URBIS

SOCIAL AND ECONOMIC IMPACT ASSESSMENT

Deniliquin East BESS
Wamba Wamba and Perrepa Perrepa Country

Prepared for
BESS ARCTIC PTY LTD C/O GRANSOLAR DEVELOPMENT AUSTRALIA PTY LTD
25 March 2025

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	P0050308
Report Number	Final

Acknowledgement of Country

Urbis acknowledges the Traditional Custodians of the lands we operate on.

We recognise that First Nations sovereignty was never ceded and respect First Nations peoples continuing connection to these lands, waterways and ecosystems for over 60,000 years.

We pay our respects to First Nations Elders, past and present.

The river is the symbol of the Dreaming and the journey of life. The circles and lines represent people meeting and connections across time and space. When we are working in different places, we can still be connected and work towards the same goal.

Title: Sacred River Dreaming
Artist Hayley Pigram
Darug Nation
Sydney, NSW

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EXECUTIVE SUMMARY

Urbis Ltd (Urbis) was engaged by BESS Arctic Pty Ltd c/o Gransolar Development Australia Pty Ltd (the Proponent) to prepare a Social and Economic Impact Assessment (SEIA) for 21356 Riverina Highway Deniliquin (the subject site). The SEIA will inform a State Significant Development Application (SSDA) to provide a battery energy storage system (BESS) on the subject site

REPORT PURPOSE AND SCOPE

Social Impact Assessment

A SIA is an independent and objective study that identifies and analyses the potential positive and negative social impacts associated with a proposed development. It involves a detailed study to scope potential positive and negative social impacts, identify appropriate mitigation and enhancement measures, and provide recommendations aligned with professional standards and statutory obligations. The intention is that the SIA process will inform the proposal, not just reflect and report on impacts.

Social impacts can be understood as the consequences people (individuals, households, groups, communities, or organisations) experience when a new project brings change. A SIA considers physical and intangible impacts, direct and indirect impacts, and short-term (construction) and long-term (operational) impacts.

The NSW Department of Planning, Housing and Infrastructure's (DPHI) Social Impact Assessment Guideline (2023) states that a SIA should consider the likely changes to the following social elements of value to people: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods and decision-making systems.

Economic Impact Assessment

An Economic Impact Assessment (EIA) is an independent study that assesses the potential economic impacts expected to arise from the proposed development at the subject site. The key components of an EIA include the assessment of impacts such as net employment benefits, net value-added benefits, and any other identified potential positive or negative impacts.

Workforce Accommodation Needs

A workforce accommodation assessment was carried out to determine the supply of short-term accommodation in the area compared to the potential demand for worker accommodation from the project.

METHODOLOGY

Social impact assessment

A SIA social baseline, field study, impact scoping and assessment was undertaken to complete this report. A detailed methodology is included in Section 2.

The potential social impacts of the proposal are assessed by comparing the magnitude of impact (minimal to transformational) against the likelihood of the impact occurring (very unlikely to almost certain). This risk assessment methodology has been applied from the DPHI SIA Guideline: Technical Supplement (DPHI, 2023) and is outlined in Section 2.2 of this report.

Economic impact assessment

This EIA is an independent study that assesses the potential economic impacts, whether positive or negative, that are expected to arise from the proposed development at the subject site. Best practice industry principles guided the assessment of economic impacts.

The potential economic benefits of the proposal have been quantified in terms of value-added expenditure generation and employment generation.

The methodology to prepare the Economic Impact assessment is outlined in Section 2.1.

Workforce Accommodation Needs

The workforce accommodation assessment was completed based on 150 kilometres and 50 kilometres Catchment (refer to Section 5.3.2 for Catchment definitions). It involved calculating the potential demand for worker accommodation compared to available short-term accommodation within the Catchment. It assumed only 20% of short-term accommodation would be available for use for worker accommodation needs to keep the impact low. This study looked at all the major projects in the Catchments including renewable energy, non-renewable energy, transmission line and major non-energy projects.

EXISTING ENVIRONMENT

The subject site is located at 21356 Riverina Highway in Deniliquin, within the Edward River Local Government Area (LGA). The subject site is currently used for low-intensity agricultural activities. The proposed Battery Energy Storage System (BESS) will occupy approximately 3.5 hectares of a 14-hectare private landholding.

The surrounding area is predominantly agricultural, with the Mulwala Chanal running adjacent to the Riverina Highway to the south. Six rural residential properties are located within a 1.5 kilometres radius along Aratula South Road and the Riverina Highway. The Deniliquin Substation, situated about 400 metres from the subject site, will connect to the BESS via overhead electrical cables.

Deniliquin town centre, located approximately 12 kilometres north-west of the subject site, offers a range of residential, commercial, and community services. The subject site is part of the Riverina Murray Region, known for its productive agricultural lands and significant biodiversity, including the Murray and Murrumbidgee Rivers. Although the subject site is about 30 kilometres from the South West Renewable Energy Zone (REZ), the BESS will contribute to the National Electricity Market (NEM) and support the growth of low-emission energy generation in the region.

From the social baseline (refer to Section 3) and the field study (refer to Section 4) have been identified the areas more likely to experience social impacts a the construction and operation phase of the proposal:

- **The immediate social locality** includes residents within a 2-kilometre radius of the subject site who may be directly impacted by construction and operational activities, such as potential noise and changes to the visual landscape.
- **The broader social locality** includes the Deniliquin town centre and the surrounding rural areas, where workers and residents may experience temporary disruptions due to an influx of construction workers, but are also likely to benefit from the long-term advantages of the BESS operation and associated community benefits.

POTENTIAL POSITIVE AND NEGATIVE SOCIAL IMPACTS

A summary of the potential positive and negative social impacts identified are provided in the Table 1 below, presented by impact significance. The full assessment is provided in Section 7.

Table 1 Potential positive and negative social impacts summary

Impact category	Impact title	Mitigated assessment	Recommendations provided
Way of life	Social cohesion and short-term accommodation availability during construction	Low negative to negligible during construction for residents and workers in the immediate social locality	Yes – refer to Section 7.2.1.1
	Temporary increase in demand for social	Low negative to negligible for residents, workers and future construction workers in	Yes – refer to Section 7.2.1.2

Impact category	Impact title	Mitigated assessment	Recommendations provided
	infrastructure and services	the immediate social locality during construction	
Community	Contributions to the renewable energy sector	High positive for residents in the immediate and surrounding social locality during operation	Yes – refer to Section 7.2.2.1
	Increased opportunities for social value creation	High positive for existing residents, businesses and workers in the immediate social locality during operation	Yes – refer to Section 7.2.2.2
Accessibility	Potential access impacts from increased construction traffic	Low negative to negligible for the immediate and surrounding social locality during construction	Yes – refer to Section 7.2.3.1
Culture	Potential impact on Aboriginal objects and places	Low negative to negligible for Aboriginal and Torres Strait Islander peoples who currently live within the surrounding social locality or have a connection to the land during construction and operation	Yes – refer to Section 7.2.4.1
Health and wellbeing	Potential amenity and health and wellbeing impacts during construction	Negligible for landowners and residents in the immediate social locality including along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane during construction	Yes – refer to Section 7.2.5.1
	Amenity impacts related to operational noise	Low negative to negligible for landowners and residents in the	Yes – refer to Section 7.2.5.2

Impact category	Impact title	Mitigated assessment	Recommendations provided
		immediate social locality including along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane during operation	
	Human safety risks	Low negative to negligible for existing and future residents, businesses, workers and visitors in the immediate and surrounding social locality during operation	Yes – refer to Section 7.2.5.3
Surroundings	Perceived loss of productive agricultural lands	Low negative for existing residents in the immediate and surrounding social locality during operation	Yes – refer to Section 7.2.6.1
	Changed sense of place related to changes to visual landscape	Negligible for residents, businesses, workers and visitors in the immediate social locality during operation	Yes – refer to Section 7.2.6.2
Livelihoods	Contribution to the local economy through increased employment opportunities and spending at local businesses	High positive for people employed in the construction and building maintenance industries in the immediate and surrounding social locality during construction and operation	Yes – refer to Section 7.2.7.1
Decision-making systems	Opportunities for the local community to get involved in the decision-making process	High positive for existing residents, businesses and services in the immediate and surrounding social locality during construction and operation	Yes – refer to Section 7.2.8.1

Impact category	Impact title	Mitigated assessment	Recommendations provided
Cumulative social impacts	A discussion on cumulative social impacts is outlined in Section 7.3. This includes the following cumulative social impacts: Contribution to the renewable energy transition Contribution to community benefits sharing initiatives Demand for local housing and accommodation Potential for consultation fatigue		Yes – refer to Section 7.3.

POTENTIAL POSITIVE AND NEGATIVE ECONOMIC IMPACTS

The potential positive and negative economic impacts identified are listed below. The full assessment of each impact is provided in Section 7.

The Deniliquin East BESS is expected to generate 52 peak direct jobs and 106 indirect jobs during its construction phase and contribute $59.83 million to the local community in gross value add. During the operational phase an additional eight jobs will be generated on an ongoing basis. The BESS will contribute approximately $2.76 million per year in gross value add to the economy while contributing to meeting Australia's net-zero future targets

A portion of the construction Deniliquin East BESS workers will require temporary and ongoing accommodation. The Proponent intends to hire as many local workers on the site as possible and has found that, from previous work undertaken on similar projects, they are able to source a good portion of local workers.

Looking at an optimal 50 kilometres Catchment, equating to a 50-minute drive time, it was found that the cumulative impact of workers for all major projects, which overlapped with the timing of Deniliquin East BESS, was not expected to exceed 20% of available short-term accommodation. With Moama being slightly over the 45-minute optimal drive time, a shuttle bus could be incorporated into a Workforce Accommodation Plan.

PROPOSED MITIGATION, ENHANCEMENT AND MANAGEMENT MEASURES

Section 7 of this report provides a consolidated list of measures to enhance positive social impacts and mitigate negative social impacts identified throughout this report and summarised in the table above. Additional SIA recommendations to further enhance positive impacts and mitigate negative impacts are also provided in Section 8 of the report.

1. INTRODUCTION

Urbis Ltd (Urbis) was engaged by BESS Arctic Pty Ltd c/o Gransolar Development Australia Pty Ltd (the Proponent) to prepare a Social Impact Assessment (SEIA) for 21356 Riverina Highway Deniliquin (the subject site). The SEIA will inform a State Significant Development Application (SSDA) to provide a battery energy storage system (BESS) on the subject site.

1.1. REPORT PURPOSE AND SCOPE

A SEIA is an independent and objective study that identifies and analyses a proposed development's potential positive and negative social impacts. The two components of a SEIA are a Social Impact Assessment and an Economic Impact Assessment.

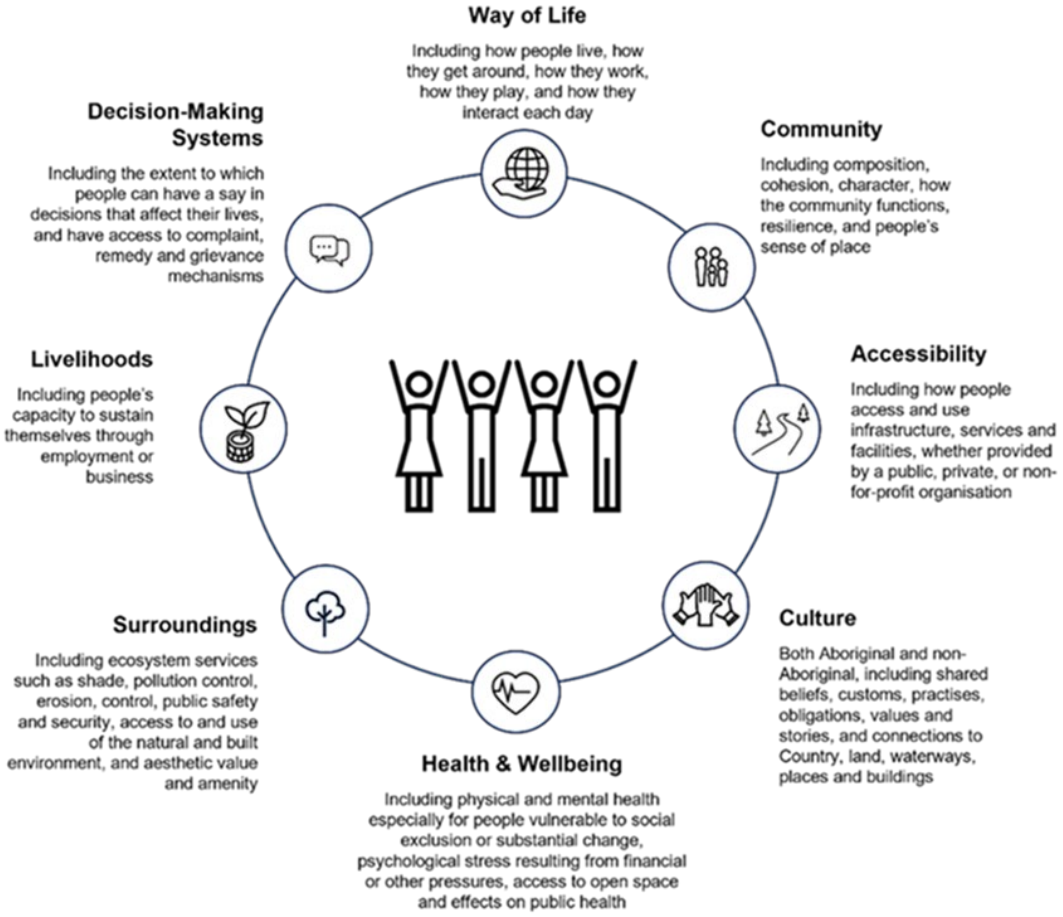
1.1.1. Social Impact Assessment

A Social Impact Assessment (SIA) involves a detailed study to scope potential positive and negative social impacts, identify appropriate mitigation and enhancement measures and provide recommendations aligned with professional standards and statutory obligations. The SIA process intends to inform the proposal, not just reflect and report on impacts.

Social impacts can be understood as the consequences people (individuals, households, groups, communities, or organisations) experience when a new project brings change. A SIA considers physical and intangible impacts, direct and indirect impacts, and short-term (construction) and long-term (operational) impacts.

The NSW Department of Planning, Housing and Infrastructure's (DPHI) Social Impact Assessment Guideline (2023) states that an SIA should consider the likely changes to the following social elements of value to people.

Figure 1 SIA categories



Source: SIA Guidelines (DPHI 2023, p. 19)

1.1.2. Economic Impact Assessment and Workforce Accommodation Study

An Economic Impact Assessment (EIA) is an independent study that assesses the potential economic impacts, whether positive or negative, expected to arise from the proposed development at the subject site. The key components of an EIA include the assessment of impacts such as net employment benefits, net value-added benefits, and any other identified potential positive or negative impacts.

A workforce accommodation study was also completed for Deniliquin East BESS based on both a 150-kilometre and a 50-kilometre Catchment (refer to Section 5.3.2 for Catchment definitions). This study aimed to determine the demand for worker accommodation compared to the available short-term accommodation in each of the Catchments and recommend the appropriate workforce accommodation strategy to be implemented during the construction of the proposed project.

1.2. SIA GUIDELINES AND REQUIREMENTS

The SIA component of this SEIA aligns with the best practice methods contained within the DPHI's SIA Guideline (2023). The DPHI SIA Guideline (2023) provides a framework to identify, predict and evaluate likely social impacts and helps to provide greater clarity and certainty for proponents and the community.

This SIA has been prepared to satisfy the Secretary's Environmental Assessment Requirements (SEARs) for the proposal issued on 28 September 2023. The individual SEARs item relevant to this SIA is outlined in Table 2 below.

Table 2 SEARs item

SEARs requirement	Relevant section of report
Social and Economic: Including an assessment of the social and economic impacts in accordance with the Social Impact Assessment Guideline (DPE, 2023), any benefits of the project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, consideration of construction workforce accommodation, assessment of impact on agricultural resources and agricultural production on the site and region.	This report (Sections 1- 8)

Source: SEARs issued for the proposal, issued 28 September 2023 (DPHI 2023)

1.3. PROPOSAL OVERVIEW

The proposal includes a lithium-ion battery energy storage system with a 100 MW/200MWh capacity, associated power conversion systems, switchgear, and a control room. Associated infrastructure as part of the project includes overhead lines and collector units, a storage area, internal access tracks, on-site parking, security fencing, a temporary construction laydown area, and landscaped screening.

The proposal will connect the nearby Deniliquin Substation (Deniliquin 132/66kV TS) via a 132kV overhead transmission line crossing the Mulwala Canal and Riverina Highway. Site access will be provided through a new six-metre-wide vehicular access road, crossing the Moulamein Channel and connecting to the Riverina Highway.

The key elements of the Project will include:

- Containerised lithium-ion battery modules with up to 100MW/200MWh capacity.
- Power conversion units convert the DC power from the battery modules to 33kV AC.
- On-site 33/132 kV substation, including power transformer and oil containment system.

- A 33kV switch-room.
- Control room.
- Maintenance container.
- A 132 kV overhead transmission line connecting with the Deniliquin Substation.

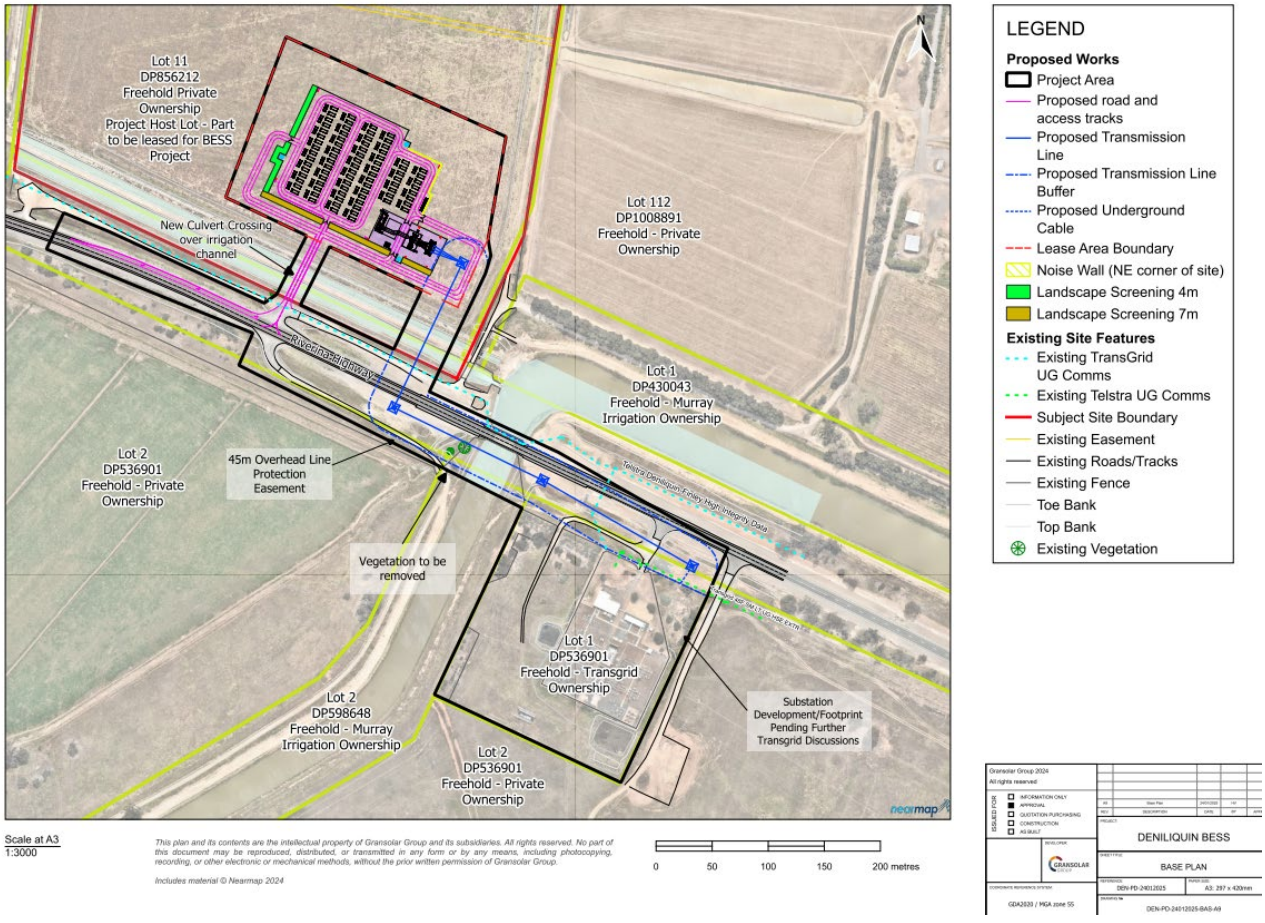
Permanent supporting infrastructure will include:

- Upgraded site vehicle access road and bridge to provide access to Riverina Highway
- Internal access roads and car parking for maintenance vehicles.
- Three 25,000-litre water tanks.
- Security fencing and CCTV security system.
- Noise wall.
- Landscape screening.
- Lightning mast.

Temporary construction facilities will include:

- Laydown area.
- Construction materials storage.

Figure 2 Site plan



Source: Gransolar, 2024

1.4. AUTHORSHIP AND SIA DECLARATION

The authorship SEIA Declarations for this report are provided in the following sections.

1.4.1. Authors

This report has been prepared by a suitably qualified and experienced lead author and reviewed and approved by a suitably qualified and experienced co-author with the appropriate qualifications and relevant experience to carry out the SIA for this proposal. The following introduces each author:

SIA Component	
Allison Heller	Review and quality assurance – Social Impact Assessment
Position	Director
Qualifications	Bachelor of Town Planning, University of NSW Post Grad Diploma History of Architecture & Art, University of London
Experience	Allison has deep expertise in impact assessment. She has delivered social impact assessments and health equity impacts for various state-significant projects and precincts for government and private sector clients.
Liliana Peña	Project manager and lead author
Position	Associate Director
Qualifications	Master of Urban Planning, National University of Colombia Bachelor of Social Work, National University of Colombia
Experience	Liliana is a specialist in social impact assessment and stakeholder engagement, with experience in local and large-scale infrastructure projects in the renewable energy and built environments. She follows authority standards and best practice guidelines, including the NSW SIA Guideline (DPHI 2023).
Sarah Kerridge-Creedy	Co-author – Social Impact Assessment
Position	Consultant
Qualifications	Bachelor of City Planning (Honours) (current), University of New South Wales
Experience	Sarah has experience writing social impact assessment reports for renewable energy projects in the context of the SIA Guideline (DPHI 2023) and best practice social research, evaluation and impact assessment.
Sarah Nectoux	Co-author – Social Impact Assessment
Position	Consultant
Qualifications	Master of Geography, Planning, Environment and Development, University of Franche-Comte (France) Master of Research (Institute for Culture and Society), Western Sydney University
Experience	Sarah has experience writing social impact assessment reports for renewable energy and regional projects in the context of the SIA Guideline (DPHI 2023) and best practice social research, evaluation and impact assessment.
Jett Wilde	Co-author – Social Impact Assessment
Position	Assistant Social Planner

Qualifications	Diploma of Social Science Western Sydney, Bachelor of Planning (Major in Geography and Urban Studies), Western Syndey University (ongoing)
Experience	Experience in writing SIA reports for renewable energy and regional projects and best practice social research, evaluation and impact assessment.

EIA Component

Richard Gibbs	Review and quality assurance – Economic Impact Assessment
Position	Director
Qualifications	Master of Business Administration, Macquarie University
	Bachelor of Economics (Hons), University of Sydney
Experience	Experience in reviewing and quality assurance of EIA reports across a variety of land uses, including residential, retail, industrial, renewable energy and agriculture.
Jennifer Williams	Author – Cumulative Impact Assessment
Position	Senior Consultant
Qualifications	Bachelor of Commerce Property Economics, Western Sydney University (Distinction average, Bachelor of Arts (Human Geography) Grad Dip Real Estate Management
Experience	Experience in the preparation of EIA, CIA, and workforce accommodation reports across NSW.
Peter Youssef	Lead-author – Economic Impact Assessment
Position	Consultant
Qualifications	Bachelor of Property Economics, University of Technology Sydney
Experience	Experience in the preparation of EIA reports across a variety of land uses.

1.4.2. Declaration

The authors declare that this SEIA report:

- Was completed on 25 March 2025
- Has been prepared in accordance with the EIA process under the EP&A Act
- Has been prepared in alignment with the DPHI's (2023) SIA Guideline
- Contains all reasonably available Proposal information relevant to the SIA
- As far as Urbis is aware, it contains information that is neither false nor misleading.

Liliana Peña
Associate Director – Lead Author
25 March 2025

Allison Heller
Director - Review and quality assurance
25 March 2025

1.5. SIA GUIDELINES REVIEW QUESTIONS AND RESPONSES

The review questions outlined by the SIA Guideline (2023) are designed to confirm that the requirements of the SIA Guideline have been fulfilled when considering the scale of social impacts associated with the proposed development. Table 3 below outlines these review questions and indicates how they have been addressed in this SIA.

Table 3 Guideline review questions and responses

SIA Review questions	**Addressed by report (yes/no), relevant section**
Does the lead author meet the qualification and experience requirements?	Yes, Section 1.1.1
Has the lead author provided a signed declaration?	Yes, Section 1.1.2
Would a reasonable person judge the SIA report to be impartial, transparent and suitably rigorous given the nature of the project?	Yes
Project's social locality and social baseline	
Does the SIA report identify and describe all the different social groups that may be affected by the project?	Yes, Section 3 and Section 6
Does the SIA report identify and describe all the built or natural features that have value or importance for people, and explain why people value those features?	Yes, Section 3, Section 4 and Section 6
Does the SIA report identify and describe historical, current, and expected social trends or social changes for people in the locality, including their experiences with this project and other major development projects?	Yes, Section 3 and Section 4
Does the social baseline study include appropriate justification for each element, and provide evidence that the elements reflect both relevant literature and the diversity of view and likely experiences?	Yes, Section 3
Does the social baseline study demonstrate social-science research methods and explain any significant methodological data or limitations?	Yes, Section 2.2 and Section 3
Identification and description of social impacts	
Does the SIA report adequately describe likely social impacts from the perspectives of how people may experience them, and explain the research used to identify them? When undertaken as a part of SIA scoping and initial assessment, has the plan for the SIA report been detailed?	Yes, Section 7 and Section 8
Does the SIA report apply the precautionary principle to identifying social impacts, and consider how they may be experienced differently by different people and groups?	Yes, Section 7
Does the SIA report describe how the preliminary analysis influenced project design and EIS engagement strategy?	Yes, Section 3 and Section 4

SIA Review questions	Addressed by report (yes/no), relevant section
Community Engagement	
Were the extent and nature of engagement activities appropriate and sufficient or canvass all relevant views, including those of vulnerable of marginalised groups?	Yes, Section 4
How have the views, concerns and insights of affected and interested people influenced both the project design and each element of the SIA report?	Yes, Section 4
Predicting and analysing social impacts	
Does the SIA report impartially focus on the most important social impacts to people at all stages of the project, without any omissions or misrepresentations?	Yes, Section 7
Does the SIA report analyse the distribution of both positive and negative social impacts, and identify who will benefit and who will lose from the project?	Yes, Section 7
Does the SIA report identify its assumptions, and include sensitivity analysis and alternate scenarios? (including 'worst-case' and 'no project' scenarios where relevant?	Yes. Section 2.2 sets out the key assumptions underpinning the assessment. This includes the assumption that information provided through other technical reports (e.g., traffic and noise) are accurate. In alignment with the EIS, the SIA considers alternative subject site scenarios from the perspective of the 'worst case' scenario (i.e., no technical mitigations). The SIA's role is to assess the chosen development scenario at hand – no other alternative scenarios have been considered. Therefore, the sensitivity analysis and assessment of 'worst case' scenarios relate to a 'no mitigations' scenario for the chosen development option.

SIA Review questions	Addressed by report (yes/no), relevant section
	This evidence is clearly assessed as part of the SIA tables in Section 7.
Evaluation significance	
Do the evaluations of the significance of social impacts impartially represent how people in each identified social group can expect to experience the project, including any cumulative effects?	Yes, Section 7
Are the evaluations of significance disaggregated to consider the likely different experiences for different people or groups, especially vulnerable groups?	Yes, Section 7
Responses, monitoring and management	
Does the SIA report propose tangible, deliverable responses that are likely to be durably effective, directly related to the respective impact(s), and adequately delegated and resourced?	Yes, Section 7 and Section 8
Does the SIA report demonstrate how people can be confident that social impacts will be monitored and reported in reliable, effective and trustworthy ways?	Yes, Section 7 and Section 8
Does the SIA report demonstrate how the proponent will adaptively manage social impacts and respond to unanticipated events, breaches, grievances, and non-compliance?	Yes, Section 7 and Section 8

1.6. STRUCTURE OF THIS REPORT

This SEIA has eight sections, as summarised below:

- **Section 1** (this Section) introduces this report's proposal, purpose and scope.
- **Section 2** outlines the legislative requirements and methodology to complete this SEIA.
- **Section 3** provides a social baseline of the study area, including the subject site's context, social and demographic characteristics, and policy context.
- **Section 4** provides an overview of the field study undertaken to inform the SIA, including the key findings.
- **Section 5** assesses the proposal's economic impacts, including direct and indirect employment and competing projects workforce demands and a cumulative impact assessment
- **Section 6** identifies and provides details on the proposal's social locality.
- **Section 7** assesses the proposal's positive and negative social impacts, including with and without mitigation and enhancement measures.
- **Section 8** outlines the assessed social impacts' mitigation, enhancement, and management measures.

2. METHODOLOGY

This section outlines the methodology to prepare this SEIA, with reference to the relevant legislative requirements and guidelines.

2.1. ECONOMIC IMPACT ASSESSMENT

This EIA is an independent study which assesses the potential economic impacts, and whether they are positive or negative, which are expected to arise from the proposed development at the subject site.

Key components of this EIA include:

- Net employment benefits (construction and operational)
- Net value-added benefits (construction and operational)
- Other positive impacts – supporting the emerging renewable energy sector in Australia.
- Cumulative impact assessment of workforce accommodation needs

2.2. SOCIAL IMPACT ASSESSMENT

The methodology undertaken to prepare this SIA is outlined in Table 4. The methodology was informed by the guidance in the SIA Guideline and Technical Supplement (DPHI 2023).

