



ARK ENERGY

Richmond Valley Solar Farm

Community Information Session



Acknowledgement of Country

We acknowledge the Traditional Custodians of the land upon which we meet and their continuing connection to lands, waters and communities.

We pay our respects to Elders past and present.

Introductions

Ark Energy

- Tim Chan, Project Manager.
- Andrew Wilson, General Manager Development - NSW.
- Melissa Pisani, Head of Communications & Stakeholder Engagement.

Consultants - Umwelt Australia

- Jessica Henderson-Wilson, Principle Environmental Consultant.
- Paula Saad, Senior Social Consultant.



Ark Energy

- Specialising in greenfield utility-scale wind, solar and hydrogen. 20+ years of experience, 13 projects in development.
- 25-year history in Qld through sister company Sun Metals - zinc refinery and solar farm.
- Mandate to decarbonise the energy supply of Korea Zinc, help third-party customers accelerate their energy transition and contribute to the transition of Australia's electricity market.
- Korea Zinc is the first major refiner to join RE100 and commit to powering global operations from 100% clean energy by 2050.



Why renewables? Energy transition

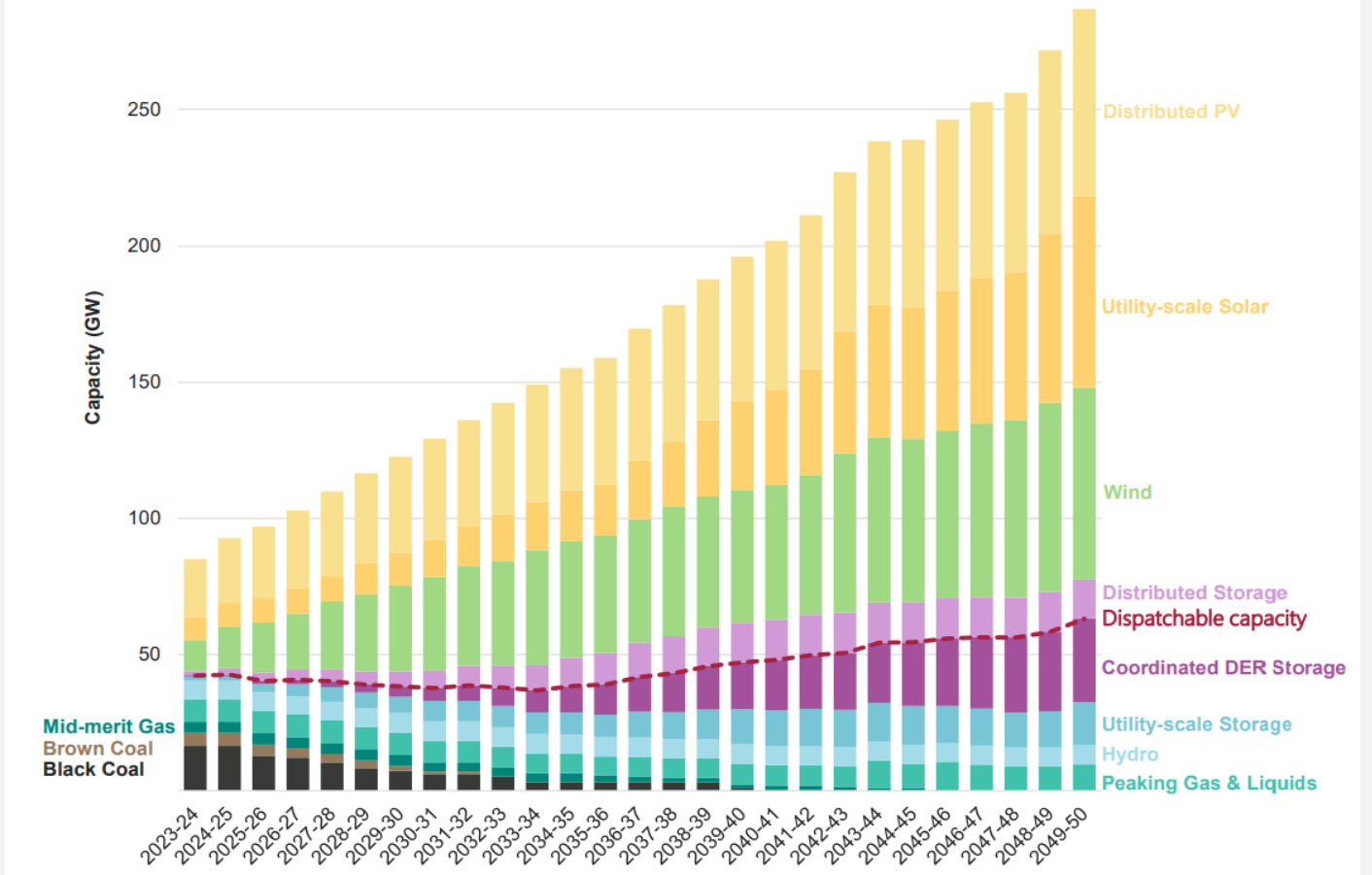
Australian Energy Market Operator's [2022 Integrated System Plan Step-change scenario](#), by 2050:

- Electricity demand to double.
- Coal retired 2-3 times faster.
- Nine-fold increase in grid scale wind and solar required.

National targets

- 82% renewable energy in the National Energy Market by 2030.
- Emissions reduction - 43% by 2030, net zero by 2050.
- 2022 = 36%.

