

# **Glenellen Solar Farm Project**

IPC Public Meeting November 16<sup>th</sup> 2023

Glenellen Solar Farm



# **Acknowledgement of Country**

We acknowledge the Traditional Owners and Custodians of the lands on which we work and pay our respects to Indigenous Elders past, present and emerging.



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## **1.1. Project Introduction**

#### **GLENELLEN SOLAR FARM**

#### Scope of Development

- Location Glenellen, NSW 2646
- Community consultation commenced in early 2018 for the Glenellen Solar Farm.
- The Solar Farm will be connected to the Jindera Substation providing clean energy to the National Energy Grid

#### Development Overview

- SEARS (Issue) Sept. 2018
- EIS Submission Oct. 2020
- RtS Submission Dec. 2022
- DPE Referral Oct. 2023
- Connection Agreement Date Estimated Q4 2023

#### Fast Facts

- System Size: 200MWac solar tracking system
- Number of Panels Estimate: 393,960
- Reduced the Project footprint from 334.2 ha to 308.9 ha
- Equivalent to providing 86,500 homes with Clean Energy
- 200 Jobs will be created during construction
- The Project will also contribute to reducing carbon emissions by 328,000 tons of CO2 annually



#### 1.2. Applicants Trinasolar 120GW+ 9.5GW+ Æ Shipments **Grid-connected** 17,000+ 150 +Employees Countries

With over 25 years of customer service excellence and market leading technical experience in the Solar panel and solar power development business, Trina Solar is committed to leading the way in smart solar energy solutions for a net-zero future.

Our solar project development business, Trina Solar International System Business unit (ISBU), is a dedicated one-stop system integration solution provider with expertise in solar PV project development, financing, design, construction, operation and maintenance.



Global Power Generation (GPG) is the Naturgy Group subsidiary dedicated to international power generation. GPG develops and manages generation assets with a global approach, and offers development, construction, operation and maintenance services for its facilities.

The Roadmap for Australia is to have ~2.5GW of installed capacity by the end of 2025. Currently we are developing, building and operating facilities in 4 territories: NSW, QLD, Victoria and WA. With 1.6GW under development, 0,5GW under construction and 0.4GW under operation.

## 1.3. Applicant's position

- The project is located within the Riverina Murray region of NSW
- The site does not contain any mapped Biophysical Strategic Agricultural Land (BSAL)
- Land and Soil Capability (LSC) Class 4 (land with moderate to severe limitations)
- There is existing electricity transmission infrastructure surrounding the site, including TransGrid's Jindera substation.
- Site: 398Ha / Development footprint 309 ha.
- Substation relocation 2 m lower profile
- Additional setbacks along Drumwood Rd (10 m) and Ortlipp Rd (20 m) to security fence
- Increased vegetation screening for receptors
- EEC retained along Ortlipp Rd and around TransGrid Substation. Several scattered trees to be retain along southern Project boundary.



### 2.1. Traffic and transport – Route

- Updated transport study and road safety assessment completed during Submissions phase of Project
- New route avoids unsuitable roads/follows approved B-Double routes
- Consultation with Albury City and Greater Hume Councils – support for revised plans
- Construction traffic will include approximately 45 heavy vehicles a day and 11 heavy vehicle requiring escort in total.
- Operational traffic will be negligible (both light and heavy vehicles)
- Ortlipp and Lindner Road was a focus for consultation



### 2.1. Traffic and transport – Road upgrades

Recommended minor upgrades and traffic control during construction. Minor upgrades include:

- Urana Rd / Walla Walla
   Jindera Rd intersection
- Walla Walla Jindera Rd / Lindner Rd intersection
- Lindner Rd
- Lindner Rd / Ortlipp Rd intersection
- Ortlipp Rd



