# Bulli Creek North Energy Hub FAQs

June 2026

## What is being proposed?

Trina Solar is proposing to develop a renewable energy project called the Bulli Creek North Energy Hub (the Project), located in Western Creek, Queensland (Qld), approximately 35km west of Millmerran and 110km southwest of Toowoomba, in the Darling Downs Region of southeast Qld. The Project includes a 450 MW (megawatt) solar farm and a 750 MW / 3000 megawatt hour (MWh) battery energy storage system (BESS), and it is the combination of these two elements that makes it an 'Energy Hub'.

## Is this Project related to the Bulli Creek Solar Project?

No, this Project is not related to the Genex Bulli Creek Solar Project. The Bulli Creek North Energy Hub is being proposed by Trina Solar, has a separate Project Site, and is independent from any other renewable developments in the area.

## Who is Trina Solar?

Trina Solar has over 27 years of excellence in customer service and technical expertise in renewable energy. The company manufactures high-performance solar modules, solar trackers, and energy storage systems. Trina Solar is an internationally recognised leader in renewable developments, with products that are deployed in residential, commercial, and utility-scale projects worldwide. Operating in over 150 countries, Trina Solar drives innovation and sustainability through robust research and development capabilities. The Trina Solar team includes over 20 offices across five continents, with two established offices in Australia.

In Australia, Trina Solar has 4GW of projects in development covering Solar & BESS projects across Queensland, Victoria, South and Western Australia, and also New Zealand. Trina Solar has developed, constructed, and is now operating over 6GW of solar electricity generation worldwide.

## What stage is the Project at?

Trina Solar is in the early development application phase of the Project and is currently assessing the limitations and restrictions through environmental assessments and community engagement. The information gathered at this stage will be compiled to ensure the development plans align with local landscape values and identity and, therefore, inform the final development application.

## What is the current expected timeline of the Project?

Trina Solar is anticipating submitting the development application for the Bulli Creek North Energy Hub in late 2026. Should the Project be approved for development, it is anticipated that construction would start in early-mid 2028, with the Project to be fully operational by 2031. The Project currently has an estimated operational life of 30 years, and because of this, decommissioning would likely occur in 2061.

## Who approves the Project?

Under Qld's Planning Act 2016, large-scale renewable energy projects are now assessed by the State Assessment and Referral Agency (SARA) on behalf of the Queensland Government. Prior to the 2025 amendments to the Planning Regulation 2017, solar farms were generally assessed by local Councils, with State involvement only if specific State interests were triggered.

The updated regulation introduced a clear threshold, making solar farms with a capacity of 1 MW or more (and all wind farms) subject to assessment by the State. While local Councils will still provide input on local planning, infrastructure, and community matters, final development approval for projects of this scale now rests with SARA. Applications will be assessed against local planning schemes and the newly adopted State Code 26: Solar farm development, which establishes consistent State-wide standards for the assessment and operation of large-scale projects.

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## Why is this Project needed? Isn't there enough renewable energy being produced elsewhere?

Qld has made some progress in renewable energy over the past decade, with around 27% of the State's electricity now generated from renewable sources. Since 2015, more than 50 large-scale renewable projects have been delivered or committed, representing billions of dollars of investment, thousands of construction jobs and more than 6,000 MW of clean energy capacity. However, despite this growth, Qld's demand for electricity continues to rise, and the State still relies heavily on ageing coal and gas generation to maintain supply.

The 2025 Qld Energy Roadmap reinforces that further renewable energy development is needed to keep the system reliable, affordable and sustainable. The Roadmap outlines Queensland's pathway for the next decade, including new large-scale wind and solar projects, energy storage and transmission upgrades. While earlier legislated renewable energy targets have been repealed, the Roadmap still identifies the need for significant new clean-energy capacity to support population growth, replace ageing coal-fired power stations over time, and reduce long-term exposure to volatile fossil-fuel markets.

## Why is this land not being used for agriculture?

The Project Site was selected following careful consideration of a range of factors, including the landowner's willingness to diversify land use, the generally low environmental value of much of the already cleared area, and the site's proximity to transmission infrastructure. Trina Solar understands that undeveloped parts of the property are expected to continue to be used for agricultural purposes in the future.

Developing new renewable projects in Queensland also strengthens the State's energy independence. Relying on energy produced "elsewhere" is not a long-term solution, as Queensland must ensure it has enough generation to meet its own demand, maintain grid stability, and deliver lower emissions for future decades. Continued renewable energy development is therefore essential to support economic growth, deliver more resilient energy infrastructure, and keep power affordable for Queensland households and businesses.