Figure 1 Forecast NEM capacity to 2050, Step Change scenario



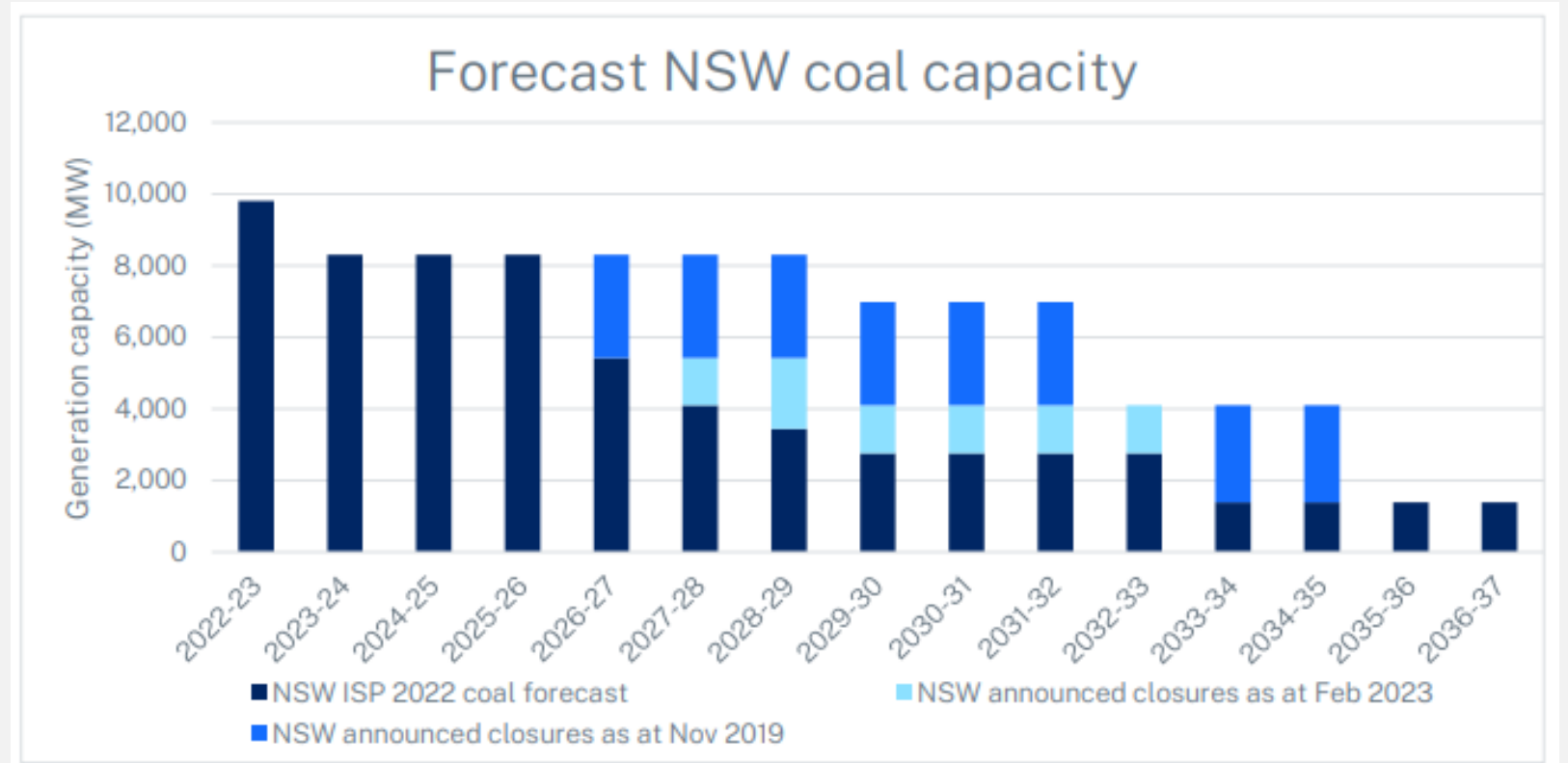
Source: AEMO ISP 2022



Energy transition - NSW

New South Wales renewable energy targets and commitments:

- Halve emissions by 2030.
- Net zero by 2050.
- [NSW Electricity Strategy](#) includes \$8 billion of new private investment over the next decade.
- 2022 = 30.7%

