Caring for Country and Community

Clean Energy BIG Yarnin

Help us shape the Northern Peninsula Area's energy future – and reduce the communities' reliance on fossil fuels.

We're working to improve the security and sustainability of our isolated electricity networks. This journey will see us introduce clean, renewable energy into the power supply for Seisia, New Mapoon, Bamaga, Injinoo and Umagico, along with large batteries to store the energy generated for use when needed.

It's about Caring for Country and, at the same time, ensuring our First Nations and remote communities share in the benefits of clean, reliable and affordable energy into the future.

Transitioning to renewable energy will future-proof the communities' energy supply. Reducing the current reliance on fossil fuels – on diesel generation – is a big positive for the environment. It can also provide economic and other community benefits by supporting rooftop solar, as well as further electrification and energy efficiency measures.

As we progress, it is important that the community is part of the conversation. The transition will require community support, as well as a significant investment, to put in place the right solutions.

To find out more, don't hesitate to contact Tommy Sebasio, in our community engagement team, on 0428 000 736 or email us at: NetworkProjectEngagement@energyq.com.au

The nearby Thursday Island wind turbines represent the history and the future of renewable energy. Since 1997, they have saved over five million litres of diesel and, with the recent major refurbishment, can now generate clean energy for years to come.

March 2025

Finding future solutions

In 2021 an Expression of Interest was made for technical providers to explore the options for scaling up the transition to renewables to decarbonise the energy supplies throughout our isolated communities.

This led to eight companies visiting communities across the Cape and Torres Strait and completing detailed feasibility studies of potential solutions. The solutions explored included solar, wind, battery storage, hydrogen storage, alternate renewable generation sources and biodiesel.

This work was the foundation for a detailed assessment of the options available to decarbonise the Northern Peninsula Area's (NPA) power supply, and the concept designs for the renewable energy investment outlined here.

The proposal for the NPA is to establish a centralised solar and energy storage system to transition all five communities to renewable energy.

About the renewable energy project

Solar farm and utility-scale battery

For the NPA to move to 80% renewable energy, we are currently proposing to build a 19MW solar farm, with a 12MVA/28Wh battery energy storage system. The project will also include 22kV switchboards and control buildings, with two dedicated 22kV powerlines feeding the clean energy into the existing Bamaga Power Station. From here the electricity generated will supply Seisia, New Mapoon, Bamaga, Injinoo and Umagico through the existing electricity network.

This investment will reduce diesel use by over five million litres a year, saving 9,755 tonnes of carbon dioxide equivalent (tCO_2-e) emissions. It's a great win for the environment. With less reliance on fossil fuels being transported into and used in the community, it will also improve the resilience and security of the power supply.

Saving 3.6 million litres of diesel each year

Our target is to reduce diesel use by 80% by 2030

Northern Area Peninsula	
Renewables	Target 80% by 2030
Proposed Scope	19MW solar farm 12MVA/28MWh battery
Diesel / emissions savings	3.6 million litres 9,755tCO2-e

The diesel fuel tanks at the back of the Bamaga Power Station.

Land use consultation

The photo below shows the proposed location for the new renewable energy infrastructure.

We have been talking with Traditional Owners (including the Ipima Ikaya Aboriginal Corporation), the NPA Regional Council, and other stakeholders about the different sites that could potentially be used for the solar farm.

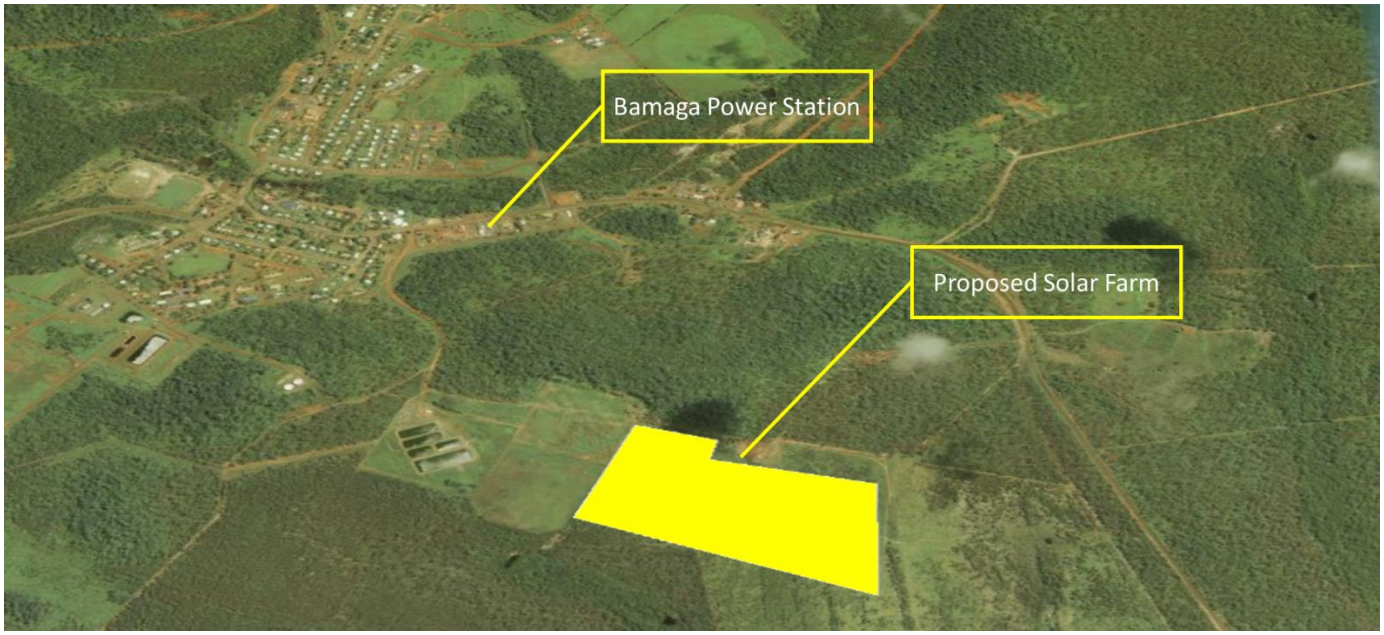
The lot on the eastern side of the waste water treatment plant is currently believed to be the most appropriate location.