This Project will help Queensland close the gap by delivering new clean energy generation, supporting regional employment, improving the State's energy security, and placing downward pressure on both electricity prices and carbon emissions.

## How much energy will the Bulli Creek North Energy Hub produce?

The Project will generate enough power for approximately 190,000 Qld homes, helping ensure an ample future power supply and support the State's transition toward a lower-emission, reliable energy future.

## How will construction traffic and road impacts be managed?

At this stage, access to the site is anticipated to be from existing public roads, such as Bulli Creek Road, Gore Highway, and Boodandilla Road, with entry and exit points designated to minimise impacts on local traffic. Traffic management measures will be implemented as needed during construction, and internal access tracks will connect key infrastructure while reducing disturbance to the surrounding area.

During the anticipated 24-month (two-year) total construction period, construction vehicles would range from light vehicles to 26m B-Doubles. Light vehicles would arrive during AM/PM peaks, with heavy vehicle deliveries to be spaced out during the day.

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## Will there be outages during construction?

There will be no outages expected during the construction phase. Trina Solar will work closely with Powerlink during the different phases of the project to minimise the impact on any distribution power line. Once the project is built and operational, it will help to increase the grid stability.

## How long will this Project operate for? What happens after that?

The operational life of the Project is expected to be up to 30 years. After this time, the site will be decommissioned and the land rehabilitated and returned to its original use. The decommissioning plan is a critical part of the development application process, and a decommissioning plan must be included for the development to be considered.

## Why did Trina Solar choose this site for the Project?

Careful consideration is needed to select the most appropriate site for the Project. There are many factors to consider, including:

- Access to the electricity grid
- Current land use
- Environmental impacts
- Landowner consent
- Proximity to residents.

It is the combination of these factors that has allowed for the chosen site to be looked at for development.

## What will happen to the residual land?

Involved land unused by the Project's development footprint (solar panels, BESS, and supporting infrastructure) will continue to be used at the discretion of the landowners. Currently, the land is being used for agricultural grazing, and it is the understanding of Trina Solar that those practices will continue alongside the Project development.

## Will the Project devalue my land?

Many factors influence the value of a property, and there is no evidence base available to reference a direct link to the devaluation of property solely due to proximity to renewable development. It is because of this that we do not expect this development to devalue land in the area.

The Australian Clean Energy Council (CEC) has produced a **fact sheet** about property values and property insurance in relation to renewable energy development. The fact sheet highlights the lack of Australian data to suggest long-term property devaluations because of proximity to renewable energy developments. We would recommend reading this fact sheet along with all other available CEC resources, as they are a great educational resource for both industry and communities.

Trina Solar aims to deliver a Project that provides shared benefits to the community, while working with the site neighbours to reduce any potential or perceived impacts and invest in meaningful opportunities to support the resilience of the Western Creek, Millmerran and Toowoomba regional communities.

## Will there always be a contact on-site in case of emergency?

There will be a 24/7 contact via a remote-Control Centre, and other staff members will be based near the Project. The Project will also be monitored continuously by CCTV.

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## How many jobs will be created by the construction and operation of the Project?

Employment opportunities will range from skilled to manual labour. For the construction of the Project, anticipated to start in early 2028, it is estimated that a workforce of 350 full-time equivalent (FTE) jobs will be needed at peak construction. Following this, approximately 20 ongoing FTE roles will be required in operations, which is anticipated to be from 2031.

Using qualified local contractors is always a key element for Trina Solar when developing a project, and we intend to work with local service and product suppliers to boost the local economy.

## What kind of jobs would be needed in construction and operation?

During the construction phase, the estimated 350 FTE roles will likely be made up of:
Project Manager, Site Manager / Construction Manager, Civil and mechanical Engineers, Electrical Engineers, Traffic management officers, HSE (Health, Safety & Environment) Manager / Officers, Quantity Surveyor / Cost Controller, Procurement / Contracts Manager, Site Supervisors, Technicians and Trades (electricians, civil, mechanical installation works crews), Logistics / Materials managers and coordinators, Commissioning manager and engineers, Surveyors, Site security officers, SCADA / Control Systems Engineer, and Grid / Performance Engineer.

During the operations phase, the estimated 20 FTE roles will likely be made up of;

Operations Manager, Asset Manager, Plant / Site Manager, Maintenance Technicians (electrical/ mechanical), SCADA / Control Systems Engineer, Grid / Performance Engineer, HSE Officer and Administration / Support Staff.

## Where does the Project intend to house workers?

Workforce accommodation options for the construction and operations of the Project will be investigated as part of the Social Impact Assessment (SIA). Throughout this process, different accommodation options will be explored to minimise impacts on the local community.

