



be big-T™



GE Renewable Energy

FACT SHEET — March 2022

Situated on Lake Cressbrook, approximately 50km north-east of Toowoomba, the renewable energy Project would generate 400MW with 10 hours storage. It has high electrical efficiency and can support 4,000MWh of continuous generation in a single operating cycle.

The Big-T Project has a funded cost of \$1 billion and will bring significant social and economic benefits to the Toowoomba and Somerset regions and Queensland. This includes local investment and employment opportunities for residents — 250-500 jobs during construction and 15-30 ongoing jobs during operation.

BE Power and GE Renewable Energy are co-development partners in the investigation, development, construction, and operation of the Big-T Pumped Hydro Energy Storage (PHES) Project at Lake Cressbrook.

It presents one of the lowest-cost PHES opportunities available on mainland Australia and is expected to fast track achievement of the Queensland Government's 2030 Renewable Energy Target. It will help to facilitate the Southern Renewable

Energy Zone, consisting of 3,000–5,000MW¹ in potential renewable energy projects. Development of this zone would displace approximately 7.9–13.3 million tonnes of CO₂ per annum.

¹ AEMO Integrated System Plan 2020 Appendix 5



Lake Cressbrook Big-T Project

Proposed development

The Big-T Project consists of an upper reservoir to be constructed on privately owned land with the lower reservoir utilising Lake Cressbrook. The power station is situated underground.

The electricity connection involves construction of an underground transmission line from the Project's underground power station to the Tarong to Middle Ridge transmission line. The underground electricity connection is proposed within the existing public road easements (Sebastapool and Three Mile Roads).

The combination of an underground power station, an underground transmission line, and the transmission line traversing the existing public road easement minimises land usage, negates the visual impact of above ground power station infrastructure and overhead transmission towers/lines and also mitigates bush fire risk associated with overhead transmission.



Estimated timing

The Project team is currently undertaking a Bankable Feasibility Study and other associated development activities including securing the necessary permits and approvals.

The Project partners are preparing an application to the Coordinator-General for a Coordinated Project declaration, seeking a whole-of-government environmental impact assessment approach.

Following obtaining the necessary approvals, BE Power is aiming for construction to begin in 2023.



About BE Power

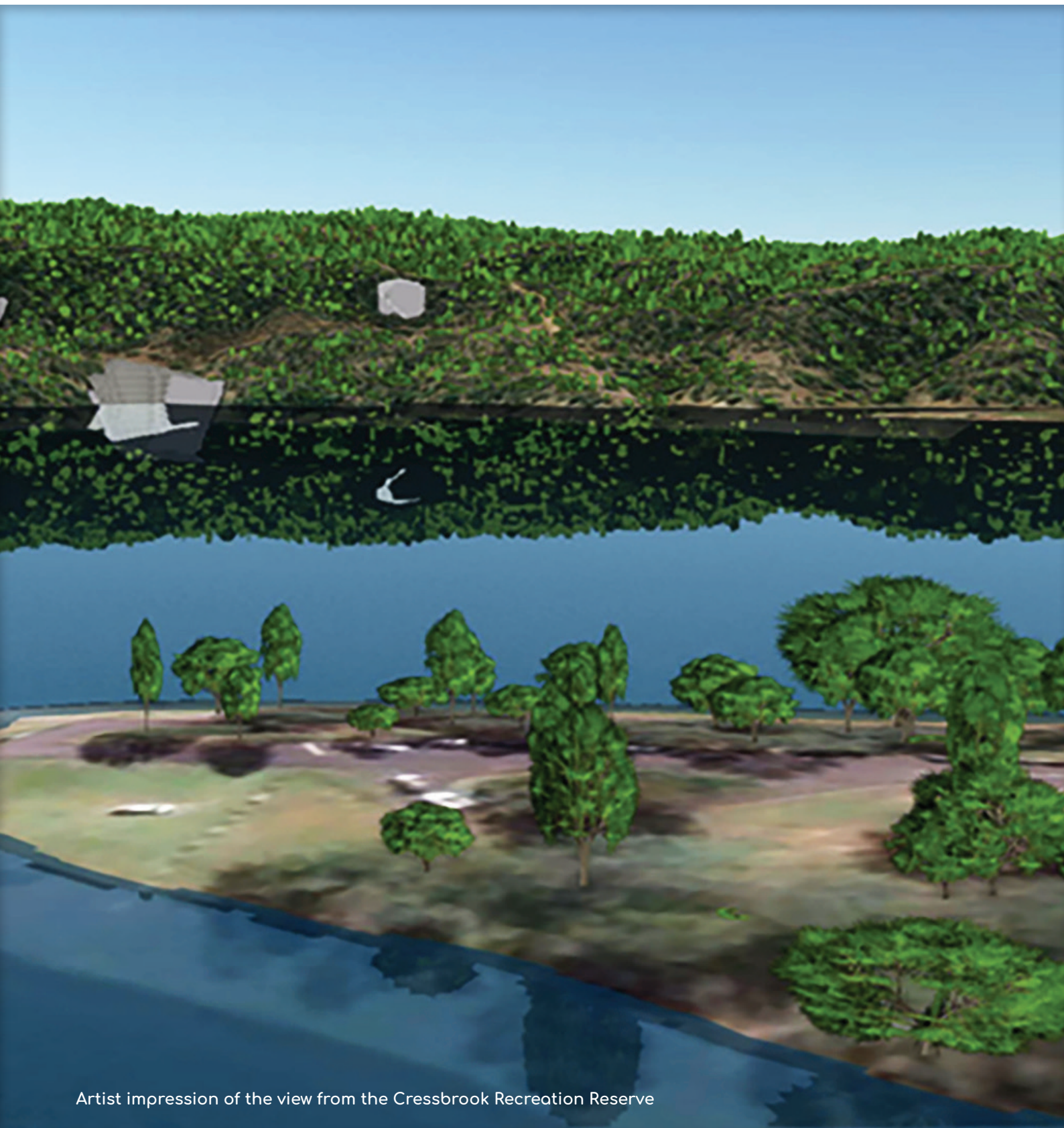
BE Power Group develops, finances and operates renewable energy power plants. BE Power also undertakes electricity trading and retailing activities.



