



TROPICAL NORTH QUEENSLAND

GREEN  
& BLUE

ECONOMIC  
STIMULUS  
PACKAGE

JULY 2020

IGNITING THE **SMART GREEN CAPITAL** OF AUSTRALIA



# KEY SUPPORTERS



# KEY CONTACTS

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# SUMMARY

Tourism is the economic engine of Tropical North Queensland (TNQ) and it has been hit hard by the Coronavirus pandemic. The prosperity of our community and the health of our natural areas are intricately linked. The natural environment underpins our economy as well as the social and cultural fabric of our communities.

The Green and Blue Economic Stimulus Package will provide immediate employment and economic activity to offset the impact on jobs of the tourism industry slow down. It will also support a transformative approach to increasing our region's longer-term economic resilience and employment while protecting its natural assets. At the nexus of the two best managed World Heritage Areas, this initiative will help position TNQ as the smart green capital of Australia.

\$180 million of additional funding over three years is required to fund this package, which will create 510 jobs per year<sup>1</sup>, according to analyses by Natural Capital Economics, and be a catalyst to grow new industry sectors. \$20 million is required to kick-start the initiative in the first year.



<sup>1</sup> Tropical North Queensland Green and Blue Economic Stimulus Package, Economic impacts – Phase 1, NCEconomics, 15 July 2020



# KEY CHALLENGES

## TNQ ECONOMIC STRESSORS

coronavirus

downturn in domestic tourism after bushfires

severe flooding in 2019/20

unprecedented coral bleaching events (2016, 2017 & 2020)



# INTRODUCTION

The practical and innovative land and sea management, restoration and other activities being proposed in this package will maintain employment and upskill employees during economic recovery and create new business opportunities. Long-term career pathways for young people and First Nations peoples, who are most affected, will be a focus.

## THE PROGRAM HAS TWO KEY ELEMENTS:

- rapid creation of additional jobs and business opportunities to stabilise the economy by expanding successful 'shovel-ready' projects
- increased resilience and strength of the regional economy by funding innovative catalytic initiatives to reduce the 'boom and bust' cycles faced by the region

This package has been developed in consultation with a broad range of stakeholder organisations from tourism and economic development, First Nations, conservation, local government, research, and education sectors, as well as the management authorities of the Wet Tropics Rainforest and Great Barrier Reef.

The Wet Tropics World Heritage Area and the Great Barrier Reef World Heritage Areas are significant economic drivers, generating an economic contribution of over \$11 billion per annum. Tourism generates \$3.5 billion annually<sup>2</sup> in TNQ and was hit first and hit hardest by Coronavirus. Agriculture generates \$1.62 billion annually<sup>3</sup> and is also facing challenges. Modelling by Ernst & Young and ID<sup>4</sup> shows that TNQ will face a higher and more

prolonged unemployment rate and economic downturn than other regions in Queensland and nationally. Our tourism industry is heavily reliant on:

- maintaining a skilled pool of young people (hardest hit demographic)
- continued health and beauty of our reef and rainforest
- unique and authentic visitor experiences that are aligned with stewardship values

Coral bleaching, bushfires and cyclones present a significant ongoing risk to the Wet Tropics and Great Barrier Reef as well as the industries, communities and ecosystem services provided by these natural systems. Even our Wet Tropics rainforest, the world's oldest rainforest, is now at risk of bushfires, with TNQ experiencing one of the driest wet seasons on record in 2019/20.

Our region needs support to get key industries back on track, but also to continue to build resilience in our economy, environment and community to ensure that we can weather future economic, health and natural crises.

<sup>2</sup> Tourism Tropical North Queensland Tourism Fact File - National Visitor Survey year Ending September 2019

<sup>3</sup> <https://economy.id.com.au/fnqroc/value-of-agriculture>

<sup>4</sup> Delivering economic stimulus through the conservation and land management sector, Economic impact assessment, 25 June 2020 & <https://economy.id.com.au/fnqroc/covid19> - 7 May 2020



# THE SOLUTION

## GREEN & BLUE STIMULUS PACKAGE FOR TNQ

A stimulus package that invests in sustaining and regenerating our natural assets, on land and in our marine environments. This package has two components:

1) immediate stimulus to address our short-term economic challenges and deliver jobs now and

2) an innovative recovery from the downturn that is a catalyst for increasing the diversity and future resilience of our regional economy.



