# TEXAS SOLAR FARM FREQUENTLY ASKED QUESTIONS

ALL ALL ALL ADDRESS



# GENERAL

#### Q What is proposed?

A FRV is proposing to construct and operate a solar farm, up to 400 megawatt (MWac) capacity, and Battery Energy Storage System up to 200 MWh, for the purposes of providing a critical new source of clean energy for New South Wales and the national energy grid. The solar farm will be capable of supplying renewable energy for approximately 90,000 homes.

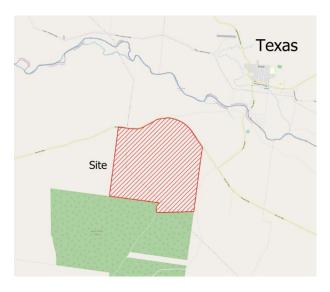
## Q Who is FRV?

- A FRV Services Australia (FRV) is a highly experienced and capable solar farm developer. FRV has developed 1.6 gigawatts (GW) of renewable energy projects globally and our current portfolio of solar farms in Australia includes:
  - Royalla Solar Farm 24 MW Operational since 2015
  - Moree Solar Farm 70 MW Operational since 2016
  - Clare Solar Farm 125 MW Operational since 2017
  - Lilyvale Solar Farm 126 MW Operational since 2019
  - Goonumbla Solar Farm 89MW Operational since 2020
  - Winton Solar Farm 100 MW Operational since 2021
  - Sebastopol Solar Farm 109 MW Operational since 2022
  - Metz Solar Farm 1415 MW Operational since 2022
  - Dalby Solar Farm and BESS 5MW Operational since 2024
  - Walla Walla Solar Farm 353 MW Under Construction
  - Tieri Solar Farm Development Approval Received
  - Bluewater Solar Farm 80 MW Development Approval Received
  - Ravenswood Solar Farm 96 MW Power Purchase Agreement
  - Terang Battery Energy Storage 100 MW– Under construction
  - Gnarwarre Battery Energy Storage 220 MW Development Approval Received
  - Fosterville Solar Farm 100 MW Development Approval Received



#### Q Where is the site located?

A We're investigating 900 hectares of private rural land in Texas, NSW, located between the Bruxner Highway to the north and Bebo State Forest to the south.



#### Q Why Texas?

A The biggest constraint that renewable energy developers face is finding suitable land close to a transmission line that can handle additional load from the generation of electricity.

FRV plans to connect this solar farm to the existing 330kV Bulli Creek to Dumaresq overhead transmission line, which is owned and operated by service provider TransGrid. This powerline crosses through the Texas Solar Farm site.

Inverell Shire Council and the local Texas area has a small but growing renewable energy industry. Projects such as the Texas Solar Farm, will help with the region's growth as it transitions from fossil fuels and diversifies its local economy.

## Q When will construction commence and how long will construction take?

A The construction start date is dependent on a variety of factors, including receiving planning approval, approval from TransGrid, negotiation of a Power Purchase Agreement and completion of the project financing. Once those milestones are achieved and construction contractors are appointed, works on site would likely take approximately 18 months.

#### Q Will FRV stay on as the project owner?

A FRV develops solar energy projects to own and operate for the long-term. While FRV have sold some assets in the past, our core business is retaining assets as this provides us with a sustainable return on investment and ensures we manage the running of our solar farms directly. For us, it is important that our assets are operated responsibly and perform well over their lifetime.



#### Q How long will this project operate for?

A Typically, it is expected that solar farms being constructed today will operate for about 35 years. After 35 years, the site would either be rehabilitated back to farmland or the land may be reutilised and infrastructure upgraded, subject to landowner agreements and planning approvals.

## PLANNING APPROVALS

#### Q What stage is this project at?

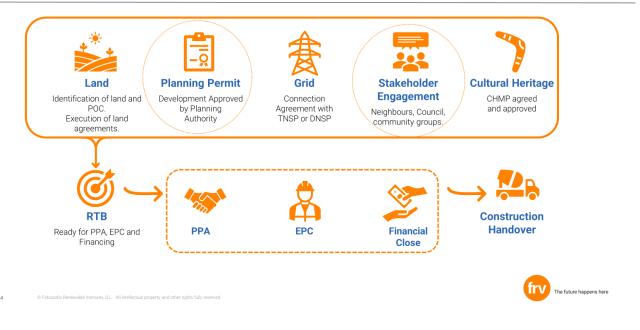
A Texas Solar Farm is currently in the early planning stages, having received the Secretary's environmental assessment requirements (SEARs) in early 2024, identifying information to be included in the environmental impact statement (EIS). The SEARs can be viewed online by accessing the <u>NSW Major Projects Portal</u>.