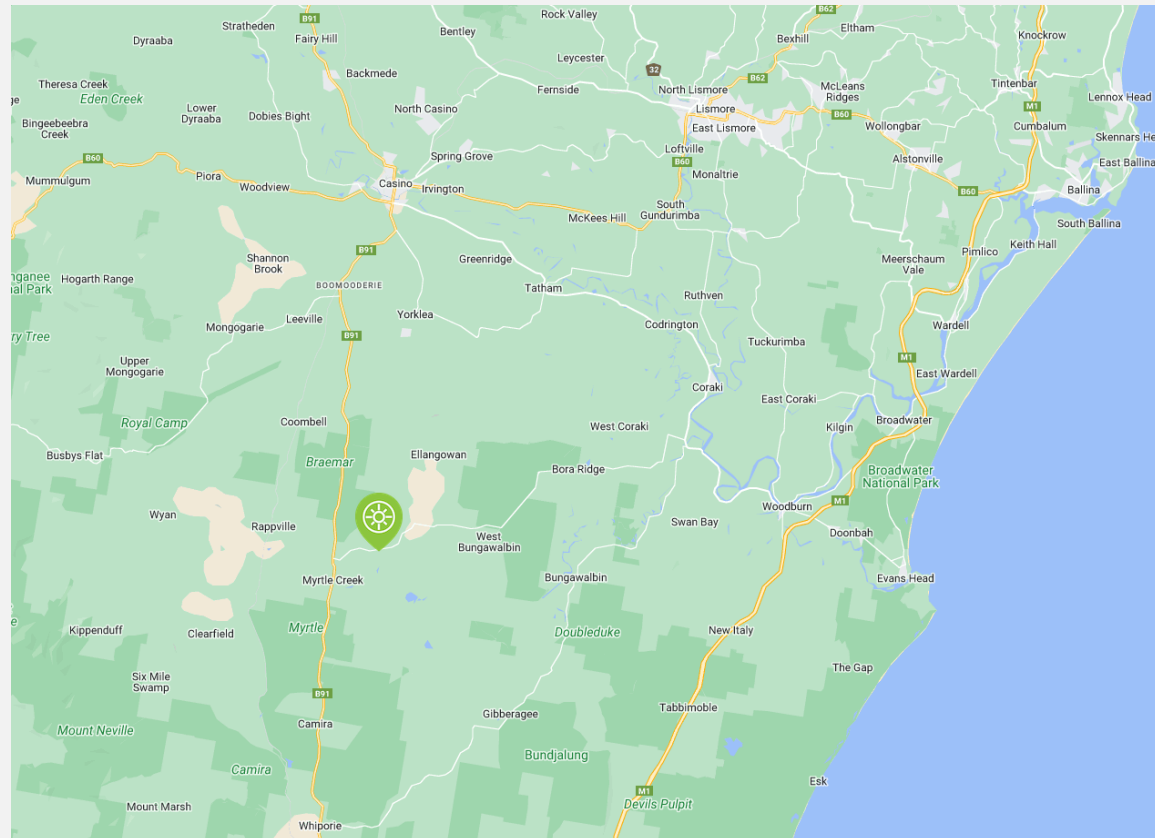


Source: NSW Electricity Infrastructure Roadmap benefits modelling report June 2023



Richmond Valley Solar Farm

Located near Myrtle Creek in the Northern Rivers region of New South Wales. It is approximately 7 km east of Rappville and 25 km south of Casino.



Site Selection



Economic resource.



Grid connection -
Coffs Harbour to
Lismore 330 kV
powerline on site.

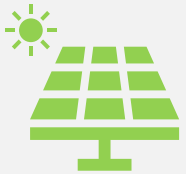


Land – formally
private forestry and
relatively flat.



Richmond Valley Solar Farm

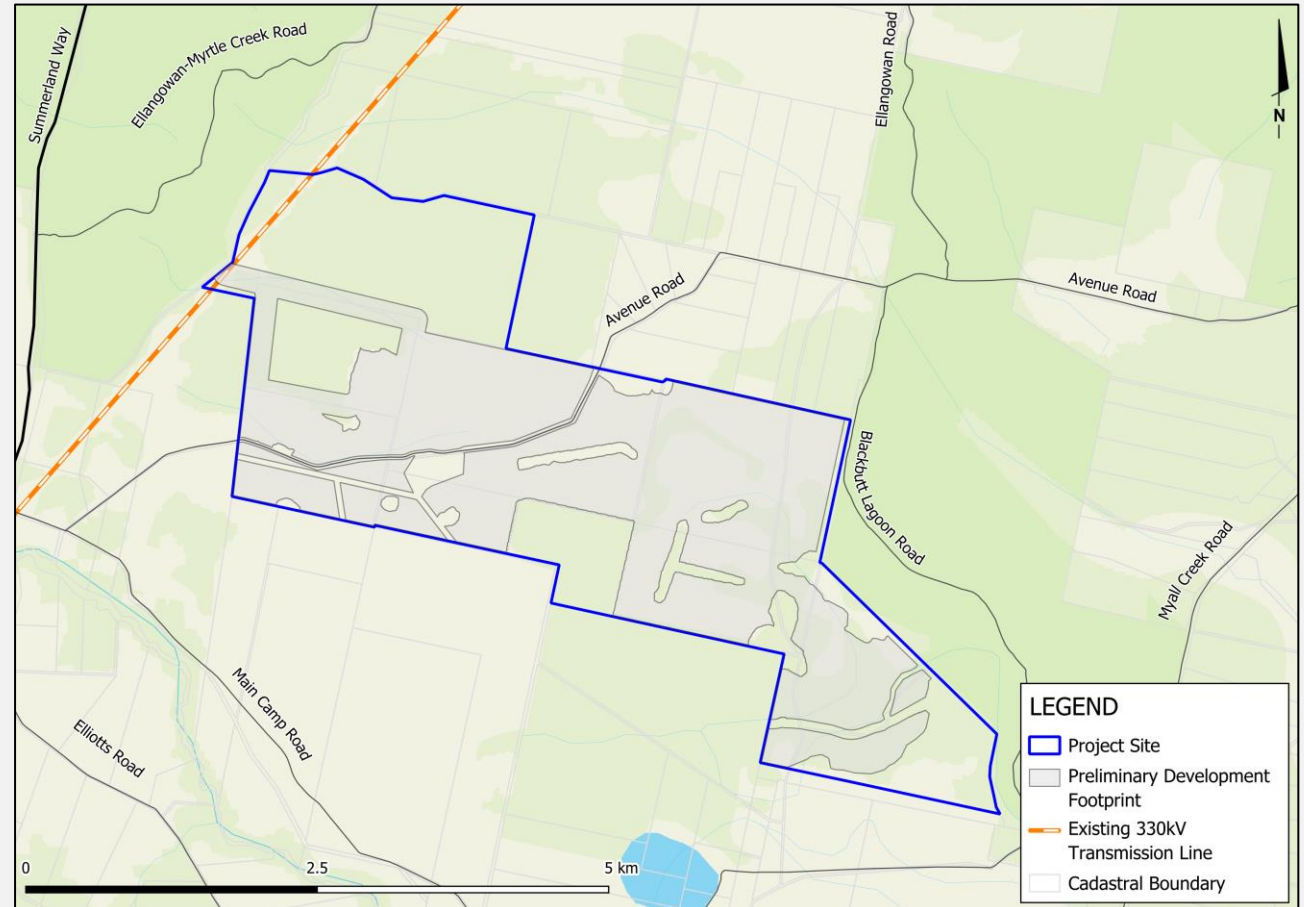
- Richmond Valley Solar Farm includes:



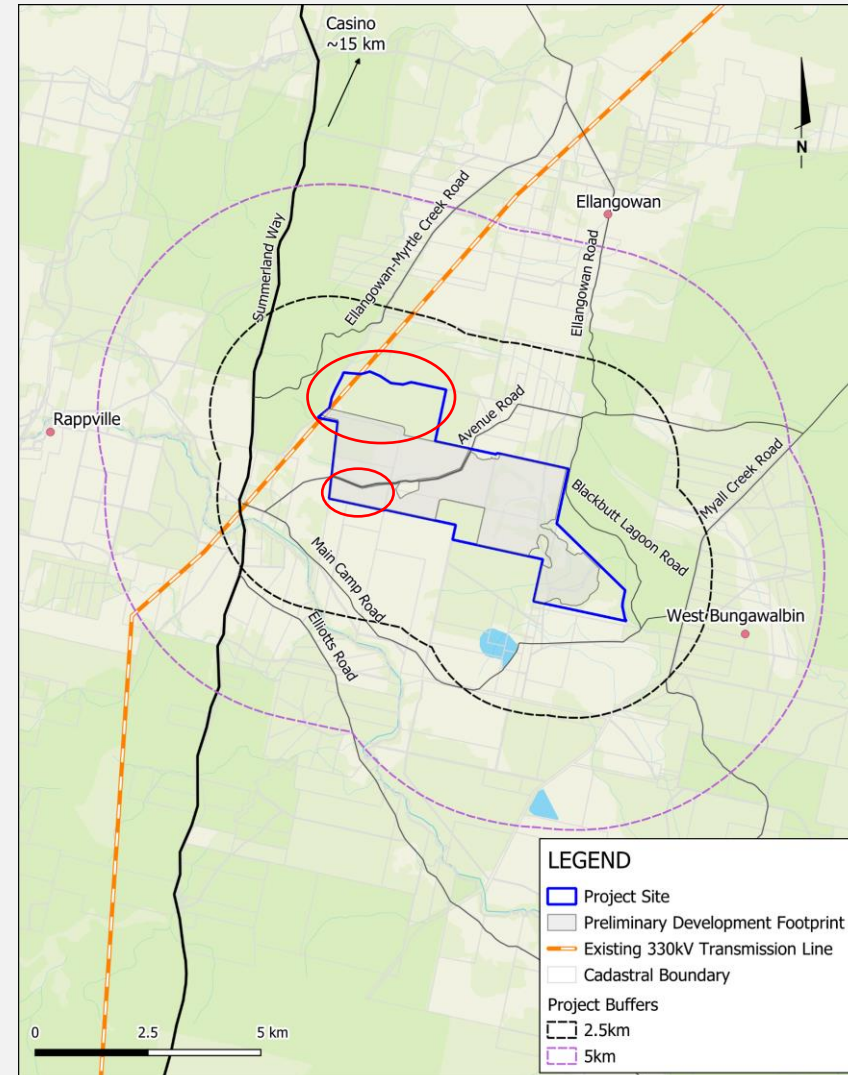
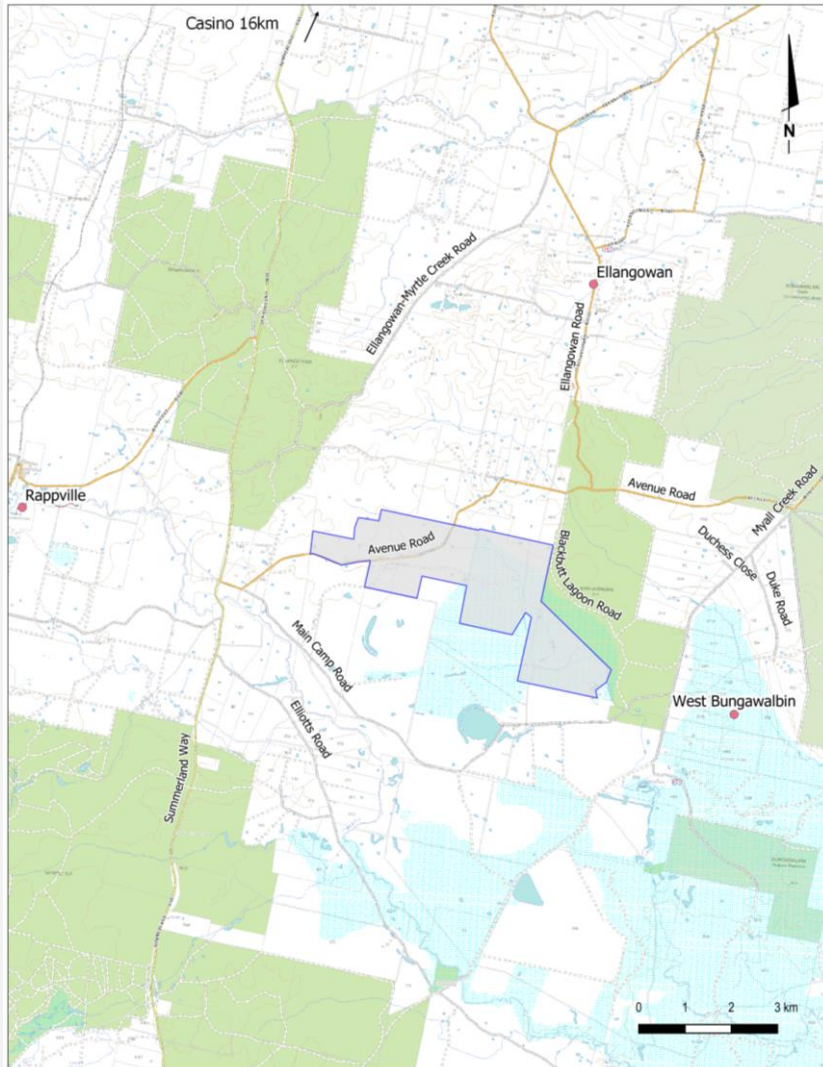
the construction, operation and decommissioning of a solar photovoltaic (PV) energy-generating facility with an estimated capacity of 500 MW; and