Table 4 Methodology overview

Stage	Activities
Social baseline	▪ Site visit or desktop review of surrounding land uses and subject site. ▪ Review of relevant state and local policies and strategies to understand potential social implications. ▪ Analysis of relevant data sets to understand the existing community profile and community values, strengths and vulnerabilities. ▪ Identification of likely impacted groups and communities. ▪ Early identification of potential social impacts (positive and negative) based on research tasks undertaken.
SIA field study	▪ The following community and stakeholder engagement activities were conducted: ▪ Engagement with the Deniliquin community through a project newsletter for nearby neighbours, newspaper advertisements, an online survey and community information sessions across two days. ▪ Engagement with stakeholder representatives from Edward River Council's Economic Development Team Council ▪ Analysis of field study data and identification of key themes.
Impact scoping	▪ Review of social baseline and SIA field study outcomes. ▪ Review of proposal plans, proposal documentation and relevant technical assessments. ▪ Identification of the proposal's social locality and likely impacted groups.

Stage	Activities
	▪ Identification and scoping of potential social impacts (positive and negative), mitigation and enhancement measures. ▪ Identification of potential opportunities for additional measures to be incorporated into the proposal.
Assessment and reporting	▪ Assessment of social impacts (positive and negative) with and without mitigation and enhancement measures. ▪ Provision of recommendations to further reduce negative social impacts and enhance positive social impacts. ▪ Preparation of draft and final SIA reports.

Approach to assessing social impacts

The assessment of social impacts can be approached in several ways. The Technical Supplement of DPHI's SIA Guideline highlights a risk assessment methodology, whereby the significance of potential impacts is assessed by comparing the magnitude of an impact against the likelihood of the impact occurring.

The DPHI's risk assessment methodology has been applied in this SIA and is outlined in Section 7.

Assumptions

- This report is dated 10 March 2025 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date.
- In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.
- All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and based on information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and forecasts set out in this report will depend, among other things, on the actions of others over which Urbis has no control.
- Information provided through other technical reports that have informed the identification and assessment of impacts is assumed to be accurate.
- This report has been prepared with due care and diligence by Urbis. The statements and opinions in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the abovementioned limitations.

3. SOCIAL BASELINE

This chapter provides a social baseline of the subject site and surrounding area. This includes a review of the subject site location, policy context and demographic profile. The findings from the social baseline have been used to inform the approach to consultation, scoping of initial impacts and the formation of the subject site's social locality (as described in Section 6).

3.1. SITE LOCATION

3.1.1. Local context

The subject site is located at 21356 Riverina Highway, in the suburb of Deniliquin and the Edward River local government area (LGA). It is currently used for low-intensity agricultural activities, including cropping and grazing. The proposed BESS is located on a 14ha private landholding, with the BESS subject site comprising approximately 3.5ha.

The subject site is surrounded by agricultural land and Mulwala Chanal, which is south of the subject site and runs adjacent to Riverina Highway. Six rural residential properties are within a 1.5-kilometre radius of the subject site along Aratula South Road and the Riverina Highway.

The Deniliquin Substation is approximately 400m from the subject site on the southern side of the Riveria Highway and will connect to the proposed BESS by overhead electrical cables. The subject site context is shown in Figure 3 below.

Figure 3 Site context map

Source: Urbis, 2024

Figure 4 Site photos

Picture 1 View of the subject site

Picture 2 View of the east end of the subject site and towards the closest neighbouring property

Picture 3 View of the Mulwala Chanal through the subject site

Picture 4 View of the subject site driveway from the subject site

Picture 5 View of the east end of Riverina Highway towards the Deniliquin Substation

Picture 6 View of the west end of Riverina Highway towards the Deniliquin town centre

Source: ***Urbis, 2024***

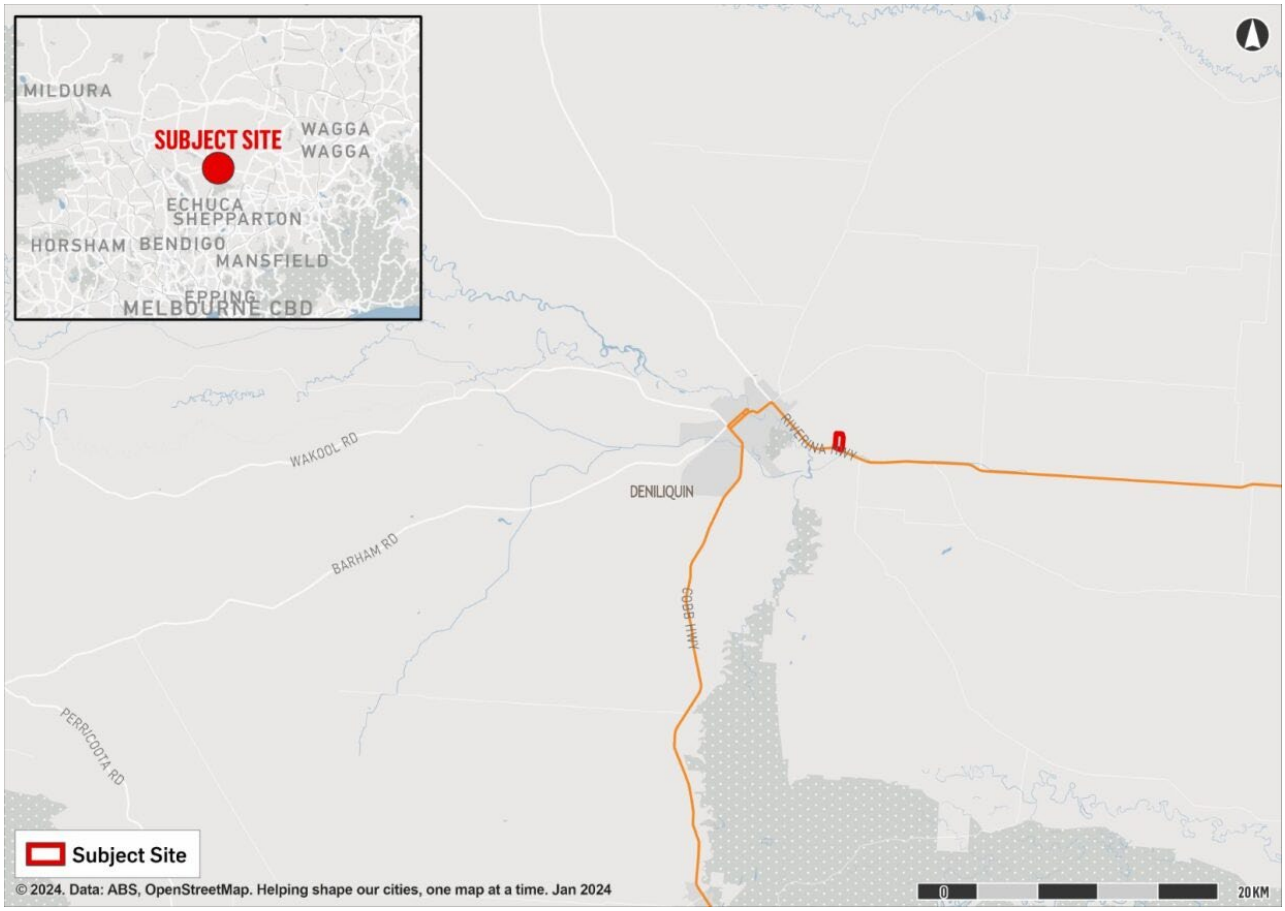
3.1.2. Regional context

The subject site is approximately 12 kilometres south east of the Deniliquin town centre, which contains a range of residential, commercial, and retail uses as well as social infrastructure, community services, and open space.

The subject site is located within the Riverina Murray Region, one of Australia's most productive agricultural regions. The region is characterised by rural and biodiverse lands, the Murray and Murrumbidgee Rivers, and a network of distinct communities across the region's metropolitan cities, regional cities, and towns.

The subject site is approximately 30 kilometres from the South West Renewable Energy Zone (REZ). While outside the zone's boundary, the proposal would supply significant amounts of stored renewable energy to the National Electricity Market (NEM) and support the growth and colocation of low-emission generation capacity in the proposed South West REZ.

Figure 5 Regional context map



Source: Urbis, 2024

3.2. SURROUNDING SOCIAL INFRASTRUCTURE AND OPEN SPACE

3.2.1. Social infrastructure and open space overview

Social infrastructure is critical to supporting a community's needs and resilience. It includes 'hard' infrastructure (facilities, venues, and spaces) and 'soft' infrastructure (activities, events, and programs). Open space comes in various forms, from structured sports fields to parks and natural ecosystems.

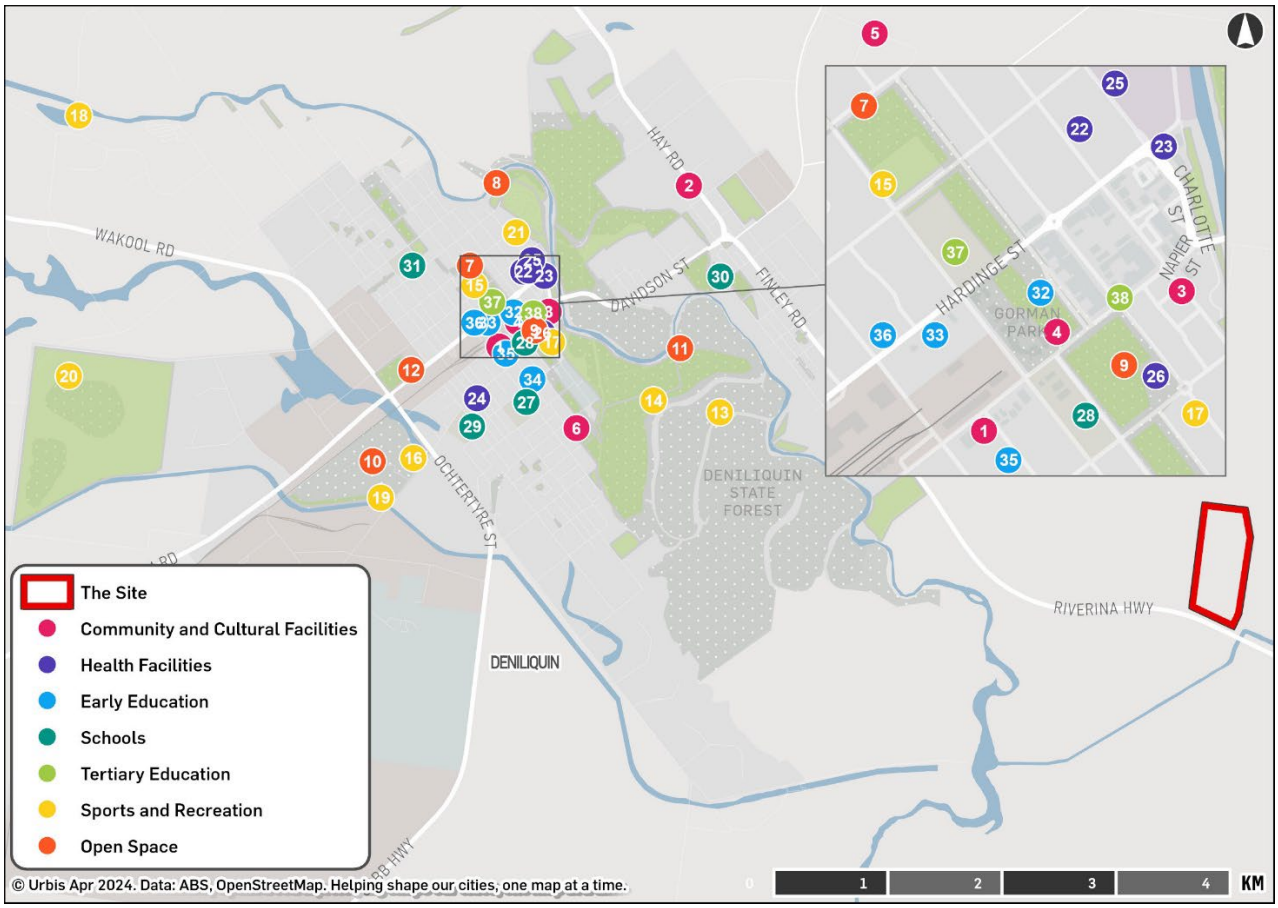
This section contains an overview of hard social infrastructure in the Deniliquin town centre. This includes community facilities, cultural facilities, libraries, education institutions, childcare centres, health facilities, sport and recreation facilities and open space. This review, along with the consultation outcomes (see Section 4) will help to understand strengths and challenges within the social infrastructure and open network, including opportunities to inform the voluntary planning agreement (VPA).

3.2.2. Existing social infrastructure and open space in Deniliquin

As shown in Figure 6, Deniliquin is currently serviced by four community and cultural facilities, six health facilities, five education facilities, five early education facilities, and two tertiary education facilities. There are also nine sport and recreation facilities, five local parks and one regional park. These facilities are listed in Table 5 4 5 below.

According to Schools Infrastructure NSW, a new public preschool at Deniliquin South Public School is currently in the planning stages. The new preschool is scheduled to be open by 2027.

Figure 6 Social infrastructure in the Deniliquin town centre



Source: Urbis (April, 2024)

Table 5 Social infrastructure and open space in Deniliquin

No.	Facility type	Facility name
1	Community and cultural	Intereach - Deniliquin Neighbourhood Centre (Community Transport)
2	Community and cultural	Yarkuwa Indigenous Knowledge Centre Aboriginal
3	Community and cultural	Peppin Heritage Centre
4	Community and cultural	Edward River Library
5	Community and cultural	Deniliquin Festival Site
6	Open space	Deniliquin Bowling Club
7	Open space	Scotts Park

No.	Facility type	Facility name
8	Open space	Mcleans Beach
9	Open space	Waring Gardens
10	Open space	Rotary Park
11	Open space	Murray Valley Regional Park
12	Open space	Deniliquin Oval
13	Sport and recreation	Deniliquin Mountain Bike Trails
14	Sport and recreation	Deniliquin Golf Club
15	Sport and recreation	Deniliquin Swim Centre
16	Sport and recreation	Deniliquin Basketball Stadium
17	Sport and recreation	Deni Sports Centre
18	Sport and recreation	Deniliquin Boat Club
19	Sport and recreation	Deniliquin Rugby Club
20	Sport and recreation	Deniliquin Racecourse
21	Sport and recreation	Deniliquin Lawn Tennis Club
22	Health	Deniliquin Clinic
23	Health	Ochre Medical Centre Deniliquin
24	Health	Shiloh Medical Practice
25	Health	Deniliquin Hospital and Health Services
26	Health	Community Mental Health and Drug and Alcohol Service-Deniliquin
27	Schools	Deniliquin High School
28	Schools	St Michael's Primary School
29	Schools	Deniliquin South Public School
30	Schools	Deniliquin North Public School
31	Schools	Edward Public School
32	Early education	River Region Early Education
33	Early education	Deniliquin Early Learning Centre
34	Early education	Gulpa Pre School
35	Early education	Intereach - Deniliquin Family Centre

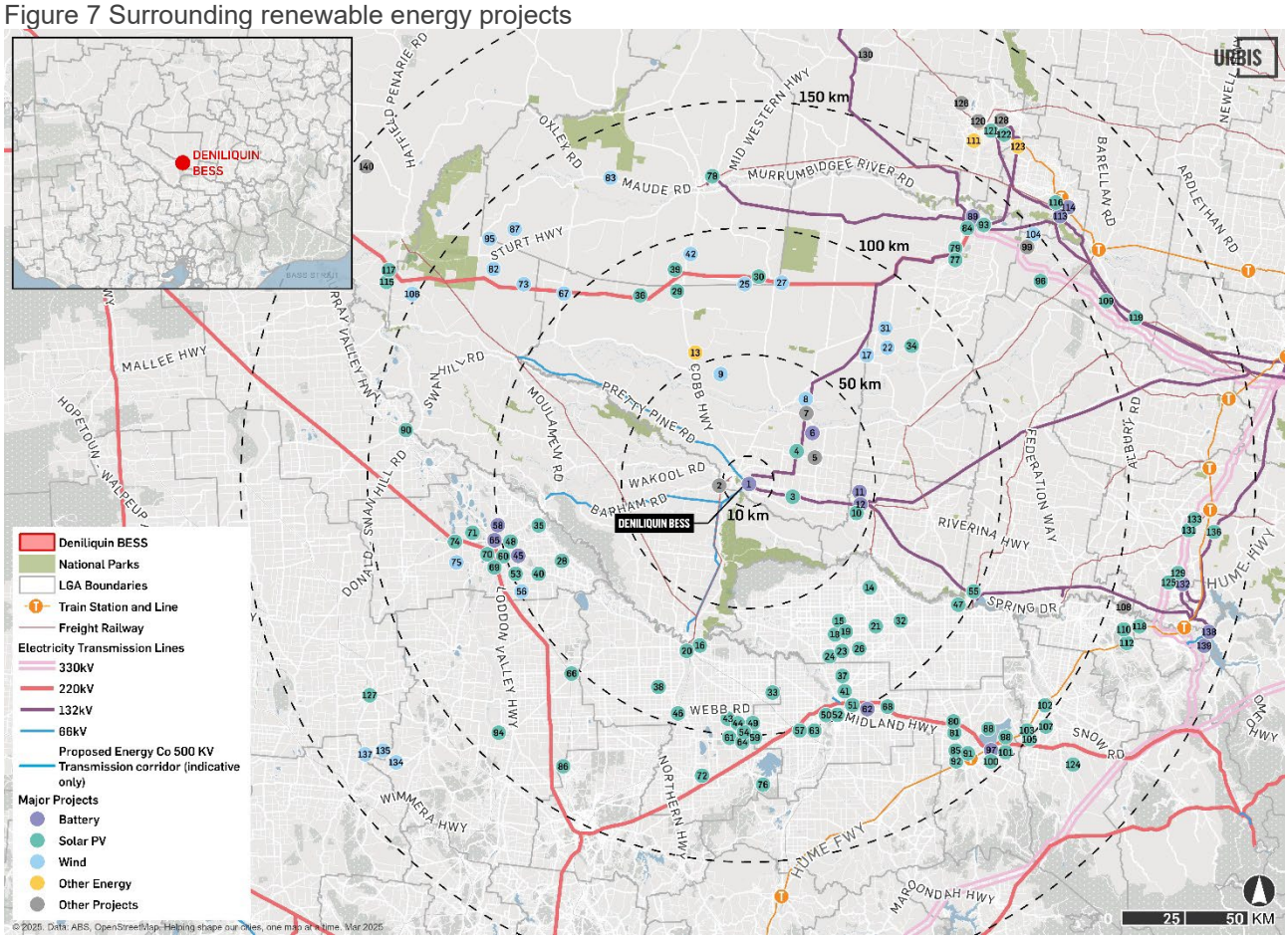
No.	Facility type	Facility name
36	Early education	Goodstart Early Learning Deniliquin
37	Tertiary education	TAFE NSW Deniliquin
38	Tertiary education	Riverina Community College Inc.

3.3. SURROUNDING RENEWABLE ENERGY PROJECTS

When planning for new renewable energy projects, it is crucial to consider the existing and likely future supply to help assess workforce accommodation demand (see Section 5.3) as well as other potential cumulative social impacts (see Section 7.3).

Figure 7 below shows the existing and potential future battery, solar photovoltaic (PV) and wind projects within 200 kilometres of the subject site. A list of these projects is contained in Appendix D of this SEIA.

Figure 7 Surrounding renewable energy projects



Source: Urbis (March, 2025)

3.4. POLICY CONTEXT

A review of relevant state and local policies was undertaken to understand the strategic context of the proposed development and any potential impacts (positive and negative). This included:

State

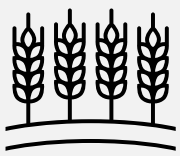
- NSW Government, Net Zero Plan NSW Stage 1: 2020-2030 (2020)
- NSW Government, South West Renewable Energy Zone (2022) - Website
- NSW Government, NSW Electricity Strategy (2020)
- NSW Department of Planning, Housing and Industry, Riverina Murray Regional Plan 2041 (2023)
- NSW Government, Electricity Infrastructure Investment Act 2020 (2020)
- NSW Government, NSW Network Infrastructure Strategy: A 20-Year Strategy to Transform the NSW Electricity Network
- NSW Government, NSW Renewable Energy Sector Board's Plan (2022)
- NSW Government, Draft Energy Policy Framework (2023)
- NSW Government, NSW Electricity Infrastructure Roadmap (2020)
- Energy Corporation of NSW, Community and Employment Benefit Program for Renewable Energy Zones in NSW (2024)

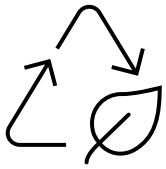
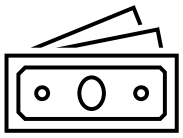
Local

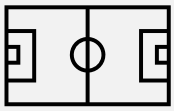
- Edward River Council, Community Strategic Plan 2022-2050 (2022)
- Edward River Council, Local Strategic Planning Statement (2020)
- Edward River Council, Open Space Strategy (2018)
- Edward River Council, Recreation Strategy (2019)
- Edward River Council, Economic Development Strategy 2018-2021 (2018)
- Edward River Council, Deniliquin Public Space Strategy (2018)
- Edward River Council, Deniliquin Rural Residential Land Use Strategy (2019)
- Edward River Council, Operational Plan 2023-2024 (2023)

The key social themes from the policy review are summarised in Table 6 below.

Table 6 Key social themes from policy review

Theme	Summary of findings
Established agricultural and industrial sectors 	The Local Strategic Planning Statement (2020) explains that Deniliquin accommodates a thriving manufacturing and light industrial sector that primarily engineers products for the rural and agricultural sector, the largest industry in the Edward River LGA. While Council aspires to grow their agricultural and industrial sectors, they recognise the importance of minimising the impacts of these activities on the community and the environment. This is also recognised in the Riverina Murray Regional Plan 2041 (2023), noting that growing industries will support a growing population requiring an increase in health and education services to support their needs. However, the Deniliquin Rural Residential Strategy (2019) recognises that rural residential development has the potential to

Theme	Summary of findings
	create land use conflicts with agricultural and industrial uses, as well as renewable energy potential.
Renewable energy shaping the future of Deniliquin 	The Community Strategic Plan (2022) outlines community aspirations to have a diverse economy that delivers ongoing benefits and a community that is healthy, socially connected, and resilient. A key strategic outcome of these aspirations is for Council to shape the future of Deniliquin by protecting and enhancing its natural and built environment as the population grows. To achieve this, the Plan expresses a desire to explore renewable energy initiatives as a tool to reduce the Council's carbon footprint and to maintain Deniliquin's natural environment. This is also discussed in Council's Economic Development Strategy 2018-2021 (2018), which indicates a need to review access to affordable and secure energy sources. The Local Strategic Planning Statement (2020) notes the LGA's local electricity network provider, Essential Energy, provides adequate electricity to the Edward River area. It also notes that the existing electricity network capabilities have no constraints to providing electricity to future development.
Supporting the transition to net zero by 2050 	The NSW Government has committed to net zero emissions by 2050, requiring greater renewable electricity generation, transmission and storage, as outlined in the Net Zero Plan Stage 1 2020-2030 (2020). The NSW Electricity Infrastructure Roadmap (2020) aims to attract $32 billion of private sector investment by 2030 in large-scale generation, storage and transmission to maintain a reliable, secure and affordable supply. The Roadmap notes that investment in long-duration electricity storage will be required to provide large amounts of reliable electricity on demand. This is achieved by storing surplus electricity and releasing it into the grid when demand exceeds supply. The Riverina Murray Regional Plan 2041 (2023) indicates the Riverina Murray's climate, resources and strategic connections to utility infrastructure places it in a strong position to contribute to and capitalise on the net zero target and electricity infrastructure plans.
Investment in the South West Renewable Energy Zone 	The Australian and NSW Governments are fast tracking the delivery of Renewable Energy Zones (REZ) across NSW. The Zones are intended to connect investors with communities that are looking to diversify their local industries into renewable energy, as explained in the Net Zero Plan Stage 1 2020-2030 (2020). The South West REZ is located in the Riverina Murray region and includes the northern suburbs of the Edward River LGA. While the subject site is not within the South West REZ, it will contribute to the $2.8 billion in private investment by 2030 and over 2,000 construction jobs generated by the REZ at its peak. The Energy Corporation of NSW's (EnergyCo) Community and Employment Benefit Program for REZ in NSW (the Program) (2024) also outlines how the

Theme	Summary of findings
	benefits of NSW's transition to renewable energy can be shared with the communities that host new energy infrastructure, such as BESS. This Program is funded by energy infrastructure developers within the REZ by EnergyCo, requiring payment of an ‘access fee’ that will be distributed to impacted communities throughout the REZ via a merit assessment of community grant applications. The types of potential community and employment benefits highlighted within the Program include the provision of public or community services or infrastructure, health services, accommodation or housing, employment, skills, and training programs, amongst others.
Ageing sporting and recreational facilities 	Council’s Open Space Strategy (2019) notes that while there is no shortage of open space within the LGA, the community has reported that many existing recreational facilities are ageing or need replacing. They also noted that existing parks lack connectivity and activation, specifically infrastructure and pop-up events. The Recreation Strategy (2019) also notes that several sporting clubs have issues with the age, condition, design absence, or accessibility of clubhouses, and at least one club is experiencing capacity issues with its playing space and facilities. The Deniliquin Public Space Strategy (2018) explains that funding and resources have been severely constrained in recent decades, and years of underinvestment have adversely impacted public places, infrastructure, and local policy development. The Council’s Operational Plan 2023-2024 (2023) outlines its capital works programs, which propose investments in the natural and built environment, transport, partnerships, and community assets and services.

3.5. DEMOGRAPHIC PROFILE

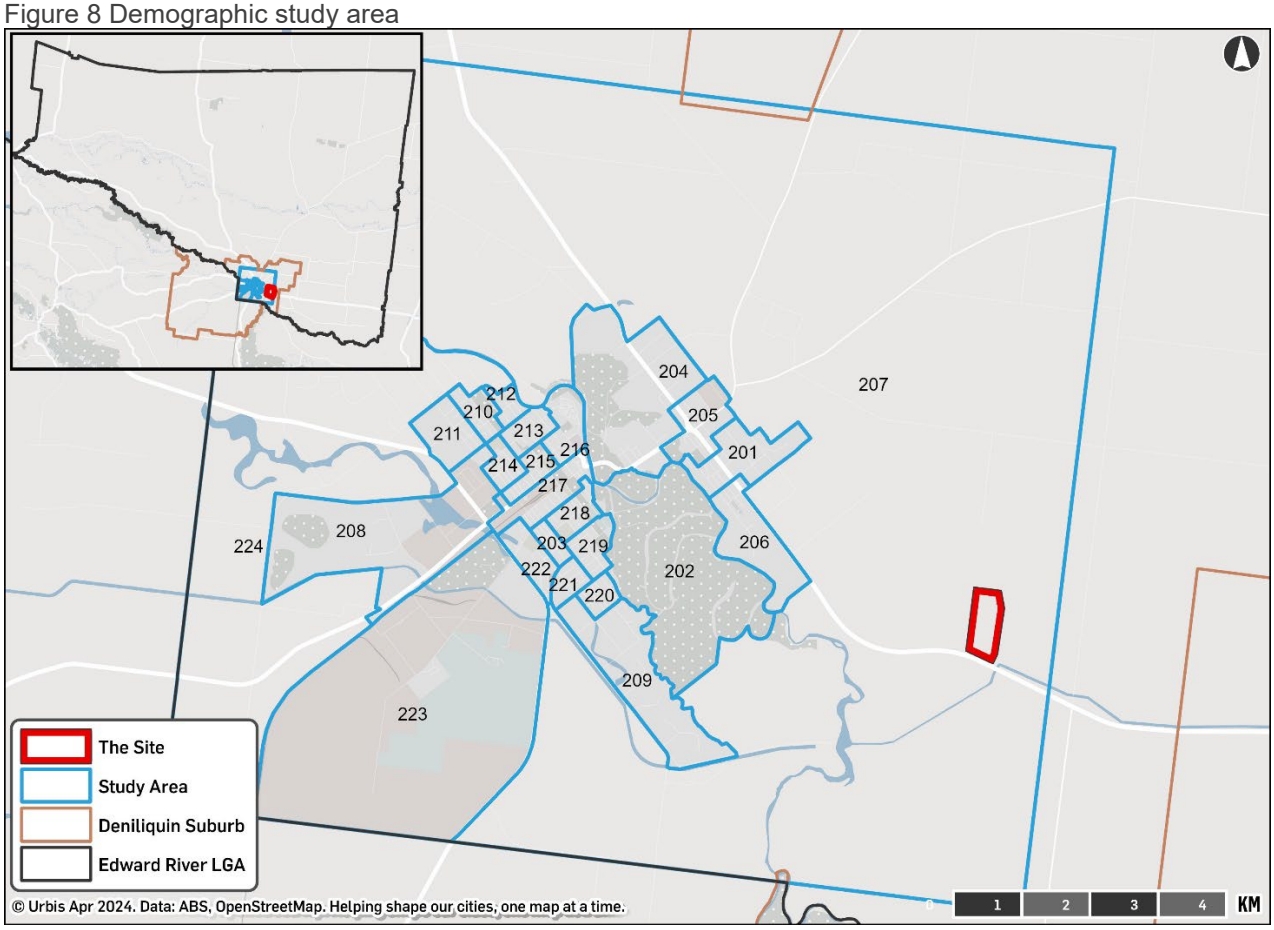
A demographic profile identifies the demographic and social characteristics of a proposal's likely social locality. This is an essential tool in understanding how a community currently lives and that community's potential capacity to adapt to changes arising from a proposal.

A demographic profile has been developed for the combined area of 24 Statistical Area 1 within Deniliquin (referred to as the 'study area' from here on). The study area captures residents immediately surrounding the proposal and those living within the Deniliquin town centre. The study area aligns with the surrounding social locality identified in Figure 8 below.

For some topics where data aggregation is not possible, the study area has been replaced by the Deniliquin suburb (SAL).

This profile is based on demographic data from the Australian Bureau of Statistics Census of Population and Housing (2021) and DHPI's population projections (2022). Where relevant, non-Metro NSW has been used as a comparison area to identify demographic trends and changes.

Figure 8 Demographic study area



Source: Urbis, 2024

Note: The first eight digits of the SA1 codes (10903118) are duplicates and have been omitted from SA1 code annotations on the map to assist with readability.

