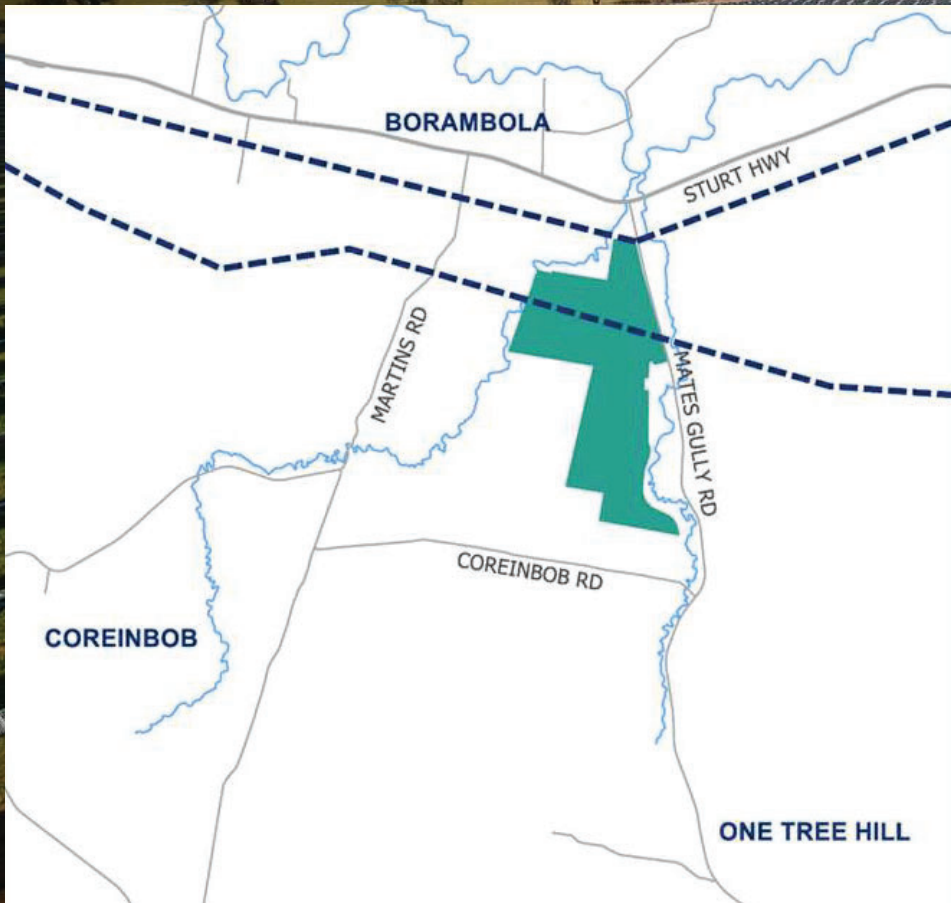







MATES GULLY SOLAR FARM PROJECT OVERVIEW



-  Proposed solar development to be located ~30km east of Wagga Wagga, between Borambola and Tarcutta.
-  Up to 160MW solar generation capacity and 100MW firm battery energy (100 MW for 4 hours).
-  Generation equivalent to powering ~90,000 NSW homes per year.
-  Offsetting the emission of >300,000 tonnes of greenhouse gases per year.
-  ~200 jobs during construction and 3-5 jobs during operations.

WHAT IS BEING PROPOSED?

Solar farm	Photovoltaic (PV) panels mounted on single axis trackers that slowly rotate and follow the sun from east to west each day. Sheep would continue to graze on the solar farm land – this already occurs at Spark Renewables' Bomen Solar Farm north of Wagga Wagga.
Battery	A containerised battery energy storage system, enabling electricity to be exported when the sun isn't shining.

WHY HAS THIS SITE BEEN CHOSEN?

Irradiance	Excellent solar resource with one of the highest irradiance areas in the state (as recorded by Australian Bureau of Meteorology).
Land suitability	The ~1,135 acres (~460 hectares) of land is flat and mostly cleared of native vegetation. The proposed solar farm land would be suitable to be grazed by sheep and for other agricultural activities once operational. Fencing and water infrastructure would allow for the rotation of stock across the site and to maximise productivity.
Connection	Proximity to the existing 132kV Transgrid transmission lines that cross the site.

