FOSTERVILLE SOLAR FARM
FREQUENTLY ASKED QUESTIONS

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GENERAL

Q What is proposed?

A FRV is proposing to construct and operate a 100 MWac solar farm and a 240 MWh Battery Energy Storage System for the purposes of providing a critical new source of clean energy for Victoria. The solar farm will be capable of supplying renewable energy for approximately 33,580 homes across the state.

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 – 24MW – Operational since 2015 (sold by FRV)
- Moree Solar Farm – 70 MW – Operational since 2016
- Clare Solar Farm – 125MW – Operational since 2017 (sold by FRV)
- Lilyvale Solar Farm – 125MW – Operational since 2019
- Goonumbla Solar Farm – 83.7MW – Operational since 2020
- Winton Solar Farm – 106MW – Operational since 2021
- Sebastopol Solar Farm – 90MW – Operational since 2022
- Metz Solar Farm - 115 MW – Operational since 2022
- Dalby Solar Farm and BESS – 5MW – Operational since 2023
- Walla Walla Solar Farm – 350MW – Commissioning 2024
- Lauriston Solar Farm (NZ) - 61MW – Commissioning 2024
- Terang Battery Energy Storage - 100 MW/200MWh– Pre-Construction
- Tieri Solar Farm -100MW - Development Approval Received
- Bluewater Solar Farm – 80MW – Development Approval Received
- Ravenswood Solar Farm – 63MW - Development Approval Received
- Gnarwarre Battery Energy Storage - 250MW/500MWh – Development Approval Received
- Fosterville Solar Farm and BESS - 100MW – Development Approval Received
- Maules Creek Solar Farm and BESS - 180MW - SEARs received.
- Armidale East BESS - 400MW/1600MWh - SEARs received.
- Texas Solar Farm and BESS – 300MW – SEARs received.

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Q Where will this project connect to?

A The project was initially intended to connect to the existing 220kV Bendigo to Shepparton overhead transmission line, which is owned and operated by Service Provider Ausnet. This powerline crosses through the northern half of the Fosterville Solar Farm site. Due to connection guidelines changes in Victoria, the project is now planning to be connected into the proposed and future Axedale Solar Farm Terminal Station directly north-east of the project site, which will feed into the existing 220kV Bendigo to Shepparton powerline.

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

The construction start date is dependent on a variety of factors, including receiving planning and grid connection approvals, negotiation of a Power Purchase Agreement and completion of the Financial Close process. Once construction contractors are appointed, works on site are to take approximately 14 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 Planning permit (PA2101458) was issued by the Minister for Planning on 8 December 2022. The permit approves a ~100MW solar farm and Battery Energy Storage System (BESS) including construction of a new substation to connect to a 220kV transmission line running through the north-western corner of the site. The permit approves a transmission connection point on-site, which is no longer an option.

In order to get approval for the new connection route and layout changes, FRV is currently going through the process of amending the planning permit. When all the requirements and environmental studies have been updated and finalised in late 2024, FRV will lodge the planning permit amendment with the updated impact assessments to the Department of Transportation and Planning (DTP). If the project is successfully awarded consent,

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Q What type of environmental assessments are required?

A The objective of the planning permit and evaluation phase 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 already undertook these detailed assessments to help shape the overall design of the project, with some of them currently being reviewed and updated for the amendment:

- Biodiversity
- Agriculture
- Noise
- Social Impacts
- Heritage
- Landscape and Visual
- Water
- Economic Impacts
- Land Use
- Traffic and Transport
- Potential Hazards (incl Bushfire)
- Waste and Rehabilitation

DESIGN CONSIDERATIONS

Q Why has this specific site been chosen?

A A combination of conditions needs to be analysed when choosing an appropriate solar farm site. The choice of this location for Fosterville Solar Farm is driven by a combination of:

- Excellent solar irradiation
- Low level of environmental impact – the site has been largely cleared and heavily disturbed by previous cultivation and cropping
- 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, vegetation to be retained, etc. FRV is reviewing and updating the previous environmental assessment to ensure that the existing environmental limitations would not be impacted by the proposed solar farm.

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

Q What about the impact on agricultural land?

A FRV have examined data from operational solar farms and have found that the grass growth is maintained underneath the panels thus allowing the continued grazing of the land within a solar farm.

The Fosterville Solar Farm site is located within an agricultural area, and FRV acknowledges that the potential use of agricultural land for a solar farm may be a concern of some within the community. The solar farm site would occupy around 185 hectares of land, which represents a fraction of the larger farming district. After the operational life of the solar farm the land can be returned to agricultural production.

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Allowing sheep grazing with the solar farm can provide a dual use of the land and further sustains the local economy through job retention in the agricultural sector. The term 'AgriSolar' is commonly used to show the symbiotic relationship between both enterprises.

Sheep grazing at FRV's operational Lilyvale Solar Farm.

Q What steps will be taken to minimise the clearing of native vegetation?

One of the reasons why FRV considers that the proposed site is suitable for a solar farm is because it has already been largely cleared of native vegetation for cropping, meaning that adverse impacts on biodiversity are unlikely.

Whilst it is likely that the project will require the removal of some isolated paddock trees, there would be no widespread clearing of native woodland. Engineering design will also consider these impacts and will try to avoid native vegetation when possible. The minor and unavoidable impacts will be entirely offset in accordance with VIC environmental law and regulations.

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 5.5m above the natural ground level – a similar height to other existing features in the landscape, such as farm sheds.

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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 has recently completed a detailed review on the glint and glare assessment before submitting the planning permit amendment for the project, which showed that the potential glare impacts would be negligible.

Q Will the site contain a battery?

A Fosterville Solar Farm is expected to include a 200 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?

Solar farms are not 'thermally massive', and panels are only around 5 cm thick. This means that there is no significant structure bulky enough to absorb and radiate an unsafe level of heat. Because Fosterville 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 Fosterville 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.

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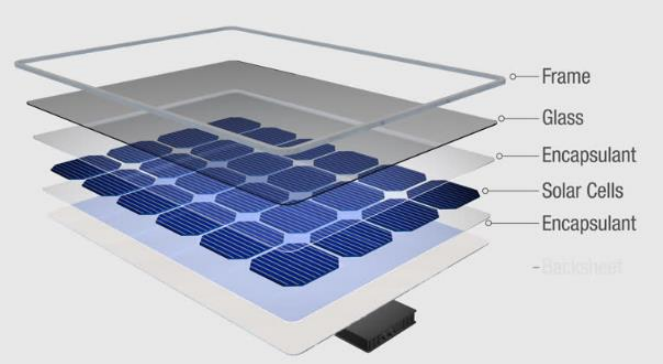
Q Will the solar farm cause contamination in the soil?

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.



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 150 people.

Utilising qualified local contractors 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 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 likely use 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 Fosterville Solar Farm project.

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

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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 A power purchase agreement or a PPA is simply a contract to buy power at a specific the 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 planning approval process, FRV undertook a detailed traffic assessment in consultation with the community and Greater Bendigo Council, so that we can reduce any traffic impacts as far as possible. FRV will also prepare a Traffic Management Plan with detailed information on the expected traffic impacts, mitigation measures and details of how the project will be integrated within the existing transport network.