## What is a SIA?

An SIA is an assessment process used to understand how a proposed development (such as a renewable energy project) may affect local communities. In Qld, an SIA examines the potential social, economic and community impacts of a project, including effects on employment, housing, local services, infrastructure, community wellbeing, and land use.

The assessment involves gathering information about the local area and engaging with residents, businesses, community groups and Traditional Owners to understand their views and concerns. The findings are used to identify both positive opportunities and potential impacts, and to develop measures that maximise community benefits while avoiding or reducing negative effects. The SIA helps ensure that community perspectives are considered in project planning and decision-making and uses the community perspective outcomes to inform the CBA.

## What is a community benefit agreement (CBA)?

As part of the **Planning (Social Impact and Community Benefit) and Other Legislation Amendment Act 2025**, project proponents are now expected to enter into a Community Benefit Agreement (CBA) with the relevant local government. A CBA is an arrangement between a renewable energy developer and the local community that outlines how the project will provide lasting benefits to the area. These agreements are guided by the findings of the Social Impact Assessment (SIA), which are developed in consultation with residents, community groups and councils to ensure the benefits reflect local priorities and are designed to manage social impacts while delivering long-term, place-based benefits to local communities.

A CBA is a legally binding commitment that ensures developments provide targeted support where it's needed most. These benefits may include community funding programs, support for local infrastructure or services, local employment and training opportunities, and initiatives that support regional economic development. A CBA helps ensure that communities hosting renewable energy projects share in the positive outcomes of the energy transition and contribute to the long-term well-being of the host community.

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## What benefits will this Project bring to the area and Millmerran?

The Project will improve the stability and reliability of the electricity network, provide employment opportunities to the Millmerran community during both construction and operations and contribute to the community through a locally informed Community Benefit Agreement (CBA) to ensure that communities hosting renewable energy projects share in long-term positive outcomes. Potential benefits may include local infrastructure improvements (such as road upgrades), increased economic activity and support for local businesses, as well as the generation of renewable, zero-emissions electricity. As the Project is expected to operate for more than 30 years, Trina Solar is committed to delivering long-term benefits for the local area.

## What impact will this Project have on the Millmerran coal-fired power station?

The Project will not work in competition with locally established Coal-fired power facilities such as the Millmerran coal-fired power station or the Commodore mine, but rather fill the required energy gap anticipated to be created by the announced closures of power plants elsewhere in Queensland.

# Batteries

## What is a BESS?

A BESS is a group of batteries used to store excess electrical energy from the grid. The excess energy could be from a variety of sources, including solar, wind, rooftop solar or coal-fired power. The battery system can compensate for the intermittency of renewable energy generation sources such as solar and wind, to provide energy stability to the national grid. For example, when the sun is not shining or when the wind is not blowing, a BESS will be able to provide additional power, and in reverse, when solar power and wind power are in excess, a BESS will be able to store that energy for use when demand is needed.

A BESS can provide backup power to address both weather conditions and lack of grid space. They are crucial to the increased adoption of dispersed energy sources and infrastructure, reducing the risk of widespread power outages. BESS' will serve as a crucial piece of energy infrastructure as the national energy system transitions away from coal-fired power, for maintaining system strength and ensuring network security.

## Will there be any visual impact?

Inevitably, the installation of a BESS will have some effect on the current look of the landscape, though the BESS cubicles are unlikely to emit glare or reflection. The Development Application process consists of independent technical assessments, and the visual impact will be assessed as part of this. If required, BESS facilities can be screened (by either vegetative or artificial means) to minimise any potential visual impacts.

Trina Solar is committed to working closely with the local community to address any concerns and encourages the community to approach them with any issues that may arise.

## Are there health risks associated with EMF's and living near a BESS?

EMFs (electro-magnetic fields) are naturally present in the environment. They are present in the earth's atmosphere as electric fields, while static magnetic fields are created by the earth's core. EMF are also produced wherever electricity or electrical equipment is in use (e.g. household appliances like fridges, and powerlines).

Technical and engineering experts, including the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), have found no known or documented electromagnetic radiation impacts associated with big batteries.

The operation of a BESS also generates no emissions, such as CO2 or any other harmful gases.

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## Batteries

### What does a BESS look like?

BESS's are container-like modular systems grouped with multiple inverter stations that are configured based on site and capacity obligations and can be compared to shipping container-like objects. The containerised form of the BESS will decrease installation and maintenance duration, enhance the electrical and environmental safety of the entire plant, and minimise the impact on the original landscape. As technology improves, the systems are becoming increasingly efficient and more compact.

