Newsletter

Pleystowe BESS

March 2025

Thank You to the Community

We sincerely thank all community members and stakeholders who took the time to engage with us during our recent information sessions on 18 and 20 February and through door-knocking visits with nearby residents. Your participation and feedback are invaluable to us.

Hearing directly from the community helps us better understand local perspectives, concerns, and priorities. Your insights play a key role in shaping the project, ensuring that we carefully consider environmental, safety, and social factors in our planning and decision-making. We deeply appreciate your willingness to share your thoughts, and we remain committed to an open and ongoing dialogue as the project progresses.

If you have any further feedback, we encourage you to continue reaching out to us. Your input remains essential in developing a project that benefits both the local community and Queensland's energy future.

Pleystowe Energy Storage System

Trina Solar is proposing to develop the Pleystowe Battery Energy Storage System (BESS) at 244 Pleystowe School Road, approximately 2.5 km northwest of Walkerston and 13 km west of Mackay. This 200MW / 800MWh facility will store renewable energy and support the national electricity grid during peak demand and emergencies.

The project will include:

- An onsite substation connecting to the existing 132kV terminal substation
- Associated infrastructure including transformers and inverters
- Internal access tracks
- Operations and maintenance (O&M) buildings, offices, staff amenities Switch yard
- Parking site

Designed to comply with Australian safety, environmental, and planning regulations, the project will minimise local impacts while delivering benefits such as job opportunities and increased economic activity. By supporting Queensland's goal of 70% renewable energy by 2032, the Pleystowe BESS will help improve energy security and contribute to Australia's clean energy transition.

Project Updates

Since our last newsletter, we have made significant progress in both the planning and grid connection processes.

Planning and Environmental Studies

We have now completed all required impact assessments and studies as recommended by the Mackay Regional Council. These include:

- Noise Impact Assessment – Evaluating potential noise levels and ensuring compliance with the Sensitive Receptors are the Acoustic Quality Objectives from the Environmental Protection (Noise) Policy 2019 (EPP(Noise) 2019) (Queensland Government, 2019) and Background Creep criteria adopted from EPP (Noise) 2008 (Queensland Government, 2008).
- Traffic Impact Assessment – Assessing construction and operational traffic movements to minimise disruptions.
- Landscape and Visual Assessment – Reviewing how the project fits within the surrounding environment.
- Preliminary Stormwater Assessment – Ensuring appropriate water management measures are in place.
- BESS Hazard Risk Assessment – Addressing safety and emergency response planning.
- Preliminary Decommissioning and Rehabilitation Plan – Outlining long-term site restoration plans.

With these studies completed, we are now finalising the planning report and preparing the full submission package for assessment. We are on track to lodge the application with the council on 21 March 2025.

Grid Connection Progress

On the grid connection side, we are working closely with Powerlink and our technical consultants to complete network modelling and assessment. This ensures the BESS integrates efficiently into the electricity grid, providing benefits such as:

Supporting grid stability by storing excess renewable energy and supplying power when demand is high.

Reducing reliance on fossil fuels by shifting energy from peak generation times to when it is most needed.

Enhancing energy security by providing backup power during system disruptions or extreme weather events.

We appreciate the community's continued interest in the project and will provide further updates as we progress through the approval process.

Key Questions from the Community

During our recent information sessions and direct discussions with local residents, we received valuable questions about the Pleystowe BESS. Many of these focused on safety, environmental impact, noise levels, and long-term land use. We appreciate the community's engagement and would like to address some of the most frequently asked questions below.

Common Questions Raised

How will fire risks be managed? What type of fire suppression system will be used?

The fire protection measures for the Battery Energy Storage System (BESS) are designed to minimize risk and ensure a rapid response in case of an emergency. These measures include:

1. Desing Considerations
   a) Firebreak Buffer
      The engineering design incorporates a minimum 10-meter firebreak buffer between the BESS infrastructure and the site boundary. This buffer acts as a physical barrier to prevent external fire risks from reaching the site and to contain any potential incidents within the facility.
   b) Site Layout
      Battery containers are strategically spaced apart rather than clustered together. This layout is a key fire mitigation strategy, as it reduces the risk of fire propagation between units, limits thermal runaway events, and allows for better access for emergency response teams.
   c) Containerized Design
      The batteries are housed in containerized units designed to prevent the propagation of thermal events. This enhances safety and containment in the event of incidents such as thermal runaway or fire, in compliance with industry standards.
   d) Water Tanks
      Dedicated water tanks are strategically distributed across the site to provide a readily available water supply for emergency firefighting needs.
   e) Enhanced Emergency Access
      The site design incorporates two dedicated access gates to ensure rapid emergency response and enhanced accessibility for firefighting services. This dual-gate configuration complies with stringent Queensland Fire and Emergency Services guidelines by maintaining clear emergency routes and sufficient separation between equipment, thereby facilitating safe intervention in the event of an incident.
2. Fire Suppression Systems
   a) Aerosol Fire Extinguishing System

   This system is activated in two modes:

   Automatic Mode: When a heat or smoke detector is triggered, an initial Level 1 alarm is sounded. If a second detector is activated, a Level 2 alarm is triggered, followed by a 30-second countdown before aerosol release.