WHO IS SPARK RENEWABLES?



Spark Renewables is a leading developer and long-term owner of renewable energy generation. Our portfolio comprises the 100MW operational Bomen Solar Farm near Wagga Wagga as well as an extensive development portfolio of wind, solar and storage projects in Australia. Spark Renewables is owned by the Spark Infrastructure Group. Spark Infrastructure is an owner of essential energy infrastructure, including generation, transmission and distribution infrastructure across Australia.

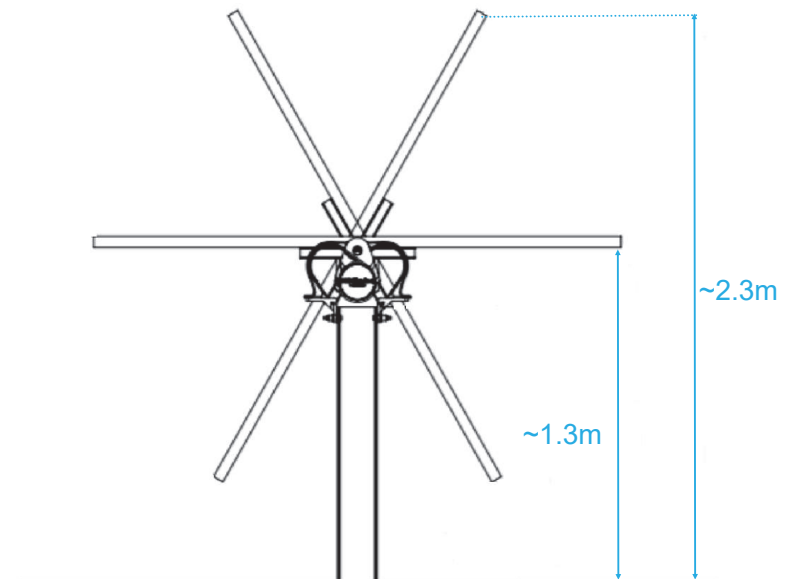


Spark Renewables is a member of the Clean Energy Council (CEC) and a signatory to the CEC's Best Practice Charter for Renewable Energy Developments.

SOLAR FARM & BATTERY TECHNOLOGY



APPROXIMATE TRACKER DIRECTIONS AND SIZE



SOLAR FARM

Panels:	~2x1 metres and 500-600 watts each.
Panel mounting:	Single axis trackers ~90 metres long and 80-90 panels per tracker.
Inverters:	Containerised power conversion stations to convert direct current (DC) to alternating (AC) power.
Materials:	Responsibly chosen low-impact materials and environmentally safe maintenance.

BATTERY ENERGY STORAGE SYSTEM (BESS)

