degree as a pathway into a post graduate Flinders medical degree.

The CDU Menzies School of Medicine has received strong support from across the local health sector and Aboriginal Community Controlled Health Organisations.

In December 2023, the Commonwealth Government announced \$2.8 million to support CDU to undertake preparatory work for the establishment of a new medical school in the NT. While we welcome this commitment from the Commonwealth Government, it is not yet a commitment to fund Commonwealth Supported Medical Places and ancillary capital works needed. Unlike other courses, universities cannot deliver medical degrees without an allocation of Commonwealth Medical Supported Places from the Commonwealth Minister for Education.

The NT is the only jurisdiction in Australia that funds its own medical places and it's time for that to end.

16. CDU asks for the next NT Government to commit its advocacy to gaining Commonwealth Medical Supported Places.

Rural placement scholarships for allied health students in the NT

There is a significant health workforce maldistribution across Australia between rural and metropolitan communities. All health care professionals – nurses, midwives, allied health professionals and doctors – are under-represented in the rural workforce. In the NT this is exacerbated with significant vacancies in remote settings.

One way of increasing the health workforce is by providing students a positive rural clinical work-integrated-learning placement. A positive experience of a rural clinical experience increases the likelihood of graduate health care practitioners returning to work in such settings. Similarly, placements in rural and remote settings can offer a unique experience of different models of patient care for students. In doing so it provides students with an opportunity for personal and clinical growth enabling them to develop a connection to work in such settings upon graduation.

Engaging students to undertake rural placements is difficult given financial demands on the students. Student placements are significant, typically required on a full-time basis and requiring travel from home. For example, social work students are required to undertake two blocks of 500 hours each.

Students prefer to undertake these close to home often for convenience and affordability. Access to low-cost accommodation is available through the Rural Health Multidisciplinary Training Program, however students still need to fund their time away from home and away from regular income (if they are otherwise working).

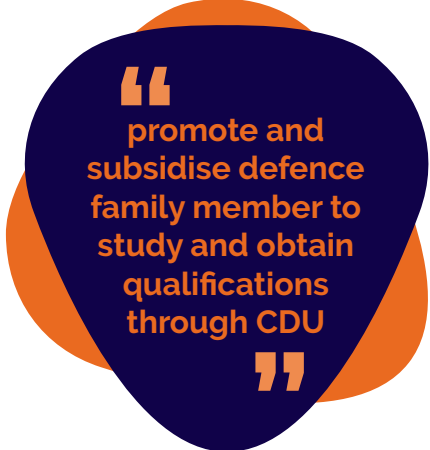
To support students to undertake these opportunities CDU proposes offering a rural placement scholarship to all allied health students completing an NT rural health placement.

17. CDU asks for the next NT Government to fund rural placement scholarships for allied health students in the NT.

Providing support for Defence family members to study or train at CDU

CDU TAFE offer fee exemptions for Australian Defence Force veterans and academic entry for current defence members. In 2024 CDU is delivering a project for the Department of Veteran's Affairs to streamline Recognition of Prior Learning for those who have served as Australian Defence Force personnel. Collectively these initiatives make CDU a friend of the Defence Force.

In line with the Northern Territory Defence Veteran Strategy, this proposal aims to promote and subsidise defence family members to study and obtain qualifications through CDU, helping to build local connections for family members and supporting the potential for retention post-service. This could include a scholarship of support for those studying degree education or a fee-free environment for those in TAFE.



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18. CDU asks for the next NT Government to fund Defence family members to study or train at CDU.

Infrastructure to meet a growing economy and an activated population

As well as providing professional workforces in regional and remote NT, CDU provides a backbone of community infrastructure. Revitalisation will ensure our campuses can continue to deliver the education, training and research needs of the Territory.

The new CDU Danala | Education Community Precinct is an iconic contribution to Darwin's landscape in the heart of the CBD. The campus will accommodate up to 6,000 students, playing an integral role in the revitalisation of the Darwin CBD by attracting students from elsewhere in Australia and internationally. In addition, the NT Library will be co-located with the CDU Library and public spaces, and includes an expansive forecourt available for community use.

A CDU campus in Alice Springs CBD

Establishing new education facilities in central Alice Springs has the capacity to drive greater youth engagement and economic activity. It is an opportunity to contribute to the Alice Springs and NT economy

and reinvigorate higher and vocational training opportunities in Central Australia. In addition, a new campus would contribute aesthetically to the Alice Springs township and create a positive amenity in the CBD. There would also be the potential to unlock additional land for housing, from within the existing CDU campus.