Please see the image below for an example battery container and inverter station.


### Will I be able to hear the BESS?

Like all large-scale developments, BESS facilities may generate noise; however, due to the Qld EPA Act and the BESS's location, it is not expected to be heard by nearby residents or the community. The main sources of the sound include:

- Inverter station and unit transformer,
- HV transformer in a voltage step-up substation,
- Cooling fans are required to regulate the operating temperature of the individual battery cells.

The inverter stations are built in a containerised cabinet to reduce the noise level naturally. The sound of the battery cooling load is similar to an air conditioning unit or a dull whirring noise.

The noise level will decrease with distance and can be further reduced by the installation of acoustic enclosures or barriers. Studies are ongoing to assess noise levels, the impact this may have on the area, and to provide clear mitigation recommendations.

### What type of BESS units will be used?

The design is still to be finalised, but in general, BESS units use mature liquid-cooled lithium-ion batteries with electrically isolated coolant. However, the latest technology will be used at the time of construction. BESS units can also be adapted to utilise updates in technology, and with Trina Solar being a global leader in battery research and development, they are well placed to make these adaptations.

### How high will the units be?

BESS units will be installed on low-lying structures and are expected not to exceed 5.5m above the natural ground level. It is expected that the project area will be at the same height or lower than other existing features in the landscape.

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## Batteries

### Do the batteries have their own fire suppression capabilities?

The project will be designed with a multi-level approach to fire suppression:

Equipment level:

1. The battery cell features a gas outlet hole designed to release internal pressure in case of a fault, such as a short-circuit or overheating. This safety measure helps mitigate further damage to the battery.

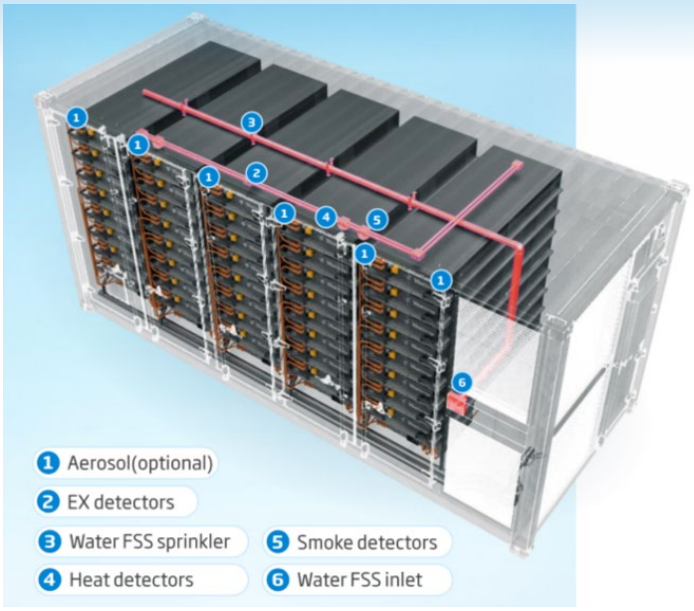
2. Within the battery pack, as depicted below, multiple battery cells are housed in an enclosed structure equipped with a signal interface. This configuration serves the dual purpose of fire prevention and continuous monitoring for potential issues.

3. Each battery container (see the image below) has a built-in liquid fire suppression system, combustible gas detection system, active ventilation system, and aerosol fire extinguishing system. Internally, the design ensures optimal heat distribution within the cabinet and maintains a strict isolation between the coolant and the electrical circuitry.

Control and plant level:

1. All sensors and equipment at different levels are connected to a monitoring system called BMS and the plant's SCADA system. If there's a problem like overheating or a fire, these systems will send out signals, like an alarm. This alarm can be sent to a phone number or email address that's been chosen beforehand, so someone can respond quickly, day or night.

2. The project will have an automatic shutdown control for safety. If there's a problem with any part of the battery system — whether it's the electricity, heat, or chemicals — the system can shut down automatically to prevent any accidents. The inverter, which helps generate electricity, also has an alarm system to stop it if there's a problem. The SCADA system can even be programmed to turn off the battery system if there's an alarm





### What happens in the case of a chemical spill?

BESS facilities are designed to manage chemicals and avoid chemical spills on site. Batteries have an IP (Ingress Protection) rating that consists of two numbers. The first indicates the protection against solid objects, and the second indicates protection against liquids. The project has a protection level of IP67; '6' meaning complete protection against dust ingress (dust-tight), and '7' meaning protection against immersion in water up to 1 meter depth for 30 minutes.