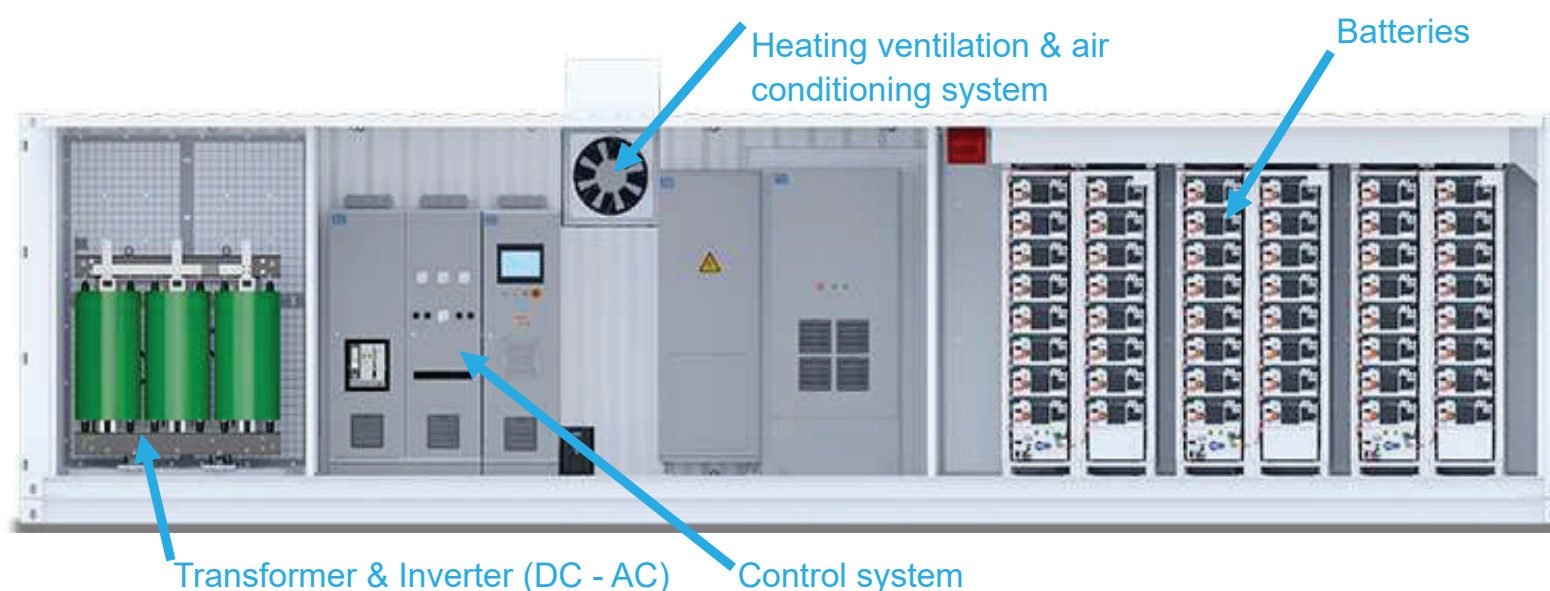
Chemistry:	Lithium-ion or similar.
Dimensions:	Either 40-foot containers in a purpose-built compound or smaller DC coupled units distributed within the solar array.
Purpose:	<ul style="list-style-type: none"> Provides firm generation 'on demand' for the electricity grid. Store excess electricity from the solar panels when the sun is at its peak, and then distributes to the electricity grid when demand is at its highest.

BATTERY PACKS (SMALLER UNITS) AND CONTAINERISED BATTERY DESIGN



Fire Hazards & Risk Mitigation

Integrated within the battery design will be an Asset Protection Zone serving as a fire break, as well as a heating, ventilation and air conditioning (HVAC) system.



PROJECT ASSESSMENT

MATES GULLY SOLAR FARM PROJECT

- The project is considered a State Significant Development under NSW planning policy.
- A Scoping Report was lodged in May 2022.
- The Scoping Report is publicly available on the NSW DPE's Major Projects website:
www.planningportal.nsw.gov.au/major-projects

HOW WILL THE PROJECT BE ASSESSED?

The NSW Department of Planning and Environment (DPE) has in place a legislated planning process to ensure that a project is suitable for the community, economy, and environment, and therefore whether it should be granted a development approval. DPE will then assess the proposal. The consent authority will be either the Minister for Planning and Public Spaces or the Independent Planning Commission.

HOW WILL CONCERNS BE ADDRESSED?

Any issues, including community's concerns relating to the project, would require undertaking studies, which are submitted to the DPE as part of the Environmental Impact Statement (EIS).