Population and age

	In 2021, 7,394 people lived in the study area, representing 87.4% of residents in Edward River LGA.
	The largest age group is 60-64-year-olds, comprising 7.9% of the study area population. There is a higher proportion of people aged 55+ in the study area (40.9%) compared to non-Metro NSW (35.8%).
	The study area has a slightly lower average household size (2.2 people) than Non-Metro NSW (2.4 people).

	According to the DPHI's Population Projections (2022), the Edward River LGA is anticipated to remain relatively stable with a slight population decline over the next 20 years, falling from 9,073 people in 2021 to 9,012 in 2041. This represents a decrease of 62 residents.

Culture and diversity

	The study area has a lower proportion of Aboriginal and/or Torres Strait Islander People (4.9%), compared to Non-Metro NSW (6.1%).
	The study area has slightly lower levels of cultural and linguistic diversity than Non-Metro NSW, with 3.3% of households in the study area speak a language other than English at home compared to Non-Metro NSW (7.1%).
	The top countries of birth other than Australia include New Zealand, United Kingdom and India.

Education and qualifications

	The study area has a lower proportion of people who hold tertiary education qualifications, with 21.4% of the study area residents have obtained a Bachelor's level qualification or above (compared to 31.2% in Non-Metro NSW).
	The study area has similar proportions of people who hold an advanced diploma or associate degree (21.3%), and a certificate level qualification (54.7%) compared to Non-Metro NSW (20.9% and 47.9%).

Workforce, employment and income

	The study area has a similar proportion of people in the labour force (60.3%) compared to Non-Metro NSW (60.4%).
	The top occupation in the study area is professional (16.1%), followed by community and personal service workers (15.1%), managers (14.3%) and technician and trade workers (14.3%).
	The top industry of employment in study area is health care and social assistance (17.7%), followed by agriculture, forestry and fishing (10.6%), and retail trade (10.1%). These industries are also the top industries of employment across Non-Metro NSW. The study area has a higher proportion of people employed in agriculture, forestry and fishing (10.6%) compared to Non-Metro NSW (5.3%).
	The most common **method of travel to work for study area residents is by private vehicle** (79%), a higher proportion compared to Non-Metro NSW (64.5%). There is also a high proportion of study area residents who worked at home or did not go to work (14%), this is likely due to the high proportion of residents working in agricultural industries.
	The median household income is similar in Deniliquin ($1,221) and Edward River LGA ($1,240) but lower compared to Non-Metro NSW ($1,434).

Housing and homelessness

	There is a total of 3,363 private dwellings in the study area. Of these dwellings, 12.0% are unoccupied.
	The majority of study area residents live in separate houses (78.8%), which is similar to Non-Metro NSW (73.3%).
	There are also high levels of home ownership within the area, with 42.2% of the study areas residents owning their home outright, compared to 39.6% in Non-Metro NSW. The study area has a similar proportion of renters (26.8%) compared to Non-Metro NSW (27.9%).

	Almost a third of households within the study area are experiencing rental stress, with 31.5% of households spending more than 30% of their household income on rent. This proportion is lower compared to Non-Metro NSW (36%).
	A lower proportion of households within the study area are experiencing mortgage stress, with 6.5% of households spending more than 30% of their household income on mortgage repayments (compared to 12.7% in Non-Metro NSW).
	Approximately 4% of all occupied dwellings (105 dwellings) in the study area are rented as **public or community housing**.
	Data on the estimated levels of homelessness has been analysed according to the ABS 2021 Estimating Homelessness Census. This data is only available at the regional level and has been gathered for Edward River LGA. Rates are per 10,000 population. ▪ In 2021, there were three people in Edward River LGA living in improvised dwellings, tents, or sleeping out. ▪ There were 16 people residing in supported accommodation for the homeless, and 19 people temporarily residing in another household. ▪ Further, there were no people recorded living in crowded or 'severely' crowded dwellings.

Advantage and disadvantage

	According to the 2021 SEIFA, relative to other NSW suburbs, Deniliquin has a lower relative score of for the following socio-economic indexes: ▪ Deniliquin ranks in the bottom 20% of suburbs in the Index of Relative Socio-Economic Disadvantage and in the Index of Economic Resources. This suggests that the area has a greater number of people and households with low incomes, no qualifications, or low-skilled occupations, as well as an average number of households that pay low rent or do not own their homes. ▪ Deniliquin suburb ranks in the bottom 20% of NSW suburbs in the Index of Relative Socio-Economic Advantage and Disadvantage. This indicates that there may be more households with low incomes, and unskilled occupations, or few households with high incomes and people in skilled occupations. ▪ Deniliquin also ranks in the bottom 20% of suburbs in the Index of Education and Occupation, indicating that the area may have many people without qualifications, people in low skilled occupations, or people who are unemployed.

Health, wellbeing and disability

	Over one-third (39.1%) of residents in the study area have at least one long-term health condition, which is slightly higher than the non-Metro NSW proportion (37.0%).
	The three most common long-term health conditions within the study area are arthritis (13%), mental health conditions (10.5%), and asthma (10.4%).
	Of the total study area population, 7.9% (556 people) identified as needing assistance due to disability, old age, or long-term health condition.
	Of residents aged 15 and over in the study area, 12.8% of people (747 people) provided unpaid assistance to someone with an identified need for assistance due to disability, old age, of long-term health condition

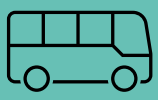
Crime and safety

Crime data from November 2022 to December 2023 from the NSW Bureau of Crime Statistics and Research (BOCSAR) indicates that Deniliquin generally has lower crime rates (per 100,000 population) compared to NSW averages. However, crime types where Deniliquin had notably higher rates of crime per 100,000 people than NSW include:

- Break and enter non-dwelling: 405.1 (compared to 106.4 in NSW)
- Malicious damage to property: 1,620.3 (compared to 609.1 in NSW)
- Trespass: 445.6 (compared to 151 in NSW)
- Steal from motor vehicle: 964.6 (compared to 358.7 in NSW).

BOCSAR also produces crime hotspot mapping, which shows that crime incidents are generally isolated to the Deniliquin town centre. These crimes include assault, break and entering and malicious damage to property. The crime profile indicates the suburb may be more susceptible to opportunistic theft, particularly within the town centre as these areas have a high level of pedestrian activity and concentration of retail stores and homes.

Transport



Of employed residents aged 15 and over in the study area, 77% travelled to work by car as driver or passenger and 0.2% travelled to work by public transport in Deniliquin. This is a similar proportion compared to Edward River LGA (72.7% and 0.1% respectively) and higher compared to Non-Metro NSW (65.2%). There is also a high proportion of study area residents who worked at home or did not go to work (14%), this is likely due to the high proportion of residents working in agricultural industries.

More than half of households had two or more registered vehicles in the study area (555.8%), a similar proportion compared to Edward River LGA (57.5%) and Non-Metro NSW (57.9%).

4. SIA FIELD STUDY

This section provides an overview of the community and stakeholder consultation undertaken to inform this SEIA. Consultation is critical to understanding what is important to people and how they feel the proposal may impact them.

In some cases, what people may expect to feel may not be what eventuates as part of the proposal. The consultation summary below does not distinguish between this and summarises the consultation as it was heard to provide an accurate sentiment of people's thoughts, feelings and feedback. The assessment of social impacts (Section 7) considers the outcomes from consultation against the proposal's details and other technical report findings.

Approach and summary of SIA field study and engagement activities

Urbis' Social Planning and Engagement teams developed and undertook an integrated SIA field study and engagement program to accompany the proposal. The field study was informed by the outcomes of the social baseline (see Section 3) to identify the potentially impacted community and appropriate engagement methods. Activities were focused on individuals and groups within the immediate social locality (Figure 23), as well as key stakeholders.

The methods of engagement and consultation with community and key stakeholders are provided in Table 7. The Urbis engagement team also undertook additional communication and engagement activities, which are detailed in full in the Engagement Outcomes Report (Urbis, 2025).

A copy of relevant engagement material is provided in Appendix A, Appendix B and Appendix C.

Table 7 Methods of engagement and consultation

Method	Administered	Timeframes	Invited	Participated
In-depth interview with Edward River Shire's Economic Development team	Online See Appendix A – Council discussion guide	29 May 2024	Representatives from Edward River Shire's Economic Development team	One Council representative
Community newsletter, project website and newspaper advertisement	See Appendix B – Community newsletter	Newsletter emailed on 7 May and 8 May 2024 Project website live from 7 May 2024 Newspaper advertisement published in the Deniliquin Pastoral Times on 10 May and 14 May 2024	Neighbouring landowners	Newsletter emailed to six neighbouring landowners
Online social impact survey	Online and distributed via a newsletter that was emailed to neighbouring properties and posted on local	Online survey opened between 7 May and 3 June 2024	Deniliquin community	Four survey responses, including one complete response and three partially complete /

Method	Administered	Timeframes	Invited	Participated
	community Facebook groups, and on the Community Information Poster Boards See Appendix C – Social impact survey questions			incomplete responses
Community pop up sessions	In person at Deniliquin Plaza	Friday 17 May, 4pm – 6pm Saturday 18 May, 10am – 12pm	Deniliquin residents via newspaper ads and email	Approximately 15 community members

4.1. IN-DEPTH INTERVIEW SUMMARY OF FINDINGS

A videoconference was held with an economic development representative from the Edward River Council on 29 May 2024. This discussion aimed to understand the community's local character and any other potential positive or negative social impacts associated with the proposal. A copy of the interview guide is provided in Appendix A.

A summary of the consultation, as relevant to this SEIA, is provided below.

Strong sense of community through participation in local community groups

- Sporting clubs and recreation spaces promote a strong sense of belonging and community amongst local residents, particularly for nearby satellite communities such as Blighty.
- Arts and cultural groups and programs are also significant within the local community.

Lack of access to local services and facilities

- There is a lack of health services in the LGA, specifically General Practitioners (GPs), despite having a hospital located within Deniliquin. The Council is creating incentives to attract more GPs to the local area.
- There is a lack of tertiary education facilities, and the Council is currently exploring opportunities to deliver a satellite university campus.
- There is limited access to upskilling or apprenticeship opportunities, particularly in relation to trade services.

Community sentiment towards renewable energy projects

- Community sentiment towards renewable energy projects is generally favourable.
- The local community generally feel protective over their productive agricultural lands (i.e., land near irrigation channels) and has previously expressed dissatisfaction with proposed renewable energy projects that propose a loss of productive agricultural land.
- It was also noted that the local community needs more education about renewable energy projects.

Workforce accommodation

- Concern was raised about the availability of local housing and temporary accommodation (e.g., hotels and motels) for the potential FIFO/DIDO construction workforce generated by the proposal, specifically during peak construction periods.
- The workforce accommodation strategy should consider housing availability in nearby townships like Finley.
- Concern was raised in relation to potential cumulative impacts of several construction workforces seeking out housing or short-term accommodation in the local area.
- It was suggested that the timing of peak construction should be planned around peak tourism periods in Deniliquin, such as long weekends and the annual Deni Ute Muster Festival, to ensure an adequate supply of accommodation for tourists and visitors.
- The Council is not opposed to the development of on-site temporary workforce accommodation; however, a plan must demonstrate how the facilities will be repurposed after the construction period ends.

Economic and employment benefits

- Council recognises the positive economic benefits of a temporary construction workforce, particularly for hotel and motel owners.
- To enhance local economic benefits, the representative suggested that the Proponent employ local construction companies and/or provide opportunities for apprenticeships and upskilling during the construction of the proposal.
- It was noted, however, that Deniliquin has a limited supply of trade services. Therefore, as per the Council, the Proponent should also consider local employment in neighbouring townships and LGAs.
- It was noted that Deniliquin has a local airport and train line, which should be considered in the transportation of workers and construction materials.

Visual impacts

- It was noted that BESS projects generally have a small footprint and minimal visual impact on the landscape.
- To further mitigate potential view impacts, it was suggested that trees be planted to screen the view of the BESS from the street.

Community benefits

- Council has expressed a preference for receiving a Letter of Intent. This non-legally binding document outlines the community benefits or financial contributions a proponent intends to provide through a VPA. Community and Council priorities can change between the time a proposed development is lodged and approved; therefore, Council is seeking more flexible agreements to ensure contributions are most effectively used.
- It was noted that the primary beneficiaries of the proposal's VPA would likely be to neighbouring properties, local Aboriginal groups, infrastructure located near the proposal, or into Council's Community Benefits Fund.

4.2. COMMUNITY NEWSLETTER, NEWSPAPER ADVERTISEMENT AND PROJECT WEBSITE

Community newsletter

A newsletter was distributed via email to nearby landowners. The purpose of the newsletter was to inform the surrounding businesses and community about the proposal and provide an opportunity to raise concerns related to the proposal. A copy of the community newsletter is included in Appendix B of this SEIA.

Newspaper advertisement

A newspaper advertisement was published in the Deniliquin Pastoral Times on 10 May and 14 May 2024. The advertisement included details about the proposal and how to provide feedback, as well as an invitation to attend the information sessions.

Project website

From 7 May 2024, detailed project information has been available on the project website (https://deniliquinbess.com.au/). The website was advertised via the e-newsletter, the newspaper advertisement, and on information boards displayed at the community information pop-up sessions.

4.3. COMMUNITY SURVEY SUMMARY OF FINDINGS

An online social impact survey was prepared to obtain feedback on potential positive and negative social impacts associated with the proposal. The SIA survey was advertised on the community newsletter and project website and was open between 7 May and 3 June 2024. A copy of the social impact survey questions is included in Appendix C of this SEIA.

The survey had four responses, which included one complete response and three partially complete / incomplete responses. One respondent was the owner of the land where the BESS is proposed.

A summary of the key findings from the survey is provided below:

- Providing employment for local residents and increased consumer spend at local businesses were identified as positive impacts associated with the proposal.
- Using local accommodation for construction workers and opportunities for sponsorship of community events and programs were identified as considerations to enhance positive social impacts.
- Limiting the visual impact of the subject site, ensuring the proposal does not contaminate water supply, implementing fire control mechanisms, limiting construction impacts on surrounding land and considering alternative energy sources were identified as key areas for consideration.
- Local community organisations, local businesses and people living adjacent to the development were identified as top three stakeholders who should be the main beneficiaries of the VPA.
- Renewable energy and energy saving programs, community sponsorship grants programs, health or wellbeing programs, community services and improvements to recreation facilities were the top five community benefits identified for consideration.

4.4. COMMUNITY POP UP SESSION SUMMARY OF FINDINGS

Representatives from Urbis and the Proponent held two community pop up sessions in Deniliquin Plaza. The sessions aimed to provide residents and workers with an opportunity to learn about the project and to share any feedback or concerns directly with the project team. The project team presented four poster boards with information on the project and the Proponent.

A summary of the consultation, as relevant to this SEIA, is provided below.

Fire and other safety concerns

- One resident raised concerns around fire safety and asked about fire risk mitigation measures being implemented as part of the proposal.
- One community member suggested providing a Rural Fire Services (RFS) shed with a fire truck to enhance public perception of fire safety.
- One resident expressed concerns related to the impacts of solar flares on BESS infrastructure and the associated risks.
- One resident expressed concerns related to radiation risks.

Perceived loss of productive agricultural land

- One resident expressed negative sentiments towards renewable energy projects being developed on productive agricultural land.

Economic and view impacts on neighbouring properties

- One resident of a neighbouring property expressed concerns related to the devaluation of their property. They also raised concerns related to the impact of the proposal on their beekeeping business and farming practices.
- One resident of a neighbouring property expressed concerns related to the impact the BESS will have on their views from their property, noting it is one of their favourite things about living there.

Positive sentiment towards BESS projects

- Six residents expressed positive sentiments about the BESS proposal, noting its proximity to the Deniliquin Substation and that it would support a more sustainable energy supply.
- While there was general support for the BESS proposal, two of the above residents expressed negative sentiments towards solar and wind projects.

Community benefits

- One community member queried whether the proposal would contribute to more reliable power in the LGA, noting a recent power outage.
- One community member enquired if local construction companies will be engaged, noting this would be a community benefit that should be considered.
- Additional suggestions for community benefits included:
  - Sponsorship of the Picola League and/or Murray League sporting clubs
  - Upgrade of the Deniliquin Rams football club grandstand
  - Upgrade of the Deniliquin Rovers netball club facilities
  - Sponsorship of awards for Deniliquin Business Chambers local business awards
  - Sponsorship of annual Deni Utes festival in October.

4.5. KEY IMPLICATIONS OF SIA FIELD STUDY FINDINGS

This section outlines the key social impacts identified by participants throughout the SIA field study and engagement activities. All consultation sought to understand how participants viewed their community, and to identify how the proposal may impact their community. Participants identified both positive and negative impacts, as well as opportunities to mitigate or enhance these potential impacts, shown in Table 8.

Table 8 Community identified potential positive impacts, negative impacts, and opportunities

Positive impacts	Negative impacts	Opportunities
▪ Increasing sustainable and reliable energy supply ▪ Local economic benefits during construction ▪ Proximity to the Deniliquin Substation ▪ Adequate supply of housing and temporary accommodation in	▪ Perceived fire and human safety risks ▪ Perceived loss of productive agricultural land ▪ Potential impacts on neighbouring property values and business operations ▪ Potential change to visual character	▪ Increased local employment, upskilling and apprenticeship opportunities during construction ▪ Additional funding to support local community groups, infrastructure and services

Positive impacts	Negative impacts	Opportunities
Deniliquin and in surrounding towns to accommodate the proposal's construction workforce	▪ Potential cumulative impacts from several construction workforces entering the local community at the same time	▪ Providing landscaping and tree planting to screen the subject site from the street and neighbouring properties

5. ECONOMIC IMPACT ASSESSMENT

5.1. ASSESSMENT OVERVIEW

Property development and infrastructure projects provide economic benefits to a local economy and wider region during both the construction / development phase, and during the ongoing operation or working life of the project. Direct economic benefits during the development phase are identified in the form of expenditure, economic growth and employment benefits. These direct benefits in turn generate flow on (multiplier or indirect) benefits which also benefit the regional and state economies.

In this assessment, REMPLAN software has been used to model and quantify the potential economic benefits associated with the proposed development. REMPLAN is an Input Output model that captures inter-industry relationships within an economy. It can assess the area specific direct and flow on implications across industry sectors in terms of employment, wages and salaries, output and value added (Gross State Product).

The potential economic benefits of the proposed development have been quantified in terms of value-added expenditure generation and employment generation:

- Expenditure Generation – Estimation of the direct and indirect expenditure impacts resulting from the proposed development. This estimates value added expenditure impacts to the regional and state economies during both the development and operational phases.
- Employment Creation – Estimation of the direct and indirect employment impacts resulting from the proposed developments. Direct employment of existing and proposed development has been provided by the Proponent.

Key points regarding the workings and terminology of the model are as follows:

- REMPLAN uses the value of investment or employment generation as the primary inputs. For this analysis, both the value of total upfront investment and the future employment (as provided by the Proponent) at the proposed development have been used to assess the benefits of the construction phase and the ongoing economic benefits of the operational phase.
- Outputs from the model include direct and indirect employment and value added (i.e. economic growth) generated through the project
- Employment generated includes all full-time and part-time jobs created over the life of the construction phase; or in terms of the ongoing operations, total ongoing jobs generated
- Both the direct and indirect benefits are modelled for employment and value added
- Direct refers to the effect felt within the industry where the investment is being made. For example, during the construction phase, new direct jobs are created within the construction industry
- Indirect effects are:
  - those felt within industries that supply goods to the industries directly affected (industry effects) and
  - to industries that benefit from the wages that are earned and spent by those employed within the industries directly affected (consumption-induced effects). For the purposes of this analysis, consumption-induced effects have been excluded. Consumption-induced effects are prone to overstate the benefits of a particular investment as they overestimate the impact of wage and salary increases in the local economy. This is accepted industry practice.

To effectively model the impact of the proposed development, the following estimates and assumptions have been adopted:

- Construction costs would be distributed pro-rata across the construction period.
- A peak period consisting of up to 169 employees on-site during the construction stage, with the total number of construction workers equivalent to 52 peak direct jobs per annum and an additional 117 indirect supply-chain jobs.

The following sub-sections present a summary of benefits for the different scenarios for this phase.

5.2. DIRECT AND INDIRECT EMPLOYMENT

5.2.1. Construction phase economic benefits

Construction of the proposed development would require substantial capital investment and employment over the development period. This investment would sustain significant employment in the construction industry and have supply chain effects felt through the Edward River Council LGA and NSW economy.

Table 9 illustrates the estimated number of jobs required during the construction phase and the development's effects on supply chain employment. According to the Proponent, the BESS will require up to around 52 direct jobs in the peak construction months.

In addition to direct employment, supply chain effects are felt through the local economy. Specifically, the 52 peak direct jobs required to construct the BESS have the potential to support a further 117 jobs across the project's supply chain in the Edward River Council LGA because of increased demand for intermediate goods and services.

Therefore, the total employment generated from the construction phase could be up to **169 jobs over the development timeframe**.

Table 9 Construction employment benefit

	Construction Phase Peak
Direct Employment (FTE)	52 Jobs
Supply Chain Effect Employment across NSW (FTE)	117 Jobs
Total Employment (FTE)	**169 Jobs**

Source: Gransolar Development Australia; REMPLAN; Urbis (June 2024)

Based on the estimated total construction cost, the proposed development would contribute $17.62 million GVA to the economy through the construction phase.

Table 10 shows that the development has the potential to support up to $42.21 million in supply chain GVA across NSW. Supply chain GVA reflects increased economic activity in supporting and supplying businesses as a result of construction jobs and output. Over the total construction phase, this could support up to a total GVA of $59.83 million.

Table 10 Construction Gross Value Added (GVA)

	Construction Phase
Estimated Construction GVA	$17.62 million
Supply Chain GVA across NSW	$42.21 million
Total GVA	**$59.83 million**

Source: Gransolar Development Australia; REMPLAN; Urbis (June 2024)

5.2.2. Operational phase economic benefits

When construction of the proposed development is complete, operation of the BESS will support new jobs in the form of staff required to operate the facility. This direct employment benefit will also have a direct GVA benefit and supply chain flow on effects felt through the economy.

Ongoing Employment

Based on an estimate provided by the Proponent, the operation of the proposed BESS could require up to 2 full-time equivalent employees on subject site. Table 11 10 presents the supply chain employment benefit that could arise as part of the ongoing operation of the facility. The proposed BESS operations could support

6 additional jobs in supplying industries throughout the Edward River Council LGA. Total employment generated from the operational phase could, therefore, be in the order of 8 jobs ongoing throughout the operation.

Table 11 Ongoing employment benefit

	Operational Phase
Direct Jobs	2 Jobs
Supply Chain Effect Jobs	6 Jobs
Total Jobs	**8 Jobs**

Source: Gransolar Development Australia; REMPLAN; Urbis (June 2024)

Ongoing GVA

Table 11 illustrates that direct ongoing employment of three jobs at the facility has the potential to support direct GVA of up to $0.88 million in each year of operation.

This direct employment and economic benefit, in turn, can support up to $1.88 million in supply chain GVA across NSW each year. Supply chain GVA reflects increased economic activity in supporting and supplying businesses due to jobs and output from the facility.

Therefore, the total economic benefit from the operational phase could be in the order of $2.76 million in GVA in each year of operation.

This is in contrast to the subject site's historical primary use as dryland sheep grazing. The income generated from the Existing Use of the subject site has been considered for an area of 3.5 ha, including the entire area of the proposed BESS development.

According to the Agricultural Impact Assessment, the entirety of the income generated at the subject site comes from dryland sheep grazing. The following information was determined in consultation with the property manager and landowner:

The carrying capacity of sheep within the subject site is estimated to be 1.5 Dry Sheep Equivalent (DSE) per hectare. The subject site covers 3.5 hectares and would therefore represent 5.25 Dry Sheep Equivalent (DSE).

It can be extrapolated from the 2020-21 Australian Agricultural Census (ABARES, 2021) that the average value of sheep and lambs in the Edward River LGA is $86.35 per head.

Assuming that there are 5.25 Dry Sheep Equivalent (DSE) produced annually from the subject site, the estimated annual agricultural production of the study area is $453.33, significantly lower than the $2.76 million in total GVA across NSW each year from the proposed development.

Table 12 Ongoing Gross Value Added (GVA) benefit

	Operational Phase
Direct Jobs	2 Jobs
Direct GVA per year	$0.88 million
Indirect Jobs	6 Jobs
Supply Chain GVA per year	$1.88 million
Total GVA per year	**$2.76 million**

Source: Gransolar Development Australia; REMPLAN; Urbis (June 2024)

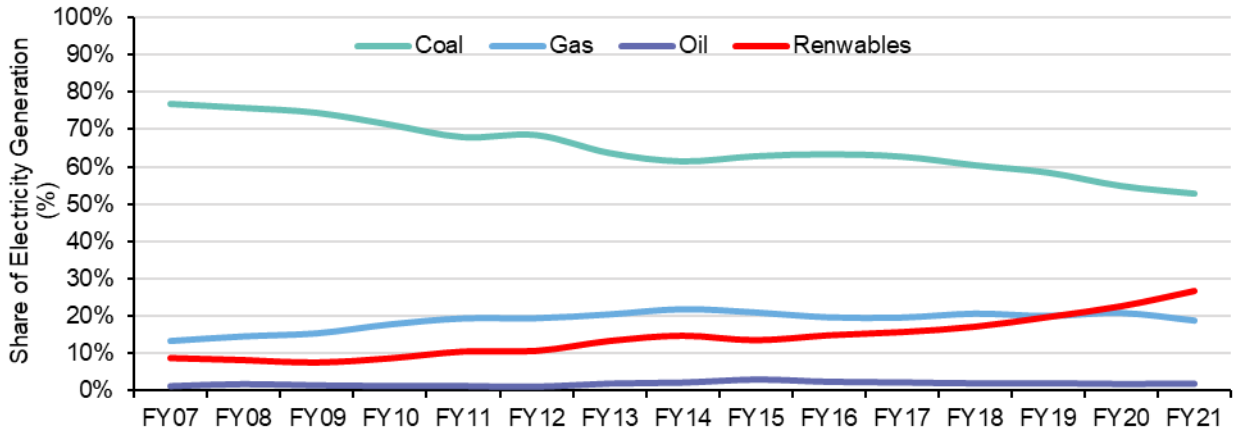
5.2.3. Supporting the emerging renewable energy sector in Australia

Once the proposed development is complete and operational, it has the potential capacity to store 100 MW / 200 MWh of Australian renewable energy. This influx of renewable energy will contribute to the national effort to transition from fossil fuels to clean energy, noting the achievement of a “100% renewables” electricity system is ideal (Grattan Institute, 2021).

NSW is steadily phasing out coal-fired generation power stations, which the state has historically relied on heavily. As reflected in Figure 9, Australia has experienced a shift towards more renewable energy sources, which have increased their share of total electricity generation from 10.5% in FY11 to 26.7% in FY21. During this period, the reliance on coal dropped from 77% to 53%. This increased reliance on renewables is likely to substantially improve domestic energy security in the longer term as coal is a finite resource and has resulted in Australia being the world’s sixth largest producer of solar energy, noting Australia has the second highest potential for solar power.

The proposed development will also contribute to the NSW Climate Change (Net Zero Future) Act 2023, which targets a 50% emissions reduction on 2005 levels by 2030, a 70% reduction on 2005 levels by 2035 and Net Zero by 2050.

Figure 9 Australia energy generation by source



Source: DISR; Urbis (June 2024)

5.3. WORKFORCE AND ACCOMMODATION STUDY

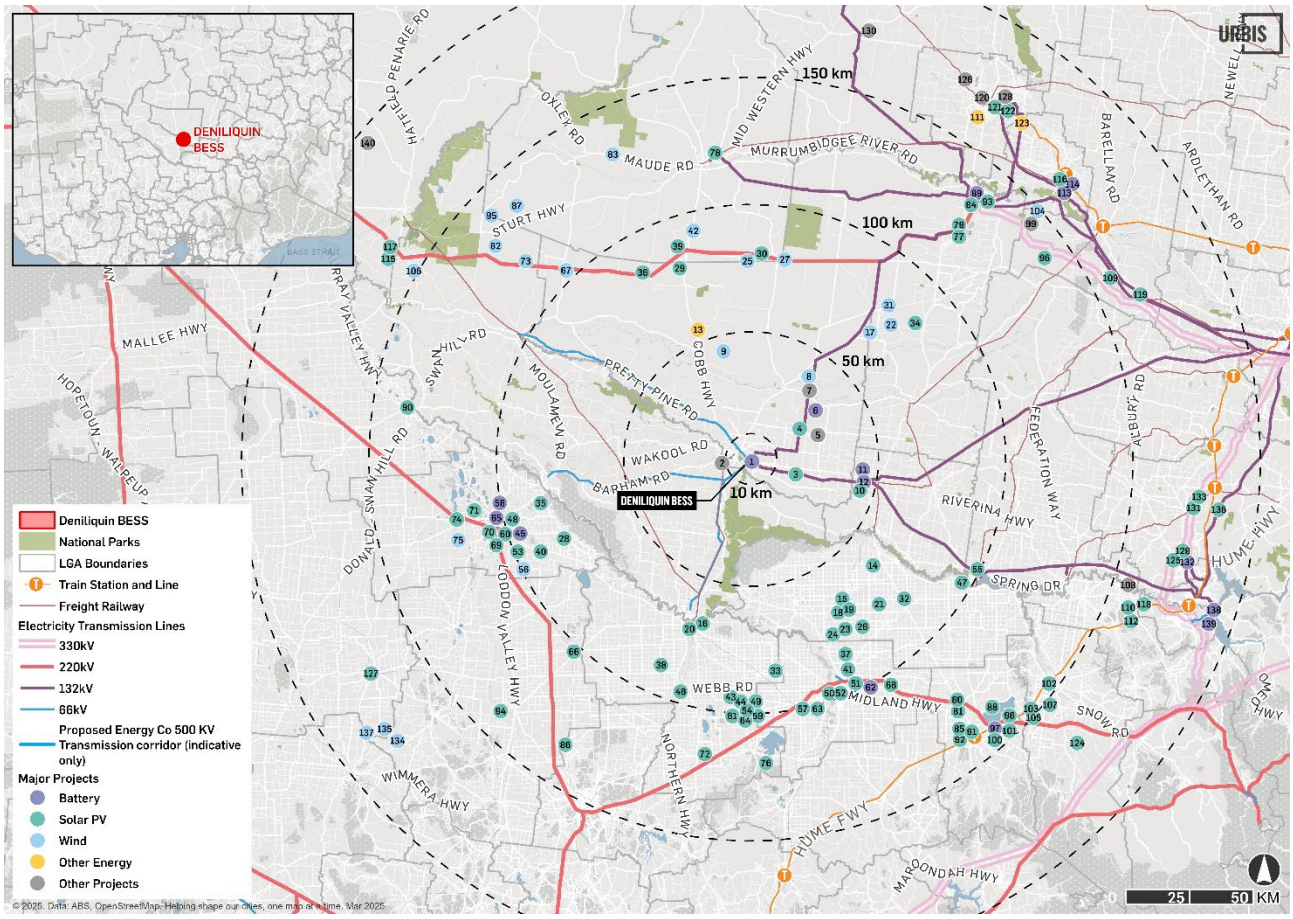
5.3.1. Introduction

The purpose of this section is to support the preparation of an insight-informed and data-driven bid for the delivery of a BESS in the Deniliquin region, considering:

- Local employment capacity that the proposed development can draw upon, highlighting employment within relevant occupations.
- Major projects the proposed development will compete with for local employment.