While the project still has further steps to undergo – including land surveys, further technical designs and costings – before our Board and Queensland Government financial approvals, we are consulting now to listen to feedback and gain support to go forward with this location. Further discussions will also be needed to finalise the route for the connecting powerlines.

We will continue to engage with the community, through planning and construction, which is targeted for 2026-27.

We spoke with the community about the proposal in September 2024, and the benefits for the community, and the environment.

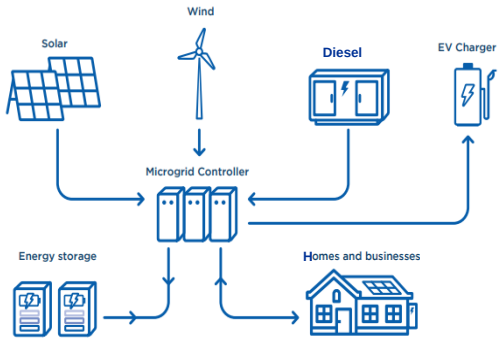
To reduce diesel use by 80%, the NPA will need a solar farm around the same size as the solar farm at Hughenden, which uses around 60-80 acres of land.



Rooftop solar

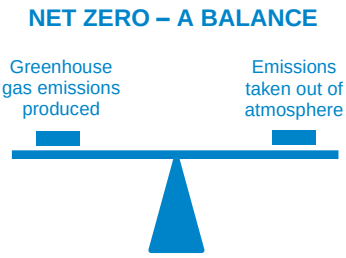
This project will enable more rooftop solar to be connected across the community. The use of advanced controllers and dynamic connections will allow decentralised rooftop solar to integrate safely into the system.

We are also looking at the opportunity for Ergon Energy Network to invest in rooftop solar, as well as other initiatives that can give back to the community. This will fast track our goal to reduce greenhouse gas emissions.



A journey to net zero electricity emissions

The proposed project in the NPA is part of Ergon Energy Network's commitment to delivering a sustainable electricity supply, and moving to net zero electricity emissions across our isolated networks.



Our initial project plans aim to achieve 25% renewables across all of our 33 isolated networks. While we are focusing initially on the communities with the large to medium power stations, including the NPA, we're doing feasibility studies across our other isolated communities to support renewable generation where it is cost effective.

We are looking to support social benefits through the clean energy transition, embed First Nations land stewardship, preserve, and protect cultural heritage, and ensure the potential economic benefits are shared. We are especially wanting to engage respectfully around land use.

All of this 'big yarnin', and everything we learn from our current projects and our feasibility studies, will help refresh our Isolated Networks Strategy for all the communities we serve.

These projects will not remove the ongoing need for the Queensland Government's current subsidies on electricity prices. As part of its commitment to keeping regional Queensland power prices on par with the southeast, the Queensland Government provides a subsidy. This lets Ergon Energy Retail charge all of their customers to same regulated electricity prices wherever they live – whether in Bamaga or Bundaberg.

In the longer term, introducing renewable energy into Queensland's energy mix, and taking advantage of new technologies, will help put downward pressure on electricity prices for all.

Get in touch with us

To find out more, don't hesitate to contact Tommy Sebasio, in our community engagement team, on 0428 000 736 or email us at: NetworkProjectEngagement@energyq.com.au

Tommy has worked locally with Ergon Energy for thirty years, having been involved in everything from getting the power back on after a cyclone to educating businesses about energy efficiency, and mentoring locals looking for a career path into the electricity industry. He is keen to ensure we engage with cultural sensitivity and respect for traditions and protocols. Keoyma Eso, Au Eso.

Ergon Energy Network acknowledges the Traditional Custodians of the land on which we live and work, and recognise their continuing connection to land, waters and community. We pay respect to Elders past and present.

ERGON ENERGY NETWORK