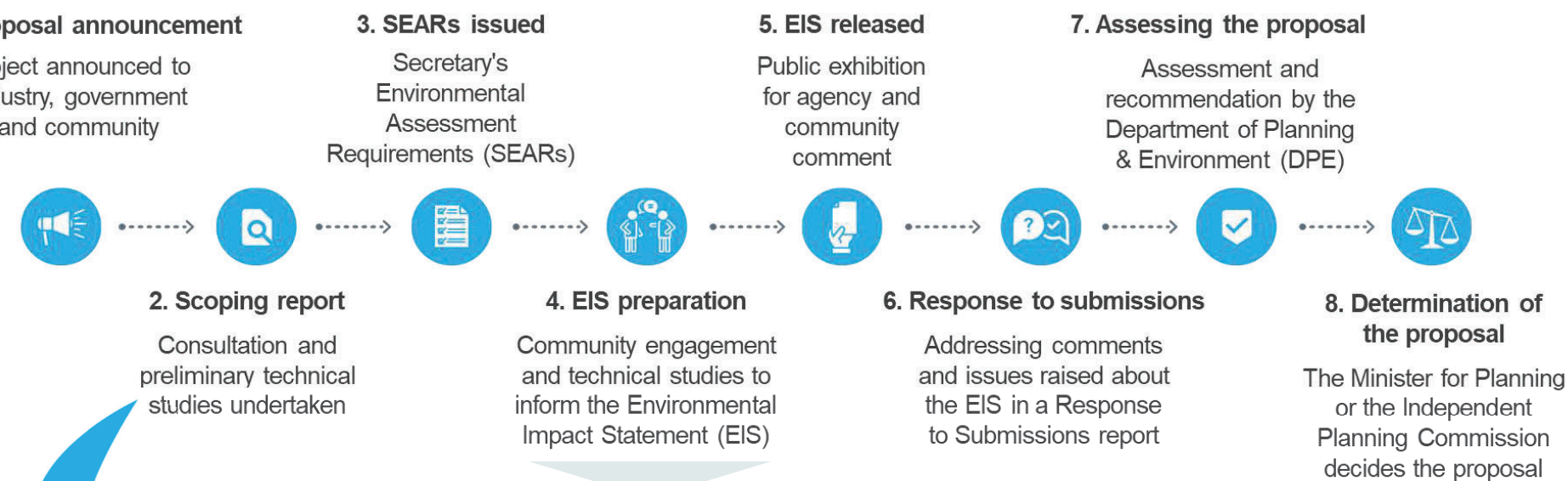
HOW IS DEVELOPMENT QUALITY ASSURED?

The DPE uses the "Large-Scale Solar Energy Guidelines" to assess issues and community concerns. Should the project receive a Development Approval, it would include Conditions of Consent that must be followed by operators for the lifetime of the project. This includes requirements for environmental management plans to monitor, manage and report on all environmental impacts during the lifetime of the project, and decommissioning at the end of the project.

WHAT IS A SCOPING REPORT?

A Scoping Report is a formal request to the DPE to issue Secretary's Environmental Assessment Requirements (SEARs). The Scoping Report outlines the proposed project and identifies important issues that may require further assessment, consultation and/or technical studies.

PLANNING PROCESS — CURRENTLY IN STEP 2



STUDIES TO BE UNDERTAKEN AS PART OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

- | | |
|-------------------------------------|----------------------------|
| 1. Biodiversity | 9. Soils |
| 2. Visual amenity | 10. Bushfire |
| 3. Aboriginal heritage | 11. Waste |
| 4. European/Non-Aboriginal heritage | 12. Air quality |
| 5. Traffic and access | 13. Utilities |
| 6. Contamination | 14. Electromagnetic fields |
| 7. Flooding and hydrology | 15. Land use |
| 8. Noise and vibration | 16. Cumulative impacts |

COMMUNITY ENGAGEMENT

COMMUNITY BENEFITS



Large community fund would be offered.



Long-term community benefits in accordance with level of impact.



Supporting the community, local businesses, and local facilities with greening initiatives.

HOW TO STAY INFORMED



Stay informed by signing up to our newsletters at the project website www.matesgullysolarfarm.com.au



Need more information? Ask us about having a one-on-one meeting or call.



Email info@sparkrenewables.com
Phone 1300 271 419

CONSULTATION

Consulting with the community is in early stages and will inform the Environmental Impact Statement.

Scan to provide feedback via survey or go to www.surveymonkey.com/r/MGSFjune2022



BENEFIT-SHARING AT BOMEN SOLAR FARM



Above: Abbeyfield Koorringal project—installation of roof-top solar systems.
Below: Eunony Bushfire Brigade—upgrade of fire shed.

\$1 million Community Fund

- Partnership with Mount Austin High School: \$500,000 in support of 'Transition Program' and the 'Girls @ the Centre' program.
- A funding agreement with Wagga Wagga City Council: \$350,000 to promote biodiversity and revegetation in the local area.
- Eunony Valley: \$100,000 for the community-led planting program.
- Support for the Eunony Bushfire Brigade: \$50,000.
- Solar support for Abbeyfield Koorringal: \$10,000.