5.3.2. Catchment definition

Figure 10 Catchment map



Source: Urbis (March 2025)

For the purposes of this workforce accommodation study, two catchments have been defined based on a radius spanning 150 kilometres and 50 kilometres around the subject site shown in Figure 10. The 150 kilometres catchment encompasses all major renewable energy projects surrounding the subject site. It's important to note that in this rural region, a one-and-a-half-hour drive, which roughly corresponds to this radius, may be considered unreasonable based on worker safety and, therefore, a more reasonable 45-minute drive time was also explored. The larger catchment is most useful to show the potential risk of surrounding projects, whereas the smaller catchment is the most likely scenario for the subject site given it is where most workers will locate temporarily to complete the construction phase of the Deniliquin East BESS.

Additionally, the 150 kilometres Catchment Area and the supplementary 50 kilometres serve as a strategic buffer against investment risk. This expanded radius reveals the competitive landscape of projects vying for the same employment base and provides a broader perspective for informed decision-making.

5.4. THE 150 KM CATCHMENT ANALYSIS

Employment by occupation

Due to the size of the wider catchment, an analysis of the potential non-local worker population was completed based on the Census and employment in the wider region to calculate latent capacity. In 2021, the people who worked within the Catchment Area were employed mainly in 'white collar' occupations. This includes the occupations of:

- Professionals
- Clerical and administrative workers

- Managers
- Community and personal service workers
- Sales workers

People in white-collar occupations represented 64% of the workforce across the Catchment Area, significantly below the 73% in the Rest of NSW and Victoria benchmarks.

During the project's construction phase, the project will draw a significant share of its workforce from people in ‘blue collar’ occupations. This includes the occupations of:

- Technicians and trades workers
- Labourers
- Machinery operators and drivers

As shown in Table 13 the blue-collar workforce represents 36% of occupations across the Catchment Area, greater than the 27% achieved in the Rest of NSW and Victoria benchmarks.

Table 13 Employment by 0ccupation, place of work (2021)

	Catchment Area		Rest of NSW and Victoria	
Occupation	**No.**	**%**	**No.**	**%**
Managers	18,939	18%	959,990	15%
Professionals	15,222	15%	1,727,869	26%
Labourers	15,090	14%	563,168	9%
Technicians and Trades Workers	14,933	14%	821,116	12%
Community and Personal Service Workers	12,281	12%	726,068	11%
Clerical and Administrative Workers	11,120	11%	861,936	13%
Sales Workers	8,565	8%	549,641	8%
Machinery Operators and Drivers	7,971	8%	402,154	6%
Total	**104,121**	**100%**	**6,611,942**	**100%**
White-collar	66,127	64%	4,825,504	73%
Blue-collar	37,994	36%	1,786,438	27%

Source: ABS 2021; Urbis (June 2024)

Note: Totals differ between Table 13 and Table 14 as response rates differ between the questions in the Census

5.4.1. Employment by Industry

Table 14 below shows the number and proportion of workers within the Catchment Area relative to the Rest of NSW and Victoria benchmarks, broken down by industry (1 digit), as per the ABS Census 2021.

As shown in Table 14, 99,682 people worked within the Catchment Area, representing 2% of the total workforce in the Rest of NSW and Victoria (6.4 million workers).

Employment within the Catchment Area was largely concentrated in agriculture, forestry and fishing, health care and social assistance and manufacturing. Together, these industries accounted for over 40,000 jobs (40% of total employment) within the Catchment Area. This share of employment is greater than the 23% seen in the Rest of NSW and Victoria benchmarks.

Construction, manufacturing, transport, postal, and warehousing accounted for 20% of total employment within the Catchment Area, equating to approximately 27,500 jobs. These industries employ more than 1.3 million people in the Rest of NSW and Victoria.

Table 14 Employment by industry, place of work (2021)

	Catchment Area		Rest of NSW and Victoria	
Industry	**No.**	**%**	**No.**	**%**
Agriculture, Forestry and Fishing	14,853	15%	127,008	2%
Health Care and Social Assistance	14,629	15%	960,377	15%
Manufacturing	10,523	11%	411,825	6%
Retail Trade	9,260	9%	619,659	10%
Construction	8,845	9%	604,664	9%
Education and Training	7,985	8%	591,365	9%
Accommodation and Food Services	6,434	6%	417,339	6%
Public Administration and Safety	5,278	5%	395,759	6%
Transport, Postal and Warehousing	4,378	4%	312,450	5%
Other Services	3,935	4%	231,173	4%
Professional, Scientific and Technical Services	3,215	3%	590,349	9%
Administrative and Support Services	2,725	3%	214,760	3%
Wholesale Trade	2,282	2%	190,518	3%
Electricity, Gas, Water and Waste Services	1,307	1%	70,324	1%
Financial and Insurance Services	1,260	1%	320,886	5%
Arts and Recreation Services	1,048	1%	105,274	2%
Rental, Hiring and Real Estate Services	763	1%	108,092	2%
Information Media and Telecommunications	502	1%	117,164	2%
Mining	460	0%	44,207	1%
Total	**99,682**	**100%**	**6,433,193**	**100%**

Source: ABS (2021); Urbis (June 2024)

Note: Totals differ between *Table 13 and Table 14* as response rates differ between the questions in the Census.

5.4.2. Workforce by occupations relevant to the subject site

Table 15 presents occupations relevant to the subject site and their capacity. For the purposes of reporting, these occupations have been grouped into white-collar and blue-collar.

Relevant white-collar occupations represent approximately **9% of total occupations within the Catchment Area.**

In the Catchment Area, there were 1,278 employed people in the white-collar occupations relevant to the subject site, with the top two occupations being:

- Architectural, Building and Surveying Technicians (427 jobs)
- Managers (356 jobs)
- Blue-collar occupations represent a significantly higher proportion of the relevant occupation employment in the Catchment Area. These occupations represent 91% of employed people within the Catchment Area (12,365 jobs).

The top two relevant occupations in the blue-collar professions in the Catchment Area were:

- Truck Drivers (2,688 jobs), primarily offsite jobs delivering goods on subject site
- Electricians (1,362 jobs), on-site jobs

Table 15 Subject site relevant white and blue-collar occupations, 2021 in the study area

		Catchment Area		Rest of NSW and Victoria	
ANZSCO 2021 - level 4 - Major Group	**Unit**	**No.**	**%**	**No.**	**%**
Truck Drivers	General labourers	2,688	20%	84,045	10%
Electricians	Electricians	1,362	10%	68,148	8%
Structural Steel and Welding Trades Workers	General labourers	1,323	10%	27,314	3%
Construction Managers	Builders	965	7%	66,096	8%
Forklift Drivers	General labourers	786	6%	34,260	4%
Earthmoving Plant Operators	General civil work (grader, dozer, excavator operators, etc.)	709	5%	16,537	2%
Gardeners	Vegetation Management	664	5%	35,989	4%
Purchasing and Supply Logistics Clerks	Logistics	555	4%	43,826	5%
Other Specialist Managers	General labourers	486	4%	38,663	5%
Architectural, Building and Surveying Technicians	Land planners and surveyors	427	3%	39,971	5%
Managers, nfd	Management, Superintendents, Supervisors	356	3%	32,736	4%
Labourers, nfd	General labourers	352	3%	10,622	1%
Human Resource Professionals	General labourers	347	3%	40,957	5%
Human Resource Managers	General labourers	295	2%	33,411	4%
Supply, Distribution and Procurement Managers	General labourers	293	2%	25,406	3%
Machine Operators, nfd	General civil work (grader, dozer, excavator operators, etc.)	234	2%	12,039	1%
Technicians and Trades Workers, nfd	General labourers	197	1%	12,629	2%
Security Officers and Guards	Security	197	1%	26,306	3%
Machinery Operators and Drivers, nfd	General civil work (grader, dozer, excavator operators, etc.)	193	1%	5,958	1%
Manufacturers	Management, Superintendents, Supervisors	185	1%	9,507	1%
Civil Engineering Professionals	Engineers (electrical and other)	181	1%	29,016	4%
Other Building and Engineering Technicians	Builders	132	1%	7,398	1%
Electrical Distribution Trades Workers	Electricians	125	1%	3,455	0%
Other Machine Operators	General civil work (grader, dozer, excavator operators, etc.)	121	1%	7,470	1%
ICT Managers	General labourers	101	1%	51,733	6%
Telecommunications Trades Workers	Telecommunication	84	1%	7,450	1%
Civil Engineering Draftspersons and Technicians	Engineers (electrical and other)	65	0%	4,472	1%
Electrical Engineering Draftspersons and Technicians	Electricians	54	0%	3,985	0%
Metal Casting, Forging and Finishing Trades Workers	Metal manufacturers	40	0%	1,275	0%
Machine and Stationary Plant Operators, nfd	General civil work (grader, dozer, excavator operators, etc.)	32	0%	1,607	0%
Electrical Engineers	Engineers (electrical and other)	30	0%	10,044	1%
Building and Engineering Technicians, nfd	Engineers (electrical and other)	29	0%	3,865	0%
Logistics Clerks, nfd	Logistics	17	0%	2,552	0%
Construction Trades Workers, nfd	Builders	10	0%	1,150	0%
Architects, Designers, Planners and Surveyors, nfd	Land planners and surveyors	5	0%	5,203	1%
Telecommunications Technical Specialists	Telecommunication	3	0%	2,329	0%
Education, Health and Welfare Services Managers, nfd	HSE personnel	0	0%	614	0%
Telecommunications Engineering Professionals	Telecommunication	0	0%	6,479	1%
White Collar		**1,278**	**9%**	**134,814**	**17%**
Blue Collar		**12,365**	**91%**	**679,703**	**83%**
Total		**13,643**	**100%**	**814,517**	**100%**

Source: ABS (2021); Urbis (June 2024)

5.4.3. Unemployed residents

Table 16 outlines the number of unemployed residents within the Catchment Area by field of study (by highest completed non-school qualification) as of the 2021 Census. This data helps assess the skill level of the labour force and the potential labour force from which the proposed development could draw.

The relevant qualifications required for the project construction phases include those within:

- Architecture and Building
- Engineering and Related Technologies
- Within the Catchment Area, approximately 284 unemployed (looking for part-time or full-time work) residents with relevant qualifications were looking for work.

Table 16 Catchment area white and blue-collar occupations, 2021 in the study area

	Catchment Area		Rest of NSW and Victoria	
	No.	%	No.	%
Management and Commerce	268	21%	48,678	27%
Society and Culture	254	20%	27,359	15%
Engineering and Related Technologies	215	17%	22,918	13%
Food, Hospitality and Personal Services	145	11%	12,505	7%
Health	135	11%	11,959	7%
Architecture and Building	69	5%	10,408	6%
Creative Arts	58	5%	14,065	8%
Education	49	4%	8,051	4%
Information Technology	36	3%	13,248	7%
Agriculture, Environmental and Related Studies	35	3%	2,870	2%
Natural and Physical Sciences	4	0%	7,371	4%
Mixed Field Programmes	0	0%	229	0%
Total	**1,268**	**100%**	**179,661**	**100%**

Source: ABS (2021); Urbis (June 2024)

5.4.4. Latent capacity by relevant occupations

Underemployment is another key factor in determining the potential capacity to supply additional workers from the local area. Underemployment is calculated by identifying the number of hours worked by all people working in occupations of interest that are below full-time hours and comparing this to the number of hours worked in total.

The ABS defines full-time workers as those people who usually work 35 hours or more per week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more in the reference week.

As of the 2021 Census, underemployment in the catchment was experienced by 1,622 full-time-equivalent workers. Narrowing this down by occupation, it was found that there were around 59 full-time-equivalent workers who were underemployed for potential relevant on-site occupations within the Catchment Area, as shown in Table 17. The top relevant occupations of underemployment included concreters, Metal Fitters, Machinists and Other Miscellaneous Labourers and Electricians.

The latent capacity analysis is a snapshot in time, and it provides only an indication of the potential pool of underemployed workers within relevant occupations for construction projects. Going forward, there is likely to be competition for jobs from other projects outside the Catchment Area. In addition, the current market conditions (i.e., low unemployment rate, shortage of overseas workers, and supply chain issues) may contribute to a lower level of underemployment within the Catchment Area. Thus, this latent capacity should not be assumed to be static and may not be fully available for utilisation. There is also potential that some of the people unemployed in other occupations could have relevant skill sets that would make them capable of taking on construction/building work, it is estimated that a further 20% could come from these potential workers.

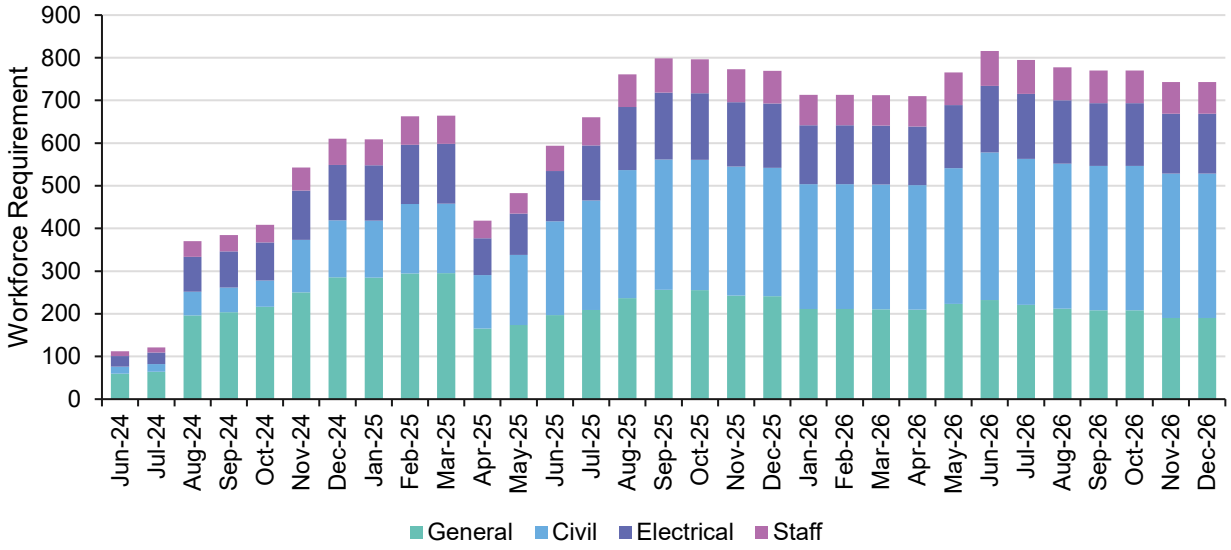
Table 17 Latent capacity for relevant on-Site occupations (2021)

	Catchment Area
Latent Workers FTE relevant jobs (on-site and off-site)	59
Full-Time Equivalent jobs	
Top Four Relevant On-Site Occupations by Latent Capacity (FTE)	
Other Miscellaneous Labourers	2.3
Metal Fitters and Machinists	2.2
Concreters	1.9
Electricians	1.3

Source: ABS (2021); Urbis (June 2024)

5.4.5. Competing projects workforce demand

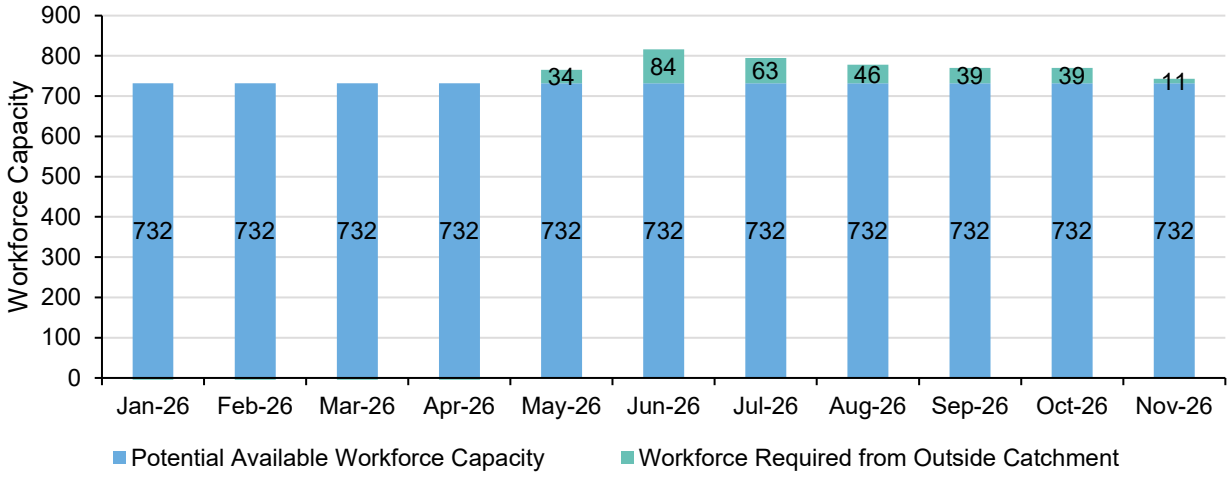
Figure 11 Projected catchment workforce peak requirement



Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External; Urbis (September 2024)

Figure 11 illustrates the construction requirements for major renewable energy projects proposed, approved or under construction that may be competing from a workforce demand perspective with projects in the Catchment Area. Peak construction employment required to deliver the planned renewable projects in the Catchment Area is approximately 816 jobs, occurring in June 2026. These projects, in conjunction with the proposed development at the subject site, given their scale and duration, will draw on both local and non-local workers (i.e. fly-in, fly-out or drive-in, drive-out).

Figure 12 Employment Capacity over the Proposed Development Timeline



Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External; Urbis (September 2024)

Figure 12 highlights the available workforce capacity and the staff shortage with the relevant qualifications within the Catchment Area over the construction phase of the proposed Deniliquin East BESS development. The available workforce has been calculated using 2021 ABS Census data for the full-time equivalent latent capacity (448) in conjunction with the unemployed residents with relevant qualifications in the Catchment Area (284). Upon the commencement of the project in January 2026 to April 2026, an oversupply of qualified staff is anticipated in the Catchment. As total workforce demand is anticipated to reach a peak of 816 workers in June 2026, there is anticipated to be a shortage of available workforce in the Catchment with the relevant qualifications. The undersupply of workers is then anticipated to decrease as competing projects reach completion and some additional workers are no longer required.

Over the proposed project timeline, there is an anticipated undersupply of workers within the Catchment Area to accommodate the workforce demand from the myriad projects. Forecasts are indicative. They are based on 2021 ABS Census data (the latest available data). Some companies with projects in the Catchment may prefer to bring in their own workers or expertise from outside the Catchment Area. This has not been adjusted for.

5.4.6. Short-term accommodation

An assessment of short-term accommodation facilities within the subject site's surrounding regions indicates a supply of 1,331 rooms.

Discussions with accommodation providers indicate that long-term contractual arrangements exist between companies requiring temporary accommodation for workers surrounding Deniliquin. While most operators are open to accommodating short-term construction workers, they will hold a proportion of their stock to make it available for tourist visitors.

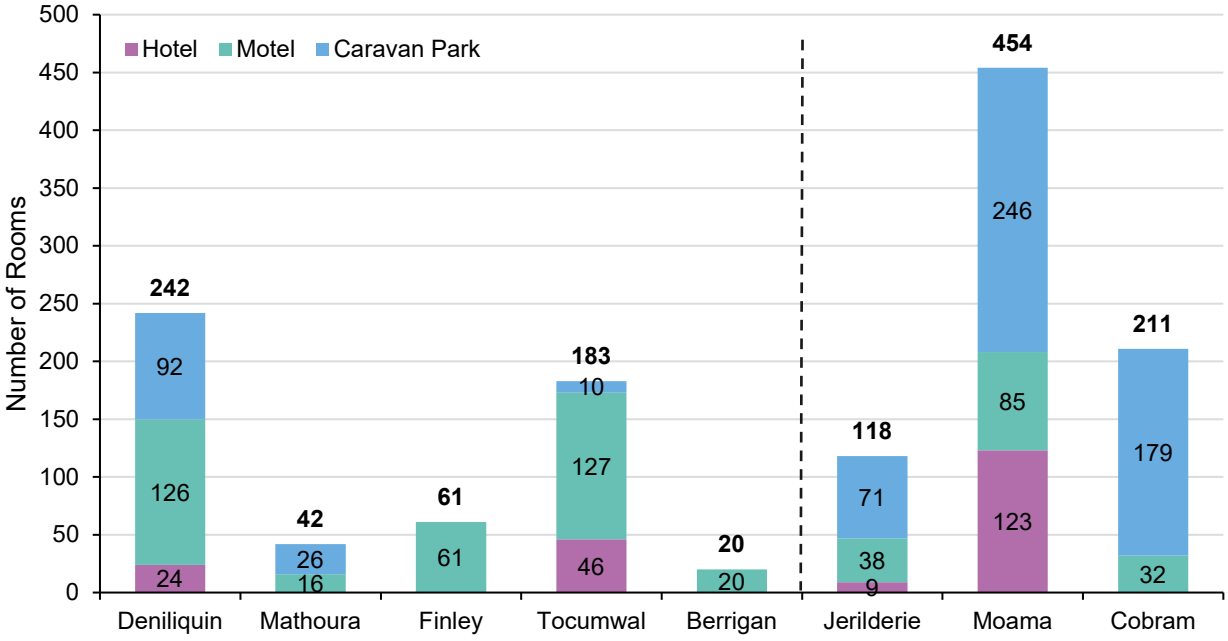
It will be necessary to seek short-term accommodation for the proposed development construction workforce beyond Deniliquin. Approximately 986 rooms are beyond a 45-minute drive from the subject site.

Figure 13 illustrates short-term accommodation supply by suburb within the surrounding region. An assessment of the following townships has been carried out:

1. Deniliquin (5km to 12.5km from the subject site – <10-minute drive time)
2. Mathoura (up to 42km from the subject site – 31-minute drive time)
3. Finley (up to 50 km from the subject site – 34-minute drive time)
4. Tocumwal (up to 70km from the subject site – 48-minute drive time)
5. Berrigan (up to 73km from the subject site – 48-minute drive time)
6. Kanoonma (up to 75km from the subject site – 49-minute drive time)

7. Moama (up to 80 km from the subject site – 58-minute drive time)
8. Cobram (up to 85km from the subject site – 66-minute drive time)
9. Jerilderie (up to 88km from the subject site – 56-minute drive time)

Figure 13 Catchment area short-term accommodation



Source: External Operators; Urbis (June 2024)

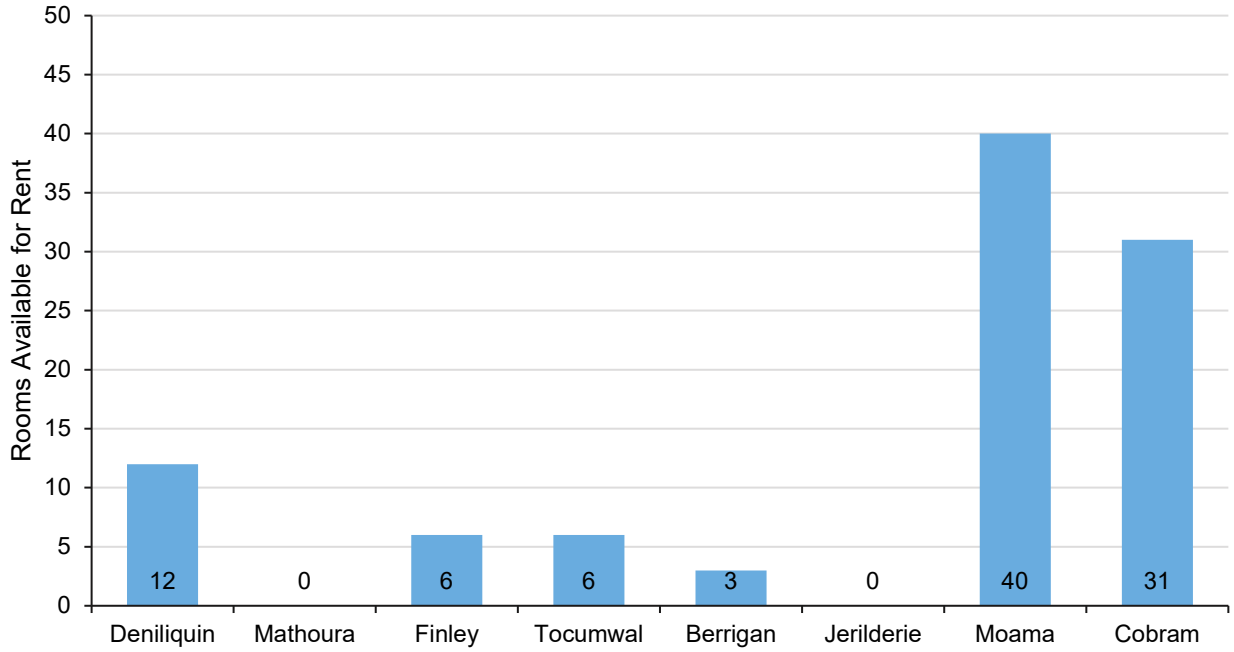
Due to the timing and number of temporary workers, there will be an increasing requirement for accommodation further away from the subject site in suburbs like Tocumwal, Jerilderie, Moama, and Cobram. Workers will commute to the proposed development each day. In addition to short-term accommodation, private rental market accommodation could also be considered.

As illustrated, there is a trade-off between distance from the subject site and availability of short-term accommodation, which will need to be considered. Only 25% of short-term accommodation rooms are within a ~50 kilometres drive of the subject site, suggesting that some workers will be required to travel further distances to the subject site.

During the 11-month construction period, there will be a maximum availability of around 266 beds across the Deniliquin and the surrounding areas listed above. This would represent 20% of the total short-term accommodation room supply (assuming one bed per room).

The BESS construction will increase demand for short-term accommodation facilities within the catchment area. Additionally, the increased presence of workers will also inject retail spending into the local economy.

Figure 14 Number of Available Private Accommodation Rooms



Source: External Operators; Urbis (June 2024)

As of June 2024, 40 vacant properties were advertised for rent, equating to a total supply of 98 rooms in surrounding townships. According to SQM Research, vacancy rates in Deniliquin are very low, remaining below 0.5% since July 2020 and currently at 0.2% in May 2024. These low vacancy rates demonstrate a strong demand for rental accommodation within the region.

Due to the competition for short-term accommodation within the region (both from tourists and other developments requiring short-term accommodation), the private rental market may be necessary to meet accommodation needs. This would arise due to the timing of works during the construction phase of the proposed BESS development or peak tourism periods.

As illustrated by Figure 14 the suburbs closest to the subject site have the lowest number of available beds. Surrounding townships have been assessed, and a trade-off exists between available beds and travel times. Therefore, planning for the proposed development workforce will need to consider this trade-off.

5.4.7. Short-term accommodation constraint

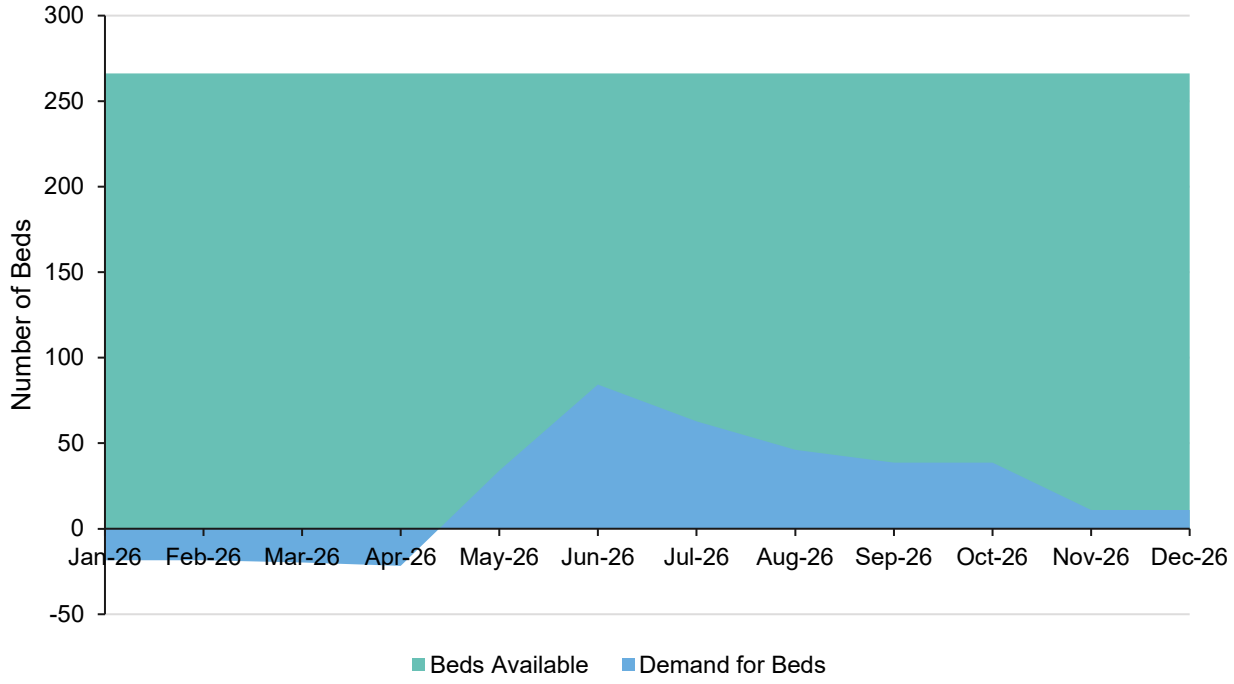
Scenario 1 Minimum workers sourced from outside catchment

Figure 15 illustrates the workforce accommodation gap within the Catchment Area under Scenario 1. Scenario 1 indicates that over the proposed development timeline, there will be approximately 266 beds available. The Catchment Area is anticipated to have a sufficient workforce to meet a large portion of the workforce demand over the proposed development timeline, with just 3% on average required from outside the Catchment. This Scenario assumes that many jobs have skills that are transferable and sufficient training on the job is supplied to supplement skills available in the currently available workforce. At the peak of construction in June 2026, the Catchment is forecast to have an oversupply of around 182 beds.

