POLICY PAPER

APRIL 2023

QUEENSLAND RENEWABLE ENERGY INDUSTRIAL PRECINCTS

Supercharging Clean Manufacturing and Industrial Decarbonisation in the Sunshine State

As the world moves to decarbonise, there's a growing global demand for low-emissions fuel and materials. Countries rich in renewable energy resources, like Australia, have an opportunity to benefit from the global transition by manufacturing products like renewable hydrogen and low-emission metals and products for growing domestic and export markets.

Here in Queensland we are blessed with some of the world's best solar and wind resources and key minerals required for clean technology. We can utilise these natural advantages to generate abundant cheap electricity and reinvigorate regional communities into clean manufacturing hubs, otherwise known as Renewable Energy Industrial Precincts (REIPs).

A REIP is an industrial ecosystem of advanced manufacturing and processing that's powered entirely by renewable energy backed by storage and renewable hydrogen. To ensure manufacturers remain globally competitive, it's essential that REIPs are as closely aligned to a 1.5°C decarbonisation scenario for Australia as possible. That means that all projects should aim to run on 100% renewable electricity within five years and 100% renewable energy within 10 years for high temperature heating processes.

Key benefits of establishing Renewable Energy Industrial Precincts include:

- Attracting new local investment and industries to secure long-term good jobs and economic prosperity;
- Providing cheaper shared infrastructure and renewable energy access to participating industry;
- Encouraging more onshore manufacturing and minerals processing to reduce global supply chain issues;
- Protecting existing local manufacturing jobs by repowering industry with affordable renewable energy;
- Reducing emissions in the industrial sector.

Regional Queensland has long been an energy and export powerhouse, and REIPs will continue that proud tradition long into the future, sustaining our industrial heartlands with affordable renewable energy to make the products the new economy demands: green steel and aluminium, renewable hydrogen and ammonia, and zero-emissions chemicals, critical minerals and battery materials.

We, the undersigned, are calling on the Queensland Government to work with the Australian Government and local councils to establish Renewable Energy Industrial Precincts across Queensland, supporting the unique clean manufacturing and industrial potential of each region. In the immediate future, we see the opportunity to set up example REIPs in Townsville and Gladstone, while detailed state-wide planning is undertaken to identify manufacturing opportunities across the Sunshine State.

It's important to acknowledge the significant steps that the Queensland Government has already taken to establish clean manufacturing hubs. In many ways, Townsville and Gladstone are well on the way to becoming some of Australia's first REIPs due to the leadership of the Queensland Government and the commitments outlined in Queensland's Energy and Jobs Plan. However, particularly in the context of the large investments being made in clean energy and manufacturing in the US and Europe, now is the moment to scale up and fast-track investment in regional Queensland's low-carbon economic potential.

In this document, we further detail the opportunities as well as the steps the Queensland Government can take to establish thriving clean energy economies and decarbonise industry across the regions.

WWF AUSTRALIA

SolarCitizens

CLIMATE COUNCIL

beyond ZERO emissions

AUSTRALIAN CONSERVATION FOUNDATION

Steps the Queensland Government Can Take to Support Renewable Energy Industrial Precincts

The Queensland Government has a number of existing initiatives that could be used to support the delivery of REIPs. These include the development of Renewable Energy Zones, the $200 million Future Skills Fund, $200 million Regional Economic Futures Fund and $4.5 billion Renewable Energy and Hydrogen Jobs Fund. The 25 GW of renewable energy planned for in the Queensland Energy and Jobs Plan can also make a large contribution to the energy needs of regional industry.

These regional investments and existing government programs are a good first step towards realising Queensland's potential as a clean economic powerhouse. However, benefits to the community and economy could be maximised with greater planning, coordination and financial certainty for projects, alongside the scaled-up rollout of Renewable Energy Zones to deliver the extensive amount of renewable energy required to decarbonise existing industry as well as power new industries.

It's for this reason that we're calling on the Queensland Government to work with the Australian Government and local councils to pledge to establish the Townsville and Gladstone regions as the first of multiple Renewable Energy Industrial Precincts across the State. The first step to deliver these REIPs should be to develop a comprehensive plan for each REIP region, otherwise known as a REIP roadmap, while also increasing clean energy investment and fast-tracking the delivery of key transmission infrastructure.

Based on work from the Climateworks Centre, Beyond Zero Emissions and WWF-Australia, we suggest that four pillars should underpin the design, planning and establishment of Renewable Energy Industrial Precincts.

