Moah Creek

Renewable Energy Project

Newsletter 02 | December 21

CQP
CENTRAL QUEENSLAND POWER

Project Overview

Welcome to the second newsletter for Moah Creek Renewable Energy Project (MCREP) - an integrated wind, solar and battery storage project.

Our previous newsletter can be found here https://www.moahcreek.com/news

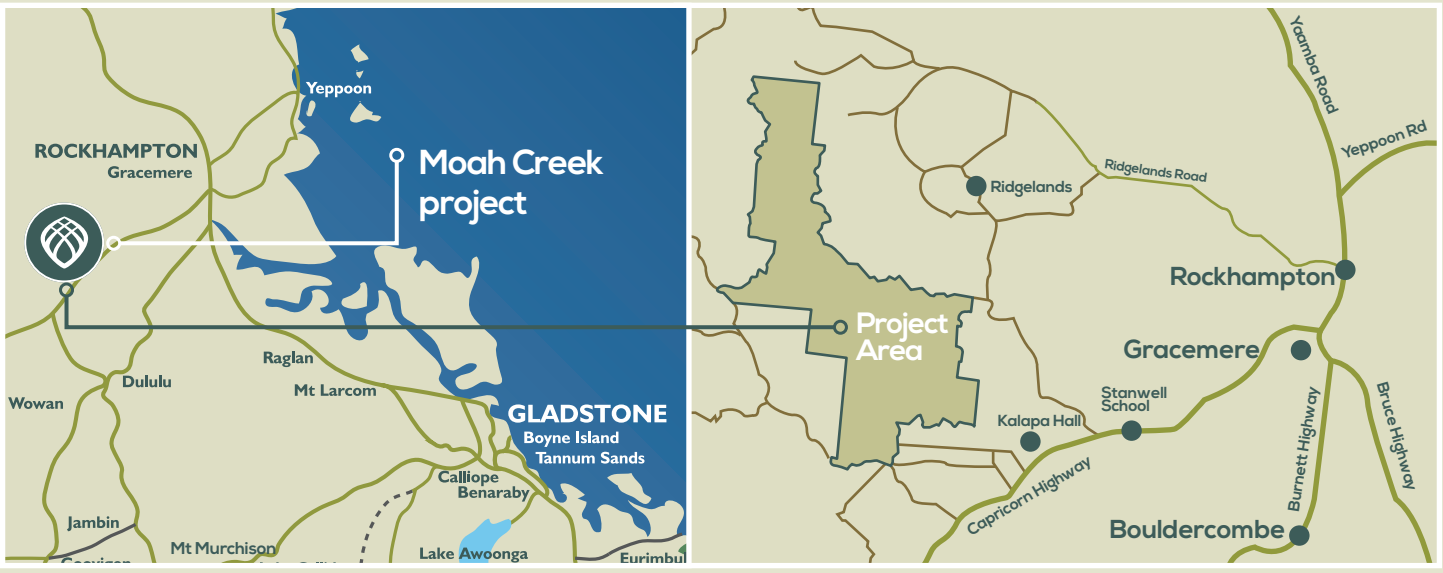
At a glance:

Moah Creek Renewable Energy Project indicative capacity

- 400 MW Wind
- 200 MW Solar
- 300 MW Battery

Project location

The project location and turbine layout will be continuously refined based on a range of inputs to include the outcomes of consultation with the local community, design investigations, numerous specialist studies and environmental assessments.



Project updates since our last newsletter :

Noise Monitoring

Wind farm projects in Queensland are subject to strict noise regulations. Noise loggers have been temporarily installed at several locations adjacent to the project area, continuously collecting background noise data for 8 weeks. Acoustic scientists will utilise this data and run through state of the art computer software to identify what the potential noise levels would be once turbines become operational. This information informs the design of the project to minimise any potential impact from sound to properties close to the project area.

Aviation studies

We must consider carefully any potential impacts on aircraft within the vicinity of the project area. Detailed surveys and identification of flight paths are now well underway – these will inform the design of the project layout so as meet legal requirements & avoid impacts on aviation traffic.

Wind speed measurements

We have recently installed some additional wind monitoring devices and submitted our Development Permit Application for two 80-meter meteorological towers to be installed in early 2022. Data from wind monitoring helps us to micro-site wind turbines to maximise energy production.

Sun data

Data about sun penetration is readily available publicly and has allowed us to model the layout of the solar farm component of the project to include yield and frequency. In turn, this assists us to identify the most suitable battery storage facility options for MCREP.

Electromagnetic Interference (EMI)

There is no evidence to suggest that electromagnetic fields produced by the generation of electricity from wind or solar farms pose a risk to human or livestock health. However, EMI can result in distorted television pictures, crackling phones or disruptions to the internet. We have carried out detailed studies to ensure our project does not create any impacts from EMI.

Visual Impact Assessment

Wind farms can often be seen from many miles away and there are rigorous regulations in place to minimise visual impact. We will seek to minimise this by our choice of location, vegetation, colouration & design. We have engaged specialist consultants to conduct a comprehensive landscape and visual impact assessment of the proposed project from several locations. Photomontages from these locations will be produced and exhibited publicly (at community events and on our website) in order to receive comment and feedback from communities local to the project area.

Transmission

Over the past 12 months we have been in discussion with Powerlink to identify the best location for entering the electricity transmission network. This is a complex issue as it usually includes a substation, transmission lines & an interconnecting switchyard. Given this complexity, we have undertaken several studies and we have recently formally submitted our connection application enquiry to Powerlink for review.

Project updates since our last newsletter :

Flicker

When light shines through rotating blades, it can cast an intermittent shadow known as shadow flicker. We have completed an in-depth study on how to avoid or minimise this, to include identifying the path of the sun.

Watercourses, drainage and storm water run-off

When designing this project, we try as far as possible to keep impacts to a minimum, however a change of land use can have an impact on and may increase storm water run-off. We are undertaking studies to minimise any impacts on local watercourse or land through the careful design of drainage systems, sediment control plans & natural buffers. The results of this study will be publicly available as part of our planning process & at community events.

Flora Survey

A comprehensive survey of all ground flora was completed in spring to identify areas where there may be species of native vegetation that is identified as concerned, threatened or endangered habitat. These surveys are then mapped and allow us to avoid these areas wherever possible.

Wildlife Survey

Detailed wildlife surveys have been completed using over two years of data collection. The surveys identify bird and bat species, numbers, their flight paths, and heights of flights. Other wildlife surveys included night surveys and laying out live traps to identify the presence / absence of species. This information is invaluable in designing the project so as to ensure it has the least potential impact on wildlife.

Access

One of the most complex aspects of designing a renewable energy project like MCREP is the location and design of access to the project site, especially given the sheer length of the tower and blades of a wind turbine. We have engaged three engineering companies to closely assess the challenges, issues and potential impacts of access to the project site.

Flood Study

Our experts have concluded an in-depth study to identify the potential risk of flooding within the project area. The study takes into account the frequency and depth of flood events, the anticipated impacts of global climate change & the potential for storm surges that could be created in the event of a cyclone or similar storm system. This flood mapping ensures we locate the solar panels, necessary infrastructure, battery storage facility &our proposed substations where flooding is least likely to occur.

Indicative Development timeline

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