Scenario 1 Site implications

Under Scenario 1, additional workforce accommodation beyond the short-term accommodation likely to be available already is unlikely to be required for the subject site.

Figure 15 Scenario 1 Workers from outside the catchment to short-term accommodation gap

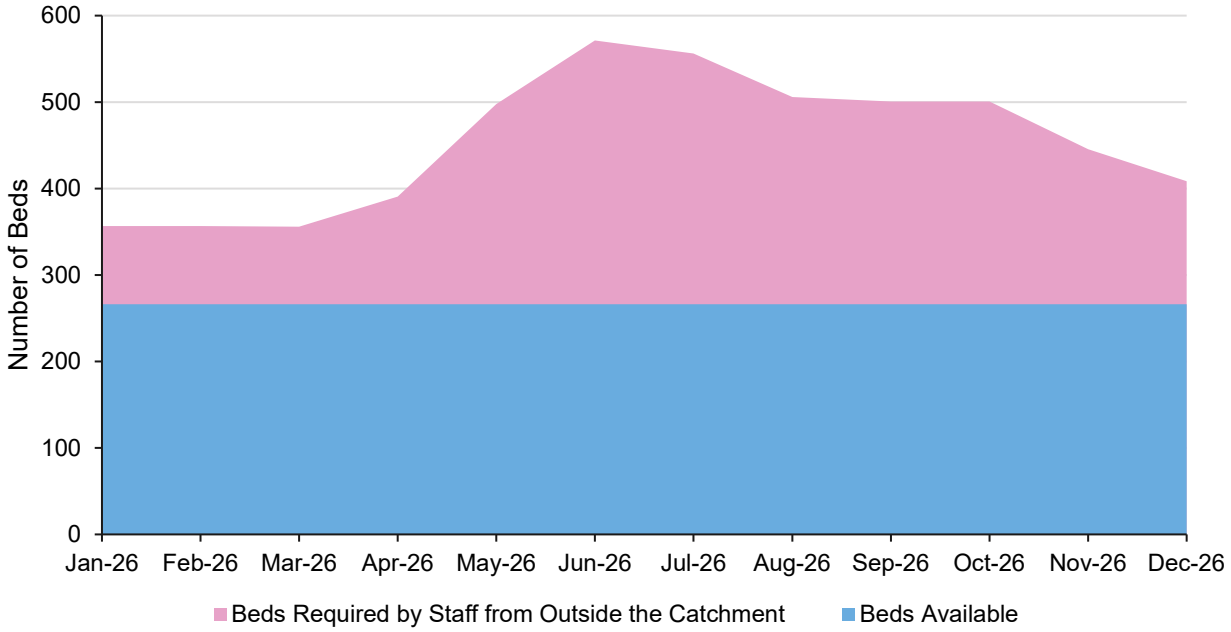


Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (September 2024)

Scenario 2 High portion of workers sourced from outside catchment

Scenario 2, shown in Figure 16, assumes that approximately 60% of the total workforce demand (including competing projects) will be hired from outside of the Catchment Area based on the requirement and staging of occupations in line with what will be required at the subject site. In this scenario, approximately 357 beds are required in the Catchment upon the commencement of the proposed development at the subject site, resulting in a shortfall of approximately 90 beds from within the Catchment Area. As total workforce demand increases to a peak of 571 additional staff from outside the Catchment in June 2026, there is anticipated to be a shortfall of approximately 305 beds in the Catchment Area. Therefore, alternative solutions will need to be provided for temporary accommodation on or around the subject site due to the likely shortage of available beds, assuming competing projects also hire around 60% of workers from outside the Catchment Area. The scale is examined in the subject site implications.

Figure 16 Scenario 2 Potential employment hired from outside the catchment compared to available beds



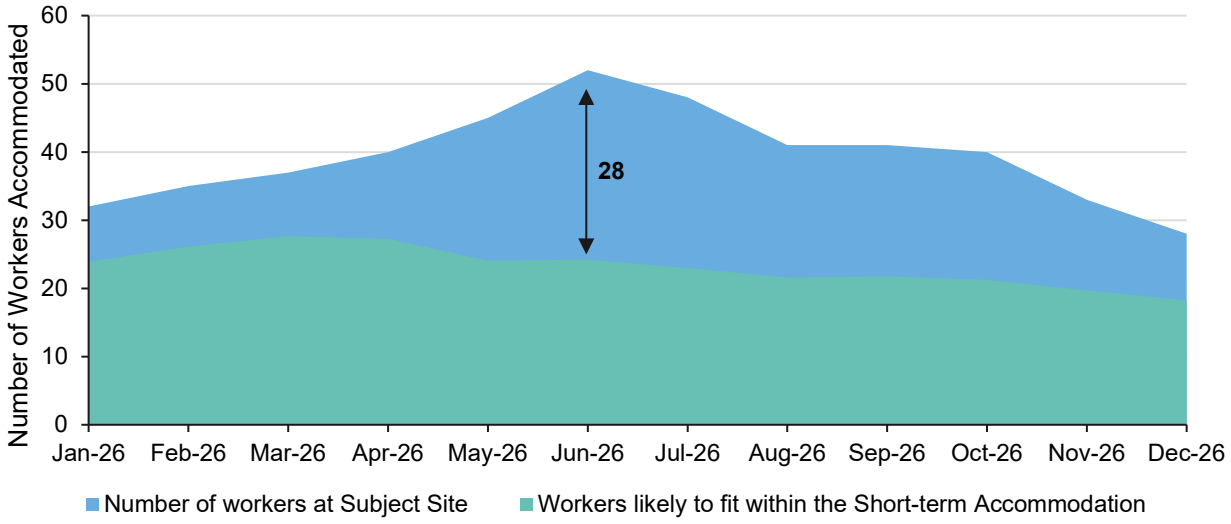
Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (September 2024)

Scenario 2 Site implications

Looking specifically at the subject site, the peak employment is 52 direct workers. Based on the types of employment available as of the 2021 Census, up to 28 of these workers would need to come from outside the Catchment Area. Under Scenario 2, a portion of these workers are unable to be accommodated within the Short-Term Accommodation examined above.

Under Scenario 2, it was found that there was a shortage of beds compared to potential incoming workers if, on average, 60% of the workforce was brought into the catchment by all the construction project operators. Applying the wider Catchment percentages to the subject site and distributing jobs across the timeline, it was found that the area in blue in Figure 17 is the number of workers who may not be able to be accommodated in existing Short-term accommodation within the Catchment. This shortage ranges from 8 workers to a peak of 28 workers who could require accommodation. Options for how the subject site could house these additional workers are included in the section on Alternative Accommodation Options for the subject site.

Figure 17 Scenario 2 Site worker accommodation potential outcome

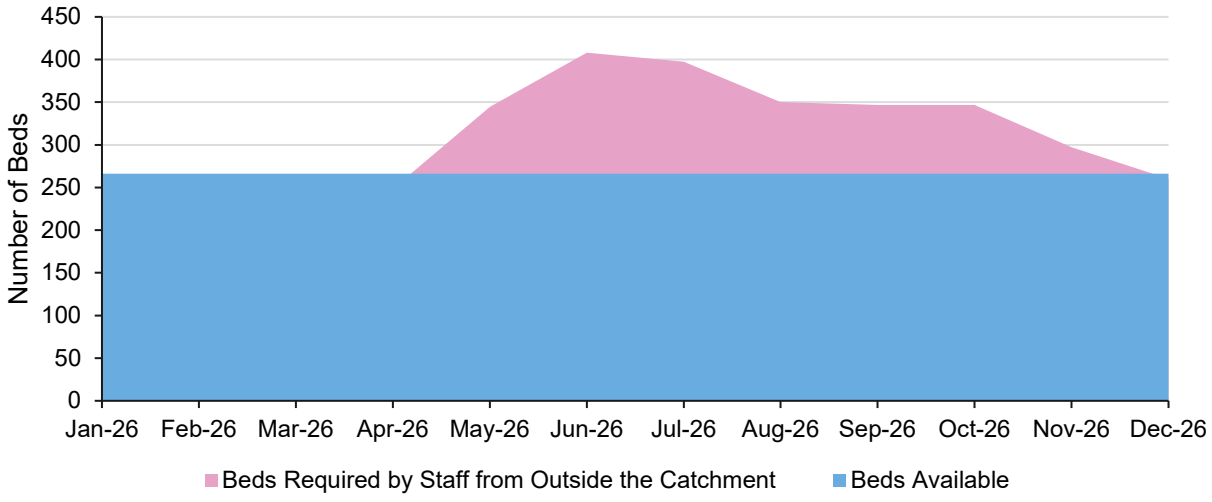


Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (September 2024)

Scenario 3 Moderate number of workers sourced from outside catchment

Scenario 3, shown in Figure 18, assumes that approximately 40% of the total workforce demand (including competing projects) will be hired outside the Catchment Area. In this scenario, approximately 213 beds are required in the Catchment upon the commencement of the proposed development at the subject site, resulting in a surplus of roughly 52 beds from within the Catchment Area. As total workforce demand increases to a peak of 408 additional staff from outside the Catchment in June 2026, there is anticipated to be a shortfall of approximately 142 beds in the Catchment Area. Therefore, alternative solutions will need to be provided for temporary accommodation on or around the subject site due to the likely shortage of available beds, assuming competing projects also hire around 40% of workers from outside the Catchment Area. The scale is examined in the subject site implications below.

Figure 18 Scenario 3 40% of potential employment hired from outside the catchment compared to available beds



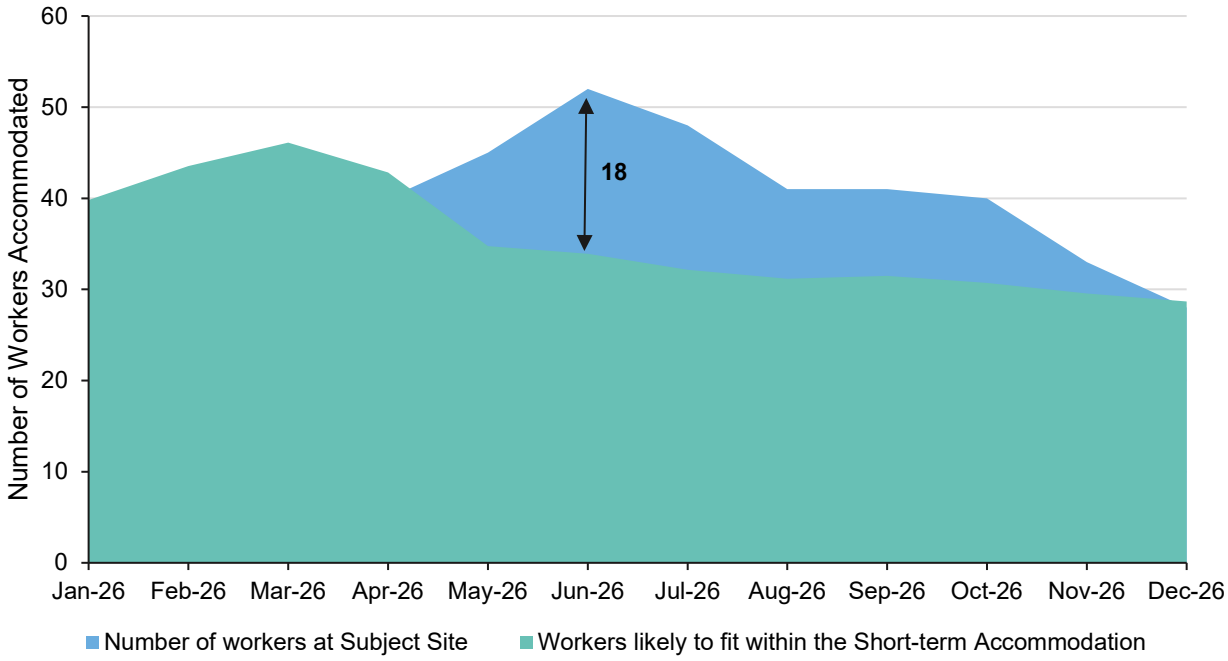
Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (September 2024)

Scenario 3 Site implications

Looking specifically at the subject site, Under Scenario 3, it was found that there was a shortage of beds compared to potential incoming workers for approximately seven months between May 2026 and November

2026. Applying the wider Catchment percentages to the subject site and distributing jobs across the timeline, it was found that the area in blue in Figure 19 is the number of workers who may not be able to be accommodated in existing Short-term accommodation within the Catchment. This shortage ranges from 3 workers to a peak of 18 workers who could require accommodation. The section on Alternative Accommodation Options for the subject site includes options for how the subject site could house these additional workers.

Figure 19 Scenario 3 Subject site worker accommodation potential outcome



Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (September 2024)

It must be noted that by not including competing projects that are located approximately 150-200 kilometres from the proposed development at the subject site, which may potentially compete for employees with the proposed development at the subject site, there is increased risk to the outcome.

5.4.7.1. Alternative accommodation options to solve the gap for the subject site

Understanding that the Proponent has a preference to seek offsite accommodation for the workers at Deniliquin East BESS and the benefits this can create for the wider community Urbis have looked at two additional accommodation options for the 150 kilometres Catchment analysis.

Option 1 - Airbnb

While 20% of workers could take Short-term accommodation in hotels/motels, caravan parks, and cabins, Airbnb was not included in the Short-term accommodation analysis and, therefore, is an option for the subject site. Table 18 shows the list of Airbnb rooms available in the Catchment by closest suburb.

Table 18 List of Airbnb options in the catchment

Property Suburb	Number of Facilities	Number of Bedrooms
Deniliquin	9	22
Mathoura	3	8
Finley	2	15
Tocumwal	16	54
Berrigan	5	6

Property Suburb	Number of Facilities	Number of Bedrooms
Jerilderie	2	3
Moama	30	94
Cobram	11	27
Total	78	229
20% of the Total	16	46

Source: Airbnb; Urbis (August 2024)

Urbis have calculated 20% of the total number of rooms available from Airbnb in the Catchment. This equates to 46 rooms across 16 facilities. This would cover the workers requiring accommodation under both Scenario 2 and 3. The number of rooms available on Airbnb is counted as of July 2024, and this will need to be monitored closer to construction commencement to understand the availability of rooms at this point. It was noted, however, that of the hosted accommodation, many of the hosts within these locations have been hosting for several years; therefore, this is likely to represent a good approximation of potential availability.

Option 2 - Purchasing existing accommodation

As an alternative to renting Airbnb facilities, there is potential to purchase an existing motel/hotel facility in the Catchment Area that provides accommodation to the potential workforce at the subject site. A possible subject site available for purchase at current is located at 2-6 Mitchell Street, Mathoura. It is being advertised at a price of $1,350,000. The motel comprises 16 units and includes two self-contained two-bedroom apartments with various rooming configurations, comprising twin, family, and two bedrooms. This project was not included in the existing supply as it currently does not have an operator. However, if purchased by the Proponent, this motel has the potential to supplement the short-term accommodation as shown in Table 19 while also averting any costs related to renting Airbnb and potentially some of the other short-term accommodation facilities.

Table 19 Airbnb options current cost sample in the catchment available from Jan-2025 to Nov-2025

Name	Suburb	Bedrooms	Price
Cadell Cabin	Mathoura	1	$45,361
Cadell Cabin	Mathoura	1	$45,342
Cadell Cabin	Mathoura	1	$45,342
Rental Unit	Echuca	2	$73,892
Cadell Cabin	Mathoura	1	$45,342
Coonara Bunk Cabin Rooms	Tocumwal	1	$9,236
Wilga Farm House	Tocumwal	5	$124,337
Coonara Farm Stay Cabin	Tocumwal	1	$19,183
Sunset Villas Cobram Retreat	Cobram	4	$155,069
Regency Court Motel	Cobram	1	$53,470
Total			**$616,574**
18 Room Average			**$34,254**
20 Room Total			**$685,082**

Source: Airbnb; Urbis (August 2024)

Note: Airbnb did not provide availability for 2026; hence, 2025 was substituted. Costs are, therefore, likely to vary from what is included in the Table 20.

If the motel at 2-6 Mitchell Street, Mathoura, was purchased by the Proponent, it has the potential to fully supply the required workforce in Scenario 3 while having additional rooms available during Months 1-4 and 8-12 of the project. Therefore, this approach could also avert short-term accommodation costs associated with using Short-term accommodation (hotels, motels, cabins and caravan parks). The rooms not occupied by the subject site workforce could also be offered to those working at competing developments in the Catchment Area.

Looking at Scenario 2 to calculate the averted value of the motel rooms at the subject site. Firstly, this assessment applied the spare rooms for each month after the Gransolar demand was taken out to the 272 room nights required over the project timeline. This is a total of 1,824 room nights for all workers across all nights over the construction time frame.

Table 20 Scenario 2 - Additional room nights available for potential motel purchase

	Jan-26	**Feb-26**	**Mar-26**	**Apr-26**	**May-26 to Jul-26**	**Aug-26**	**Sep-26**	**Oct-26**	**Nov-26**	**Dec-26**	**Total**
Rooms Available per month	12	11	11	7	0	1	1	1	7	10	Max 12
Days in month	31	28	31	30	30-31	30	31	30	31	30	272
Additional Room nights available	368	312	331	218	0	17	25	38	208	307	1,824

Source: Urbis (September 2024)

This assessment then applied the average room rate of $143 per night. This provides a total of ~$244,407 in additional averted costs from purchasing the motel at 2-6 Mitchell Street rather than renting other forms of short-term accommodation in the Catchment Area for the required workforce. Negotiation to lower room rates may be possible for longer-term stays.

In total, the averted costs from the purchase of the motel could be equal to $685,082 (cost of alternative Airbnb accommodation) plus $244,407 (cost of alternative motel accommodation), which equates to $929,489. Assuming purchase and sale prices are similar, if the Other Costs relating to the sale, purchase, and running of the motel do not exceed $929,489, this could be a superior option based on the 150 kilometres radius.

Table 21 High-level costs versus averted costs and return on potential motel purchase

	Costs	**Averted Costs/Return**
Motel Purchase	$1,350,000	
Other Costs - Stamp Duty, Land Tax, Agency costs on sale, other purchase costs, duties on purchase of business, capex, opex etc.	TBA	
Accommodation Costs Averted		$929,489
Sale Price		$1,350,000

Note: Legal, valuation and financial advice should be sought when considering a purchase. This analysis does not form part of the scope of work and is, therefore, just an illustration of the potential benefits associated with this option. Source: Urbis (September 2024)

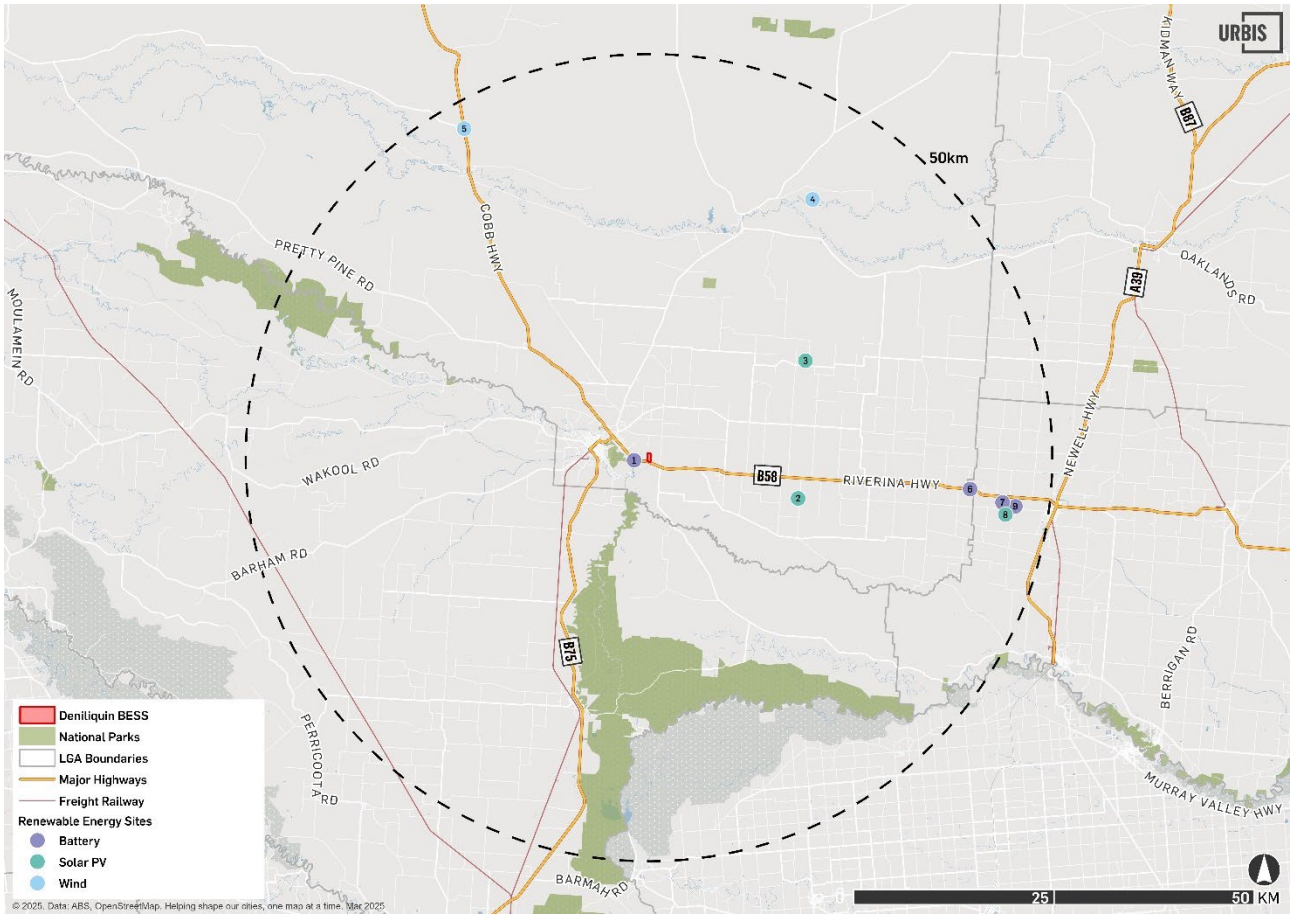
5.5. THE 50 KM CATCHMENT

While the 150 kilometres Catchment offers insight into the larger region, this is unlikely to fully show the potential impact in a smaller area, and potential workers are unlikely to want to complete a 1.5-hour drive time both to and from work. This section was, therefore, added to support the preparation of an insight-informed data-driven bid for the delivery of a BESS in the Deniliquin region considering:

- The optimal Catchment for worker safety and comfort.
- Local employment capacity that the proposed development can draw upon within the Catchment.
- Major projects that the proposed development will be competing with for local employment and accommodation within the Catchment.
- Availability of Short-term Accommodation within this Catchment to accommodate workers.
- Minimal impact solution for accommodation where more than 20% of Short-Term Accommodation within the Catchment is required across all projects.

5.5.1. Catchment definition

Figure 20 Catchment map



Source: Urbis (March 2025)

For the purposes of this workforce accommodation study, we have defined a catchment based on an approximate 45-minute drive around the subject site as shown in Figure 20. This catchment encompasses all major renewable energy projects surrounding the subject site. Of these seven competing projects within a 45-minute drive time of the subject site, only one other project is likely to coincide with the development of the subject site and, therefore, will be competing for the available workforce and short-term accommodation.

5.5.2. Competing projects workforce demand

The 45-minute drive time Catchment was used to determine the projects potentially competing with the subject site as well as the potential short-term accommodation that could be used to temporarily house workers during project construction. A 45-minute drive time is considered to be the optimal drive time in terms of safety for workers going to and from the work subject site.

5.5.2.1. Methodology

The number of workers and project timing for each of the seven projects were sourced from project website and approval documents. To determine the ramp-up of workers to peak construction jobs and tapering down after peak, we used estimates of employee numbers from other similar sized and type projects and applied the portions to the appropriate projects. We then applied a risk/probability of commencement rating based on the stage the project is in at current. All the projects were compared to the Construction timing for the subject site, which is set to be over the period from January 2026 to November 2026. It was found that only one project could potentially overlap with the timing of the subject site in terms of dates of expected construction. This project is the Tarleigh Park Solar Farm located at 260 Parfreys Road Deniliquin, which is due to commence in and finish in 2025 and finish in 2027. This project has approval; however, it gained that approval in 2018 (six years ago) and, therefore, a small risk factor of 5% was applied to the reported workforce of 150 workers. Tarleigh Park Solar Farm is included in the analysis as it will have accommodation needs at the same time as the subject site.

5.5.3. Site non-local workforce requirement

Table 22 illustrates the construction worker requirements for the subject site split by expected Specialist Workers and Civil/Mechanical Workers over the proposed development timeline. Based on the Proponent's experience in procuring the workforce for similar projects, it was found that they were generally able to source all the civil/mechanical workers locally, while Specialist workers have been more difficult to source from the local population.

Table 22 Subject site required workforce over the proposed development timeline

Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
Onsite Total Workers	5	15	22	32	50	52	52	38	34	9	4
Specialist Workers– HSE/QA/Electrical/Grid (Specialty workers likely from outside of the region)	3	9	12	15	32	34	41	29	32	9	4
Civil/Mechanical Workers – (Local Contractors May Be Possible)	2	6	10	17	18	18	11	7	2	0	0

Source: Gransolar (December 2024)

Table 23 highlights the cumulative worker requirements of the various projects within the Catchment. It ultimately provides the number of outside workers that are likely to enter the Catchment Area for all projects over the construction phase of the proposed Deniliquin East BESS development. The table first calculates the total catchment workforce required by the Deniliquin East BESS and other competing projects. These were summed together to get the Total Catchment workforce requirement. At the peak, there is a requirement for 162 workers in May-26.

The split between the non-local and local workers was calculated using the likely portion of workers, which will be Mechanical/Civil compared to Specialist workers using the proportions applied to the subject site in Table .

Upon the commencement of the Deniliquin East BESS project in January 2026, approximately 82 workers are anticipated to be required from beyond the catchment. This is expected to increase to the 137 staff required by July 2026 as construction in the Catchment peaks. The number of workers needed from beyond the catchment is anticipated to decrease as the project progresses towards completion and additional workers are no longer required.

Table 23 Employment capacity over the proposed development timeline

	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26
Workforce Requirement for Competing Projects	123	143	134	123	112	101	90	79	67	56	45	34
Subject site Workforce Requirement	5	15	22	32	50	52	52	38	34	9	4	0
Total Catchment Workforce	128	158	156	155	162	153	142	117	101	65	49	34
Portion of Local and Non-local Workers Required by Month												
Month	1	2	3	4	5	6	7	8	9	10	11	12
Proportion of Workforce Hired Locally (%)	40%	40%	45%	53%	36%	35%	21%	18%	6%	0%	0%	0%
Proportion of Workforce Hired Outside the Catchment (%)	60%	60%	55%	47%	64%	65%	79%	82%	94%	100%	100%	100%
Non-Local Workforce Requirement												
Number of Non-Local Workforce Required subject site Starts Jan-26 Month 1	3	9	12	15	32	34	41	31	32	9	4	0
Number of Non-Local Workforce Required in Competing Projects Stars Sep-25 Month 5	79	93	106	101	105	101	90	79	67	0	0	0
Number of Non-Local Workforce Required	**82**	**102**	**118**	**116**	**137**	**135**	**131**	**110**	**99**	**9**	**4**	**0**

Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External; Urbis (December 2024)

5.5.4. Short-term accommodation

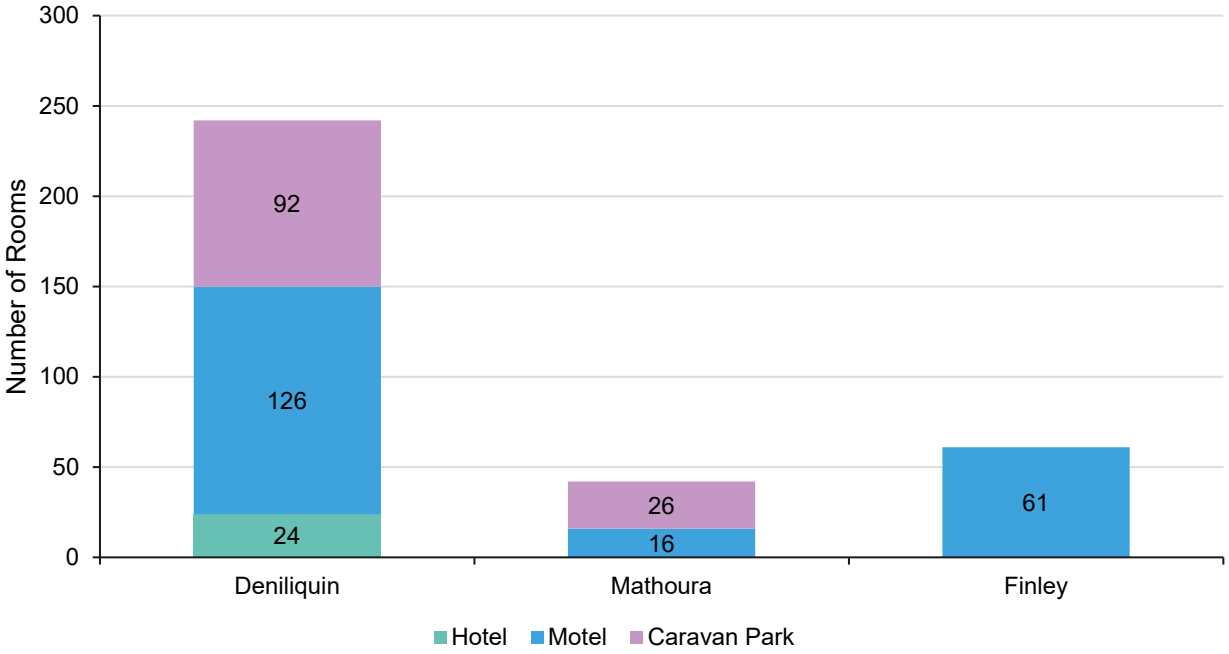
An assessment of short-term accommodation facilities within the Catchment reveals a total supply of 345 rooms. These facilities are distributed across several locations, including Deniliquin, which is situated 5 to 12.5 kilometres from the subject site, equivalent to less than a 10-minute drive; Mathoura, located 42 kilometres away with a 31-minute drive time; and Finley, 50 kilometres away, requiring a 34-minute drive. Figure 21 provides a detailed breakdown of short-term accommodation supply by suburb within the Catchment, highlighting the distribution of available rooms across these areas.