#### 2.2. Visual

- A revised Landscape and Visual Assessment (LVIA) was completed during the Submissions phase of the Project.
   20 non-associated residences within 1 km of Project Site
- The revised LVIA dwelling assessment identified seven dwellings as having a low visual impact rating with mitigation
- Amendments to the Project design were undertaken to reduce the potential visual impacts. Amendments included:
  - Relocation of the Substation to the south of the Jindera Zone Substation
  - Reduction in number of solar panels
  - Increased setback from Lindner Road
  - Increased setback along Ortlipp Road and Drumwood Road
  - Increased vegetation screening around the Project Site.
- Visual screening will be undertaken to mitigate the potential impacts on adjacent residences. → Start ASAP
- The proposed screening will successfully establish and function to reduce the potential visual impacts within the estimated timeframes (2 – 3 years).
- A glint and glare assessment was undertaken by Pager Power as part of the EIS.
- Pager Power advised that reflections are technically possible immediately after sunrise until no later than 8 am towards 10 surrounding dwelling receptors to the south and west of the Project Site. However, it was concluded that the impact is not significant.



### 2.3. Noise

- A revised Noise and Vibration Impact Assessment (NVIA) was completed during the Submissions phase of the Project.
- Construction noise levels are predicted to exceed the 'noise management level' of 50 dB(A) in the EPA's Interim Construction Noise Guideline (ICNG) at the nearest residences (as represented by LIN007 and ORT005).
- These exceedances would be short-term (approximately one to two weeks) and intermittent (two to three hours per day).
- Construction noise would be limited to standard daytime construction hours.
- Operational noise would comply with relevant noise criteria, as calculated in accordance with the NSW Noise Policy for Industry (EPA, 2017), at all residences.

### 2.4. Biodiversity

- Two Plant Community Types recorded within Project Site:
  - Blakely's Red Gum Yellow Box grassy tall woodland
  - River Red Gum wallaby grass tall woodland wetland on the outer River Red Gum zone mainly in the Riverina Bioregion
- Approximately 8.7 ha of native vegetation and 77 scattered paddock trees will be impacted
- Majority of native vegetation is in low condition, lacking a midstorey and the groundcover was dominated by exotic pasture
- Amendments to the Project Development Footprint include:
  - Reduced impacts on CEEC Box-Gum Woodland around TransGrid substation – defined connection corridor established
  - Introduced a buffer along Ortlipp Rd to avoid as far as possible impacts upon Box-Gum Woodland CEEC
  - Several scattered trees have been excluded from the development footprint along the southern boundary.



### 2.5. Heritage

- The Aboriginal Cultural Heritage Assessment identified 3 stone artefact sites within the Development Footprint
- All artefacts were assessed to be of low significance
- These artefacts will be salvaged and relocated in consultation with Registered Aboriginal Parties (RAPs) and prior to the commencement of construction
- No historic heritage items are located within the Development Footprint.



### 2.6. Riparian & Flooding

- Riparian
  - The 1st and 2nd Order streams within the Project Site have no defined channels, beds or banks.
  - Kilnacroft Creek, the one 3rd Order stream dissecting the Project Site, is a degraded creekline that has been heavily impacted by previous land uses. The creekline is currently grazed and is mostly void of canopy vegetation. A 20 m Vegetated Riparian Zone (VRZ) each side of Kilnacroft Creek has been adopted for the Project.
- Amendments to the Project Development Footprint include:
  - Re-contouring of an inundation area in the south-eastern part of the Project Site to allow for natural flows to occur, and prevent any backfilling inundation into adjacent properties and agricultural land.
  - A revised flooding assessment was undertaken to determine the flooding impacts upstream and downstream of the Project Site in relation to recontouring works proposed.
  - The revised flood modelling indicates that there is a negligible impact on peak water surface height and peak flows with the Project across all modelled flows. This amounts to less than 0.2% difference in these measures between modelled scenarios.



### 2.8. Land Use: Agri-solar

- The project is located within the Riverina Murray region of NSW, which has a strong and diverse agricultural sector
- No BSAL occurs within the Project Site.
- The Project Site is currently used for agricultural productivity, primarily sheep and cattle grazing.
- A Land and Soil Capability (LSC) Assessment was undertaken to validate the LSC Class. The Project Site has been validated as Class 4, which is defined as land with moderate to severe limitations, which can support grazing but requires active management to sustain cultivation on a rotational basis.
- An Agricultural Impact Assessment was completed for the Project. The Project would only result in a 25% reduction in productive sheep carrying capacity across the Project Site.
- DPI Agriculture did not raise any concerns with the project and it supported the proposed grazing activities



