



# About FRV Australia

- FRV entered Australia in 2011.
- FRVAU has over 1 gigawatt (GW) of projects built or under construction – enough to power around 300,000 Australian homes.
- Globally, FRV has 3.6 GW of projects built or in construction.
- FRVAU specialises in large-scale **solar photovoltaic** (PV) technology and **battery energy storage** systems (BESS). We were one of the first to use this technology in Australia.
- FRVAU has one of the largest solar portfolios in Australia, with over 7.2% market share of the National Energy Market.<sup>(1)</sup>
- FRVAU develops, constructs, owns and operates our assets
   we are a part of the communities in which we operate.
- FRVAU operational projects **directly employ 28 people** in regional NSW, VIC and QLD.

(1) Based on 2023 Analysis of the National Energy Market (NEM) by Jacobs













# Achievements and Milestones First developer in Australia: to use single-axis tracking technology in Australia. to deliver a utility scale, project-financed solar farm in Australia. Moree Solar Farm recognised as the highest performing solar farm in the National Energy Market.

- FRV has signed agreements (PPAs) with organisations such as Victorian State Gov, Microsoft, Snowy Hydro, Origin Energy to provide reliable, clean energy.
- Over \$9.5 million committed to regional communities to date:
  - direct investment on community infrastructure, such as road upgrades and upgrades to assets like public swimming pools
  - funding traineeships for local young people.
  - sponsoring local community events, community groups, sport events and schools.





## **Project Overview**

The proposed project would occupy an area of up to 270 hectares, and would include:

- a solar farm with a capacity of up to 120 MWac
- a 4-hr battery (BESS) with a capacity of up to 150 MWac
- a dedicated substation, connecting to the Tamworth-Narrabri 132 kV transmission line
- an on-site office and storage shed
- a primary site access on Middle Creek Road and a secondary access on Glencoe Road
- road improvements along Middle Creek Road, including widening
- at-grade creek crossings over Middle Creek (similar to the Horsearm Creek Crossing on Harparary Road)
- underground cabling (except for the network connection, or where prevented by environmental conditions.)







# Project Benefits

#### **Economic Benefits**

- Up to 150 jobs during construction
- Workers that could not be sourced locally, would stay in Narrabri and Boggabri, supporting local businesses
- Procurement of local contractors, materials and services, supporting additional, indirect employment
- 4 to 5 full-time local, permanent workers during operations

#### **Environmental Benefits**

- enough renewable energy to power up to 40,000 homes (more than the combined total of Narrabri, Gunnedah, Tamworth and Liverpool Plains LGAs)
- Up to 194,000 tonnes of greenhouse gases avoided each year.

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## Project Benefits

# Local Benefits

#### Local Benefits

- A **Benefit Sharing Program** is currently being developed to ensure that benefits are spread locally.
- Following community feedback, FRV is now proposing:
  - An initial one-off investment of \$450,000 at commencement of construction
  - Ongoing payments of \$25,000 per year during operations
- This equates to a spend of \$1.45 million over the anticipated life of the project.
- The aim of the benefit sharing program is to spread benefits throughout the community, in ways that are tangible for locals and key stakeholders.



#### Project Benefits

# Local Benefits - Benefit Sharing Program

FRV wants to hear from Maules Creek Residents about ways that the Benefit Sharing Fund could have the most impact.

Some examples include:

- financial benefits to those that live closest to the solar farm, like rooftop solar, a home battery or other energy efficiency measures
- funding traineeships or scholarships for local or disadvantaged students
- updating equipment or facilities for the local hall or public school
- funding local community events to bring people together
- sponsorship of local sports groups, community groups or charities



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Biodiversity • We anticipate very limited removal of vegetation, associated with S and Office the following activities: - removal of isolated paddock trees within the solar array; - widening Middle Creek Road; - preparing an easement between the substation and the transmission line; and - potential widening of an internal crossing over Middle Creek. Any unavoidable vegetation removal will be offset in accordance with the NSW Biodiversity Conservation Act and the NSW Biodiversity Offset Scheme. Legend Indicative Layout Retained Vegetation NB: The layout is subject to change as we prepare the EIS

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### Project Status - Environmental Studies Aboriginal Cultural Heritage

Project Status - Environmental Studies

- Advertisement Narrabri Courier 20 Nov 2022
- 13 applicants registered to be consulted as RAPs
- Methodology developed using Heritage NSW guidelines, and in consultation with RAPs
- A site investigation took place from 16 18 January 2024 in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW and the Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW
- One stone artefact was identified, assessed as having low significance and suitable for salvage prior to construction.
- The project will setback 50 metres from Middle Creek to avoid potentially sensitive areas.
- Report is currently being prepared



PV Arra



Project Status – Environmental Studies

## Land Use and Agriculture

- The entire site is mapped as **Class 4 Land** under the *NSW Land* and Soil Capability Assessment Scheme. Under this scheme, Class 4 Land is considered to have moderate to high limitations for agricultural land uses.
- The site is not BSAL, SSAL or part of a CIC.
- A Level 2 Reduced Agricultural Assessment must be completed in accordance with the *NSW Large-scale Solar Guideline*. This report is currently being prepared.
- A Level 2 Assessment includes soil testing, consideration of historic land uses and providing regional context of agriculture in the area. A Land Use Conflict Risk Assessment (LUCRA) will also be completed.
- The site is currently used for grazing cattle. Once constructed, the solar farm would support sheep grazing.
- All infrastructure will be removed, and the site will be returned to agricultural productivity once solar farm operations cease.