Discussions with accommodation providers indicate long-term contractual arrangements exist between companies requiring temporary accommodation for workers surrounding Deniliquin. While most operators are open to accommodating short-term construction workers, they will hold a proportion of their stock to make it available for tourist visitors.

Due to the timing and number of temporary workers, it is likely there will be a requirement for accommodation slightly further away from the subject site in the town of Moama, which is approximately 45-55-minute drive from the subject site.

Throughout the 11-month construction period of the Deniliquin East BESS, there will be a maximum availability of around 69 beds across Deniliquin and the surrounding towns within the Catchment. This represents 20% of the total short-term accommodation room supply (assuming one person per room).

Figure 21 Catchment area short-term accommodation

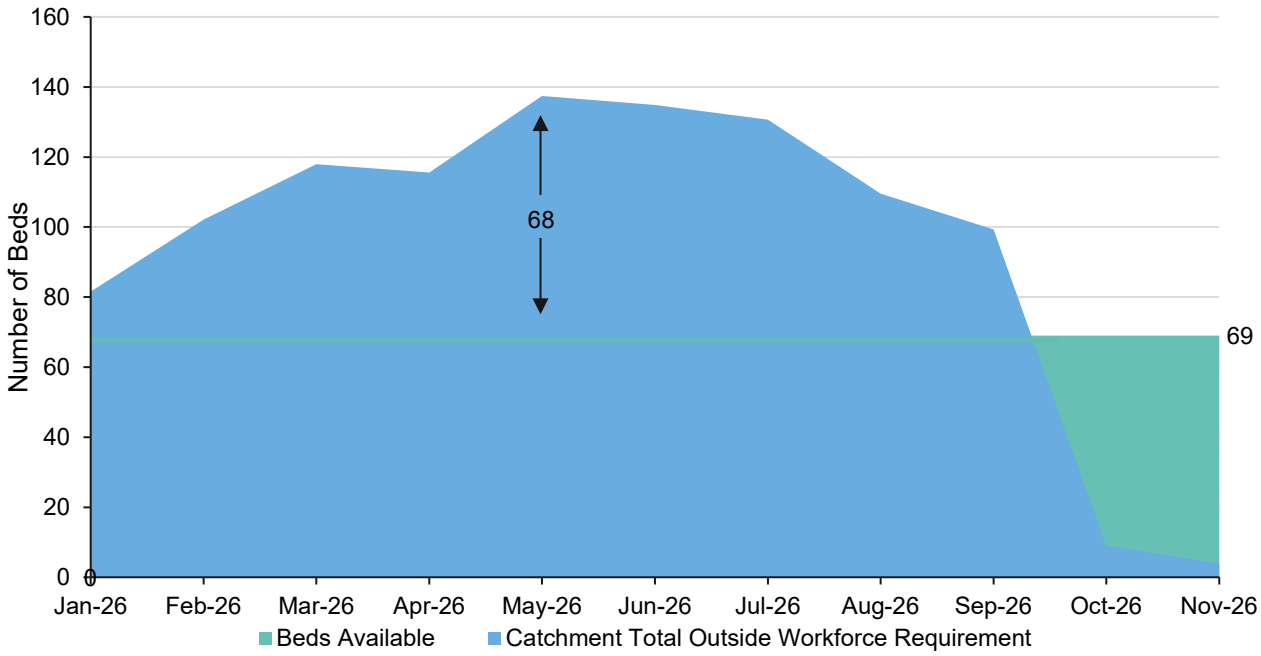


Source: External Operators; Urbis (December 2024)

5.5.5. Workforce accommodation gap solutions

Figure 22 illustrates the 20% of available workforce accommodation, shown in green, within the Catchment Area compared to the expected non-local workers who will require accommodation, shown in blue. The Catchment is anticipated to have insufficient workforce accommodation to meet all the workforce demand from January 2026 to September 2026, based on taking 20% of short-term accommodation within the Catchment. At the peak, 137 workers are required from beyond the Catchment in May 2026; the Catchment is, therefore, forecast to have an undersupply of around 68 beds during the peak month of construction activity.

Figure 22 Workers from outside the catchment to short-term accommodation gap



Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (December 2024)

5.5.6. Accommodating the remaining workforce

Table 24 shows that from January 2026 to September 2026, workforce accommodation is expected to be undersupplied within the 45-minute drive time Catchment of the subject site. This section explores securing accommodation in the next closest town along the highway, in the suburb of Moama, approximately 45-50 minutes from the subject site. There are approximately 454 short-term accommodation rooms in the suburb of Moama. As many Short-term Accommodation operators hold a proportion of their stock to make it available for tourist visitors, we have only assumed a 20% proportion of this stock as being available. This equates to 91 rooms available for workforce accommodation. At the peak of worker requirements, there would be a requirement of 68 workers outside the 45-minute Catchment. Assuming both Tarleigh Park Solar Farm and Deniliquin East BESS accommodated their remaining workforce at Moama, the two projects would only take 15% of the existing short-term accommodation at the peak of the shortfall, which is well below the 20% slated as tolerable to maintain a healthy tourism market.

The timing of other projects around the Moama area were checked to see if their timing was during the critical months for the subject site of January 2026 to November 2026 and no projects were found to be aligned with this timing.

Adding Moama will provide sufficient accommodation for the non-local workforce to be fully accommodated from January 2026 to September 2026, with October and November 2026 already covered within the Catchment. The Proponent intends to run a shuttle bus services between the town of Moama to the subject site to transfer their workers safely every day to work. Based on the portion of non-local workers at the subject site compared to total non-local worker requirements in the Catchment, the Proponent would need to take between 4% and 32% of the demanded accommodation space at Moama. The increasing portion is due to Tarleigh Park Solar Farm ramping down its construction worker demand prior to Deniliquin East BESS as it is expected to commence five months prior.

Table 24 Workers from outside the catchment to fill short-term accommodation gap

	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26
Number of Non-local Workforce Required	82	102	118	116	137	135	131	110	99	9	4	0
20% Short-term Accommodation Supply within the Catchment	69	69	69	69	69	69	69	69	69	69	69	69
Workforce Accommodation Gap (-shortfall /+surplus) within Catchment	-13	-33	-49	-47	-68	-66	-62	-41	-30	60	65	69
20% Short-term Accommodation within Moama	91	91	91	91	91	91	91	91	91	91	91	91
Workforce Accommodation Gap (-shortfall /+surplus), including Moama	78	58	42	44	23	25	29	50	61	-	-	-
Site Proportion of Workers Accommodated beyond Catchment	4%	9%	10%	13%	23%	25%	31%	28%	32%	-	-	-
Subject site Non-Local Workforce Accommodation need in Moama	3	5	4	6	5	6	9	14	20	0	0	0

Source: Cordell Connect Construction Database; New South Wales Government; Victorian Government; REMPLAN; Alt Energy; External Operators; ABS; Urbis (December 2024)

In summary, additional workforce accommodation beyond 20% of the short-term accommodation likely to be available within a 50-minute drive time of the subject site is unlikely to be required for all the projects in the Catchment over the expected construction period of the Deniliquin East BESS between January 2026 and November 2026. A shuttle bus can be used from Moama to Deniliquin to safely take any workers who locate in this town to the worksite. This maximum number of workers this is likely to involve is 20 workers at the peak for 1 month.

5.5.7. Conclusions

Given the key considerations of worker safety and comfort it is considered that the 45-minute drive time catchment is the most valid and practical.

The workforce accommodation plan is, therefore, to house the majority of workers within Short-Term Accommodation in the 45-minute Catchment and bus in the remaining workers from Moama. The bus will be required for nine months and provide for up to 20 workers during the month of September 2026. As the number of Short-term Accommodation units used by all projects in the catchment is less than 20% of available Short-term accommodation, the cumulative impact is considered to be low.

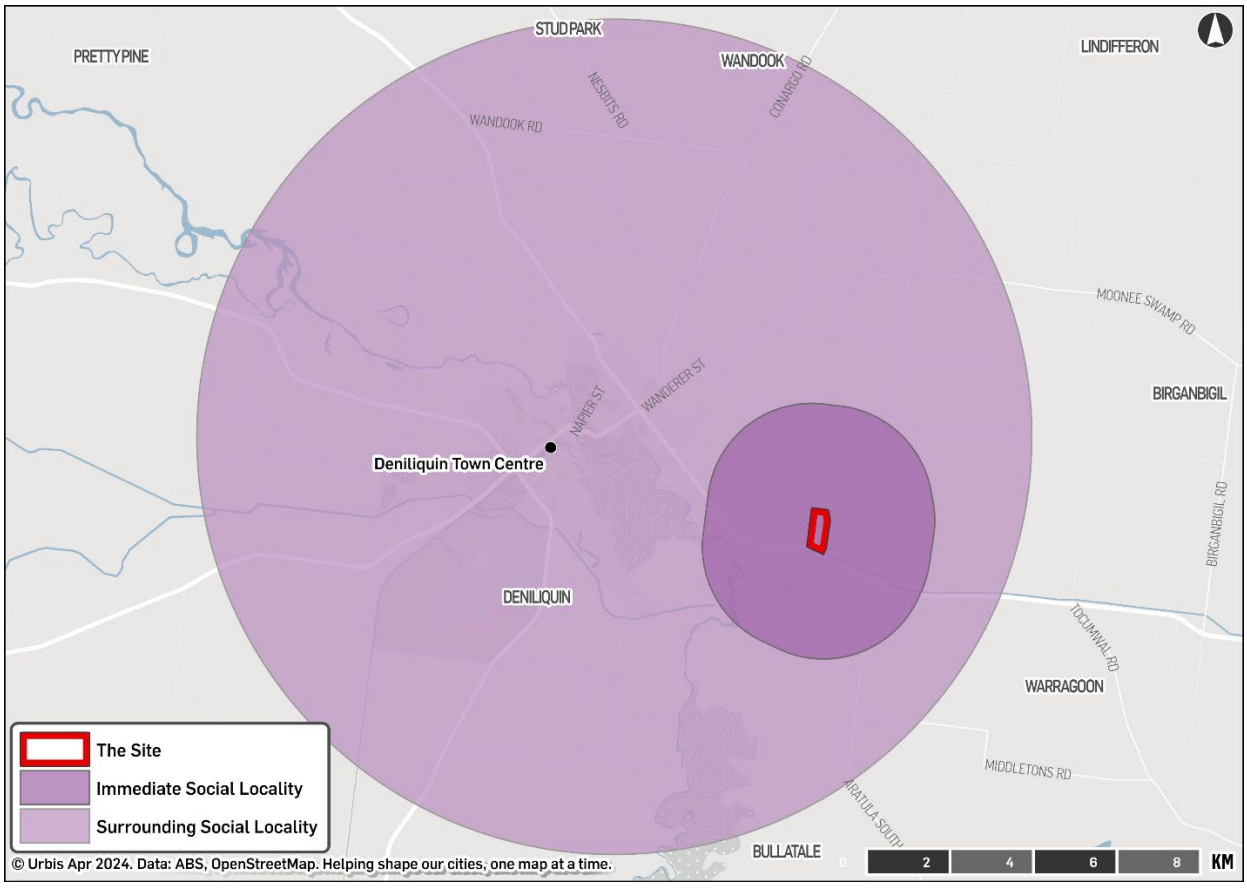
6. SOCIAL LOCALITY

A social locality helps identify the scale and nature of the proposal's likely social impacts and the likely impacted groups.

This proposal's likely social locality (shown in Figure 23) was determined based on a review of the proposal, surrounding context and consultation outcomes. The social locality considers two key areas and likely impacted groups. These include:

- **Immediate social locality**: This area includes the residents within 2 kilometres of the proposal who may be directly impacted during construction and operation, such as potential noise impacts and change to visual character.
- **Surrounding social locality**: This area includes workers and residents within the Deniliquin town centre and the surrounding rural area. These groups may be impacted by the temporary increase in workers living in the Deniliquin town centre during construction. These groups are also likely to experience long-term benefits associated with the operation of the proposal and community benefits delivered as part of the proposal's Voluntary Planning Agreement (VPA).

Figure 23 Social locality



Source: Urbis, 2024

7. SOCIAL IMPACT ASSESSMENT

This chapter provides a ranking of the identified social impacts of the proposal. It is structured by the social impact categories outlined in the SIA Guideline (DPHI 2023) – as shown in Table 25 below.

7.1. ASSESSMENT APPROACH

Each impact is assessed according to the risk assessment methodology applied in the SIA Guideline Technical Supplement. This methodology assesses the significance of each potential social impact by comparing its magnitude against the likelihood of occurring.

This methodology and associated assessment parameters are outlined in the tables below.

Table 25 Social impact category definitions

Social impact category	Definition
Way of life	Including how people live, how they get around, how they work, how they play, and how they interact each day
Community	Including composition, cohesion, character, how the community functions and people's sense of place
Accessibility	Including how people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation
Culture	Both Aboriginal and non-Aboriginal, including shared beliefs, customs, values and stories, and connections to Country, land, waterways, places and buildings
Health and wellbeing	Including physical and mental health, especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, and changes to public health overall.
Surroundings	Including ecosystem services such as shade, pollution control, erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity
Livelihoods	Including people's capacity to sustain themselves through employment or business, whether they experience personal breach or disadvantage, and the distributive equity of impacts and benefits
Decision-making systems	Particularly whether people experience procedural fairness, can make informed decisions, can meaningfully influence decisions, and can access complaint, remedy and grievance mechanisms.

Source: SIA Guideline (DPHI 2023, p.19)

Table 26 Significance matrix

		Magnitude level				
		1	2	3	4	5
Likelihood level		Minimal	Minor	Moderate	Major	Transformational
A	Almost certain	Low	Medium	High	Very high	Very high
B	Likely	Low	Medium	High	High	Very high
C	Possible	Low	Medium	Medium	High	High
D	Unlikely	Low	Low	Medium	Medium	High
E	Very unlikely	Low	Low	Low	Medium	Medium

Source: DPHI, 2023, SIA Guideline: Technical Supplement, p. 13

Table 27 Likelihood levels

Level	**Definition**
Almost certain	Definite or almost definitely expected (e.g. has happened on similar projects)
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Source: SIA Guideline: Technical Supplement (DPHI 2023, p. 12)

Table 28 Magnitude levels

Magnitude level	**Meaning**
Transformational	Substantial change experienced in community wellbeing, livelihood, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% of a community.
Major	Substantial deterioration/improvement to something people value highly, either lasting indefinitely or affecting many people in a widespread area.
Moderate	Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time or affecting a group of people.
Minor	Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable.
Minimal	Little noticeable change was experienced by people in the locality.

Source: SIA Guideline: Technical Supplement (DPHI 2023, p. 13)

Table 29 Dimensions of social impact magnitude

Dimension	Explanation
Extent	Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any vulnerable people? Which location(s) and people are affected? (e.g., near neighbours, local, regional, future generations).
Duration	When is the social impact expected to occur? Will it be time-limited (e.g., over particular project phases) or permanent?
Intensity or scale	What is the likely scale or degree of change? (e.g., mild, moderate, severe)
Sensitivity or importance	How sensitive/vulnerable (or how adaptable/resilient) are affected people to the impact, or (for positive impacts) how important is it to them? This might depend on the value they attach to the matter; whether it is rare/unique or replaceable; the extent to which it is tied to their identity; and their capacity to cope with or adapt to change.
Level of concern/interest	How concerned/interested are people? Sometimes, concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or intensity.

Source: SIA Guideline: Technical Supplement (DPHI 2023, p. 12)

Mitigation and enhancement measures

Social impacts are assessed before and after implementing mitigation measures (for negative social impacts) and enhancement measures (for positive social impacts). These measures can take different forms and may be incorporated in the proposed development's design, planning, construction, or operational stage. Mitigation measures, enhancement measures, and SIA recommendations are summarised in Section 8.1.

SIA recommendations

SIA recommendations are proposed throughout the impact assessment to enhance positive social impacts further and mitigate negative ones. These measures have not been included in the assessment of mitigated or enhanced impacts but have been recommended as additional measures for consideration by the Proponent to improve the social outcomes of the proposal. Mitigation and enhancement measures, which are committed to and have informed the assessment of mitigated and enhanced social impacts, are detailed in the 'mitigated' and 'enhanced' sections of each social impact throughout this section and summarised in Section 8.1. SIA recommendations are identified separately from the mitigated and enhanced assessment for each impact and are summarised in Section 8.2.

7.2. ASSESSMENT OF IMPACTS ACROSS CATEGORIES

This section assesses the proposal's key impacts per the categories set out in the SIA Guideline.

7.2.1. Way of life

Guideline definition: *Way of life, including how people live, how they get around, how they work, how they play, and how they interact each day.*

7.2.1.1. Social cohesion and short-term accommodation availability during construction

Affected stakeholders	Duration of impact
Surrounding residents and workers in the immediate locality	Construction
Assessment – without mitigation: Low negative	

The impact of newcomers is an important social consideration, in relation to services capacity, housing availability as well as local social cohesion, and community sensitivities about what this means for the long-term composition and cohesiveness of a community. Ensuring equitable access to services and housing is essential for supporting the day-to-day lives of individuals living or visiting an area.

Renewable energy projects in regional NSW often require additional construction workers on a fly-in fly-out (FIFO) or drive-in drive-out (DIDO) basis due to a lack of available or adequately skilled workers in the local area. Depending on the scale of a project and the associated workforce requirements, these projects can impact local housing availability, value, affordability, and the size and length of time the workforce is required to stay.

During consultation (refer to Section 4), the local community and the Edward River Council raised concerns related to potential impacts on local housing availability during construction, given the potential for a large, temporary construction workforce population to be housed in Deniliquin. The Council specifically noted the importance of considering potential cumulative impacts on housing availability within Deniliquin, as several renewable energy projects in the surrounding area may exacerbate this impact.

The Proponent has advised that during peak construction months, the proposal is expected to require up to 52 direct jobs at the peak over the expected construction timeframe of 12 months (refer to Section 5.2.1). Of these, it is expected that approximately 18 jobs will be sourced locally (civil/mechanical workers), and 34 jobs will be sourced externally (specialist workers) (refer to Section 5.5.3).

Based on previous work undertaken in the area, the Proponent has advised that most mechanical and civil workers can be sourced within a 45-minute drive catchment from the subject site (the catchment). However, specialist construction workers will likely need to be sourced from outside the catchment and will require temporary accommodation within the catchment during the construction period. The EIA estimates that 41 externally sourced construction workers will be needed during the peak construction period (refer to Section 5.3).

To understand how the proposal's construction workforce housing need can be met, the Workforce and Accommodation Study (refer to Section 5.3) looks at the availability of short-term accommodation and private rentals within the catchment. The Accommodation Study found that 345 short-term accommodation rooms are available within Deniliquin, Mathoura, and Finley, far exceeding the needs required for the proposal's construction workforce. To mitigate the proposal's impact on local short-term accommodation availability, only 20% of the 345 short-term accommodation rooms were considered available. This is based on the average vacancy rates in the area.

The Accommodation Study also considers the proposal's cumulative construction workforce housing needs and other competition projects within the catchment that are expected to be constructed at a similar time. The EIA identifies one competing proposal, Tarleigh Park Solar Farm, located at 260 Parfreys Road Deniliquin. The cumulative assessment found that the expected combined externally sourced construction workforce will result in minor exceedances of 20% of available short-term accommodation within the catchment. Consequently, the Accommodation Study also considered Moama, located a 50-minute drive from the subject site. It found that only 4.6% of available short-term accommodation in Moama was required to house the additional workers.

The presence of newcomers in a local community and the inflow/outflow of temporary residents during construction may change a community's way of life, cohesion, and function—including actual and perceived impacts. However, it is acknowledged that the proposal's externally sourced construction workforce would be a small number. Added to a short construction timeframe, the proposal is unlikely to impact community cohesion during construction.

Considering the above, the proposal's impact on social cohesion and housing availability during construction is assessed as **low negative**, given the unlikely likelihood and minor magnitude.

The Proponent has advised that an additional eight jobs will be required on an ongoing basis to support the operation of the proposal. Given the small number of expected workers and the fact that community stakeholders raised no concerns regarding the operational workforce impacting local housing availability, the operational workforce is expected to have a **negligible** impact on housing availability.

Assessment – with mitigation/ enhancement: Low negative to negligible

The Proponent intends to implement several mitigation measures to reduce further potential impacts on short term accommodation availability in Deniliquin and surrounding towns. Ensuring that no more than 20% of available short term accommodation rooms are occupied by the proposal's construction workforce will mitigate negative impacts on visitors to the local area. This measure also ensures positive economic impacts for the local short-term accommodation providers by accommodating rooms that are typically vacant. The economic benefits of the proposal on short-term accommodation providers are considered in the assessment of 'contributions to the local economy' in Section 7.2.7.1 of this SIA.

In the scenario where construction workers are required to be housed in Moama, located 5 minutes outside the catchment, the Proponent has advised that a daily shuttle bus service will be provided from Moama to the subject site to ensure worker safety and comfort. Further, to maximise the number of locally sourced workers, the Proponent has expressed a willingness to train and upskill the local workforce to meet their project requirements, as they have done for previous projects in the area.

It is essential to note that while the proposal may contribute to cumulative impacts on short term accommodation availability, the proposal will generate a relatively small number of workers (compared to more extensive projects), thereby reducing the magnitude of this impact. Given this, the mitigated impact on housing availability during the proposal's construction is assessed as **low negative to negligible**, depending on the number of workers that can be sourced locally.

During consultation (refer to Section 4.1), Council also recommended the Proponent develops a Workforce Accommodation Strategy, specifically considering the cumulative impacts on short-term accommodation from the proposal and other renewable energy projects in the area. While this has been considered within the EIA (refer to Section 5), it is important for the Proponent to reconsider these cumulative impacts prior to commencing construction should construction timeframes change.

SIA recommendations – additional social mitigations

- Ensure the construction workforce does not occupy more than 20% of available short-term accommodation in the local area.
- Prior to selecting a construction partner, prepare a Workforce Accommodation Plan or Strategy that assess the potential cumulative impacts on local short term accommodation availability if additional competing renewable energy projects emerge with similar construction timeframes to the proposal.
- Consult with local short term accommodation providers to align peak construction periods outside of months when they experience peak occupancy rates, such as when major events occur (e.g. Deni Ute Festival).
- Provide guidance for the workforce on expected behaviours through a Code of Conduct. Inform the community about measures in place to support harmonious dynamics between workforce and local community.
- Continue to consult with the Edward River Council regarding the pipeline of proposed renewable energy projects in the local area. This will enable the Proponent to adequately consider cumulative construction impacts as part of their Workforce Accommodation Plan and/or stage their construction activities to minimise overlapping construction periods with competing renewable energy projects.
- Engage with local employment and training organisations to ensure that potential local employees are communicated with opportunities associated with the proposal through various channels.

7.2.1.2. Temporary increase in demand for social infrastructure and services

Affected stakeholders	Duration of impact
Immediate social locality, including residents, workers and future construction workers	Construction
Assessment – without mitigation: Low negative	

Social infrastructure comprises the facilities (e.g. healthcare, schools, public facilities, parks, and community support), spaces, services and networks that support communities' quality of life and wellbeing.

Deniliquin is economically and socially important to the broader region as it acts as a regional service centre drawing people from surrounding villages, the Berrigan LGA and Murray River LGA. As highlighted in Section 3.2, Deniliquin is serviced by a range of local social infrastructure and services, with other district-level facilities and services available in nearby regional centres (e.g. hospitals). The importance of social infrastructure was highlighted by the Council, noting that sporting clubs, recreation spaces, arts and cultural groups, and programs help create a strong sense of belonging and community for residents of Deniliquin and satellite communities (refer to Section 3.4).

The Council identified existing social infrastructure gaps and access challenges, noting that Deniliquin currently lacks access to health services (particularly GPs), tertiary education facilities, and upskilling and apprenticeship opportunities (particularly in the trade services sector). While the Council explained they have strategies to address some of these issues (refer to Section 4.1) the proposal's incoming construction workforce could strain existing service providers and exacerbate these gaps and challenges.

Specifically, the proposal would introduce a temporary workforce (estimated to be 34 jobs sourced from outside the area) to support the construction phase. Like the existing community, the incoming worker population would likely require access to local social infrastructure and services to meet their needs, which may strain the availability of existing facilities and services. Therefore, the proposal's incoming

worker population would likely impact how the existing community access social infrastructure and services. The Council raised this matter as a concern (see section 4.1).

Considering the existing context and the Council's concerns, this unmitigated impact is assessed as **low negative,** given its possible likelihood and minimal magnitude. It is noted that this impact would be temporary and only experienced during the construction phase of the proposal.

Assessment – with mitigation/ enhancement: Low negative to negligible

The Proponent intends to minimise the number of externally sourced construction workers hired during the construction period. This would minimise the impact that an increased local population would cause on social infrastructure and services.

The Proponent is also discussing the development of a community benefit-sharing scheme with the Council. This refers to an agreement, such as a Voluntary Planning Agreement (VPA), between the Proponent and the Council to determine the amount and distribution of financial contributions from the Proponent to offset potential negative impacts and share any benefits associated with the proposal. As discussed in section 4.1, the Council and the community have identified several community benefit opportunities.

The implementation of a VPA has the potential to increase the supply of social infrastructure while providing the Council with the autonomy to distribute the funding where it is needed most to support the needs of the existing and incoming worker population. The details of the proposed community benefit scheme are further assessed in the assessment of 'community investment' (refer to Section 0).

During the consultation, the Council recommended that the proposal prepare a Letter of Intent, a non-legally binding document outlining the community benefits or financial contributions a proponent intends to provide through the VPA. This allows for greater flexibility, given that community and the Council priorities can change between lodgement and approval and allows the Council to coordinate community benefits associated with other renewable energy projects. Considering this, the mitigated impact is assessed as **low negative to negligible**, given the likely likelihood and minimal magnitude.

SIA recommendations – additional social mitigations

- Ensure service providers and venues are well informed of the incoming workforce to plan for it.
- Continue to consult with the Council to confirm the potential community benefits to be considered for the Community Benefit Sharing Scheme/VPA.
- Prepare a Letter of Intent, a non-legally binding document outlining the community benefits or financial contributions a proponent intends to provide through a VPA. This allows for flexibility, given that community and Council priorities can change between lodgement and approval and allows the Council to coordinate community benefits associated with other renewable energy projects.
- Prepare the final VPA, ensuring it is informed by Council consultation.

7.2.2. Community

Guideline definition: *Community, including composition, cohesion, character, how the community functions, resilience, and people's sense of place*.

7.2.2.1. Contributions to the renewable energy sector

Affected stakeholders	Duration of impact
Residents in the immediate and surrounding social locality.	Operation
Assessment – without mitigation: High positive	
As outlined in Section 3.3., NSW is progressively phasing out coal-fired generation power stations and shifting towards more renewable energy sources. In the national context, a 2023 survey found that over 6,700 Australians, 87% of individuals, would like to see moderate to significant changes in the future for energy transition (CSIRO, 2023). This is evident across State and local strategic plans, as delivering more renewable energy projects is a key priority (refer to Section 0). Specifically, the NSW Electricity Infrastructure Roadmap (NSW Government, 2020) aims to attract $32 billion of private sector investment in renewable energy projects by 2030, including long-duration energy storage. The proposal closely aligns with these strategic objectives. The proposal would assist in balancing supply and demand on the power grid, enhancing reliability and efficiency by storing excess energy and releasing it when needed. These systems help reduce reliance on less environmentally friendly power sources and minimise greenhouse gas emissions (Huawei, 2023). As such, BESS infrastructure is an integral part of the shift to renewable energy, providing greater stability to the community's electricity provision. BESS also alleviates the pressure on the grid, a significant challenge in developing the renewable energy sector (Time2Energy, 2023). One community member mentioned a recent power outage in the area, inquiring if the proposal would provide more reliable electricity (refer to Section 4.1). The proposed BESS will be connected to the existing energy infrastructure, specifically the Deniliquin substation. It will be able to provide power to up to 28,000 local homes. This represents more than the number of homes in the Edward River LGA and the immediately adjacent LGAs of Berrigan, Murrumbidgee, and Murray River combined (approximately 18,000 homes combined). Consultation with Council representatives indicates that community sentiment towards energy projects in the area is generally positive, but more education on renewable energy is needed to ensure the community is adequately informed of the actual benefits and risks (refer to Section 4.1) Local residents who attended the community pop-up session reinforced this positive sentiment toward the BESS proposal; however, some expressed negative sentiments towards larger renewable energy projects (e.g., wind and solar farms). Given the provision of renewable energy and its contribution to achieving both State and local renewable energy objectives, this enhanced impact is assessed as **high positive**, given its likely likelihood and moderate magnitude.	
Assessment – with mitigation/ enhancement: High positive	
As described above, the proposal would contribute to the renewable energy sector by providing long-term storage of electricity, which is required to provide large amounts of reliable energy on demand.	

During the community pop-up session (refer to Section 4.4), a community member noted a recent power outage in Deniliquin and emphasised the importance of having access to reliable electricity. However, concerns raised by other attendees, such as radiation and solar flare-associated risks, suggest there are some misconceptions or a lack of knowledge relating to the benefits of BESS infrastructure.