   Manual Mode: Operators can trigger the system manually, with an option to suspend activation in emergencies.

   b) Combustible Gas Detection & Active Ventilation System

   Continuous monitoring for gas buildup, with ventilation triggered at a 10% Lower Explosive Limit (LEL), and enhanced alarms at 25% LEL. A safety signal disconnects high-voltage systems.

   c) Water-based Suppression System

   An independent water system with external interface delivers a 360° spray to suppress fires by cooling the affected area.

What chemicals are used in the cooling and fire suppression systems?

The cooling system employs a 50:50 mix of Ethylene Glycol and water. In the fire suppression system, an aerosol-based extinguishing agent is used to rapidly disperse a chemical suppressant that interrupts the combustion process and helps control any potential fire incident.

What type of lithium battery will be used? Is it a lithium iron phosphate (LFP) battery?

Trina Battery uses Lithium Iron Phosphate (LFP) battery technology. LFP batteries are known for their high safety standards, thermal stability, and long

cycle life, making them an ideal choice for large-scale energy storage systems.

How will noise be managed to minimise disturbance to nearby residents?

To minimize noise impact, we propose to use inverters and BESS containers that are fitted with silencer kits to reduce noise levels. We will ensure that the noise emissions remain well below the acceptable criteria set by the local regulations.

As a further mitigation measure, we are considering the installation of a noise wall near the transformer area, though this will depend on the results of future detailed noise assessments and design evaluations.

Is Trina planning to expand and request more land for developing solar or wind projects?

Trina has no intention to expand the Pleystowe BESS into a hybrid project (solar or wind). The current proposed project site is more than adequate to support the planned BESS development, and there are no plans to request additional land for this purpose.

How will potential impacts on livestock and pasture land be addressed?

The land currently supports a small number of cattle for grazing. The project footprint covers approximately 9 hectares, which is a minimal portion of the total grazing land in Queensland. The remaining area can potentially continue to be used for grazing.

How will Trina ensure that the land is restored to its original condition after the project's lifespan?

To ensure the land is restored after the project's lifecycle, a Decommissioning and Rehabilitation Plan has been developed as part of the Development Approval process. Key activities include:

- Infrastructure Removal: All aboveground and underground electrical infrastructure, including transformers, inverters, and cables, will be removed and recycled by approved facilities.
- Site Clearing and Building Demolition: Operational buildings, site offices, and other structures will be dismantled, with materials recycled or disposed of responsibly.
- Land Restoration: Native vegetation will be re-established through seeding and propagation, ensuring the site returns to its pre-development state.

Additional measures, including sediment and erosion control and hazardous material management, are also outlined in the plan to ensure comprehensive site rehabilitation. We understand that these concerns are important to the community, and our project team is committed to addressing them with clear and transparent information.

Development Application (DA) Process and Next Steps

Here's an overview of the DA timeline and next steps:

- **DA Lodgement**: We plan to submit the DA to the Mackay Regional Council 21 March 2025.
- **Assessment Period**: The overall assessment period is for 4-6 months
- **Request for Information (RFI)**: If additional information is required, we anticipate a 1-month period for us to respond.
- **Public Notification**: The project will be open for public notification for 15 business days. During this period, the community is invited to provide feedback directly to the Council.
- **Decision Period**: The Council will make a decision on the application within 35 business after the notification period.

If you wish to share your feedback directly with the Council, we encourage you to do so during the public notification period. This is the designated time for community input and will ensure that your voice is heard as part of the assessment process.

Future Engagement

Our planned engagements over the coming months include:

- Ongoing engagement with nearby landowners
- Email/letter updates to the community
- Presentations to a range of groups, including the Mackay Regional Council.
- Continue running the online survey
- Discussions with local media

How to Leave Feedback

Your ongoing feedback is important, and we encourage you to complete the community feedback survey by visiting https://pleystowebess.com.au/ or email us at pleystowebess@trinasolarc.com.