Typical PV Array Arrangement for Agri-Solar

### 2.9. Bushfire risk and APZs

Bushfire Risk Analysis prepared by Eco Logical Australia to support the EIS

To manage bushfire risk, management measures will be implemented, including, but not limited to Asset Protection Zones (APZs), access to water, and preparation of a Bushfire Emergency Management and Operations Plan

#### **Asset Protection Zones**

- Will be established surrounding the entire Project Site
- APZ width will be 10 m within security fence
- Will incorporate a 4 m Category 1 perimeter fire trail
- Will be managed in accordance with the NSW RFS (2019) APZ requirements for an Inner Protection Area.

#### Water

- A dedicated water supply of four 10,000 litre tanks fitted with Storz couplings as filling points for fire tankers.
- Placement will be advised by the RFS, however indicative locations will be as follows: one at the operations compound, one at the main entrance and two along Drumwood Road.



### 2.10. Waste management and disposal

- A Waste Management Plan will be developed for the Project to reduce the quantity of waste generated . e Proponent will manage waste through the following hierarchy:
  - 1. Reduce waste production
  - 2. Recover resources (including reuse, reprocessing, recycling and energy recovery)
  - 3. Dispose of waste appropriately
- During the construction and operation, monitoring will be undertaken by staff, management and appropriate regulatory authorities including GHSC and the NSW EPA.
- A designated, monitored, complaints phone number will be available for the general public to be able to report any waste or other issues
- Wastes will be classified in accordance with the NSW EPA Waste Classification Guidelines Part 1: classifying waste (EPA 2014) and addendum (EPA 2016). These wastes will be disposed of lawfully at a licensed waste facility.
- Recycle all solar panels at the completion of the Project at a facility that recycles all components of the solar panel for re-use and avoids any components entering landfill.

### 2.11. Water supply

- Discussions with GHSC have been undertaken to potentially source this water from GHSC water mains via the GHSC owned standpipe in Jindera. GHSC has confirmed water can be supplied from the village water scheme.
- The current 9 ponds will be retained for grazing activities.

Construction Water Requirements		
Dust suppression	5.0625 ML	
Dust suppression (re-contouring area)	0.525 ML	
Panel cleaning	1.21 ML	
Road dust suppression	6.9375 ML	
Potable water	3.6 ML	
Firefighting	0.225 ML	

Operational Water Requirements	
Panel cleaning	1.21 ML
Potable Water	0.013 ML
Firefighting	0.225 ML
Other Maintenance Activities (Landscaping)	0.39 ML



Mr J Flores Head of Development Glenellen Solar Farm Pty Ltd Level 13, 465 Victoria Avenue CHATSWOOD NSW 2067

C/- Jose.flores@trinasolar.com

Dear Mr Flores

#### Proposed Glenellen Solar Farm – Water Usage

I refer to your letter dated 9 November 2022 which seeks Council's confirmation of the availability of the following amounts of water:

- 17 ML annually during construction at an anticipated daily consumption of 48,000L.
- 1.8 ML annually during operation at an anticipated daily consumption of 5,000L.

Council confirms the availability of the abovementioned volumes of water. The water can be drawn from the standpipe at the intersection of Urana Road and Jindera Walla Road. Alternatively, the water can be supplied directly from the village water supply via the installation of a new water main and standpipe fitted with a motorized valve to stop pipe hammer at your expense under Council's supervision (preferred Council option).

All correspondence

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ABN 44 970 341 154

Should you require further assistance in relation to this matter please contact Colin Kane, Director Environment & Planning, on 6044 8928 or email ckane@greaterhume.nsw.gov.au.