associated infrastructure, including grid connection and battery storage of approximately 500 MW.



Richmond Valley Solar Farm



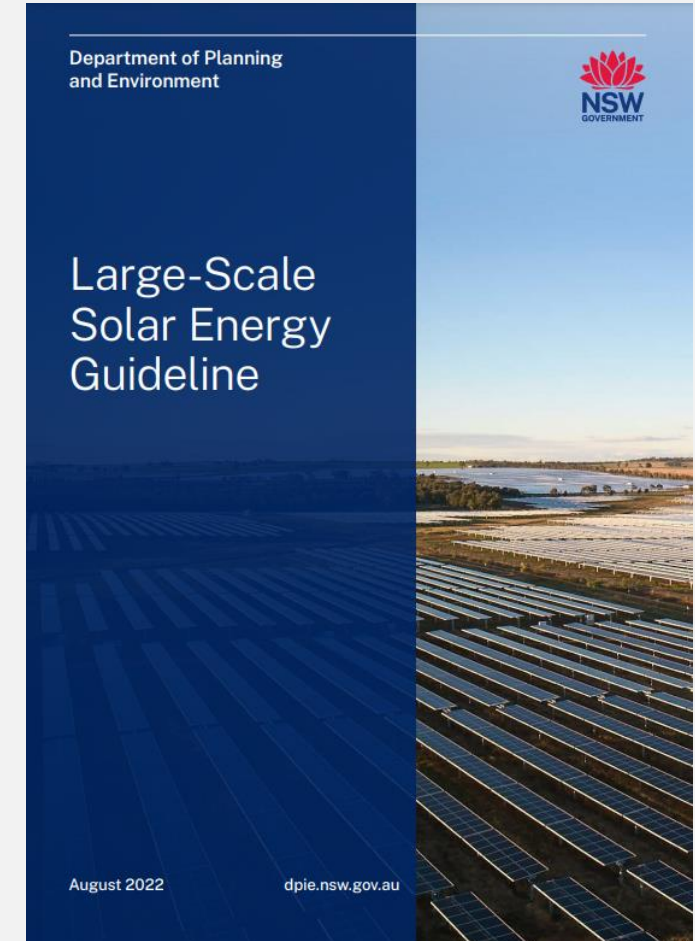
Planning / Assessment Process

- Large-scale solar projects in NSW are subject to planning controls and assessment criteria.
- In general, projects with a capital value of:
 - < \$5 million - assessed and approved by the local council(s).
 - between \$5-30 million - assessed by the local council(s) and approved by the relevant Regional Planning Panel.
 - > \$30 million are classified as State Significant Developments (SSD) and assessed by the NSW Department of Planning & Environment (DPE).



Planning / Assessment Process

- Assessed by DPE as a Major Project under Pt 4 of the NSW [Environmental Planning and Assessment Act 1979](#) (EP&A Act).
- Planning [Secretary's Environmental Assessment Requirements](#) (SEARs) for the Environmental Impact Statement (EIS) issued 21 Sep 2022.
- EIS prepared in accordance with the [Large-Scale Solar Energy Guideline 2022](#).
- Preparation of EIS in progress – due to be lodged Q2 2024.
- EIS adequacy review by DPE.



Planning / Assessment Process

- EIS place on public exhibition
 - The EIS is exhibited for at least 28 days.
 - Submissions must be submitted via the [Major Project Portal](#).