# Land Use and Agriculture

Table 6: Requirements for level 2 assessment		Impacts on agricultural land Identify and describe the nature, duration	<ul> <li>Describe project impacts on identified agricultural lands including, but not limited to, potential weeds, pests, dust,</li> </ul>
Assessment required	Content and form	and consequence of any potential impacts on agricultural land subject to the project site and in the wider region.	
Project description Describe the nature, location, intensity and duration of the project and include a map of the project area.	Project description     Location     Duration     Areas of the site that would be disturbed or temporarily     removed from agricultural use		Consider project potential to permanently remove agricultural land and/or fragment or displace existing agricultural industries     Consider cumulative impacts of multiple solar energy projects on agriculture in the region
Regional context Describe the regional context.	Zoning of the project site     Climate and rainfall     Regional landform     Regional landform     Regional land use including any significant agricultural     industries and/or infrastructure	Mitigation strategies Outline strategies that may be adopted to mitigate potential impacts on agricultural land and minimise land use conflict.	<ul> <li>Outline and consider strategies to mitigate project impacts on agricultural land</li> <li>Consider co-location with existing agricultural practices and investigate feasibility of agrisolar where it would result in a meaning ful benefit (see Clean Energy Council's Australian Guide to Agrisolar for Large-Scale Solar).</li> </ul>
Site characteristics and land use description Describe the nature and location of agricultural land with the potential to be impacted by the development. Describe the current agricultural status and productivity of the proposed development area and surrounding locality including the land capability aper Office of Environment and Horitage's (DEH) Land and soil capability assessment scheme (PDF 1,390 KB).	Describe the land subject to the project site     Describe existing agricultural land uses (i.e. orchards, vineyards, breeding paddocks, intensive livestock areas)     Describe the history of agricultural practices on the project site     Identify soil type, fertility, land and soil capability     Provide a map showing the verified LSC class of the project site     Provide a map showing topography of the site	Class 4 land has moderate to severe limitations for high- impact land uses that must be managed to prevent degradation. These limitations can only be managed with high levels of knowledge, expertise and investment. Class 4 land is generally used for grazing. It has cropping limitations due to erosion hazard, weak structure, salinity, acidification, shallowness of soils, climate, wetness, stoniness or a combination of these factors. Source: NSW Government Soil and Capability Assessment Scheme	
LUCRA assessment Conduct an assessment of potential land use conflicts, including completion of an assessment in accordance with the Department of Industries' Land Use Conflict Risk Assessment Guide (PDC 351 KB).	<ul> <li>Land use compatibility and conflicts</li> <li>Discuss compatibility of the development with the existing land uses on the site and adjacent land (e.g. aerial spraying, dust generation and biosecurity risk) during operation and after decommissioning, with reference to the zoning provisions applying to the land</li> </ul>		



# Traffic and Transport





# Visual Amenity – Preliminary Assessment



#### In accordance with the NSW Large-Scale Solar Guideline, a Preliminary Visual Assessment was prepared by a Landscape Architect, accompanying the Project's Scoping Report. It assessed:

- all public viewpoints (i.e. roads) within 2.5 km
- all private viewpoints (i.e. dwellings) within 4 km
- Preliminary Tools<sup>+</sup> were used to produce a computer model demonstrating which receivers within 4 km would have no visibility of the project due to topography\*.
- The results showed that 6 dwellings and 3 public viewpoints would require detailed assessment in the EIS under the Guideline.
- FRV has included an additional two concerned receivers in the detailed visual study. Whilst those receivers fell outside of the scope of the Guideline, an assessment has been offered in good faith.
- \* NB: preliminary mapping is based on topography and doesn't take vegetation, fences or buildings into account. This methodology is used to produce a much more conservative outcome.
- + These are quantitative assessment tools prescribed by the NSW Large-Scale Solar Guideline.



# Visual Amenity – Mitigation



- In response to concerns about visual impacts, FRV has reduced the maximum predicted height of panels from 5.5 metres to 3.01 metres.
- Proposed vegetation buffers within the site would:
  - be made up of a mix of large trees, small trees and large shrubs
  - be endemic/native, and include both fast-growing 'pioneer' species and slower growing, taller species
  - consist of at least two rows of trees and have a width of 10 metres
- Any dwellings that have views towards the solar farm will be offered additional landscaping, in addition to the vegetation buffers that would be planted surrounding the solar farm itself. This landscaping would be:
  - provided at FRV's cost
  - offered without obligation



## Water



• FRV's consultants are completing detailed flood modelling for the project.

- This modelling is being conducted to verify that:
  - the project infrastructure won't alter stormwater flowing to neighbouring properties.
  - The project infrastructure won't be impacted by floodwaters.
- The flood modelling assesses different scenarios, including 1 in 100-year flood and the maximum probable water level.
- FRV has committed that:
  - on-site bores will not be used by the solar farm water will be sourced from Council's Bulk Water Dispensing Units
  - road upgrades will not alter flow along Green Gully
  - most vegetation will remain on site (including groundcover), preventing changes to stormwater flows



## Noise

- Solar Farms do not generate significant noise, however we acknowledge that construction can be disruptive for nearby residents.
- The EIS will include noise modelling to demonstrate that the project meets stringent noise criteria, both during operation and construction.
- The modelling assesses noise values from all nearby dwellings.
- Noise modelling has commenced. We hope to have the results of the noise modelling available by the next CCC meeting.
- Once finalised, FRV will offer face to face meetings with all neighbours to discuss the findings. We will also provide a summary to the CCC.



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