

Cairns & Far North Queensland as a leader of the Smart Green Economy In Australia

Summary

EY

Building a better working world

Global challenges such as climate change, resource scarcity, land degradation and waste require regional industries and communities to innovate and leverage opportunities in a Smart Green Economy.

Numerous policies and initiatives have emerged at the state, national and international level to respond to these challenges, as well as market trends towards green investment, innovation and sustainability.

In alignment with these policies and trends, Cairns and Far North Queensland (FNQ) have a unique value proposition to leverage opportunities and realise economic growth and resilience - not only to adapt to the green economy of the future, but to become an exemplar and leader in the Smart Green Economy.

Vision

For Cairns and Far North Queensland to become a globally recognised leader of the Smart Green Economy in Australia.

Objectives:

- ▶ Economic growth and creation of 'new' employment opportunities through regenerative development models (wherever possible)
- ▶ Low carbon and nature positive economy, powered by tech and renewables
- ▶ Economic resilience and security with strong supply chains and a circular economy
- ▶ Resilient and thriving natural environment
- ▶ Vibrant and prosperous community in FNQ as a desirable place to live, work and learn
- ▶ Innovation and entrepreneurial opportunities, including start-ups and commercialisation
- ▶ International relations, investment and trade opportunities
- ▶ Supported Indigenous businesses, traditional knowledge systems and pathways to employment
- ▶ Climate mitigation, adaptation and resilience outcomes

This summary paper outlines key findings from the initial stages of the Smart Green Economy project including the concept vision, objectives and key opportunities to support growth, innovation and resilience of Cairns and Far North Queensland (FNQ). This builds on Cairns Regional Council's ambitions and preliminary work as outlined in [Becoming the capital of the Smart Green Economy in Australia](#), including the three initial stages of work:

1. Situational analysis and capability profile
2. Concept definition and support
3. Valuation and prioritisation of the opportunities

The project was led by CRC and a Project Reference Group consisting of key stakeholders representing key sectors in FNQ.

Cairns and FNQ have a unique value proposition for a Smart Green Economy

First Nations connection to Country

First Nations people have inhabited the region for several tens of thousands of years and have demonstrated traditional science, knowledge and expertise vital to a Smart Green Economy

Tropical expertise and innovation

Innovative business communities across sectors such as agriculture, research, education, minerals, construction, energy, tourism and NRM that already demonstrate tropical expertise and innovation required to lead the Smart Green Economy in Australia

Iconic natural environment

The only region where two globally recognised world heritage sites exist side by side: the Great Barrier Reef and Wet Tropics Rainforest

Access to trade and international travel

Proximity to markets across the Asia Pacific with availability of international airport and port infrastructure coupled with strong marine and aviation industries give the region a natural advantage for trade and international access

Green capability

The region boasts world leading environmental science, research, natural resource management (NRM) and climate change leadership

Policy and community landscape

Local government and communities are engaged and active, with strong values around culture and community, protecting and enhancing our iconic natural environment and building a strong and resilient economy

Smart Green Economy

Sustainable Development

The Smart Green Economy objectives support FNQ and Australia to progress the United Nation's Sustainable Development Goals through:

- ▶ Promoting sustained, inclusive and sustainable economic growth, employment and decent work for all
- ▶ Building resilience to climate change and other economic, social and environmental shocks, particularly for the vulnerable and poor in the community
- ▶ Inclusive and sustainable industrialisation and fostering innovation and technological capability
- ▶ Access to affordable, reliable, sustainable and modern energy for all
- ▶ Sustainable consumption and production, consumption of natural resources, and substantially reducing waste generation
- ▶ Reducing greenhouse gas emissions

Positioning the region as a leader in the Smart Green Economy (SGE) requires rethinking how industries in the Cairns and FNQ region collaborate and operate. Through pursuing interlinked SGE opportunities aligned to the region's unique strengths and prominent 'green' market trends, Cairns and FNQ can transform the way in which it operates now and into the future.