## PLAYING TO OUR NATURAL ADVANTAGE

Natural resource management and conservation is a well-established and proven sector in TNQ. Higher economic and employment multipliers (1.6-2.6 (economic) and 1.5-3.8 (employment)) than many other sectors.<sup>5</sup>

<sup>5</sup> Estimating the Size and Impact of the Ecological Restoration Economy, BenDor et al, 2015





# THE PROGRAMS

The TNQ Green & Blue Stimulus Package consists of three programs. Each program contains 'shovel-ready' projects to provide economic recovery, jobs and benefits to our natural environment while transitioning to a stronger and more resilient community.

These initiatives will drive multiple benefits across our region, delivered by local organisations, and attract increased private sector investment and new skills to the region.

A summary of potential projects is included in Appendix B. The proposals are an indication of the kind of 'shovel-ready' projects that are ready to create additional jobs now and will evolve as further consultation is undertaken.



The TNQ Green & Blue Stimulus Package consists of three key programs.

## COMPONENT ONE:

Scaling up 'shovel-ready' work

### PROGRAM 1:

Boots on the ground - Land restoration and management

### PROGRAM 2:

Fins in the water – Coral to coast reef resilience

Investment in natural resource management and conservation sectors is a simple way to create a large number of jobs quickly. These projects will scale up existing on-ground activities to provide more jobs and a rapid economic stimulus into the community. This will boost immediate employment and business opportunities for those most affected by the economic impacts of the Coronavirus.

## COMPONENT TWO:

Innovative recovery leading to long-term resilience

### PROGRAM 3:

Igniting the Smart Green Capital of Australia

This is an opportunity to rebuild TNQ's economy to become stronger and more resilient to future economic shocks. Industry and all levels of government in TNQ agree that the region should identify opportunities that embrace the green and blue economy with a new level of intent and serious player in the global natural capital economy industry

Component 2 will leverage investment and initiate 'building block' projects to support the realisation of the vision for TNQ to become the Smart Green Capital of Australia<sup>6</sup>. Building block projects include:

- funding feasibility studies for innovative technologies, industries, and recovery solutions to ensure future investment results in successful and tangible change

- supporting the expansion of existing businesses that are demonstrating results and align with the Smart Green Capital of Australia vision
- igniting innovation in research and technology to create new industries using circular and blue economy solutions
- developing training and education programs to create meaningful employment and career pathways for young people and First Nations peoples
- introducing market-based finance mechanisms that can provide diversified income for landholders and industry through green finance
- commencing zero emissions and waste pilot programs, creating innovation in jobs and reducing carbon impacts
- increasing the amount of affordable renewable energy and electric transport, capitalising on the Electric Super Highway, the world's longest electric super highway in a single state

Each program area includes a focus on training, education, skills development, science and research to enable the existing workforce to remain in the region, be employed and upskilled, while also attracting new skills, more entrepreneurs and investment. A more detailed explanation of each of the programs is included in Appendix B.

## Governance

The TNQ Green and Blue stimulus package has initially been driven by a coalition of organisations across the region, coordinated by CAFNEC, WTMA and Terrain NRM. A skills-based board or committee, representing a cross-section of TNQ, will be responsible for selecting projects and overseeing the implementation of the programs. See Appendix A for more details.

<sup>6</sup> The Smart Green Capital initiative will initially be championed by the Cairns Regional Council in its FNQROC role and will quickly transition to become an industry-led, regional-level initiative with an appropriate funding and governance model.





Photo courtesy of Pablo Cogollos

## FUNDING REQUIRED

The funding requested to implement the overall stimulus package is estimated to be \$180 Million over three years.

This is a small proportion of the total economic value generated from the World Heritage assets (over \$11 billion per annum). An initial investment of \$20 million is required for the first year to kick-start the shovel-ready projects. The remaining \$160 million is to be phased over the three year duration of the program.