BIODIVERSITY

BIODIVERSITY

- Site comprises of cropped paddocks and exotic pastures and low biodiversity value.
- The development footprint for the project will be refined to avoid areas of threatened species, remnant vegetation and hollow bearing trees where possible.

POSITIVE IMPACTS AT BOMEN SOLAR FARM

- Spark Renewables is funding the purchase of 50,000 seedlings for Wagga Wagga City Council in locations chosen by the Wagga Wagga Urban Landcare.
- This year on the Annual Tree Planting Day on 31 July, around 1,200 trees will be planted with the help of Urban Landcare volunteers near Flowerdale Lagoon.

STUDIES TO BE UNDERTAKEN AS PART OF THE EIS

 NATIVE VEGETATION & BIODIVERSITY

 FLOODING & HYDROLOGY

 SOILS & CONTAMINATION

 WILL GROUNDWATER SALINITY LEVELS INCREASE?

- The site is presently almost completely devoid of trees.
- Permanent pasture over the life of the project would promote stable salinity levels.
- Activities such as planting deep-rooted plants to reduce groundwater salinity would be implemented as part of agricultural management.

PRELIMINARY STUDIES OF HIGH BIODIVERSITY CONSTRAINTS AND NATIVE VEGETATION



LANDSCAPE, VISUAL & HERITAGE

VISUAL IMPACTS

- The project infrastructure may be visible to road users and dwellings close to the proposed site.
- A qualified landscape architect will be engaged to assess potential visual impacts on landscape character and visual amenity from various viewpoints.
- Recommendations from the landscape architect and suggestions from the community will be incorporated where possible to mitigate impacts.