GE Renewable Energy

About GE Renewable Energy

GE Renewable Energy is a \$15 billion business with one of the broadest portfolios in the renewable energy industry including onshore and offshore wind, blades, hydro, storage, utility-scale solar, grid solutions, hybrid renewables, and digital services offerings.



Artist impression of the view from the Cressbrook Recreation Reserve

What is Pumped Hydro Energy Storage?

Pumped Hydro Energy Storage or PHES projects are large-scale water batteries that store energy.

PHES systems pump water uphill to an elevated reservoir when electricity demand is low, usually in off-peak periods. When electricity demand is high, water is released from the upper reservoir to power a turbine to generate renewable electricity.

Closed loop PHES systems, such as the Big-T Project, do not consume water. They operate by recirculating water between the lower and upper reservoirs.



Project principles

BE Power and GE Renewable Energy have committed to important principles to minimise and manage any impacts of the Project.

1. First Nations cultural heritage and engagement

We will engage with the local First Nations community during the development, construction, and operation of the Project, for their direction and engagement in minimising any impact on their land.

2. Environmental impact

We will implement a variety of initiatives to reduce the environmental impact of the Project, protect native flora and fauna and local vegetation, reduce visual impact and negate bush fire risk.

3. Lake Cressbrook water security and water quality

We will ensure the Project does not impact Council water security and minimise the impact on Lake Cressbrook water quality during construction and operation.

4. Sustainable engineering design

We will design safe infrastructure and ensure the Project has long-term design and economic viability.

5. Social and economic benefits

The Project has the capability to deliver significant social and economic benefits to the Toowoomba region and Queensland, as well as the National Electricity Market.

6. Lake Cressbrook recreational users

We will mitigate any impact on recreational users. The Project is situated on the northern side of Lake Cressbrook in an area that is not open to the general public, and none of the Project infrastructure or construction activity is expected to impede any current public open space.

7. Stakeholder engagement

We will undertake open, accurate, transparent and consultative communication and engagement with Project stakeholders and the public.



GE Renewable Energy

Get in touch

BE Power is committed to keeping the community informed throughout the life of the Big-T Project and is engaging widely with local residents, Councils, and Traditional Owners. We welcome your questions and comments.

If you would like to share your views, receive Big-T Project updates via email, or are interested in supplying services to the Project email us at enquiries@bepower.com.au or visit www.bepower.com.au