Detailed assessments to help determine the feasibility and the design of the project are currently being undertaken, including on biodiversity, heritage, land, landscape and visual, glint and glare, noise, transport, water, hazards, social impact, economic, and waste.

Information from these assessments will help inform further community consultation, ahead of the planned lodgement of a Development Application to the NSW Department of Planning and Environment (DPE) in late-2025.

If the project receives development consent, FRV will oversee construction by a subcontractor and will own and operate the solar farm.

# Development Process Australia





## Q What is an Environmental Impact Statement

- A The objective of the EIS is to ensure that any environmental, social and economic impacts of the project are identified and assessed; and to recommend mitigation measures to avoid and minimise any adverse impacts. FRV is currently undertaking these detailed assessments to help shape the overall design of the project. The EIS will consider issues such as:
  - Biodiversity
- Heritage
- Agriculture
- Landscape and Visual
- Noise

- Social Impacts
- Water
- Economic Impacts
- Land Use
- Traffic and Transport
- Potential Hazards (incl Bushfire)
- Waste and Rehabilitation

#### Q What is the planning process for the project?

A The Texas Solar Farm is considered a State Significant Development (SSD) due to its economic value.

As the project is considered SSD, it will be subject to a rigorous assessment by the NSW Department of Planning, with inputs from relevant government agencies, including Inverell Shire Council.

The local community will have the opportunity to have their say on the project once a Development Application is lodged with the NSW Department of Planning, and the project is placed on public exhibition.

# DESIGN CONSIDERATIONS

#### Q Why has this specific site been chosen?

- A A combination of conditions need to be analysed when choosing an appropriate solar farm site. The choice of this location for Texas Solar Farm is driven by a combination of:
  - Excellent solar irradiation
  - Low level of environmental impact the site has been extensively cleared and disturbed by past and ongoing agriculture
  - Level terrain for cost effective construction
  - Ideal location on the national electricity grid for exporting the solar farm's electricity into the existing network.
  - Excellent access to local and major roads

Most suitable sites present some degree of restrictions such as creek lines, protected native vegetation, etc. FRV is undertaking a thorough environmental assessment to ensure that the site environmental constraints are well understood, and the development designed with the goal of minimising environmental impacts by the proposed solar farm.

FRV have successfully developed projects across Australia with similar restrictions to those on the Texas Solar Farm site.



## Q What about loss of agricultural land?

A FRV acknowledges that the Inverell shire region is recognised across Australia for its productive agricultural land, which supports grain, sheep, and beef production and that the potential loss of agricultural land may be a concern of some within the community.

The Texas Solar Farm site, spanning approximately 900 hectares, is presently dedicated to rotational grazing with no sustained crop production, this site constitutes only a small portion of the available grazing land in the region. The proposed solar farm would also represent a temporary use of the land. After the solar farm's operational life, the solar farm would be decommissioned, and the site would be returned to grazing land.

The solar panels would not occupy a large surface area within the site, which means that pasture continues to grow within the solar farm. FRV has many operational solar farms where managed grazing of sheep can continue the site, without any health or safety risks to livestock. This management approach is commonly referred to as "agrisolar" and is an effective way of ensuring continued agricultural production while providing a diversified and additional income stream for host landowners.

FRV will complete a thorough assessment of the solar farm's potential impacts on agriculture in the region before we consider submitting a Development Application for the project.



Image 1: Sheep grazing at FRV's operational Lilyvale Solar Farm

# TECHNICAL

#### Q What type of panels will be used?

A The latest technology solar photovoltaic (PV) panels will be used on this project. These will be mounted on single axis trackers, which means that they change their orientation throughout the day to follow the sun from sunrise to sunset. This helps to maximise the energy captured, and maximise the production of clean, renewable energy.

## Q How high will the panels be?

A Panels will be installed on low-lying structures expected to not exceed 3.5m above the natural ground level – a similar height to other existing features in the landscape, such as farm sheds.



#### Q Do solar panels cause glare?

A Solar panels are designed to absorb sunlight, not to reflect it. The cells in solar panels are covered in an anti-reflective coating and only reflect a small amount of the sunlight that falls on them. Typically, you would experience more glare from other everyday objects like water surfaces and the glass windows on your home, than you would from solar panels.

FRV will complete a detailed visual assessment before we consider submitting a Development Application for the project, to give the community and near-neighbours peace-of-mind that the potential visual impacts would be negligible.

#### Q Will the site contain a battery?

A Texas Solar Farm is expected to include a 200 MW / 400 MWh Battery Energy Storage System (BESS) to support the local electricity network.

#### Q Are there known health risks associated with living near a solar farm?

A No.

Many Australian homes, airports, schools, hospitals, aged care homes have the same type of solar panels installed on their roofs. You may also have solar panels installed on your home, which operate in very much the same way.