The liquid-cooled bottom plate of a battery pack can prevent spills, and the container is sealed from the bottom side to avoid any leaks. In the unlikely event of a leak, containment measures such as bunding (a form of secondary containment consisting of a raised, impermeable barrier used to retain liquids), spill trays at the BESS foundation, and chemical absorbents are in place to capture materials on site.

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## Batteries

### Do batteries increase fire risk?

BESS sites are designed to control all elements of fire risk and not pose a fire threat to neighbouring properties, habitats or additional infrastructure on the Project site. A Fire Management Plan will be produced prior to construction commencing that will address the management of potential fires in construction, operations and decommissioning. Additionally, local paid and volunteer firefighting crews will be invited to tour the site during construction to gain an understanding of access and egress points, water tank location and general infrastructure layout.

The facility operations will be monitored using real-time data, an on-site manager and security cameras to pick up fires, which will trigger notification of the local QFD as part of the Fire Management Plan.

To mitigate potential fire risk from batteries, the following steps are undertaken:

- The substation and BESS have protection to avoid overcurrent or any electrical faults to cause a fire.
- Plant facility will have a Battery Management System or fire panel to detect smoke, fire, and action alarms.
- Water tanks, water pipeline systems, and fire extinguishing tools will be installed on site.

Trina Solar will continue to seek and take guidance from the relevant agencies to ensure the final design meets all requirements and standards and manages all elements of fire risk.

### Are batteries recyclable?

Battery manufacturing has greatly improved in efficiency and scale in the past decade, driven by the critical growth phase of battery recycling. Nearly all materials in a lithium-ion battery, including nickel, cobalt, graphite, copper, aluminium, iron, and lithium, can be recycled, with up to 95% recovery rate.

CSIRO is actively involved in supporting lithium-ion battery recycling through research on metal and material recovery processes, new battery materials development, and fostering a circular economy for battery reuse and recycling.

Australia's lithium battery recycling industry, though in its early stages, is already demonstrating progress towards a cleaner and more sustainable future, with operational recycling facilities like **Envirostream** in Victoria (via Livium).

## Solar

### How is energy created from the sun?

Solar panels harness sunlight and transform it into direct current (DC) electricity. Inverters then convert this power into alternating current (AC), which can be integrated into the electricity grid. From here, it is distributed to power homes and businesses through the National Energy Market (NEM).

### How many solar panels would the proposed site have?

Investigations are underway, and early assessments indicate that this Project could host up to an estimated 700,000 solar panels on the site.

### What happens to a solar farm at the end of its life?

At the end of life, the solar panels will be removed and decommissioned, and all materials will be recycled where available. The Clean Energy Council reports that photovoltaic solar panels consist of 95% recyclable materials.

Following the removal of infrastructure, the land will be rehabilitated and returned to its original use. The decommissioning process is a critical part of the development application process, and a decommissioning plan must be included for the development to be considered.

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## Solar

### Will the Project change the way the area looks?

Inevitably, the installation of solar panels will have some effect on the aesthetics of the landscape. Trina Solar is committed to working closely with the local community to address these concerns.

We encourage members of the community to approach us with any concerns relating to this issue.
We will work closely with the neighbours to understand their views towards the area and how vegetation screening may be applied on the site or on their land to reduce visual impacts.

### Will glare be an issue?

The primary function of PV panels is to absorb sunlight rather than reflect it. The technical process in manufacturing PV panels includes anti-reflection, hydrophobic layers that minimise the potential for sunlight reflection. CASA has approved projects close to the airport, reporting that more glare is expected from the local waterways and the sun itself.

Glaring is not an issue for solar farms, as evident by the fact that solar panels have been deployed in many areas such as residential, industrial and sensitive facilities, and are even present in airports around the world, including Ballarat, Adelaide, Brisbane, Changi (Singapore), Denver and Düsseldorf (and many more).

### Do solar panels impact native flora and fauna?

Trina Solar has engaged expert consultants who will undertake flora and fauna surveys to understand the ecological characteristics of the site. Trina Solar is committed to minimising impacts on native flora and fauna by designing the project to allow species to continue to thrive during the construction and operation phases. During these phases, management plans will be developed to ensure this compliance is maintained.

### What is the lifespan of a solar farm?

A solar farm is expected to have an operational life of approximately 30 years.

## Contact us

We are committed to working closely with the community to ensure the Project delivers positive outcomes for both the environment and residents. Input from the community will help inform the Project design and final development application.

For more information, and to provide feedback, visit;
**The Project website**
https://bullicreeknorthenergyhub.com
**Email**
BulliCreekNorth@trinasolar.com
**Complete the feedback survey**
https://www.surveymonkey.com/r/BulliCreekNorth