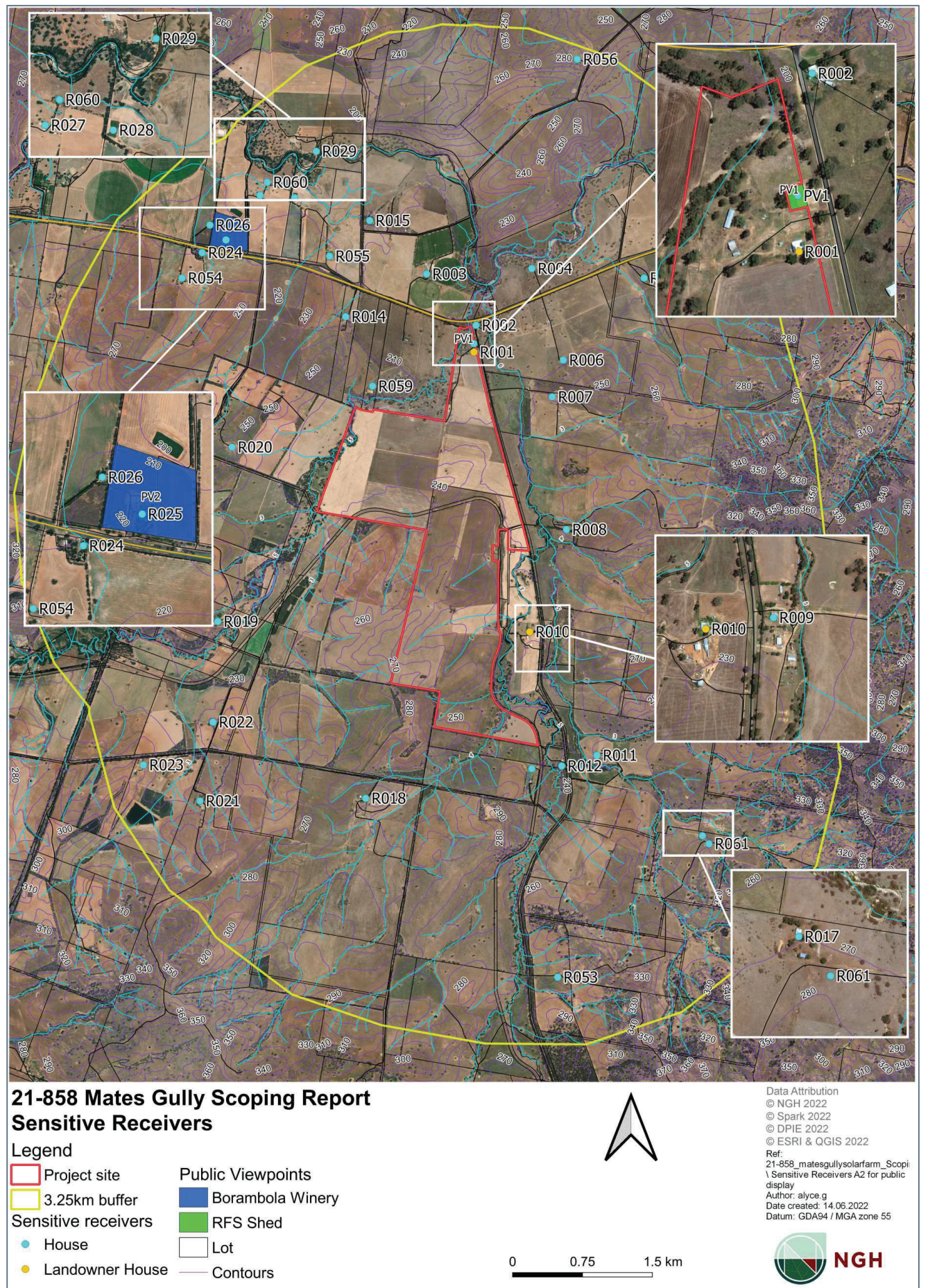
ABORIGINAL CULTURAL HERITAGE

- Project located on the traditional lands of the Wiradjuri people.
- A full onsite assessment will be undertaken as part of the EIS in consultation with Traditional Custodians, local knowledge holders and Representatives of Aboriginal Parties.
- Preliminary investigation found no records of Aboriginal Heritage Information Management System sites.
- Two creeks across the site could retain higher potential to preserve items of Aboriginal heritage significance, which may include modified trees and scattered artefacts.
- Guaranteed ongoing access to sites of significance.

HISTORIC HERITAGE

- Potential for archaeological remains to be present (relating to the use of the study area as part of the Borambola run, associated with sheep and other agricultural pursuits).
- Historic remains to be avoided where possible and taken into account in project layout.

RECEIVERS WITHIN 3.25KM RADIUS



STUDIES TO BE UNDERTAKEN AS PART OF THE EIS

-  LANDSCAPE & VISUAL IMPACTS
-  ABORIGINAL CULTURAL HERITAGE
-  HISTORIC HERITAGE

CONSTRUCTION & OPERATIONS

FIRE HAZARDS & RISK MITIGATION

- Mitigation of fire hazards and risks is the number one safety priority.
- A fire risk management plan and consultation with NSW Rural Fire Service and the community would form a crucial part of Conditions of Consent to project approval.
- Strategies for mitigation of fire risk include the creation of a fire break around infrastructure, new and improved fire trails for the NSW Rural Fire Services, and the maintenance of vegetation overgrowth and dry debris.

TRAFFIC & TRANSPORT MANAGEMENT

- A Traffic Management Plan to ensure safety and minimise noise and dust pollution.
- Transport routes into the site would be designed to minimise impacts on population centres and local residents.
- Revise construction methodology to take into account impacts.
- Any public road upgrades and/or repairs will be considered in the EIS.
- The preferred project access would be via Mates Gully Road.

STUDIES TO BE UNDERTAKEN AS PART OF THE EIS

-  BUSHFIRE & ELECTRICAL FIRE
-  TRAFFIC & TRANSPORT
-  HEALTH, NOISE & VIBRATION
-  SOCIO-ECONOMIC FACTORS
-  CUMULATIVE IMPACTS

NOISE & VIBRATION MITIGATION

- Potential noise and vibration impacts during construction.
- Revise construction methodology to take into account impacts.
- Develop mitigation strategies for residual impacts with input from affected residents and technical specialists.

INDICATIVE PROJECT TIMELINE



FIRST NATIONS

Focus on engaging Aboriginal people and businesses to support the project construction and operation.