The screenshot shows the homepage of the NSW Government Major Projects website. At the top, there is a dark blue header with the text "A NSW Government website". Below this is a white navigation bar containing the NSW Government logo, a search icon, and links for "Find a Property" and "My Account". A secondary navigation bar features dropdown menus for "myHome Planner", "Development and Assessment", "Insights and Demography", "Have your say", and "Help and Training". The main content area is a large banner with a collage of images including a modern glass building, a wind turbine, and a construction site. The banner text reads "Major Projects" and "Welcome to the Major Projects website. Please use the search bar below to Find a Project." Below the banner is a search bar with the placeholder text "Search the State Significant Projects by title, case Id, address, LGA or description..." and a "Search" button. At the bottom of the banner, there is a dark blue bar with a right-pointing arrow and the text "Login and manage applications with us in one convenient location. Create or access your Major Projects account."



Environmental Impact Statement

SEARs prescribes independent technical studies into potential impacts, and preliminary management plans, including for:

- Biodiversity
- Heritage
- Land
- Landscape and Visual
- Glint and Glare
- Noise and Vibration
- Transport
- Water
- Hazards
- Social Impact
- Economic
- Waste

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

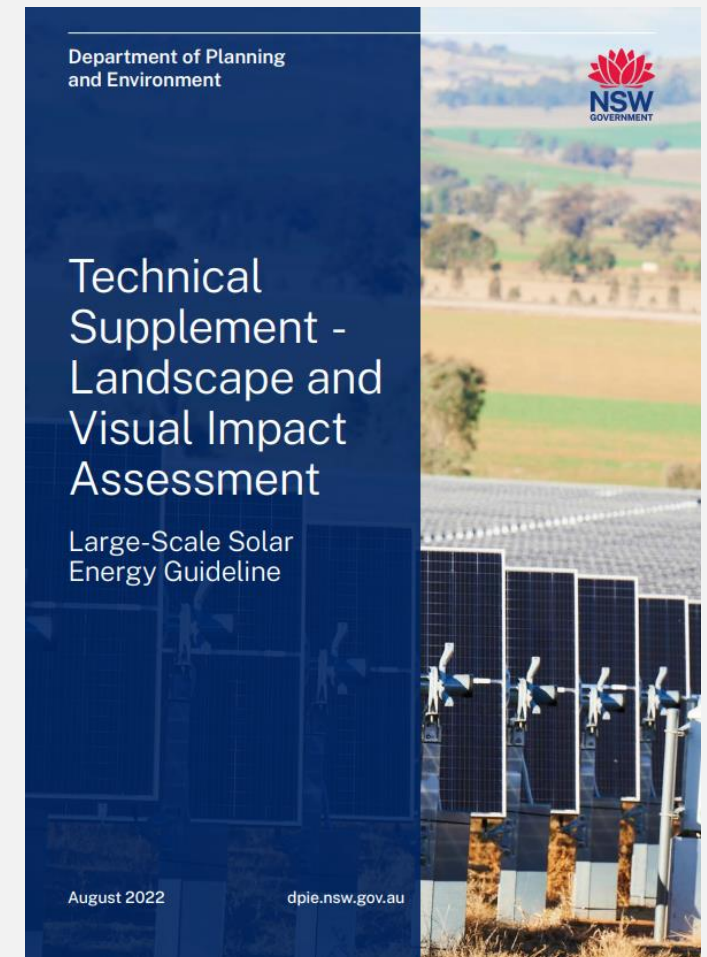
Part 8, Division 2 of the *Environmental Planning and Assessment Regulation 2021*

Application Number	SSD-41020244
Project Name	Richmond Valley Solar Farm which includes: <ul style="list-style-type: none">• the construction, operation and decommissioning of a solar photovoltaic (PV) energy generating facility with an estimated capacity of 500 MW; and• associated infrastructure, including grid connection and battery storage of approximately 500 MW.
Location	Avenue Road, Myrtle Creek, 25km south of Casino in the Richmond Valley local government area.
Applicant	Epuron Projects Pty Ltd
Date of Issue	21/09/2022
General Requirements	<p>In particular, the EIS must include:</p> <p>The environmental impact statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8, Division 5 of the <i>Environmental Planning and Assessment Regulation 2021</i> (EP&A Regulation) and must have regard to the <i>State Significant Development Guidelines</i> and the <i>Large Scale Solar Energy Guideline (2022)</i> (Solar Guideline).</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none">• a stand-alone executive summary;• a full description of the development, including:<ul style="list-style-type: none">- details of construction, operation and decommissioning, including any staging of the development;- a high quality site plan at an adequate scale showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process);- a high quality detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development;• a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including existing land use, other proposed or approved solar and major projects, rural/residential development, Crown lands within and adjacent to the project site and subdivision potential),



Landscape and visual

- Requirements outlined in DPE's [Technical Supplement - Landscape and Visual Impact Assessment](#).
- Approach to assessment:
 - Landscape character assessment.
 - Visual impact assessment.