### TNQ GREEN & BLUE ECONOMIC INITIAL STIMULUS FUNDING REQUIRED (INITIAL 3 YEAR FUNDING)

PROGRAM	SUMMARY	FUNDING
<b>PROGRAM 1</b>  Boots on the ground - Land and habitat resilience	On-ground action to increase resilience, capture carbon and reconnect landscapes including traditional fire management, habitat regeneration, pest and weed management. Science and improvement of water quality flowing to the reef.	\$50 Million
<b>PROGRAM 2</b>  Fins in the water - coral to coast reef resilience	Coral reef regeneration, mangrove planting and science.	\$50 Million
<b>PROGRAM 3</b>  Igniting The smart green capital of Australia	Undertake regional mapping and rapid feasibility studies of most promising industry and job-creating opportunities and accelerate expansion of existing businesses, industries and initiatives that align with our vision to become the Smart Green Capital of Australia.	\$80 Million
<b>TOTAL INITIAL 3 YEAR FUNDING</b>		<b>\$180 Million</b>

The funding has been nominally allocated across the three programs. An investment prospectus will be developed during the initial phase of work, which will inform the final allocation of funding between the three programs and identify additional investment opportunities for private and philanthropic organisations.





# APPENDIX A

## GOVERNANCE

### Principles for establishing the governance, planning and delivery of the TNQ Green & Blue Economic Stimulus Package

The TNQ Green and Blue stimulus package has initially been driven by a coalition of organisations across the region, coordinated by CAFNEC, WTMA and Terrain NRM. A skills-based board or committee, representing a cross-section of TNQ, will be responsible for selecting projects and overseeing the implementation of the programs. An interim steering committee comprising of CAFNEC, WTMA, Terrain NRM, and other members of the coalition will develop the governance model and terms of reference for the board/committee. The principles to establish the governance and the planning and implementation of the stimulus package are as follows:

**COLLABORATION AND PROJECT CO-DESIGN WITH FIRST NATIONS PEOPLES** and delivery across all relevant sectors.

**BENEFITS FOR INDIGENOUS ORGANISATIONS, First Nations Peoples and young people** through employment, business investment partnerships, local procurement and capacity development.

**ALIGN WITH EXISTING STRATEGIC PRIORITIES AND PLANS** that enable the region to become the smart green capital of Australia.

**BUILD ON EXISTING PROJECTS** where possible to enable rapid impact on jobs and business opportunities.

**DEVELOP MEANINGFUL EMPLOYMENT** and long-term industry resilience.

**DELIVER ON-GROUND ACTIONS** that increase the resilience of the region's natural assets, reduce emissions, reconnect habitat and demonstrate active stewardship.

**STRENGTHENING OF LOCAL SUPPLY CHAINS** and support for partnerships across sectors to improve resilience.

**MULTIPLE ECONOMIC, social, environmental, educational, and cultural co-benefits.**

The funding provided for the Green and Blue stimulus package will be in addition to existing or planned longer-term funding programs to improve TNQ's natural assets.



# APPENDIX B

## PROGRAM DESCRIPTIONS



### PROGRAM 1: Boots on the ground: land restoration and management

TNQ is the most biologically diverse region in Australia. The Wet Tropics World Heritage Area, which contains the world's oldest rainforests, has been identified as the second most irreplaceable World Heritage Area in the world. A 2015 assessment measured the economic value of the Wet Tropics World Heritage Area as over \$5.2 billion per annum<sup>7</sup>. It contributes to direct and indirect economic output and household income, as well as 13,351 direct and indirect jobs.

#### Issues

The Wet Tropics is a traditionally high rainfall region, but extreme heat events and bushfires caused by a changing climate are becoming a very real and unprecedented threat to our unique rainforests and biodiversity. We have observed a sustained decline in some populations of endangered and keystone species and mass deaths of some native animals following recent extreme weather events. And, as

never before, the rainforest is at risk of burning, and feasible solutions are needed to build the resilience of these internationally significant forests.

