



Briefing Paper: How to Turn Townsville into a Renewable Energy Industrial Precinct

A Renewable Energy Industrial Precinct (REIP) is a hub for 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 a Townsville REIP is 1.5 degree aligned and all projects within the precinct aim to run entirely on renewable electricity and clean heat as soon as feasibly possible.

Key benefits of establishing REIPs 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.

Due to leadership by the Townsville City Council, industry and key local stakeholders, Townsville is well-positioned to be one of Australia's first Renewable Energy Industrial Precincts and demonstrate to the rest of the country how the transition to a clean economy can power good, long-term employment and economic prosperity.

At present, the Townsville City Council is developing the Lansdown Eco-Industrial Precinct, noted as 'Northern Australia's first environmentally sustainable advanced manufacturing, technology and processing hub'. Lansdown is well on the way to being Australia's first REIP, however the opportunity available to Townsville is bigger than Lansdown.

Importantly, a whole region or city can be considered a REIP and participating projects do not have to be co-located. There are already a number of manufacturing and minerals processing proposals in the Townsville region that will not be situated in Lansdown, so any REIP planning and coordination efforts should extend beyond the Lansdown site.

[Our latest analysis](#) found that turning the Townsville region into a Renewable Energy Industry Precinct would create more than 5,350 ongoing jobs and 19,600 construction job years by 2030. This analysis details many of the existing manufacturing and minerals processing proposals in the region.

There are a number of reasons why Townsville is well-placed to host a REIP. These include:

- Researchers from the Victorian Hydrogen Hub identified Northern Queensland as the cheapest place in Australia to develop renewable hydrogen¹.
- North Queensland, particularly around Hughenden, has some of the country's best co-located solar and wind resources².
- The North West Minerals Province (NWMP) is rich in minerals needed to develop clean technology, such as copper, lead, silver, zinc and rare earth elements. A significant 75% of Queensland's metal mineral deposits are found in the NWMP³.
- The Townsville City Council has demonstrated significant leadership by moving forward with the development of the Lansdown Eco-Industrial Precinct. [The Masterplan for the precinct can be found here.](#)
- In Lansdown, but also across the greater Townsville Local Government Area (LGA), there are a significant number of manufacturing and minerals processing proposals related to supporting a global low-carbon economy.
- Korea Zinc, which owns Sun Metals and Ark Energy, are moving ahead with plans to repower their Townsville zinc smelter and have staged plans to build a 3,500 MW electrolyser and be a global leader in producing renewable hydrogen. Work is already underway on a 1 MW hydrogen pilot facility in Townsville.
- Fortescue Future Industries is working with Windlab to deliver the North Queensland Super Hub, which is estimated to have a staggering 10 GW of clean energy capacity when completed.

At present, the development of the Lansdown Eco-Industrial Precinct and other projects outside of the site are moving forward. So far government commitments to the region include:

- \$72 million in federal funding to turn the city into a hydrogen hub;

¹ [Senior Research Fellow Steven Percy. \(2022\). Green hydrogen is coming - and these Australian regions are well placed to build our new export industry.](#)

² [Green Energy Markets. \(2018\). Renewable Energy across Queensland's Regions. Page 28.](#)

³ [Acil Allen consulting. \(2020\). Copperstring Economic Technical Report. Page 21.](#)

- \$36 million in federal funding, \$12 million in state funding, and \$2 million in council funding for the Lansdown Eco-Industrial Precinct;
- \$40 million in state funding for a Northern Queensland Renewable Energy Zone;
- \$10 million in state funding for a new Vanadium processing facility;
- \$15 million in ARENA funding for Sun Metals' renewable hydrogen pilot;
- \$20 million in state funding and \$11 million in federal funding for the CopperString 2.0 transmission line, which will connect Mt Isa to the National Electricity Market close to Townsville;
- \$10.6 million in state funding for a TAFE Hydrogen and Renewable Energy Training facility at Bohle.

In addition to these location-specific funding commitments, the Queensland Government has a number of existing initiatives that could be used to support the delivery of a REIP. 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.

These regional investments and existing government programs are a good first step towards realising Townsville'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.

It's for this reason that Solar Citizens is calling on the Queensland Government to work with the Australian Government and pledge to establish the Townsville region as a Renewable Energy Industrial Precinct. The first step to deliver this is developing a comprehensive plan for establishing a REIP in the region (otherwise known as a REIP roadmap).

According to work by ClimateWorks Centre, Beyond Zero Emissions and WWF Australia, there are four general pillars that underpin the establishment of a Renewable Energy Industrial Precinct. These pillars should be key considerations for developing a REIP roadmap:

1. Coordination and Skills:

- Convening for precinct co-design and ongoing industry coordination;
- Strategic land use planning;
- Consistency with First Nations Clean Energy strategy co-design;
- Skills and training;
- Innovation/supply chain readiness;
- International linkage funding (e.g. manufacturers in Australia and overseas to work together to build manufacturing networks and ecosystems, unlock complementary capabilities, overcome barriers to scale and grow, and access global markets).

2. Infrastructure upgrades:

- Water;
- Transmission;
- Hydrogen infrastructure;
- Port upgrades;
- Transport.

3. Decarbonising existing industry:

- Research and development to support decarbonisation;
- Renewable electricity generation, storage and firming to support industrial decarbonisation;
- Renewable heat and feedstock supply, such as renewable hydrogen;
- Grants and financing for heavy industry upgrades;
- Material use and energy efficiency (including incorporating principles of a circular economy).

4. Incentives for attracting new businesses:

- Incentives for new businesses to set-up in REIPs and be 100% renewable from the get go.

Turning Townsville into a REIP

To turn Townsville into one of Australia's first REIPs, we'd like to see the Queensland and Australian Governments work together to:

In the immediate future:

- Pledge to turn Townsville into a Renewable Energy Industrial Precinct and set a 1.5 degree decarbonisation goal for the REIP region;
- Convene key stakeholders (Townsville City Council, industry and local community) to co-design a precinct roadmap, building on the existing Lansdown Masterplan;
- Undertake strategic land use planning and infrastructure needs analysis for a Townsville REIP;
- Identify gaps and fund skills development/training programs to support existing and new workers.

In the medium-term:

- Provide innovation/supply chain readiness and international linkages/coordination support to participating projects in the precinct;
- Provide further funding to support renewable hydrogen, transport, water and other enabling infrastructure identified through a strategic land-use and infrastructure planning process;
- Convene, or provide support to another party to convene, ongoing industry coordination in the precinct;
- Co-invest in incentives to attract new businesses to the precinct.