Therefore, it is recommended to continue providing information to educate the local community on the benefits of BESS infrastructure and its broader contribution to the NSW renewable energy sector. During consultation the Council also raised increasing education as a recommendation for the Proponent (refer to Section 4.1). While the Proponent has already distributed some information to the local community through newsletters, community briefings, and the community pop-up session (see Engagement Outcome Report, Urbis, 2025), this should continue throughout the proposal's development timeframe.

Considering the above enhancement measures, the enhanced impact remains as **high positive**, given the likely likelihood and moderate magnitude. However, there are opportunities to enhance the proposal's perceived positive impact amongst the community, as outlined above and in the SIA recommendations below.

SIA recommendations – additional social mitigations

- Continue educating the local community about the role, function, and benefits of BESS projects. This could be included in future project newsletters and on the project website.

7.2.2.2. Increased opportunities for social value creation

Affected stakeholders	Duration of impact
Existing residents, businesses and workers in the immediate social locality.	Operation

Assessment – without enhancement: Medium positive

As the renewable energy sector matures, community benefit sharing is increasingly used to integrate projects into local communities positively, benefiting developers, councils and residents. As mentioned, community benefits are typically shared through a formal and legally binding agreement, such as a VPA between the Proponent and Council. A VPA aims to determine the amount and distribution of financial contributions from the Proponent to offset potential negative impacts and share any benefits associated with the proposal.

As mentioned in the policy context (refer to Section 3) a Community and Benefit Sharing Program for REZ in NSW (the Program) (EnergyCo, 2024) highlights potential benefits that can be shared with the local community through developer contributions. Examples include the provision of public or community services or infrastructure, health services, accommodation or housing, employment, skills and training programs, amongst others outlined in the Program. Furthermore, the Riverina Murray Regional Plan 2041 calls for investment in freight road networks, health infrastructure, planning for growth in regional cities, agribusiness, advanced manufacturing, and the protection and sustainability of the Murray River waterfront. Priorities for the Edward River LGA, as per the regional plan, include developing Deniliquin into a local centre through industry development and job creation and ensuring irrigated land is appropriately zoned and protected from inappropriate development.

While the proposal is not located within a REZ, there is an opportunity for the proposal to provide similar community or employment benefits through a VPA. Local strategic policies (refer to Section 3.2) acknowledge that Council funding and resources have been severely limited in recent years, leading to underinvestment in public spaces, infrastructure, and local policy development. These policies also

highlight the infrastructure and services that require additional investment to meet community needs. Specifically, Council's Open Space Strategy (2019) and Recreation Strategy (2019) highlight that many existing recreational facilities are aging or need replacement and that existing parks lack connectivity and activation through infrastructure and pop-up events.

As noted in Section 4, community and stakeholder consultation outcomes also highlight several types of social or community infrastructure and services that would benefit from additional funding. These include opportunities ranging from sponsorship of local sports groups or events, creation of community grants, to infrastructure upgrades (refer to Section 4). Additional social infrastructure and service gaps were identified by the Council and were assessed in detail as part of the assessment of 'temporary increase in demand for social infrastructure and services' (refer to Section 7.2.1.2).

The proposal will also likely provide employment benefits through providing local construction employment opportunities, given the Proponent intends to source as much of their construction workforce from the local area, as explained in detail in Section 7.2.1.1.

The Proponent has advised that they are committed to providing additional community infrastructure support and are in discussions with Council to develop a VPA. Considering this, the proposal is likely to generate community and employment benefits for the local community. Therefore, the unenhanced impact on community investment is assessed as **medium positive**, given its likely likelihood and minor magnitude. It is noted there is potential for long-term benefits for the local and community resilience should community investment continue into the operation phase of the project.

Assessment – with enhancement: High positive

As part of the proposal, the Proponent is submitting a Letter of Intent to enter into a VPA under Section 7.4 of the Environmental Planning and Assessment Act (EP&A Act) with Edward River Council. The Letter of Intent proposes, following the Renewable Energy Planning Framework, an annual payment of $150 per megawatt-hour (MWh) of energy produced, adjusted annually for inflation based on the Consumer Price Index (CPI), for the project's operational life. This enhancement measure aligns with the Council's preferences that were expressed during consultation (refer to Section 4.1).

The Letter specifies that these funds are intended to support community groups and sporting clubs, as the Council recommends. The Proponent also suggests directing these funds to the existing community grants program operated by Edward River Council and a potentially similar program run by Murray Irrigation Limited.

Facilitating investment in the local community would strengthen social cohesion and resilience by increasing the community's access to social infrastructure, services, and financial support. Given its possible likelihood and moderate magnitude, the enhanced impact is assessed as **high positive**. Should community investment continue into the project's operation phase, it could have potential longer-term benefits for local and community resilience.

SIA recommendations – additional social mitigations

- Develop and implement a stakeholder engagement and communication strategy so that residents can provide feedback throughout the construction period.
- Continue engagement with the Council and key stakeholders on the proposal's design, construction activities, benefit-sharing initiatives, and further opportunities to deliver local benefits to the local community and maintain a social licence to operate.

- Consider engaging communities in the definition of the community benefit fund to ensure the proposal identifies meaningful opportunities to deliver local benefits, as this is critical for establishing and maintaining a social license.
- Continue presence and consultation in the community during planning stages to increase the perception of influence.

7.2.3. Accessibility

Guideline definition: *Accessibility, including how people access and use infrastructure, services and facilities, whether provided by a public, private, or not-for-profit organisation*

7.2.3.1. Potential access impacts from increased construction traffic

Affected stakeholders	Duration of impact
Immediate and surrounding social locality	Construction
Assessment – without mitigation: Medium negative	

Regional areas typically don't have access to frequent and extensive public transport networks compared to urban areas. As a result, regional communities rely more on their local road network to access employment, social infrastructure and other services they require regularly. This is evident in the Deniliquin suburb and the Edward River LGA, as most residents travel to work in a private car, either as a driver or passenger and more than half of households have two or more registered vehicles (refer to Section 3.5). It also demonstrates an existing reliance on private vehicle transportation and the local road network.

The Transport Impact Assessment (TIA) prepared by Urbis (2025) used traffic counts to understand the existing volume of vehicles per hour (vph) passing the subject site during peak periods. This indicates the likely number of stakeholders who may be impacted by changes in the condition of the local road network during construction.

As discussed in Section 5.4.6, there is potential for construction workers to be accommodated within eight four regional towns, depending on short-term accommodation and private rental availability. However, it is assumed that most workers will likely be accommodated within the Deniliquin town centre.

The TIA (Urbis, 2025) notes that workers will have access to a shuttle bus service to and from work, but some workers may still travel in a light utility vehicle (i.e., personal car or Ute). Each shuttle bus will have the capacity for 20 workers and is intended to make two trips between the subject site and Deniliquin or another nearby town where workers are accommodated, significantly reducing the number of daily light vehicle trips. During peak construction, the TIA (Urbis, 2025) expects a total of 20 light vehicle (i.e., private cars and shuttle busses) and 50 heavy vehicle (i.e., trucks) trips per day, representing an approximate 1% % -10 % increase in traffic during peak periods. The temporary construction workforce (52 workers at peak) could impact the local road network through increased congestion and travel times in and around the Deniliquin town centre.

- The TIA (Urbis, 2025) notes that construction materials will be sourced from the Port of Melbourne and transported via road to the subject site. During construction, an increase in heavy vehicles would be generated to transport materials and machinery.
- Community stakeholders raised no concerns during the SIA field study (refer to Section 4) relating to access and the local road network. However, public safety concerns related to increased construction workforce travel and truck movements along the local road network may increase during construction.

Given that the temporary construction workforce's impacts on the local road network may be dispersed across several regional towns, the number of affected people would increase while the magnitude of the impact would be dispersed across a greater geographical area.

Considering the above, the unmitigated impact is assessed as **medium negative**, given the possible and moderate magnitude.

Assessment – with mitigation/ enhancement: Low negative to negligible

The TIA (Urbis, 2025) outlines several mitigation measures that would reduce the potential impact of construction workers on the local road network. Given these mitigation measures and the maximum number of vehicle trips per day, the TIA (Urbis, 2025) concludes that Riverina Highway will be able to accommodate the increase in traffic and will, therefore, have a minimal impact on the surrounding road network and key intersections in Deniliquin. The TIA (Urbis, 2025) also notes that the proposal is anticipated to generate minimal traffic impact during operation, given that one to three operational employees are expected to access the subject site regularly.

At this stage, some traffic-related issues remain unresolved, such as the extent of traffic-controlling measures required during the construction of the proposed access bridges, or the extent of cumulative traffic impacts associated with the construction of nearby development applications. The TIA (Urbis, 2025) outlines a detailed list of further mitigation measures that should be implemented at the post-SSDA approval and pre-construction stages.

Assuming the recommended mitigation measures are implemented, the mitigated impact is **low negative to negligible**, given the possible likelihood and minimal magnitude.

SIA recommendations – additional social mitigations

- Before construction commences, ensure all recommendations outlined in the TIA are implemented. Implement traffic mitigation measures as specified in the TIA.
- Utilising a shuttle bus service and enforcing carpooling policies among the workforce to get to and from the subject site may reduce daily project-related traffic volume. This may, in turn, mitigate public safety concerns arising from the additional temporary traffic, as the overall number of individual cars on the road would be reduced.
- Provide open and ongoing communication channels to inform the surrounding community of any changes in traffic conditions during construction.
- Undertake engagement with emergency services to gather their feedback on the proposal and promptly identify potential concerns regarding access.

7.2.4. Culture

Guideline definition: *Culture, both Aboriginal and non-Aboriginal, including shared beliefs, customs, practices, obligations, values and stories, and connections to Country, land, waterways, places and buildings*

7.2.4.1. Potential impact on Aboriginal objects and places

Affected stakeholders	Duration of impact
Aboriginal and Torres Strait Islander peoples who currently live within the surrounding social locality or have a connection to the land.	Construction and operation
Assessment – without mitigation: Low negative to negligible	
The construction and operation of any development should consider impacts on Aboriginal objects, the landscape, or the spiritual connection that Aboriginal people have with Country. As noted in the demographic profile (Section 4), Aboriginal and Torres Strait Islander people represent 4.9% of the study area population. The Aboriginal Cultural Heritage Assessment Report (ACHAR) by Urbis (2025) involved consultation with Registered Aboriginal Parties (RAPs) relevant to the study area. The RAPs did not provide specific comments about the subject site's significance during the report's preparation. The ACHAR found ground disturbance moderately high across the subject site, leading to a low to nil archaeological potential assessment. No known Aboriginal objects, declared Aboriginal places, or landscape features within the subject site that are considered sensitive to Aboriginal objects were identified within or likely to be within the subject site. Therefore, the ACHAR (Urbis 2025) concludes that construction is unlikely to cause either direct or indirect harm to Aboriginal objects or negatively impact intergenerational equity. Considering the ACHAR findings, the unmitigated impact is assessed as **low negative to negligible**, given its very unlikely likelihood and minor magnitude.	
Assessment – with mitigation/ enhancement: Low negative to negligible	
While the proposed works are unlikely to harm Aboriginal objects, the ACHAR states that should archaeological deposits be uncovered during subject site works, an Unexpected Finds Procedure and Human Remains Procedure must be undertaken to ensure that any finds are appropriately managed and mitigated. Assuming the procedures for unexpected findings are applied, the mitigated impact assessment remains **low negative to negligible,** given the very unlikely likelihood and minor magnitude.	
SIA recommendations – additional social mitigations	
▪ Continue engagement with RAPs throughout project delivery.	

7.2.5. Health and wellbeing

Guideline definition: *Health and wellbeing, including physical and mental health, especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, access to open space and effects on public health*

7.2.5.1. Potential amenity and health and wellbeing impacts during construction

Affected stakeholders	Duration of impact
Immediate neighbours and landowners in the immediate social locality, including residents along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane	Construction
Assessment – without mitigation: Low negative	
Exacerbated levels of noise or impacted air quality can impact on the way of life and physical and mental health of residents. Increased noise levels can impact an individual's sleep or ability to concentrate, while increased dust can impact an individual's health and wellbeing, particularly for those with respiratory-related health issues, such as asthma. Further, prolonged or extended periods of experiencing these types of amenity impacts has the potential to impact on individual's mental health. The construction of the proposed BESS would impact on local amenity and the physical and mental health of wellbeing of neighbouring residents through increased noise, dust and traffic. Increased traffic during construction also has the potential to impact individuals' ability to undertake everyday tasks, particularly in regional areas as they heavily rely on the local road network and private transportation. Impacts related to increased traffic during construction periods are assessed in Section 7.2.3.1 of this report. As discussed in the demographic profile (refer to Section 0), the most common long term health conditions experienced by Deniliquin residents are arthritis, mental health conditions and asthma. Further, there are 556 (or 7.9%) Deniliquin residents who identify as having a need for assistance due to disability, old age or a long-term health condition. This highlights several groups who would be vulnerable to amenity impacts, such as noise, dust and traffic, during the construction of the proposal. A Noise and Vibration Impact Assessment (NVIA) has been prepared by WSP (2025) to assess the severity and extent of construction noise impacts. The NVIA (WSP, 2025) identifies several nearby sensitive receivers (individuals or groups who are most likely to be impacted by construction noise) within a 2 kilometres radius of the subject site. This includes 11 residential properties and one non-residential subject site (a shed). Refer to the NVIA (WSP, 2025) for the full list and specific addresses for each sensitive receiver. Based on an assumed worst-case scenario, the NVIA (WSP, 2025) predicts that construction noise levels have the potential to result in a 'minor' exceedance of industry accepted noise management levels for up to nine nearby properties during the first three construction stages. Of these, one property (21354 Riverina Highway) is expected to have a more significant exceedance of above 10 dB. However, the NVIA (WSP, 2025) acknowledges these exceedances are only likely to occur during the first three construction stages, the duration of which is not specified. Amenity impacts relating to dust generated during construction activities has not been assessed at this stage and is therefore assumed to have a low impact on neighbouring properties.	

Considering the short periods of time and small number of individuals who are expected to experience construction related amenity impacts, the unmitigated noise impact during construction is assessed as **low negative**, given the likely likelihood and minimal magnitude.

Assessment – with mitigation/ enhancement: Negligible

Given the predicted noise impacts on some surrounding residents, the NVIA (WSP, 2025) recommends implementing a series of mitigation measures during construction works. The recommended mitigation measures are expected to reduce construction noise from 2 to 10 decibels. The NVIA (WSP, 2025) also provides recommendations to minimise potential cumulative noise impacts during construction, such as consulting with other developments within a 2-kilometre radius of the subject site to avoid undertaking high-noise-generating construction works simultaneously.

At the pre-construction stage, a project-specific Construction Environmental Management Plan will also be prepared and implemented prior to the construction certificate. Once specific construction methodologies are confirmed, this plan will include additional noise mitigation measures to reduce noise and dust.

The above mitigation measures are expected to reduce the magnitude of potential amenity impacts by minimising disruptive or unnecessary noisy works and the distribution of dust. Assuming these mitigation measures are implemented the proposal's construction is expected to have a negligible impact on local amenity.

SIA recommendations – additional social mitigations

- Consider preparing a Construction Noise and Vibration Management Plan to assess any potential cumulative impacts of surrounding developments.
- Prepare a project specific Construction Environmental Management Plan to minimise potential noise, dust and construction traffic impacts. This includes implementation of all reasonable and feasible recommendations provided within the Construction Environmental Management Plan.
- Provide a community liaison officer to liaise with the local community during construction. This will ensure that the local community is aware of the proposal updates and provide a point of contact for them should stakeholder complaints about increased noise or dust arise.

7.2.5.2. Amenity impacts related to operational noise

Affected stakeholders	Duration of impact
Immediate neighbours and landowners in the immediate social locality, including residents along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane	Operation

Assessment – without mitigation: Low negative

The operation of the proposal would likely result in long term amenity impacts on nearby residents, including noise and impacts. As mentioned in the assessment of 'amenity and health and wellbeing impact during construction' (refer to Section 7.2.5.1),

The NVIA (WSP, 2025) assess the proposals expected operational noise levels and the impact of this change on nearby sensitive receivers. Noise modelling undertaken without any mitigation measures indicates the proposal will comply with industry standard noise management levels for the day, evening

and nighttime periods at all receivers except for three properties where exceedances of up to 9 dB are predicted. The NVIA (WSP, 2025) notes that these exceedances require mitigation measures to be considered, these are discussed further in the mitigated assessment below.

The NVIA (WSP, 2025) also assesses the cumulative operational noise impacts associated with the proposal and the proposed Avenis BESS, located adjacent to the Deniliquin substation. It found that cumulative noise impacts are unlikely to exceed acceptable levels of operational noise at all sensitive receivers. However, it is important to note that this assessment is high-level given there is limited publicly available information on the proposed Avenis BESS. Given this, a more detailed assessment is recommended at a later stage to validate these findings.

The NVIA (WSP, 2025) has been undertaken based on several assumptions relating to the types of equipment that will be used during operation as these details are not confirmed at this stage. Therefore, a more detailed assessment would be required if equipment that is louder than those included within the modelling is used.

Considering the above, the unmitigated noise impact during operation is assessed as **low negative**, given its possible likelihood and minor magnitude.

Assessment – with mitigation/ enhancement: Low negative to negligible

The NVIA (WSP, 2025) provides several mitigation measure options to minimise predicted operational noise impacts. These are outlined in full in the NVIA (WSP, 2025). With the incorporation of these measures, it is predicted the proposal will be able to achieve compliant noise levels. However, it is noted that these mitigation measures need to be confirmed as the proposal progresses and the design is finalised.

Regarding cumulative noise impacts during operation, the NVIA (WSP, 2025) recommends that a more detailed assessment be undertaken should the surrounding Avenis development (or additional developments) proceed.

Pending further assessment, the mitigated amenity impact during operation remains as **low negative**, given the possible likelihood and minor magnitude. Assuming adequate mitigation measures are implemented, the proposal's amenity impacts related to operational noise would likely have a negligible impact.

SIA recommendations – additional social mitigations

- Implement all recommendations and mitigation measures provided in the Noise and Vibration Impact Assessment prepared by WSP (2025).
- Coordinate operational activities and mitigation measures across adjoining developments to help minimise impacts on surrounding residents.

7.2.5.3. Human safety risks

Affected stakeholders	Duration of impact
Existing and future residents, businesses, workers and visitors in the immediate and surrounding social locality.	Operation
Assessment – without mitigation: Low negative	

As noted in the SIA field study (refer to Section 4.1), community consultation activities revealed community concerns about potential human safety risks related to the proposed BESS, including fire risks and safety measures. One community member also raised concerns about the potential risks associated with solar flares and another mentioned concerns about radiation risks.

Fires can have health, and wellbeing impacts on individuals and vulnerable groups, including asthma exacerbations and chronic health problems if prolonged exposure. Fires can also trigger cardiovascular effects even with short-term exposure (Australia Government Department of Health and Aged Care, 2022). Bushfires have also been shown to increase mental health issues in local communities linked to evacuation and loss of property (Leviston et al., 2023).

As noted in the demographic profile (refer to Section 4), asthma is the third most common long term health condition, impacting 10.4% of the Deniliquin resident population. Therefore, these individuals are particularly vulnerable to potential health and wellbeing impacts associated with large, uncontrolled fires.

A Preliminary Hazard Analysis (PHA) conducted by Riskcon Engineering (2025) identifies potential hazards on-site due to the operation or storage of materials related to the proposal. The PHA (Riskcon, 2025) assessed different risks, including fire, toxicity, and property damage and accident propagation risks. Based on an assessment of these risks, as well as potential hazardous scenarios, and potential risks around the subject site, the PHA (Riskcon, 2025) classifies the proposal as potentially hazardous but permitted within the current land zoning for the subject site.

Further, as the subject site is located on 'bushfire prone' land, according to Edward River Council's Bushfire Prone Land Map (BPLM), a Bushfire Assessment Report (BAR) was prepared by Building Code & Bushfire Hazard Solutions (2025). This assessment identifies hazardous vegetation across the subject site and to the south and east on neighbouring lots that may increase the potential risk risks.

Considering the above, this unmitigated impact is assessed as **low negative** due to its unlikely likelihood and minor magnitude.

Assessment – with mitigation/ enhancement: Low negative to negligible

The PHA (Riskcon, 2025) provides several mitigations to minimise risks associated with the proposal. This includes mitigations linked to fire prevention measures and systems. Refer to the PHA (Riskcon, 2025) for the full list of recommended mitigation measures.

The BAR (Building Code & Bushfire Hazard Solutions, 2025) also provides recommended mitigation measures to minimise the risks of bushfires. This includes the provision of Asset Protection Zones to ensure the proposal has sufficient space to establish buffers between the proposal and the hazardous vegetation across the subject site to provide extra protection against bushfires. With the implementation of the recommended bushfire safety measures, the BAR concludes the proposal will provide a 'reasonable and satisfactory level of bushfire protection' to the proposal.

Additional safety measures were raised during community and stakeholder consultation (refer to Section 4). Specifically, one community members suggested the provision of a Rural Fire Services shed with a fire truck to improve actual and perceived fire safety for the public.

Assuming adequate mitigation measures are implemented at the pre-construction stage, the proposal is expected to have a **low negative to negligible** impact on human safety risks.

SIA recommendations – additional social mitigations

- Ensure consistent consultation with local Rural Fire Service (RFS). This collaboration will ensure ongoing compliance with bushfire safety measures, facilitate regular updates on fire risk management,

and provide the community with confidence in the project's commitment to safety and environmental stewardship.

- At the pre-construction stage, implement all reasonable and feasible mitigation measures recommended in the Bushfire Assessment Report and the Preliminary Hazard Analysis.

7.2.6. Surroundings

Guideline definition: *Surroundings, including ecosystem services such as shade, pollution control, and erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity.*

7.2.6.1. Perceived loss of productive agricultural lands

Affected stakeholders	Duration of impact
Existing residents in the immediate and surrounding social locality.	Operation
Assessment – without mitigation: Low negative	
The proposal is located in the Murray and Riverina region of NSW, within the Edward River LGA. The Riverina Murray Region is a productive agricultural land with valued rural and biodiverse lands, the Murray and Murrumbidgee rivers, and a network of interdependent communities. The proposal subject site is approximately 30 kilometres from the South West REZ, which is currently experiencing significant renewable project developments. Its surrounding areas are predominantly rural (refer to Section 3.1.2). According to the Agricultural Impact Assessment (AIA) prepared by Creating Greater (2024), the proposed subject site has been used for dryland grazing for about 30 years. Current land management practices involve occasional time-controlled rotational grazing of sheep. Due to the changed land use of the proposal from agricultural uses to a solar farm, there is potential for this to be perceived as a loss of productive agricultural land. As noted in Section 4, stakeholder and community consultation outcomes highlight that the community highly value productive agricultural lands and feels a need to protect them as the region accommodates an increasing number of renewable energy projects. The AIA (Creating Greater, 2024) also assessed the BESS' impact on adjacent agricultural land, and concluded that impacts on adjacent land, soil, and agricultural production in the region are minimal due to the relatively small size and low production value of the proposed BESS. As such, the loss of productive agricultural lands has been assessed as **low negative**, given its unlikely likelihood and minimal magnitude.	
Assessment – with mitigation/ enhancement: Low negative	
The proposed BESS will occupy approximately 3 hectares of a 40-hectare private landholding. Once the BESS is operational, the remainder of the subject site is intended to continue being used as a paddock for sheep grazing. While the loss of productive agricultural lands is limited on the proposed subject site, the Agricultural Impact Assessment (Creating Greater, 2024) recommends several mitigation measures to minimise land, soil and agriculture impacts.	

While the loss of productive land is limited, there is a potential local perception that the lost agricultural land may impact residents' livelihoods over the operational phase. Consequently, this impact is assessed as **low negative to negligible.**

SIA recommendations – additional social mitigations

- At the pre-construction stage, implement all reasonable and feasible mitigation measures recommended in the AIA (Creating Greater, 2024).
- Consider developing a land management plan to facilitate land and agricultural benefits during operation through post-decommissioning.
- Develop land management plans with landowners and local agricultural producers to investigate and implement sustainable land practices.
- Develop educational materials accessible to the local community to inform them about the function and role of BESS.
- Highlight the proposal's limited loss of agricultural land and provide information to the community about the decommissioning process.

7.2.6.2. Changed sense of place related to changes to visual landscape

Affected stakeholders	Duration of impact
Residents, businesses, workers and visitors in the immediate social locality.	Operation

Assessment – without mitigation: Low negative

The visual environment and landscape are essential components of people's surroundings. Changes to the visual environment or landscape, the loss of scenic aesthetics, or changes in land use, can impact the amenity within a place, influence a person's sense of place and impact community character.

Consultation activities (refer to Section 4) revealed strong community sentiments towards protecting productive agricultural lands, for both its economic and visual attributes. One nearby resident specifically noted concerns related to the loss of views from their property, noting it is one of their favourite things about living there. More broadly, Council acknowledges that BESS projects generally have a small footprint and minimal visual impacts to the landscape.

The BESS will occupy approximately 3 hectares of a 40-hectare private landholding currently used for low-intensity agricultural activities.

The Visual Impact Assessment (VIA) prepared by Urbis in 2025 evaluates the proposal's visual impact using a 'worst-case scenario' approach. The assessment found that, for all modelled views, the proposal is expected to have a generally low impact without mitigations. Additionally, the VIA highlights that the proposal is highly compatible with the existing visual environment and is appropriately co-located with existing infrastructure. It also notes that the proposal aligns with the NSW Government's strategic objectives and intended visual landscape of the South West REZ, located 30 kilometres from the subject site (refer to Section 0).

Considering community concerns and the proposal's impact on the sense of place of neighbouring properties related to changes in their visual landscape, the unmitigated impact is assessed as **low negative,** given its likely likelihood and minimal magnitude.

Assessment – with mitigation/ enhancement: Negligible
The VIA (Urbis, 2025) notes that the proposal includes visual mitigation measures through on-site landscape planting along the southern and western boundaries. This landscaping has been incorporated into the proposal's Site Plan and will help screen and minimise the proposal's visual impact using vegetation consistent with established vegetation patterns. The VIA concludes that the mitigated visual impact of the proposal is low and acceptable, given the minimal visual change and overall long-term compatibility with the surrounding visual character. Further, providing landscaping on the southern boundary will directly reduce the magnitude of potential visual impacts on the closest neighbouring property, thereby protecting their sense of place. The above mitigation measures also align with the recommendations provided by Council during consultation (refer to Section 4.1). Considering the above, the mitigated impact is assessed as **negligible**, given the reduced likelihood and magnitude.
SIA recommendations – additional social mitigations
▪ Continue stakeholder engagement to identify the risk of perceived visual impacts or if stakeholder concerns around visual impacts arise.

7.2.7. Livelihoods

Guideline definition: Livelihoods, including people's capacity to sustain themselves through employment or business, whether they experience personal breach or disadvantage, and the distributive equity of impacts and benefits.

7.2.7.1. Contribution to the local economy through increased employment opportunities and spending at local businesses

Affected stakeholders	Duration of impact
People employed in the construction and building maintenance industries in the immediate and surrounding social locality.	Construction and operation
Assessment – without mitigation: Medium positive	
A strong local economy and access to employment opportunities have significant impacts on the livelihoods of individuals and businesses and their ability to participate and contribute within their communities. The proposal will generate employment opportunities locally and in the broader region. The proposal's externally sourced construction workforce will also increase spending at local businesses, such as supermarkets, retail stores and cafes, and at short-term accommodation providers who will accommodate this workforce. During consultation (refer to Section 4.1), the community and Council highlighted potential employment and economic impacts as a positive impact for the community. However, Council noted that Deniliquin has a limited supply of trade services. Therefore, the Proponent should consider local employment in neighbouring townships and LGAs. This above aligns with the Workforce and Accommodation Study (refer to Section 5.3) findings which estimates that 36% of the workforce within a 150-kilometre radius are blue-collar workers. This indicates a potential undersupply of local workers with relevant qualifications to	

support the construction of several concurrent developments in the area. However, this shortage is expected to ease as other projects conclude and their workers become available.

The construction phase is projected to last 12 months. According to the EIA (refer to Section 5) approximately 52 direct construction jobs will be created at peak construction periods. Of these, it is expected that approximately 18 jobs will be sourced locally (civil/mechanical workers), and 34 jobs will be sourced externally (specialist workers) (refer to Section 5.5.3). These direct jobs are expected to stimulate local economic activity, resulting in an estimated 106 additional jobs across the project's supply chain within the Edward River Council LGA. In total, the construction phase is anticipated to generate around 156 jobs.

During the operational phase, the EIA anticipates for the proposal to require up to two full-time equivalent employees on-site. Additionally, the proposal's ongoing operation is likely to create six more jobs within the supply chain. Therefore, the total employment during the operational phase is estimated to be eight. Given the small quantity of operational workers, this is expected to have a minimal contribution to the local economy.

Considering the above, the proposal's expected contribution to the local economy through increased employment opportunities and spending at local business during the proposal's construction stage is assessed as a **medium positive** impact, given its minor magnitude and likely likelihood. The magnitude of this impact is minor given several of the benefits will only be available over the proposal's 12-month construction period and the ongoing benefits are only applicable to a small number of beneficiaries.

Assessment – with mitigation/ enhancement: High positive

While the construction employment opportunities will only be available over a 12-month construction period, the Proponent intends to train and upskill the local workforce, when necessary. This will equip the local workforce with skills and experiences that will increase their capacity to obtain additional employment on similar types of jobs in the future. Given there are several renewable energy projects in the local area (refer to Section 3.3), there is an increased likelihood for individuals to obtain similar employment opportunities.

As mentioned in the assessment of 'impacts on short-term accommodation availability during construction' (refer to Section 7.2.1.1), the Proponent intends to only occupy 20% of available short term accommodation rooms in the local area. This would maximise the expected positive economic impacts experienced by short term accommodation providers by filling the average number of vacant rooms they have during the proposal's construction, while not impacting their other revenue sources, such as visitors and tourists.

Given this, the mitigated assessment is assessed as **high positive**, given the moderate magnitude and likely likelihood.

SIA recommendations – additional social mitigations

- Wherever possible and practical, engage with local business services to identify and maximise local procurement benefits derived form the proposal.
- Encourage local employment during construction and operation by actively advertising available jobs in various communication means used by the local community, including community boards, local newspapers, and online community groups.
- Engage with local employment and training organisations to ensure that potential local employees are communicated with opportunities associated with the proposal through various channels.

- Wherever possible and practical, prioritise sourcing materials and services from local businesses to stimulate the local economy.