1. Coordination and Skills:

- Convening key stakeholders for precinct co-design and ongoing industry coordination;
- Undertaking strategic land use planning;
- Planning and adequately funding skills and training programs to support workers to transition to new clean industries;
- Supplying innovation and supply chain readiness support;
- Providing international linkage funding to enable manufacturers in Australia and overseas to work together to build manufacturing networks and ecosystems, unlock complementary capabilities, overcome barriers to increasing scale, and access global markets.

2. Building enabling infrastructure:

- Water infrastructure;
- Renewable electricity transmission, network, storage infrastructure;
- Renewable hydrogen infrastructure;
- Port infrastructure, including required upgrades;
- Transport.

3. Decarbonising existing industry:

- Undertaking research and development to support decarbonisation;
- Building renewable electricity generation, storage and firming in a timely manner to facilitate industrial decarbonisation;
- Supporting renewable heat and feedstock supply, such as renewable hydrogen;
- Providing grants and financing for heavy industry upgrades;
- Ensuring efficient material and energy use and incorporating principles of a circular economy.

4. **Incentives for attracting new businesses:**
    - Creating a strategy for attracting new businesses to REIPs, including procuring Queensland-made products;
    - Providing incentives for new businesses to set-up in REIPs and run on 100% renewable energy from the outset.

In addition to these pillars, any Renewable Energy Industrial Precinct development should also be guided by the following principles:

1. Ensure First Nations communities are genuinely involved in the planning and design of REIPs and projects on their country, and have the ability and choice to participate in and benefit from REIPs. We endorse the First Nations Clean Energy Network's Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects[1,2]which include the following principles in the planning and design of clean energy projects:

- Engage respectfully
- Prioritise clear, accessible and accurate information
- Ensure cultural heritage is preserved and protected
- Protect country and environment
- Be a good neighbour
- Ensure economic benefits are shared
- Provide social benefits for community
- Embed land stewardship
- Ensure cultural competency
- Implement, monitor and report back.

A critical element of engaging respectfully is that the standard of "free, prior and informed consent" (FPIC)—as set out in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)—must apply when engaging with First Nations communities. As set out in UNDRIP, consent means the opportunity to approve or reject projects before commencement, or withdraw or reconsider consent if the proposed activities change.

2. Ensure local communities benefit from the rollout of nearby renewable energy projects, transmission and clean industry. This can be achieved by making sure the planning processes reflect leading practice community engagement, and consultative community benefit models are integrated into REIP planning and development.

3. Ensure precincts and their supply chains are committed to the protection and restoration of local biodiversity.

1. First Nation Clean Energy Network. (2022). Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects.

2. *It must also be noted that the Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects were developed for place-based clean energy projects whereas Renewable Energy Industrial Precincts involve complex uses of industrial regions and land and waters. While the Principles for Clean Energy Projects will provide guidance, they cannot necessarily be directly translated, and for REIPs there will be additional layers of complexity and opportunity for inclusion and First Nations' voices and perspectives that must be addressed. For REIPs these may include transmission infrastructure, business service delivery, and participation in the workforce, as well as a range of opportunities to consider such as training and employment opportunities, and opportunities for Traditional Owners to partner in equity and investment.*

Recommendations

To realise Queensland's clean manufacturing potential, and turn Townsville and Gladstone into some of Australia's first REIPs, we're calling on the Queensland and Australian Governments work with local councils to:

- Systematically review the low emissions manufacturing and industrial potential of each of Queensland's regions, and provide funding support for fast-tracked industrial decarbonisation;
- Pledge to turn Townsville and Gladstone into Renewable Energy Industrial Precincts, with the goal of decarbonising new and existing industry in these areas as soon as feasibly possible;
- Ensure the timely delivery of scaled Renewable Energy Zones and provide investment certainty for renewable energy developers through schemes such as NSW's Long-Term Energy Service Agreements;
- Convene key stakeholders to co-design the precinct roadmaps in Townsville and Gladstone; in the case of Townsville, building on the existing Lansdown Masterplan;
- Provide innovation/supply chain readiness and international linkages/coordination support to participating projects in each precinct;
- Provide further funding to support renewable hydrogen, transport, water and other enabling infrastructure identified through a strategic land-use and infrastructure planning processes;
- Convene, or provide support to another party to convene, ongoing industry coordination in the precincts; Co-invest in incentives to attract new businesses to the precincts.