ETHICAL SUPPLIERS

Committed to protecting human rights, responsible sourcing of materials, and upholding high ethical standards in our working practices.

We do not tolerate forced labour within our business or our supply chains and have systems and processes in place to address risks.



LOCAL SOURCING

Committed to engaging with local workers and services wherever possible and will set targets to measure our achievement of this.

LAND-USE & DECOMMISSIONING

COMPATIBILITY DURING OPERATIONS

- Agricultural output during operations may reduce, however some agricultural activities can continue.
- Higher soil moisture retention under solar panels.
- Sheep production and solar farm can be co-located in the same paddock.
- Sheep grazing helps to keep pastures at manageable levels, reducing fire risk.
- Shading from panels can help protect pasture growth during periods of heat and drought.
- Implement 'lessons learnt' from solar grazing at Bomen Solar Farm, so that at Mates Gully Solar Farm we will be ready for agistment from the start.
- Solar grazing would be set up with optimal pasture mix for local conditions and shading, fencing for cell grazing and lanes, and suitable water points.
- Inherent agricultural capability of the land and soils would not be affected by the project due to limited disturbance of the land to construct and operate the Project.

DECOMMISSIONING

- The site would be fully rehabilitated to support continuation of existing agricultural land uses following decommissioning.
- Planning for land rehabilitation and decommissioning part of the Conditions of Consent.

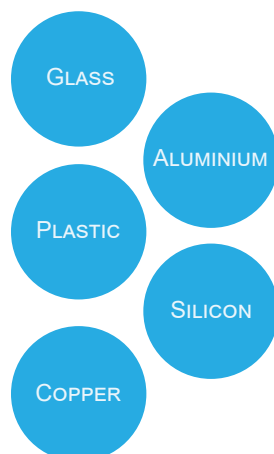
RECOVERY & RECYCLING OF MATERIALS

- Significant penalties are in place for improper disposal of solar panels.
- Up to 99% of materials are recyclable (glass, plastic, copper, aluminium and silicon).
- Recycling businesses are now being established in Australia to recycle panels.
- Spark Renewables is partnering with local providers of 'circular economy solutions' to achieve zero landfill from each panel.

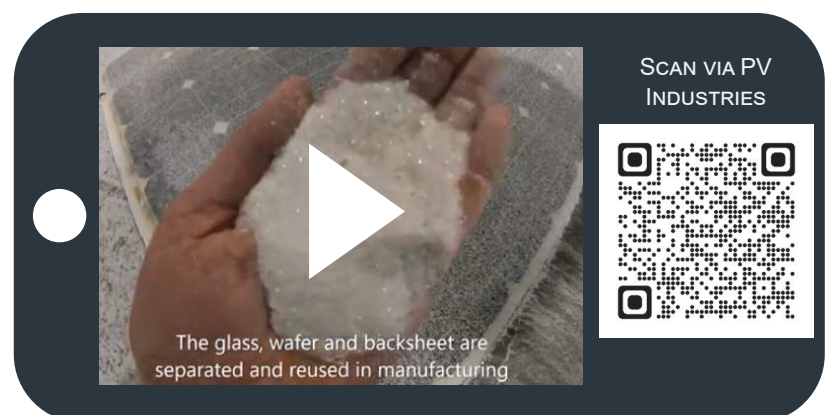
STUDY TO BE UNDERTAKEN AS PART OF THE EIS



SOLAR PANEL RECYCLING PROCESS



WATCH VIDEO AT https://youtu.be/HcTYG_k8nf4



EXAMPLES FROM BOMEN SOLAR FARM



Sheep brought to graze at Bomen Solar Farm

Co-beneficial land use

- Cell grazing of Merino wethers.
- Supporting bee-keeping business.

'Circular economy solution' for solar panels

- Participating in the PV Industries Circular Solar Trial, a project funded by the NSW Environmental Protection Agency, to develop novel solar panel recycling, resource recovery, and end-of-life solutions for the solar and lithium-ion battery economies.
- Automated technology separates panels piece into aluminium frames, cables, junction boxes and glass.
- Solar panel triage unit - to identify and grade condition of panels and determine whether these can be reused or need to be recycled.