Landscape and visual

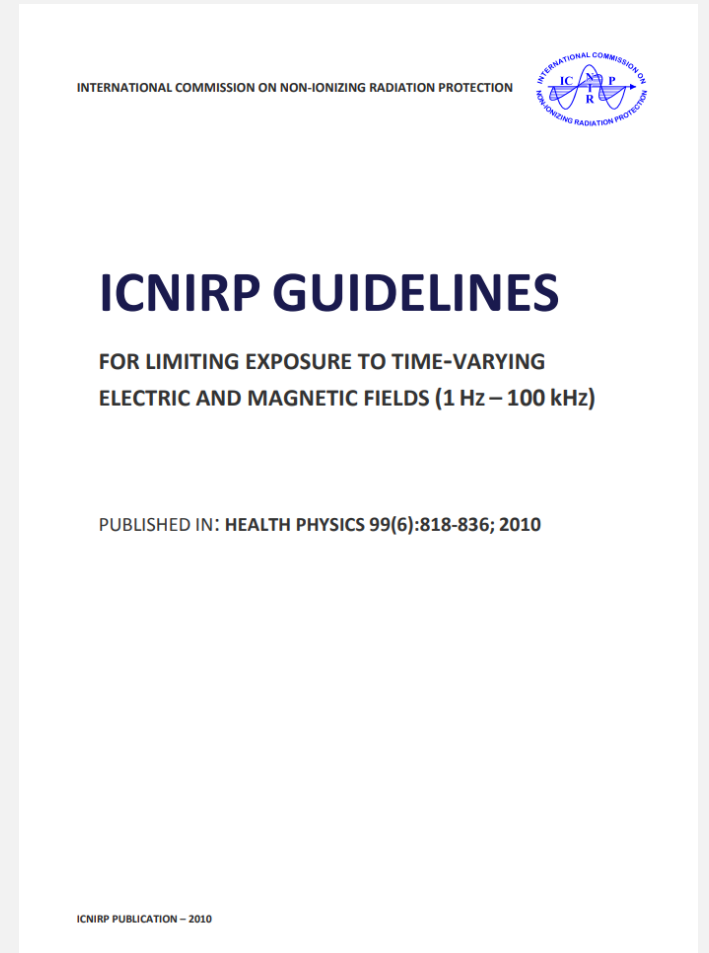


Example photomontage with vegetation screening at 5 years. Source: [Technical Supplement - Landscape and Visual Impact Assessment](#).



Hazards

- Assessment of potential hazards and risks is to be conducted against the [International Commission on Non-Ionizing Radiation Protection \(ICNIRP\) Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields.](#)
- The assessment of potential hazards and risks associated with bushfires / use of bushfire-prone land will comply with [Planning for Bush Fire Protection 2019.](#)
- Consultation with the Rural Fire Service will also be undertaken during the EIS preparation.



Biodiversity

- Initial assessments were undertaken to identify the presence of any threatened species, populations and ecological communities listed under the [NSW Biodiversity Conservation Act](#) and the Commonwealth [EPBC Act](#).
- A Biodiversity Development Assessment Report (BDAR) will be prepared in accordance with the [Biodiversity Assessment Method 2020](#).
- The BDAR will identify the biodiversity offset obligation as a result of the project biodiversity impacts and the associated biodiversity credits required.



DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

Biodiversity Assessment Method

environment.nsw.gov.au



Component examples



Battery Containers



Inverter – Converts direct current (DC) electricity to alternating current (AC) electricity



Component examples



Solar Panels - Single Axis Tracking



Sun Metals Solar Farm



Component examples



Transmission Lines – 330kV 60m single pole construction



Pump Station (Sun Metals Corporation) – recently commissioned with 2 × 796KL water storage tanks for fire fighting and training purposes

