Community Microgrid Feasibility Study Update

August 2022

Could microgrids hold the key to improving electricity reliability for remote communities?

Introducing the Community Microgrid Feasibility Study

Could microgrids hold the key to improving electricity reliability for remote communities? That's one of the questions we are looking to answer as part of our Community Microgrid Feasibility Study.

We're investigating how innovative technologies, using solar energy and battery storage integrated with smart communications devices, can improve the reliability of electricity supply to remote and regional communities at the fringe of Queensland's electricity network.

We're conducting the project with the support of the Australian Government, through the Regional and Remote Communities Reliability Fund. Our objectives with this feasibility study are to:

- understand customers' energy needs and their interest and willingness to be involved in a future microgrid solution
- determine the technical and financial feasibility of installing microgrids at the communities of Clairview and Stanage Bay
- use what we learn about microgrids for other fringe of grid locations across Queensland

Why choose Clairview and Stanage Bay for the study?

The small coastal towns of Clairview and Stanage Bay are 'fringe of grid' communities located at the end of one of Queensland's longest powerlines, measuring over 1,000 kilometres in total length – see Figures 1 and 2.

The communities have many similarities including their location and size, and they are connected to the same feeder powerline. However, the design of the powerlines supplying the two towns is very different.

This part of the electricity network is unique in that Clairview is supplied by the three-phase network and Stanage Bay by a Single Wire Earth Return (SWER) construction.

The different network design combination in a fringe of grid location makes these communities ideal for our study as it will highlight the similarities and differences in using microgrids integrated with the different network construction.

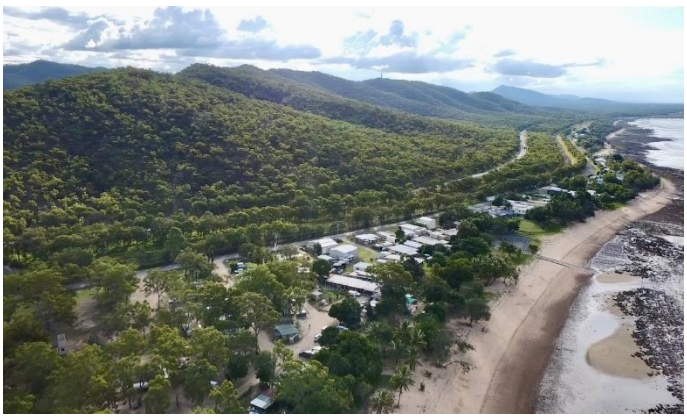

Fig 1 – Aerial view of Clairview community.

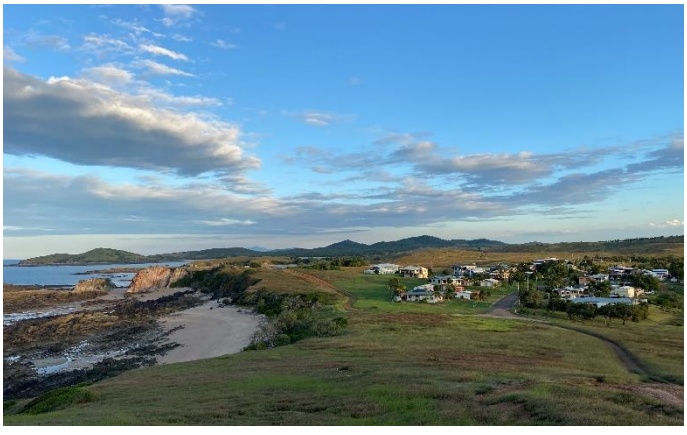

Fig 2 – View of Stanage Bay community.

Community and Council Visits

In May, we visited Yeppoon and Moranbah to meet with representatives from Livingstone Shire Council and Isaac Regional Council. We introduced the core project team and outlined the objectives of the feasibility study.

We also visited Clairview and Stanage Bay, the towns at the centre of our study. We wanted to get to know these communities better, so we spent time talking with locals – like Maree and Bevan from Plumtree Store in Stanage Bay - about their lifestyles, their community, and the best and worst things about living in these remote communities.

We spoke of the challenges of maintaining a safe and reliable electricity supply including a range of environmental conditions such as distance, coastal conditions, wildlife and in the case of Stanage Bay, access after rain.

We discovered that both communities are close-knit and resilient, and many expressed their interest in being involved in the feasibility study.

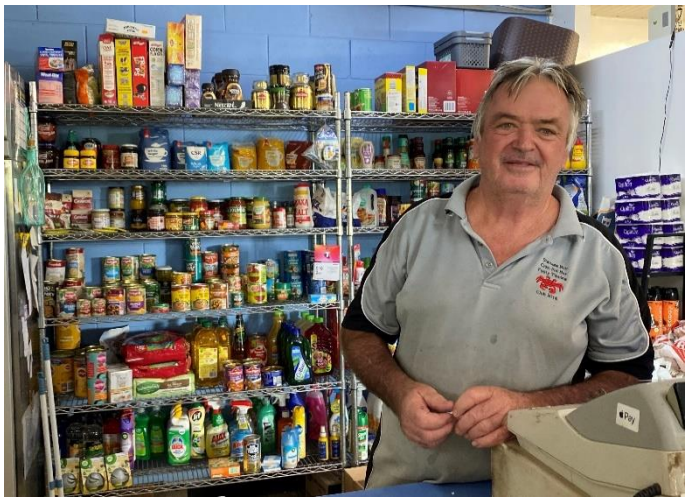

Fig 3 – Local small businessman, Bevan, from Plumtree Store and Crab Pot Pub at Stanage Bay

We know that we didn't get to meet everyone in the community during our first visit. So, we will be planning future visits throughout the project. In the meantime, we have created a short video to introduce the project and the core project team. You can access this video, as well as future project updates and videos, via our project webpage Clairview & Stanage Bay microgrid feasibility study - Ergon Energy.

Finding out what's important - Future Energy Survey

We know that every community is different, so we're taking a 'no assumptions' approach to our project engagement - we won't assume we know what interests you, we'll just ask.

So, through our recent Future Energy Survey, we asked Queenslanders to tell us what they already know about the 'energy future', and what they want to know more about. We had a great response to the survey, and respondents from around Stanage Bay and Clairview, told us that the following areas were most important to them:

- owned locally – privately, or by my community, or local government
- working together – with solutions that add community value
- lower energy costs – solutions that bring down power prices for all
- get the most from my solar – energy use and value from excess generation; and
- access to electricity – I want power at a fair cost, no matter where I am located.

You also told us that you were really interested in knowing more about:

- electricity bill/charges/rebates
- energy efficiency/saving measures
- solar energy systems (incl feed-in-tariffs)
- home battery energy storage systems, and
- community microgrids.

Knowing that this is what is important to you means that we can share more information about these topics as the project progresses. And at any time residents can get in contact with the project team to ask questions – simply follow the directions below to contact the team.

Congratulations to the winners of our survey gift card competition – all winners have been notified.

Keeping up to date on the project

To keep up to date on the project, to provide feedback, or to **register for future updates via email or SMS,** please scan this QR code or visit our project web page Clairview & Stanage Bay microgrid feasibility study - Ergon Energy

You can also contact Kate Austin our Senior Community Engagement Advisor, on 1300 653 055 or email us at: NetworkProjectEngagement@energyq.com.au