As shown below, the SGE concept consists of three main clusters with a grouping of 'activation' opportunities that, when examined collectively, set out to unlock economy-wide value. Using centres of excellence and hubs as centre points for industry collaboration and communication, the SGE would deliver sustainable economic growth, innovation, diversification and resilience outcomes in the region across sectors. A basis of innovation and collaboration allows the region to be agile to new smart, green trends as they emerge, and build on existing capabilities to build a holistic and diversified SGE.

Smart Green Economy concept opportunities

Net zero energy systems

A pathway to achieving Australia's ambition of net zero emissions requires large-scale deployment of all available and efficient energy technology. With an abundance of solar and wind resources, manufacturing and research skills and tropical expertise required to develop and implement cost-effective and resilient green energy solutions, Cairns and FNQ are in a strong position to face the challenges and realise the benefits from a smart green energy transition.

Circular economy activation

Circular economy initiatives are emerging across the region, including reuse of materials through manufacturing and construction, innovation around food waste and composting. Support for circular initiatives is growing among the investment community and interest from local and state governments. With local feedstocks of high value 'waste', strong manufacturing capabilities and research and innovation, the region stands to gain significant benefits from activating a circular economy and strengthening local supply chains by closing the loop on waste.

Biodiversity & carbon markets

Buyers are increasingly seeking robust carbon credits to demonstrate real climate action, and frameworks and standards for reporting on climate and nature-related risks and opportunities are increasingly entering the mainstream. Cairns and FNQ are at a natural advantage to leverage these opportunities and directly influence Australia's biodiversity and carbon sector, with significant conservation, ecosystem and carbon services already in operation centred around two world heritage sites and other sectors such as agriculture.

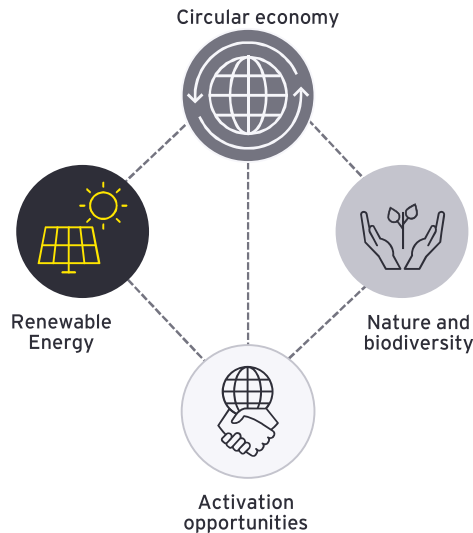
Circular economy cluster

Aligned with the true aims of circular economy, this cluster activates and embeds circularity principles across the SGE to improve material re-use, recycling and stabilise supply chains.

Net zero energy systems cluster

This cluster underpins the Smart Green Economy through innovation and implementation of renewable energy systems, forming a gateway to the wider economy and true decarbonisation.

- ▶ Renewable energy storage solutions
- ▶ Renewable energy infrastructure and projects
- ▶ Green hydrogen
- ▶ Bioenergy



Biodiversity and carbon markets cluster

This cluster establishes the region as a global leader in biodiversity and carbon markets and underpins the region's unique selling proposition, reputation and values.

- ▶ Nature-based carbon and biodiversity credit projects
- ▶ Tropical climate adaptation and resilience

Activation opportunities; unlocking potential economy wide

There are an additional six opportunities which activate a Smart Green Economy across the region through connections to other industries and opportunities. These are required to reach the SGE economy-wide objectives

- ▶ Low carbon transport
- ▶ Smart green agriculture
- ▶ Smart technology
- ▶ Critical mineral processing
- ▶ Tropical health
- ▶ Industrial carbon opportunities

Underpinned by traditional knowledge and tropical expertise across sectors

Further work is required to launch key projects and kickstart the Smart Green Economy in Cairns and FNQ. Future phases of this project aim to address key barriers to implementation and key activities to unlock concept benefits. For example, building cross-sector collaboration, providing seed funding for projects and commercialisation support, education and skills support through strategic partnerships, and building awareness of the region's Smart Green Economy capabilities to attract talent and external investment. Future phases of the project include a feasibility analysis to inform strategic planning and implementation, and establish a basis for investment and stakeholder support for projects to establish Cairns and FNQ as a leader in the Smart Green Economy in Australia.