While fire management can reduce risks to the rainforest, property, livelihoods and community safety, the deficiencies of modern hazard reduction have become clear and there is much to learn from the traditional Aboriginal practice of burning country.

#### Program goals

- scaling-up programs quickly to generate jobs and economic stimulus
- cross-tenure schedule of on-ground land management actions
- increased climate resilience for reef and rainforest
- protection of threatened, endangered and keystone species
- improved water quality runoff flowing to the reef
- collaboration with broad sectors from Indigenous ranger groups, water and Landcare groups, environmental NGOs, natural resource management organisations, and vocational education training and research organisations
- First Nations co-design of innovative land management actions
- partnerships with the agriculture, tourism and other industry sectors to support land stewardship and improved industry profitability

#### Key components

- pest and weed management
- soil improvement
- tree planting and restoration in priority wildlife corridors
- targeted landscape and riverbank repairs to reduce sediment and fertilizer runoff, and increase land productivity
- traditional fire management
- scientific research, monitoring and evaluation of restoration and management activities

#### Ready to deploy solutions

The TNQ region has many capable organisations that could quickly deploy solutions that create jobs and stimulate the economy by utilising:

**LANDSCAPE REVEGETATION AND REHABILITATION** projects targeted at priority areas to improve native habitat, increase resilience and protect high-value tourism sites, soils and carbon stocks

**TRADITIONAL/INDIGENOUS FIRE MANAGEMENT PROJECT LED BY INDIGENOUS RANGER GROUPS** to develop capacity to manage fires, work with landholders and oversee cultural burning programs. These projects will improve fire resilience and protect the country across private and public landscapes in the Wet Tropics region. Outcomes will include habitat protection, carbon capture and improved soil and water quality

**LARGE-SCALE INTEGRATED PEST MANAGEMENT STRATEGIES** modelled on the successful Crown-of-thorns starfish program to address key pest threats in the rainforests

**REDEPLOYING THE UNDER-UTILISED FLEET OF TOURISM VEHICLES** and staff to support and undertake land restoration activities and scientific research and monitoring

**EXPANDING THE SCIENTIFIC RESEARCH, MONITORING AND EVALUATION** program to ensure this region remains a world leader in tropical rainforest ecosystem management and becomes a world leader in native vegetation restoration, protection of endangered species, carbon farming and climate change resilience

A 2015 assessment measured the economic value of the **Wet Tropics World Heritage Area** as **over \$5.2 billion per annum<sup>7</sup>**.

<sup>7</sup> Wet Tropics Management Authority (2015) State of Wet Tropics Report 2014/15: Economic Value of the Wet Tropics World Heritage Area.



## PROGRAM 2: Fins in the water - Reef Resilience - coral to coast

The Great Barrier Reef is one of the seven natural wonders of the world and one of the two main reasons international visitors choose to visit Australia. It has been valued as a \$56 billion asset<sup>8</sup>, supports approximately 64,000 jobs, of which 40,000 are tourism-related, and it generates \$6.4 billion in expenditure annually. The Reef is one of the most significant economic drivers for TNQ.

### Issues

The Great Barrier Reef and the tourism industry are facing significant challenges from the impacts of COVID-19 and climate change, which is increasing the risk of damage from coral bleaching and cyclonic events. The combined effects of degraded water quality, cyclones, crown-of-thorns starfish, bleaching events and other impacts have reduced coral cover in the Central Great Barrier Reef from 40% in the 1960s to 12% in 2018. The minimum coral cover required for reefs to be self-sustaining is 14%.

Prior to COVID-19, widespread negative media coverage was impacting the number of paying visitors to the Reef. Visitor numbers have reportedly fallen by over 15% since 2016 and they continued to decline to the start of 2020. Urgent and strategic action is now needed to help the Reef and the Reef tourism industry simultaneously regenerate.