Yours faithfully

Colillac

Colin Kane Director Environment & Planning GREATER HUME COUNCIL

18 November 2022

Our Ref: CK:SG



### 2.12. Decommissioning and rehabilitation

- Decommissioning and restoration would occur at the end of the operational life of the Project.
  - Disconnect from TransGrid Network
  - Cable Disposal: Removal and off-site disposal of interconnecting cables with a focus on reusing and recycling.
  - Foundation Demolition: Breaking up and removing foundations from the site.
  - Module and Racking Removal: Removal and recycling of solar modules and the racking system.
  - Pile Recycling: Lifting piles from the ground and recycling whenever possible.
  - Site Restoration Ripping and returning the Project Site's surface to agricultural use.
- The Proponent has also committed to the development of a Decommissioning and Rehabilitation Management Plan, which will aim to remove all infrastructure from the Project Site.
  - Traffic: road conditions as they are likely to exist in 30 years cannot be accurately determined or assessed. However, the impacts
    are anticipated to be similar to those identified for the construction phase.
  - Noise: Similar construction activities during the decommission CNVMP

Phase	Indicative Start	Indicative Period
Construction	Q1 2024 (updated)	18 months
Operation / Repowering	Q2 2025 (updated)	28 years
Decommissioning	2054 (updated)	6 months

### 2.13. Cumulative impacts

#### Landscape and Visual Cumulative Impacts

• Cumulative visual impacts were assessed and due to the distance and intervening vegetation within and adjacent to the Project Site, there will be no or limited opportunities to view any additional solar farms simultaneously from a static viewpoint presently or in the foreseeable future.

#### **Construction Traffic Cumulative Impacts**

- Cumulative traffic construction volumes along the assessed haulage roads appear to be within acceptable Level of Service (LoS)
- The Project have little to no impact on the road network performance when considering the Jindera Solar Farm project as well.

#### **Construction and Operational Noise Cumulative Impacts**

• Cumulative operational and construction noise due to activities at the Jindera Solar Farm and Project occurring simultaneously have the same outcomes as the assessments of noise from the Project alone, therefore no cumulative noise impacts are expected.

#### Cumulative consideration of socio-economic issues

- Prepare an Accommodation, and Employment Strategy for the project in consultation with Council, with consideration to prioritising the employment of local workers.
- It is anticipated that 60% of direct labour (126 FTE jobs) will be sourced from both the local economic study area (being the GHSC LGA) and the regional economic study area

Approved SSD Solar Farm within 50km	Location
Jindera Solar Farm	320 m north-west
Walla Walla Solar Farm	18 km north
Culcairn Solar Farm	21 km north

### 3.1. Voluntary Planning Agreement

Greater Hume Shire Council approved at its ordinary meeting held on April 21, 2021, to proceed with the signing of the agreement under the following conditions, subject to IPC approval:

- Would comprise an amount equal to 1% of the project's Capital Investment Value (CIV).
- The VPA would come into effect when the project reaches Financial Close.
- Agreed initial payment will be \$500,000.
- The balance will be funded over equal payments spread over nine consecutive years.

The final agreement has been reviewed between the parties, and all points have already been agreed upon.

DATED		2023
	PLANNING AGREEMENT	
GLEN	GREATER HUME SHIRE COUNCIL VELLEN SOLAR FARM NOMINEES PTY LTD ACN 644 794 758 ATF THE GLENELLEN SOLAR FARM TRUST	
	Greater Hume Council	

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### **3.2. Neighbour Agreements**

- Assessment of eligible neighbours was done according to the following criteria:
  - Residual low visual impact as determined through the revised LVIA
  - Immediately adjacent to the Project Site and may be residually impacted during the construction and/or operation of the Project by noise or noise levels, traffic movements, visual amenity, solar panel glint or glare, emissions or construction impacts
  - Potential for cumulative noise, visual impacts as a result of proximity to the Project and proposed, neighbouring JSF
  - Residual impacts are those beyond the impacts that have been prevented, mitigated or reduced as far as possible by the Proponent during the Development Approval process
- Initial Payment with 2 extension payments (if construction lasts more than 18 months and 24 months)
- Legal expenses are covered
- Ongoing engagement to ensure details clear, acceptable
- No 'gag' clauses details of Agreements to be kept confidential
- Payment w/in 7 days of FID
- <u>2 Neighbours have exercised agreements</u>
- Ability to enter or exit scheme at any time (and after construction)



No residual impacts – no further mitigation required
Some potential residual impacts and/or individual circumstances. Consider Neighbour Agreement.
Residual impacts – predominantly visual. Apply Neighbour Agreement.

# Thank you Let Sunlight Power your Life

# **Glenellen Solar Farm**