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CDU has been working with Alice Springs Town Council to determine how a new CDU campus could contribute to the revitalisation of Alice Springs. If an application to the Commonwealth Government's Regional Precincts and Partnership Program is successful, the Program grant would be used to scope through co-design and then design a precinct to become “investment ready”. Learning from the design process for the Darwin city Danala | Education Community Precinct, collaboration with all levels of government is essential.

19. CDU asks for the next NT Government to collaborate on the design of a CDU campus in the CBD of Alice Springs as part of the revitalisation of Alice Springs.

Remote delivery trailers to mobilise TAFE delivery

This proposal seeks to increase engagement with pre-vocational and vocational training in Central Australia and the Barkly, with a focus on establishing a pool of purpose built and equipped mobile training units for remote delivery. CDU would co-invest in the storage, maintenance, and ongoing costs of mobile units.

The delivery of more place-based and technologically enabled training across Central Australia and Barkly would enable a hub and spoke model of delivery in Central Australia. CDU would work with the Department of Industry, Tourism and Trade and the Office of Central Australian Regional Controller to prioritise and implement this mobile training in line with community consultation undertaken in Central Australia.

20. CDU asks for the next NT Government to fund remote delivery trailers to take more TAFE delivery remote.

A Technical Trades Training Centre on the Katherine Rural Campus

This proposal seeks to fill an infrastructure gap to expand capacity for the delivery of vocational education and training in Katherine and the Big Rivers region. A Technical Trades Training Centre in Katherine would provide on the Katherine Rural Campus facilities for traditional trades that are otherwise taught in Darwin. In addition, the design of the space would be flexible and allow for dismantlable training equipment so that future skills needs can be met.

This proposal supports economic development in the Big Rivers region such as: potential gas projects in the Beetaloo Basin; renewable energy projects, such as Sun Cable; and the build-up of RAAF Base Tindal. It also complements the NT Government's significant upgrades to the Katherine High School and provides more seamless vocational pathways in the region.



21. CDU asks for the next NT Government to fund a Technical Trades Training Centre on the Katherine Rural Campus.

Unlocking student accommodation in Darwin CBD

Student accommodation is required in Darwin CBD to meet the successful and rapid growth of international education. A deregulatory approach to building student accommodation could include a less restrictive approach to the carparking ratios required for new buildings and connected liveability projects.

22. CDU asks for the next NT Government to take a deregulatory approach to purpose built student accommodation including reducing carparking ratios.

Snapshot of asks

1. Ongoing funding for the RATE program to provide a consistent and secure pipeline of Remote Teacher Assistants and qualified teachers into the future.
2. Policy change to the NT Higher Education Scholarship to be awarded only to students studying at CDU and for the scholarships to target professions-in-need, rather than ATAR score.
3. A new place-based TAFE funding model for remote areas.
4. A review of VET in schools that includes consideration of remote delivery models, effective engagement, and literacy and numeracy support.
5. The next NT Government establish a Chief Scientist for the NT, with CDU offering to provide in-kind support, as appropriate, through the CDU-NTG Partnership Agreement.
6. Funding to establish the Radicle Centre for Science and Technology Engagement and Pathways, with CDU offering in-kind support including space in its new Darwin CBD Campus.
7. The next NT Government partners with CDU and commits to an NT entrant in the Solar Car Challenge.
8. The NT Government commit to a review of regional planning, which includes a strong element of scientific advice, and embeds preliminary consultation with First Nations, community, industry and government stakeholders.
9. The NT Government to partner to deliver Bidjipidji and the First Nations Pre-Programs by releasing employees and funding travel costs for participants.
10. The NT Government fund a Traditional Uses Forest focused on bush food in Katherine.
11. Policy change to the Buy Local Plan to explicitly include research.
12. The next NT Government fund a Food Technology Pilot Plant.
13. The next NT Government partially fund, along with industry, a Centre of Excellence for Energy Transition.
14. The next NT Government partially fund, along with industry, an Advanced Manufacturing Training Centre.
15. The next NT Government increase the budget for Study NT in line with the realised economic contribution of international education.
16. The next NT Government commit its advocacy to gaining Commonwealth Medical Supported Places.
17. The next NT Government fund rural placement scholarships for allied health students in the NT.
18. The next NT Government fund Defence family members to study or train at CDU.
19. The next NT Government collaborate on the design of a CDU campus in the CBD of Alice Springs as part of the revitalisation of Alice Springs.
20. The next NT Government fund remote delivery trailers to take more TAFE delivery remote.
21. The next NT Government fund a Technical Trades Training Centre on the Katherine Rural Campus.
22. The next NT Government take a deregulatory approach to purpose built student accommodation including reducing carparking ratios.