### Program goals

- coordinated suite of practical in-ocean projects that improve coral and mangrove cover, native fish habitat, increase resilience of high-value tourism sites and increase carbon sequestration
- increased climate resilience for reef and coastal ecosystems through tangible action to address the impacts of a changing climate

- a targeted strategy to regenerate affected high-value reefs (80% of all tourism takes place in less than 7% of the Great Barrier Reef Marine Park) through coral restoration activities
- Implementation achieved through a partnership between reef tourism operators, dive staff, conservation NGOs, Indigenous sea ranger programs, research and science organisations, GBRMPA, tertiary and vocational education training providers amongst others

### Ready-to-deploy solutions

There are a number of ready-to-deploy solutions that will create jobs and business opportunities, increase skills and improve the condition and resilience of high-value tourism locations by:

**EXPANDING THE NUMBER OF EXISTING MANGROVE PLANTING PROJECTS** in priority locations

**EXPANDING THE NUMBER OF EXISTING OCEAN-BASED CORAL NURSERIES** and establishing new nurseries in other high-value tourism reefs

**COLLECTING CORALS OF OPPORTUNITY** (corals that have broken naturally or accidentally off reefs) and attaching these to existing reefs or creating new reefs; rapidly evolving techniques such as capturing and growing coral larvae (baby corals) and seeding them on the reef

**REDEPLOYING THE UNDER-UTILISED FLEET OF REEF TOURISM VESSELS** and staff to support and undertake scientific research coral restoration and mangrove planting programs

**EXPANDING SCIENTIFIC RESEARCH, MONITORING AND EVALUATION PROGRAMS** for this region to remain a world leader in marine science and become a world leader in coral reef, mangrove and seagrass restoration

## PROGRAM 3: Igniting the Smart Green Capital of Australia

Since the pilots' strike in 1989, TNQ has suffered from a number of major economic shocks that have created high levels of long-term unemployment and a roller coaster ride of 'boom and bust' cycles. This includes 9/11, the Ansett collapse, SARS and the 2008 Global Financial Crisis, which stubbornly lingered on for a decade.

TNQ will face a higher and more prolonged unemployment rate and economic downturn from the Coronavirus pandemic than most other regions. This time our recovery needs to be different – one that is focused on building a stronger environment and economy that is more resilient to future disasters.

### Program goals

- build economic recovery and ensure our recovery is not 'business as usual'
- create more local jobs through the development of self-sustaining industries that support and complement tourism, agriculture and education
- develop accredited training programs to grow careers (specific skills relating to interpretation will develop world class tour guides, providing multiple avenues for future employment)
- create education pathways that grow careers, providing multiple avenues for future employment and entrepreneurship in our region
- develop green-trade opportunities, diversifying economic opportunities for the agricultural, tourism and conservation sectors
- create new industries and higher employment opportunities through science and research innovation
- implement cross-sectoral partnerships of industry, civic leaders, Traditional Owners, conservation NGOs, research organisations, vocational and tertiary education providers, and government amongst others to build a strong and sustainable community

- position our region as the Smart Green Capital of Australia and a world leader in the development of prosperous, resilient communities who are stewards of the two world's best managed World Heritage Areas

### Ready-to-deploy solutions

The program will deliver self-sustaining industries, accelerate the development of locally designed market-based investment mechanisms such as Reef and Cassowary Credits and secure investment through other green finance opportunities. This will provide long-term private sector investment and reward landholders and Traditional Owners for regeneration and conservation of natural resources.

**RAPID FEASIBILITY STUDIES** that allow for the region to identify key future opportunities and ensure we are taking the best opportunities for an innovative recovery.

**SUPPORT EXPANSION OF EXISTING BUSINESSES AND INDUSTRIES** that align with the Smart Green Capital of Australia vision through supporting removal of barriers, access to capital, skills and networks.