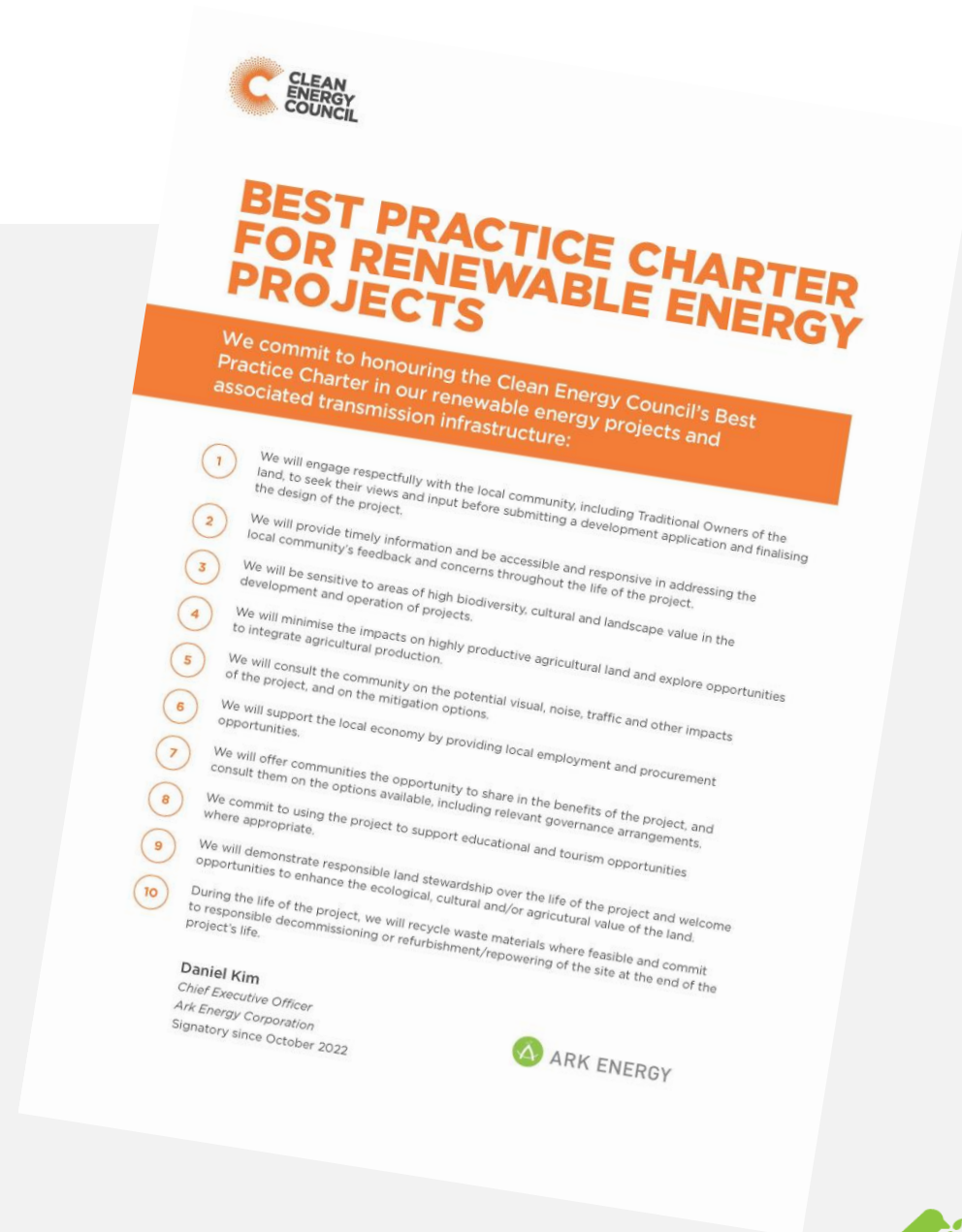


Community engagement

- Guided by best practice and International Association for Public Participation (IAP2).
- Signatory to the Clean Energy Council's *Best Practice Charter for Renewable Energy Projects*.
- Open, accessible, transparent.

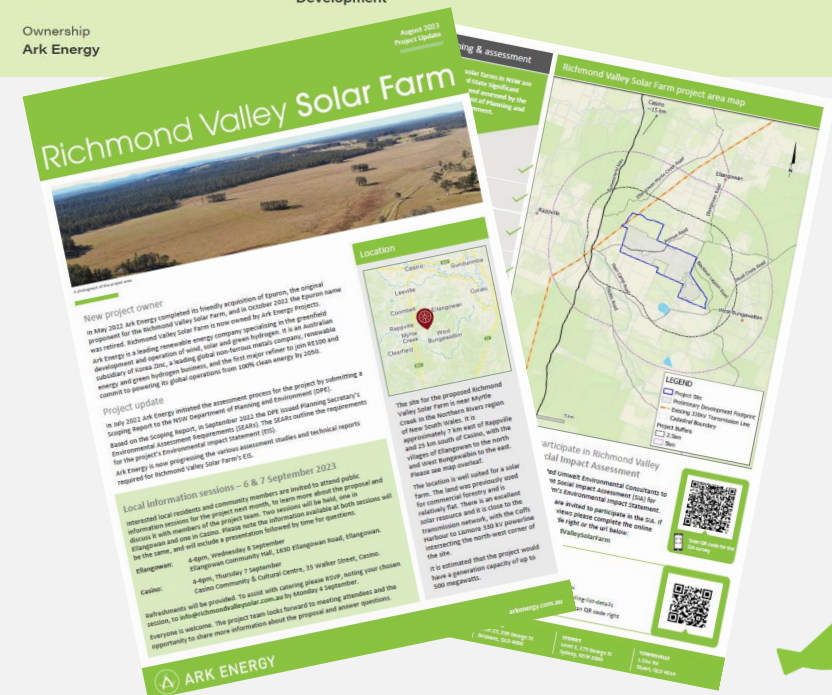
Focused on:

- Providing opportunities for interested community members and stakeholders to participate.
- Maximising opportunities for the local/regional community to benefit in meaningful ways.



Information, questions, feedback

- Website with feedback form: richmondvalleysolar.com.au
- Newsletters - email and mail.
- Briefings / meetings.
- Anytime – info@richmondvalleysolar.com.au and 1800 731 296.
- Information sessions at key points.



Social Impact Assessment

- Local community members are invited to participate in the Social Impact Assessment (SIA).
- If you would like to share your views, please complete the printed or online survey **by 22 September** available via the QR code right or the url below:
- www.research.net/r/RichmondValleySolarFarm



Scan QR code for the
SIA survey



Summary - key points

- Promote local investment and growth.
- Employment opportunities during construction and operation, including engagement of local contractors and materials and service providers.
- Capacity of up to 500 MW clean energy – putting downward pressure on electricity prices.
- Community Benefit Program and Neighbour Benefit Sharing Program from the start of construction and for the life of the project.
- Reduction in greenhouse gas emissions.
- Opportunity of net gains for key species and biodiversity in the area.



Next steps

- EIS lodgement – Q2 2024.
- EIS exhibition period – Q2 2024.
- Submissions and response to submissions.
- Determination – Q1 2025.
- Procurement & pre-construction activities – Q2 2025 to Q4 2025.
- Construction commencement – Q1 2026.



Questions & discussion



Thank you

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