The operation of a solar panel generates no emissions such as  $CO_2$  or any other harmful gases. There are no known situations in which being near a solar farm can adversely impact your health and this has been demonstrated by the thousands of solar farms installed throughout the world.

# **ENVIRONMENTAL**

#### Q Will livestock and crops be impacted by a 'heat island' effect?

A Solar farms are not 'thermally massive', and panels are less than 5 cm thick. This means that there is no significant structure bulky enough to absorb and radiate an unsafe level of heat. Because Texas Solar Farm will use fixed-axis tracking, it means it won't be possible for any heat to get 'trapped' underneath panels. The rows of panels are also typically installed up to 15 m apart.

Studies have shown that at distances of greater than 30 m there is no noticeable difference in ambient temperature. The air immediately above a solar farm can sometimes be slightly warmer than the ambient air temperature, but the temperature difference is typically less than you would experience at a shopping centre car park on a warm day.

Around the world and in Australia, sheep safely graze **within** solar farms. Livestock and crops – including those proposed to be within the Texas Solar Farm site during operations - will not be impacted as the design of the solar farm will ensure no significant build-up of heat at the site. Likewise, animals and crops on neighbouring properties will not be affected.



## Q Will the solar farm cause contamination in the soil?

A No. The solar panels that would be used on the site are the same type of solar panels used on household roofs across Australia. The solar cells are composed of thin silicon wafers, that are made of refined silicon dioxide – which is the same material as sand or quartz, used in making glass.

The solar panels are also sealed, which means that they are fully contained to outside elements. Any damaged or broken panels would be quickly replaced by the dedicated site staff.

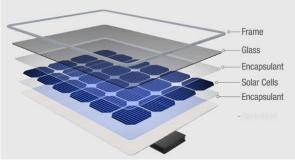


Image 2: A typical cross section of a silicon solar panel

# SOCIAL AND ECONOMIC

#### Q How many jobs will be created by the construction of the Solar Farm?

A Employment opportunities will range from skilled to manual labour. At the peak of construction, FRV estimates the project will employ up to 200 people.

Utilising qualified local contractors, where practical, is always a key element for FRV when developing a project. FRV is keen to work with local service and product suppliers to stimulate the local economy. We strongly encourage local individuals to put forward their interest in employment either for labouring or as a supplier via our website.

#### Q How many jobs will be available during operations of the Solar Farm?

A We estimate that the solar farm would directly employ 4 to 5 full time equivalent employees on a permanent basis. This is in addition to the maintenance contracts that would be required for tasks such as panel cleaning, fence repair, road grading, etc. FRV would rely on local contractors or service providers for these tasks.

#### Q Other than jobs, what other benefits will the community receive?

A As owners and operators of the solar farm for up to 35 years, FRV would be a part of the local community. FRV is committed to continuing to engage and update all stakeholders that have interest in – or may be impacted by the Texas Solar Farm project.

Benefits in addition to job creation include potential road or intersection upgrades, potential contributions to community projects and the delivery of clean, zero emissions electricity to meet the region's energy needs.



#### Q Will there be a contact onsite at all times in case of emergency?

A The plant is fully maintained throughout the life of the solar farm. There will be a 24/7 contact. An operations Manager and other staff members will be based in close proximity to the solar farm. The Solar Farm will also be monitored 24/7 by remote CCTV.

#### Q What is a Power Purchase Agreement (PPA)?

A power purchase agreement or a PPA is simply a contract to buy power at a specific price. The 'Seller' in this type of agreement is usually a utility scale generator e.g., Solar and Wind Farms. The 'Purchaser' in this type of agreement will have significant electricity requirements which allows them to purchase all or some of the output of a project. Examples of buyers include utilities, governments, and major corporates. Examples of companies which have entered into PPAs across Australia include Telstra, Mars, Blue Scope Steel, Snowy Hydro, UNSW, and Coles, with many others considering this option.

#### Q Will there be any traffic impacts associated with the Project?

A During the construction period there is likely to be an increase in traffic on local roads while materials are being transported to site. These impacts will be limited to the construction period, and are likely to be short in duration.

Once the solar farm is operational, there would not be any noticeable impact on traffic, with the only traffic being associated with the 4-5 full time employees, occasional contractors or deliveries.

As part of the EIS, we are undertaking a detailed traffic assessment in consultation with the community and local Councils so that we can reduce any traffic impacts as far as possible. The EIS will include detailed information on the expected traffic impacts, mitigation measures and details of how the project will be integrated within the existing transport network.

#### Q How can I find out more?

A If you have any questions about this project, please contact Kristie on 0488 227 427 or Thomas on 0430 073 421, or email <u>texassolarfarm@frv.com</u>.

For more information on the project, visit texassolarfarm.com.au