**BUILDING ON THE TTNQ MARKETING CAMPAIGN "SEE GREAT. LEAVE GREATER"** by enabling visitors to invest and contribute to regenerating the environment and economy while supporting a thriving Indigenous culture. It is vital that visitors are genuinely participating in the solution, not the problem. The project will include:

- attracting visitors to TNQ by demonstrating they are part of the solution
- designing a sustainable business model that includes visitor involvement and investment in conservation, research programs and cultural tourism development.
- further developing existing accredited master tour guide programs (see below)
- developing and implementing zero emissions operations and waste targets

<sup>8</sup> Deloitte Access Economics - At what price? The economic, social and cultural value of the Great Barrier Reef



### PROGRAM 3: Igniting the Smart Green Capital of Australia (continued)

- developing a World Heritage Area accreditation program for tourism operators to ensure they are providing experiences that respect and uphold world heritage values

**CREATING RAINFOREST PROTECTIVE HABITAT FOR AT-RISK SPECIES.** Protective habitat measures – actions to increase protective habitat to provide shelter during climatic extremes. Measures such as artificial refugia, biobanking, genetic editing and possible ex-situ conservation (e.g. captive breeding) and assisted migration in collaboration with Rainforest Aboriginal Peoples.

**EXPANDING THE SUCCESSFUL MASTER REEF GUIDE PROGRAM,** which is delivered in partnership with the tourism industry, to upskill and educate existing marine tourism staff, grow careers, enable businesses to better manage coral reefs, and provide a higher value customer experience.

**DESIGNING INNOVATIVE BUSINESS MODELS** that seek to identify multiple sources of revenue to increase the resilience of businesses and communities.

**EXPLORING BIODISCOVERY OPPORTUNITIES,** which involves the collection and use of native biological material (e.g. plants, animals and other organisms) for commercial applications (e.g. pharmaceuticals and insecticides). The Queensland Government is expected to introduce new legislation in 2020 that will provide a framework to commercialise opportunities benefiting Traditional Owners and the regional economy. The Great Barrier Reef and Wet Tropics rainforests have some of the highest levels of biodiversity on the planet and this region has the potential to become a hotspot for discovering and commercialising new opportunities.

**TRANSITIONING TO A MORE RESILIENT AND PROSPEROUS ECONOMY** with projects for a low carbon and zero waste economy. Identifying and de-risking opportunities, seeking investment for new projects, up-skilling capabilities, and jobs in low carbon industries. The transition will lower the overall cost to our environment and economy and return greater the benefits for investment. Opportunities to include:

- Localising the economy to ensure the basic needs of business and the community come from our region
- Creating bio-based high value products to replace plastics and other raw materials
- Funding and expanding the Indigenous bush food network for local catering and export
- Using waste as a resource to create economic opportunities e.g. using biological nutrients to regenerate the environment.
- Increase affordable, regional, clean renewable energy production
- Using innovative technology inspired by nature (biomimetics/biomimicry) to solve complex problems
- Developing zero-emissions public assets including public transport and facilities
- Higher-value and diversified agricultural production income streams e.g. through bio-based products, alternative energy supplies and market-based income for land stewardship.

## APPENDIX C

### PROJECT LIST



Coordinated under a partnership between Terrain, CAFNEC and WTMA, the programs and projects have been identified from Tourism Tropical North Queensland (TTNQ), Far North Queensland Regional Organisation of Councils (FNQROC), Advance Cairns, Central Queensland University, James Cook University, Reef and Rainforest Research Centre (RRRC), Great Barrier Reef Marine Park Authority (GBRMPA), Tribal Ecologist Network, Firesticks Alliance, Citizens of the Great Barrier Reef, the Cairns Young Chamber of Commerce, Regional Development Australia Tropical North, Mulgrave Landcare and Catchment, Kuranda Envirocare, Trees for the Evelyn and Atherton Tablelands (TREAT) and others.

The conservation land management sector generally has higher economic and employment multipliers (1.6-2.6 (economic) and 1.5-3.8 (employment)) than many other sectors.

The types of roles available in this sector range from manual and low-skilled work to high-end research and professional services. The focus of this initiative is to better utilise existing capacity in the community.

The project list will continue to develop as further consultation occurs and as the package is rolled-out. The list of projects can be provided on request.

The funding provided for this stimulus package will not replace existing funding programs and will not remove the need for longer-term measures to improve TNQ's natural assets.





IGNITING THE **SMART GREEN CAPITAL** OF AUSTRALIA