7.2.8. Decision-making systems

Guideline definition*: Decision-making systems include the extent to which people can have a say in decisions affecting their lives and access to complaint, remedy, and grievance mechanisms.*

7.2.8.1. Opportunities for the local community to get involved in the decision-making process

Affected stakeholders	Duration of impact
Existing residents, businesses and services in the immediate and surrounding social locality.	Construction and operation
Assessment – without mitigation: Low positive	
Decisions about the built environment significantly impact how communities interact and live, making inclusive engagement essential to fostering community cohesion and trust. The proposal is situated in a region set to experience transformative change associated with the South West REZ. This transformation will reshape the area's character and identity and heighten the importance of ensuring community members are adequately informed and have access to the appropriate communication channels to have a say in decisions that affect their lives in the short and long term. Keeping residents and stakeholders updated reduces potential feelings of uncertainty or lack of control over the significant transformations occurring in the area. Clear, consistent communication throughout all proposal phases is essential to ensure the community understands the changes in their environments and their potential impacts. As detailed in Section 4, the Proponent has undertaken targeted community and stakeholder engagement for the proposal (refer to Section 4). The Proponent has also provided communication channels to interested community members and stakeholders and access to complaints, remedy and grievance mechanisms. The Proponent has fostered opportunities for stakeholders to increase their ability to participate in decision-making for the proposal. Through the engagement activities, stakeholders have demonstrated general support for the proposal. However, few residents generally expressed negative sentiments towards solar and wind renewable projects. All feedback collected to inform this SIA is summarised in Section 4 of this SEIA. Refer to the Engagement Outcomes Report prepared by Urbis (2025) for a summary of all feedback collected to inform the proposal. Considering the above, the proposal has provided an extensive number of communication channels to increase community and stakeholder participation in decision-making systems that affect them. The impact is assessed as **low positive**, given the likely likelihood and minimal magnitude.	
Assessment – with mitigation/ enhancement: High positive	
As detailed above, the proposal has engaged with the community and key stakeholders through various channels to provide them with opportunities to participate in the decision-making process. The Engagement Outcomes Report (Urbis, 2025) notes the Proponent will continue to keep stakeholders and the community informed of the project approval process through the exhibition and determination phases.	

Developing and implementing a community and stakeholder engagement strategy and facilitating investment in the local community would strengthen social licence to operate. Should Council and stakeholder engagement continue into the project's operational phase, it could have potential longer-term benefits for local community participation.

Considering these enhancement measures, the enhanced impacts is assessed as **high positive** given its likely likelihood and moderate magnitude.

SIA recommendations – additional social mitigations

- Utilise communication channels that are relevant and accessible to the local communities. Ensure updates and opportunities for involvement are communicated efficiently and not redundant to avoid consultation fatigue.
- Establish a dedicated community liaison officer prior to construction to act as a consistent point of contact for residents, address concerns, and provide timely information.

7.3. CUMULATIVE IMPACTS

Cumulative impacts result from incremental, sustained, and combined effects of human action and natural variations over time and can be positive and negative (DPHI 2022, p.4). They can be caused by the compounding effects of a single project or multiple projects in an area and by the accumulation of effects from past, current, and future activities as they arise (ibid, p.4).

Several significant state and local projects operate or intend to operate in and around the subject site, which may contribute to cumulative impacts, particularly given the proposal's location in the South West REZ. Refer to Section 3.3 and Appendix D.

Potential cumulative social impacts during construction and operation are discussed below.

7.3.1. Contribution to the renewable energy transition

The proposal aims to assist the national electrical grid during peak demand and emergencies. Once the proposed development is complete and operational, it has the potential capacity to store 100 MW / 200 MWh of Australian renewable energy.

The proposal's key cumulative positive impact is its contribution to the shift towards renewable energy sources. The proposal would also contribute to the NSW Government’s aim of reaching net zero emissions by 2050. It would provide a clean energy supply for the NSW energy grid and stable and sustainable energy for current and future communities.

7.3.2. Contribution to community benefits sharing initiatives

In addition to bringing investment to the local community during construction, the proposal would create jobs, diversify income, and increase revenue for local service providers such as food, fuel, and accommodation operators.

Once the project is operational, benefits will continue with long–term jobs, ongoing operations and maintenance contracts, and the establishment of community benefit schemes.

7.3.3. Demand for local housing and accommodation

As noted in Section 6.3.1, the local rental and accommodation market may be strained by the influx of the workforce required for the anticipated development of several renewable energy facilities across the region. Any potential added pressure could generate cumulative social impacts within the broader social locality related to reduced housing availability and affordability. It is recommended that construction partners demonstrate how the workforce will be managed, including accommodation solutions that do not result in an unreasonable impost on local infrastructure and services, such as accommodation and providing solutions where capacity issues and impact risks are mitigated.

7.3.4. Potential for consultation fatigue

As shown in Section 3.3, there are a range of other renewable energy projects within 200kilometres of the subject site. Therefore, it is essential that the local community feels they can have their say in the changes happening in their area. Community members should be given genuine opportunities to voice their feedback throughout the proposal's development, from the application stage to construction and operation.

During the EIS process, the local community and stakeholders were given several opportunities to provide feedback to inform the proposal and contribute to decision-making systems aligned with the NSW SIA and Engagement Guidelines (DPHI, 2023). This dialogue with the community should continue in the following phases of the proposal, ensuring that the communication process remains timely, consistent and transparent. Suggestions from the Australian Energy Infrastructure Commissioner website include keeping the project website current with relevant information, including contact details and complaints processes, engaging with local newspapers or other local media to convey accurate information and updates, and establishing a formal complaint and enquiry process. It is noted that this process should include a system to record and manage complaints, including a register of complaints and enquiry information.

Further, as multiple projects are being developed near the proposal, there is a risk of consultation fatigue within the community. This risk can be managed by avoiding repetitive and duplicated consultations and providing clear, consolidated updates to keep the community engaged without feeling overwhelmed.

The Australian Energy Infrastructure Commissioner recognises on their website that some local regions have been impacted by a cluster of energy projects, including projects within the NSW Government Renewable Energy Zones (REZ). This may lead to feelings that projects are 'surrounding' communities. As such, the Commissioner suggests that communication be coordinated effectively with other developers in the surrounding area to provide clear and transparent information to the affected community and to minimise consultation fatigue.

To further mitigate these potential cumulative negative impacts and to enhance any cumulative positive impacts, the following SIA recommendations are provided

SIA recommendation/s

- As per the Australian Energy Infrastructure Commissioner, coordinate communication with other developers working on nearby projects to ensure that clear, coherent information is provided to the local community during construction and operation. This will also ensure that information and consultation are not duplicated to avoid consultation fatigue.
- Develop and implement a workforce accommodation strategy before construction that assesses the housing and accommodation environment, identifies potential accommodation and rental market pressures in the local and regional area, and details plans to effectively accommodate the proposed construction workforce.
- Consider developing a workforce strategy for construction and operation, including measures to prioritise local employment, establish ongoing partnerships with local training and education institutions to connect local apprentices, trainees and workers with placement during construction and operation, and upskilling pathways for employees.
- Consider liaising with other significant concurrent projects in the area to understand their peak workforce requirements and consider programming construction works for the proposal to align with reductions in workforce requirements for concurrent projects.
- Develop a Construction Management Plan or Plan of Management that considers concurrent renewable and significant projects, particularly concerning cumulative traffic impacts, and aligning any workforce accommodation plans or employment strategies.
- Continue implementing a stakeholder consultation program and foster opportunities for the local community to have a say on the proposal design and delivery.

8. MITIGATION, ENHANCEMENT AND MANAGEMENT

This section provides a summary of:

- Identified positive and negative social impacts,
- Corresponding unmitigated and mitigated risk rankings and
- Proposed mitigation, enhancement and management measures.

Key potential stakeholders and/or partners have been identified to inform the implementation of the proposed mitigation and enhancement strategies. Their involvement and participation in monitoring and managing social impacts and social benefits will improve the outcomes of the proposed mitigation and management strategies.

Not all potential impacts will be the responsibility of the Proponent to mitigate or manage. In some cases, they may cooperate or inform the mitigation and provide data and information to future tenants. In other cases, they may be directly responsible for mitigating and managing the identified potential social impacts and the opportunity for partnerships.

8.1. SUMMARY OF PROPOSED MITIGATION, ENHANCEMENT AND MANAGEMENT OF SOCIAL IMPACTS

A summary of the identified social impacts and benefits, risk ratings and proposed mitigation, enhancement, and management strategies is provided in Table 30 below.

Table 30 Summary of proposed mitigation, enhancement and management strategies of social impacts

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
Way of life	Social cohesion and short-term accommodation availability during construction	Low negative to negligible during construction for residents and workers in the immediate social locality	Low negative to negligible during construction for residents and workers in the immediate social locality	▪ Ensure the construction workforce does not occupy more than 20% of available short-term accommodation in the local area. ▪ Prior to selecting a construction partner, prepare a Workforce Accommodation Plan or Strategy that assess the potential cumulative impacts on local short term accommodation availability if additional competing renewable energy projects emerge with similar construction timeframes to the proposal. ▪ Consult with local short term accommodation providers to align peak construction periods outside of months when they experience peak occupancy rates, such as when major events occur (e.g. Deni Ute Festival). ▪ Provide guidance for the workforce on expected behaviours through a Code of Conduct. Inform the community about measures in place to support harmonious dynamics between workforce and local community.	The Proponent Construction partner	Edward River Council Local short-term accommodation providers Local employment and training organisations Social Planning consultants Engagement consultant

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
				▪ Continue to consult with the Edward River Council regarding the pipeline of proposed renewable energy projects in the local area. This will enable the Proponent to adequately consider cumulative construction impacts as part of their Workforce Accommodation Plan and/or stage their construction activities to minimise overlapping construction periods with competing renewable energy projects. ▪ Engage with local employment and training organisations to ensure that potential local employees are communicated with opportunities associated with the proposal through various channels.		
	Temporary increase in demand for social infrastructure and services	Low negative for residents, workers and future construction workers in the immediate social locality during construction	Low negative to negligible for residents, workers and future construction workers in the immediate social locality during construction	▪ Ensure service providers and venues are well informed of the incoming workforce to plan for it. ▪ Continue to consult with the Council to confirm the potential community benefits to be considered for the Community Benefit Sharing Scheme/VPA. ▪ Prepare a Letter of Intent, a non-legally binding document outlining the community benefits or financial contributions a Proponent intends to provide through a VPA. This allows for	The Proponent Construction partner	Edward River Council Local service providers Social Planning consultants

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
				flexibility, given that community and Council priorities can change between lodgement and approval and allows the Council to coordinate community benefits associated with other renewable energy projects. ▪ Prepare the final VPA, ensuring it is informed by Council consultation.		
Community	Contributions to the renewable energy sector	High positive for residents in the immediate and surrounding social locality during operation	High positive for residents in the immediate and surrounding social locality during operation	▪ Continue educating the local community about the role, function, and benefits of BESS projects. This could be included in future project newsletters and on the project website.	The Proponent	Edward River Council Local stakeholders Construction partner
	Increased opportunities for social value creation	Medium positive for existing residents, businesses and workers in the immediate social locality during operation	High positive for existing residents, businesses and workers in the immediate social locality during operation	▪ Develop and implement a stakeholder engagement and communication strategy so that residents can provide feedback throughout the construction period. ▪ Continue engagement with the Council and key stakeholders on the proposal's design, construction activities, benefit-sharing initiatives, and further opportunities to deliver local benefits to the local community and maintain a social licence to operate.	The Proponent	Edward River Council Social Planning and Engagement consultant

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
				▪ Consider engaging communities in the definition of the community benefit fund to ensure the proposal identifies meaningful opportunities to deliver local benefits, as this is critical for establishing and maintaining a social license. ▪ Continue presence and consultation in the community during planning stages to increase the perception of influence.		
Accessibility	Potential access impacts from increased construction traffic	Medium negative for the immediate and surrounding social locality during construction	Low negative to negligible for the immediate and surrounding social locality during construction	▪ Before construction commences, ensure all recommendations outlined in the TIA are implemented. Implement traffic mitigation measures as specified in the TIA. ▪ Utilising a shuttle bus service and enforcing carpooling policies among the workforce to get to and from the subject site may reduce daily project-related traffic volume. This may, in turn, mitigate public safety concerns arising from the additional temporary traffic, as the overall number of individual cars on the road would be reduced. ▪ Provide open and ongoing communication channels to inform the surrounding community of any changes in traffic conditions during construction.	The Proponent Construction partner	Edward River Council Local emergency services Social Planning and Engagement consultant

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
				▪ Undertake engagement with emergency services to gather their feedback on the proposal and promptly identify potential concerns regarding access.		
Culture	Potential impact on Aboriginal objects and places	Low negative to negligible for Aboriginal and Torres Strait Islander peoples who currently live within the surrounding social locality or have a connection to the land during construction and operation	Low negative to negligible for Aboriginal and Torres Strait Islander peoples who currently live within the surrounding social locality or have a connection to the land during construction and operation	▪ Continue engagement with RAPs throughout project delivery.	The Proponent Construction partner	Local Aboriginal and Torres Strait Islander stakeholders Local RAPs Edward River Council Engagement consultant
Health and wellbeing	Potential amenity and health and wellbeing impacts during construction	Low negative for landowners and residents in the immediate social locality including along Aratula North Road, Aratula	Negligible for landowners and residents in the immediate social locality including along Aratula North Road,	▪ Consider preparing a Construction Noise and Vibration Management Plan to assess any potential cumulative impacts of surrounding developments. ▪ Prepare a project specific Construction Environmental Management Plan to minimise potential noise, dust and construction traffic impacts. This includes implementation of all	The Proponent Construction partner	Local service providers Community liaison officer Engagement consultant

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
		South Road Riverina Highway and Hogans Lane during construction	Aratula South Road Riverina Highway and Hogans Lane during construction	reasonable and feasible recommendations provided within the Construction Environmental Management Plan. ▪ Provide a community liaison officer to liaise with the local community during construction. This will ensure that the local community is aware of the proposal updates and provide a point of contact for them should stakeholder complaints about increased noise or dust arise.		
	Amenity impacts related to operational noise	Low negative for landowners and residents in the immediate social locality including along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane during operation	Low negative to negligible for landowners and residents in the immediate social locality including along Aratula North Road, Aratula South Road Riverina Highway and Hogans Lane during operation	▪ Implement all recommendations and mitigation measures provided in the Noise and Vibration Impact Assessment prepared by WSP (2025). ▪ Coordinate operational activities and mitigation measures across adjoining developments to help minimise impacts on surrounding residents.	The Proponent Construction partner	Local stakeholders Community liaison officer Engagement consultant

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
	Human safety risks	Low negative for existing and future residents, businesses, workers and visitors in the immediate and surrounding social locality during operation	Low negative to negligible for existing and future residents, businesses, workers and visitors in the immediate and surrounding social locality during operation	▪ Ensure consistent consultation with local Rural Fire Service (RFS). This collaboration will ensure ongoing compliance with bushfire safety measures, facilitate regular updates on fire risk management, and provide the community with confidence in the project's commitment to safety and environmental stewardship. ▪ At the pre-construction stage, implement all reasonable and feasible mitigation measures recommended in the Bushfire Assessment Report and the Preliminary Hazard Analysis.	The Proponent Construction consultant	Emergency service providers
Surroundings	Perceived loss of productive agricultural lands	Low negative for existing residents in the immediate and surrounding social locality during operation	Low negative for existing residents in the immediate and surrounding social locality during operation	▪ At the pre-construction stage, implement all reasonable and feasible mitigation measures recommended in the AIA (Creating Greater, 2024). ▪ Consider developing a land management plan to facilitate land and agricultural benefits during operation through post-decommissioning. ▪ Develop land management plans with landowners and local agricultural producers to investigate and implement sustainable land practices. ▪ Develop educational materials accessible to the local community to	The Proponent Construction partner	Edward River Council Local stakeholders

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
				inform them about the function and role of BESS. ▪ Highlight the proposal's limited loss of agricultural land and include information for the community about the decommissioning process.		
	Changed sense of place related to changes to visual landscape	Low negative for residents, businesses, workers and visitors in the immediate social locality during operation	Negligible for residents, businesses, workers and visitors in the immediate social locality during operation	▪ Continue stakeholder engagement to identify the risk of perceived visual impacts or if stakeholder concerns around visual impacts arise.	The Proponent Construction partner	Design consultants Local stakeholders
Livelihood	Contribution to the local economy through increased employment opportunities and spending at local businesses	Medium positive for people employed in the construction and building maintenance industries in the immediate and surrounding social locality during	High positive for people employed in the construction and building maintenance industries in the immediate and surrounding social locality during	▪ Wherever possible and practical, engage with local business services to identify and maximise local procurement benefits derived form the proposal. ▪ Encourage local employment during construction and operation by actively advertising available jobs in various communication means used by the local community, including community boards, local newspapers, and online community groups. ▪ Engage with local employment and training organisations to ensure that potential local employees are	The Proponent	Local business services Engagement consultant Local employment and training organisations

Theme	Matter	Unmitigated /Unenhanced	Mitigated /Enhanced	Proposed mitigation, enhancement and management	Responsibility	Potential partners
		construction and operation	construction and operation	communicated with opportunities associated with the proposal through various channels. ▪ Wherever possible and practical, prioritise sourcing materials and services from local businesses to stimulate the local economy.		
Decision making systems	Opportunities for the local community to get involved in the decision-making process	Low positive for existing residents, businesses and services in the immediate and surrounding social locality during construction and operation	High positive for existing residents, businesses and services in the immediate and surrounding social locality during construction and operation	▪ Utilise communication channels that are relevant and accessible to the local communities. Ensure updates and opportunities for involvement are communicated efficiently and not redundantly to avoid consultation fatigue. ▪ Establish a dedicated community liaison officer before construction to act as a consistent point of contact for residents, address concerns, and provide timely information.	The Proponent Construction partner	Engagement consultant

Theme	Matter		Potential partners
Cumulative impacts	1. Contribution to the renewable energy transition 2. Contribution to community benefits sharing initiatives 3. Demand for local housing and accommodation 4. Potential for consultation fatigue	▪ As per the Australian Energy Infrastructure Commissioner, coordinate communication with other developers working on nearby projects to ensure that clear, coherent information is provided to the local community during construction and operation. This will also ensure that information and consultation are not duplicated to avoid consultation fatigue. ▪ Assess the housing and accommodation environment, identify potential accommodation and rental market pressures in the local and regional area, and detail plans to accommodate the proposed construction workforce effectively and develop and implement a workforce accommodation strategy before construction. ▪ Consider developing a workforce strategy for construction and operation, including measures to prioritise local employment, establish ongoing partnerships with local training and education institutions to connect local apprentices, trainees and workers with placement during construction and operation, and upskilling pathways for employees. ▪ Consider liaising with other significant concurrent projects in the area to understand their peak workforce requirements and consider programming construction works for the proposal to align with reductions in workforce requirements for concurrent projects. ▪ Develop a Construction Management Plan or Plan of Management that considers concurrent renewable and significant projects, particularly concerning cumulative traffic impacts, and aligning any workforce accommodation plans or employment strategies. ▪ Continue implementing a stakeholder consultation program and foster opportunities for the local community to have a say on the proposal design and delivery.	The Proponent Construction consultant Social Planning and Engagement consultant

8.2. FURTHER SIA RECOMMENDATIONS

The following provides a summary of the recommendations are proposed to further enhance positive impacts and mitigate negative impacts as previously identified in Section 7. These measures have not been included in the assessment of mitigated or enhanced impacts but have been identified as additional measures for consideration by the Proponent to enhance the social outcomes of the proposal. Mitigation and enhancement measures which are committed to and have informed the assessment of mitigated and enhanced social impacts are summarised in Section 8.1 above.

8.2.1.1. Communication and stakeholder engagement

- Continue engagement with the Council and key stakeholders on the proposal's design, construction activities, benefit-sharing initiatives, and further opportunities to deliver local benefits to the local community and maintain a social licence to operate.
- Continue presence and consultation in the community during planning stages to increase the perception of influence and foster trust.
- Develop and implement a stakeholder engagement and communication strategy so that stakeholders can provide feedback throughout the construction period.
- Consider engaging community stakeholders in identifying opportunities to develop a benefits scheme or good neighbour programs as relevant.

8.2.1.2. Construction management

- Continue engagement with the Council and relevant stakeholders to inform construction workforce strategy before construction.
- Consider liaising with other significant concurrent projects to understand their peak workforce requirements. Moreover, programming construction works for the proposal should be considered to align with reductions in workforce requirements for concurrent projects.
- Engage key stakeholders to inform the development of the procurement plan, which should outline commitments to achieving local content and diversity requirements as required by the relevant State and Federal Government policies.
- Idnetify and assess potential cumulative construction-related impacts associated with other surrounding developments. Mitigation and monitoring measures should be provided for all identified cumulative construction impacts.
- Explore programming construction works to align with workforce requirements for concurrent projects to enhance the availability of local workers, which can support the proposal.
- Consider developing a Social Impact Management Plan to ensure social impact mitigation measures are implemented and monitored.

8.2.1.3. Operation management

- Consider engaging communities in defining the benefit-sharing initiatives to deliver local benefits as identified.

9. ACRONYMS

Acronyms	Term
ABS	Australian Bureau of Statistics
ACHAR	Aboriginal Cultural Heritage Assessment Report
BAR	Bushfire Assessment Report
BESS	Battery Energy Storage System
BOCSAR	NSW Bureau of Crime Statistics and Research
CMP	Construction Management Plan
CPI	Consumer Price Index
CSP	Community Strategic Plan
DA	Development Application
DCCEEW	Department of Climate Change, Energy, the Environment and Water's
DPHI	NSW Department of Planning, Housing and Infrastructure
DSE	Dry Sheep Equivalent
EIA	Economic Impact Assessment
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act
FTE	Full Time Equivalent
GCCSA	Greater Capital City Statistical Area
GVA	Gross Value Added
HANML	Highly Affected Noise Management Levels
kV	Kilovolt
kV AC	Kilovolt Alternative Current
LALC	Local Aboriginal Land Council
LGA	Local Government Area
LSPS	Local Strategic Planning Statement
MW	Mega Watt

MWh	Mega Watt hour
NEM	National Electricity Market
NCA	Noise Catchment Area
NML	Noise Management Levels
NVIA	Noise and Vibration Impact Assessment
PHA	Preliminary Hazard Analysis
PV	Photovoltaic
RAP	Registered Aboriginal Parties
REZ	Renewable Energy Zone
SEARs	Secretary's Environmental Assessment Requirements
SEIA	Social and Economic Impact Assessment
SEIFA	Socio-Economic Indexes for Areas
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SAL	Suburbs and Localities
SSDA	State Significant Development Application
TIA	Traffic Impact Assessment
VPA	Voluntary Planning Agreement
VIA	Visual Impact Assessment
Vph	Vehicle per hour

10. REFERENCES

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11. DISCLAIMER

This report is dated 10 March 2025 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Ltd **(Urbis)** opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of BESS Arctic Pty Ltd c/o Gransolar Development Australia Pty Ltd **(Instructing Party)** for the purpose of Social and Economic Impact Assessment **(Purpose)** and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A COUNCIL DISCUSSION GUIDE

Project overview

Urbis Community Planning has been engaged by BESS Arctic Pty Ltd c/o Gransolar Development Australia Pty Ltd to undertake a Social and Economic Impact Assessment (SEIA) to inform a State Significant Development Application (SSDA) for a lithium-ion Battery Energy Storage System (BESS) at 21356 Riverina Highway, Deniliquin (the subject site). The subject site is approximately 6kilometres south east of Deniliquin and is within in the Edward River Local Government Area (LGA).

The proposed BESS will connect to the Deniliquin substation located approximately 400m south west of the subject site via an overhead electrical cable. It is expected the proposed BESS can power up to 28,000 homes.

Urbis and Gransolar previously met with Council in February 2024 and June 2023 to discuss key statutory planning aspects of the proposal. This interview is intended to be a targeted discussion about social and economic considerations.

What is a BESS and why are they needed?

A Battery Energy Storage System (BESS) consists of lithium-ion batteries that store electrical energy generated from another source (such as solar or wind power) for later use. When the grid requires electricity, such as during peak hours, the BESS discharges the stored electricity back into the grid. Once the battery is full, it stores the electricity until it is needed. BESS technology is commonly used in electricity grids, electric vehicles, solar power installations, and smart homes.

BESS technology is a key component for Australia's clean energy transition and has become an increasingly popular solution for the integration of renewable energy and power grid stability.

Benefits of BESS technology includes increasing energy efficiency by storing excess energy during low-demand periods and releasing it during peak-periods, reducing carbon and greenhouse gas emissions and reliance on fossil fuel by integrating renewable energy sources into the grid and providing fast and reliable response times to prevent blackouts and other electricity network disruptions.

About the proposal

The proposed SSDA seeks consent for the construction and operation of the Deniliquin East BESS. Specifically, the proposal includes:

- Installation of up to 80 lithium-ion batteries with a capacity of up to 100 megawatts and 200 megawatt-hours. The batteries will be housed within containers.
- Power conversion systems, switchgear, and a control building to convert the power from the batteries to electricity for the grid.
- Internal access tracks and on-site car park with two car spaces.
- Associated infrastructure, including two new access bridges connecting Riverina Highway and the subject site, landscaping (including plantings to provide visual screening), security fencing, lightning protections and a firefighting water tank.

Subject to approval, construction is expected to commence in Q1 2025 and will occur for 18 months. Approximately 52 full time equivalent (FTE) jobs will be required during the construction peak, which is expected to be 3 months. Outside of this period, 10-15 workers will be required at any one time. The proposal will accommodate two FTE operational jobs.

About the SEIA process

A Social Impact Assessment (SIA) is an objective and independent study undertaken to identify and assess potential positive and negative social impacts associated with a proposed development. Social impacts can be understood as the consequences that people (individuals, households, groups, communities and organisations) experience when a new development brings change. Social impacts can be direct and indirect, and short term (construction) and long term (operational).

A SIA considers social impacts in relation to people's: way of life; community; accessibility; culture; health and wellbeing; surroundings; livelihoods; and decision-making systems. The SIA process is being guided by DPHI's SIA Guideline (2023).

An Economic Impact Assessment (EIA) is an objective and independent study which assesses the potential positive and negative economic impacts associated with a proposed development. In accordance with the SEARs, the EIA will assess the direct and indirect job creation, expected economic growth (Gross Value Added) and demand for workforce accommodation during the proposal's construction and operation.

About the interview

As part of the SEIA process, we are interested in speaking with you to inform our understanding of the local context and community, potential social and economic impacts (both positive and negative), and any enhancement measures (for positive social and economic impacts) and mitigation measures (for negative social and negative impacts).

Any information provided will not be attributed to individuals in the SEIA, however we would like to reference any comments as 'Consultation with Edward River Council'.

The interview will be approximately one hour in duration undertaken online via Microsoft Teams. The discussion will be led by Urbis Community Planners. The latest iteration of the draft plans will be shared on the screen during the interview.

We have prepared the following interview questions below which provide a starting point for the discussion. Thank you in advance for your time and for sharing your knowledge and insight.

Interview questions

Social and subject site context

As part of the SEIA, we have examined ABS 2021 Census data to understand the key demographic characteristics of the Deniliquin community.

- Are there any observations or insights you can add from Council's perspective on particular characteristics, or the needs and aspirations of these communities?
- Are there any vulnerable groups or communities that we should consider as part of our assessment?
- Can you describe the community's sentiment toward the delivery of renewable energy and BESS projects in the local area?

Workforce and housing

We are currently assessing the workforce demand for the proposal, including the local workforce capacity within Deniliquin and whether drive in drive out (DIDO) or fly in fly out (FIFO) workers will be required.

- Can you provide any insights into the construction workforce in Deniliquin? Are there any capacity issues that we should be aware of?
- What are the current opportunities and challenges in terms of housing in Deniliquin? How would the proposal impact on housing demand within Deniliquin if drive in drive out (DIDO) or fly in fly out (FIFO) workers are required?

Potential social and economic impacts

Do you expect there to be any positive social and economic impacts associated with the proposal? If so, what are they?

These could include:

- *Impacts to nearby residents, businesses, workers, students, visitors and other stakeholders,*
- *Short- or long-term impacts*
- *Impacts during construction and/or impacts during the operation of the solar farm.*

Impacts may be in relation to:

- *How people live, work, play and interact with others*
- *How the community looks and functions*
- *How people access services and facilities*
- *How people express your beliefs and customs (including First Nations Connection to Country)*
- *People's health and wellbeing (physical and mental)*
- *People's access and use of the natural and built environment*
- *People's work*
- *People's ability to have a say in decisions that affect your life*

How could these positive social and economic impacts be enhanced?

Do you expect there to be any negative social and economic impacts associated with the proposal? If so, what are they?

Refer to categories above.

How could these negative social and economic impacts be mitigated or managed?

Cumulative impacts

There are several nearby BESS and other renewable energy projects that are being constructed and/or operational.

- Are you aware of the other BESS or renewable energy projects in the region? Are you currently experiencing any impacts as a result of these projects?
- Do you anticipate there to be any additional cumulative impacts (positive/negative) from these nearby BESS and renewable energy projects?

Community benefits

The Proponent (Gransolar) will develop a Voluntary Planning Agreement (VPA) in consultation with Edward River Council. The VPA will contain details on funding and/or works for infrastructure, services and programs that provide a benefit to the community.

We would appreciate your insights in relation to the following questions, which have also been included in an online community survey.

Who do you think the main beneficiaries of the VPA would be?

- *Examples include those living adjacent to the development, the broader community, local businesses, local community organisations, Council etc.*

What types of community benefits would you like to see supported by the VPA?

- *Examples include renewable energy and energy saving programs, sponsorship or grants programs for community groups or events, local employment and training programs, affordable or social housing, community services for targeted groups, arts and cultural initiatives, improvements to social infrastructure and open space.*

Who do you think should be involved in choosing the programs to be supported by the VPA?

- *Examples include people selected by the community, local community groups or not-for-profit organisations, local councillors, local council employees, NSW government agencies, the developer (Gransolar), local businesses.*

Other

Do you have any other comments on the proposal and its potential social and economic impacts?

APPENDIX B COMMUNITY NEWSLETTER

GRANSOLAR GROUP

www.gransolar.com

DENILIQUIN EAST BATTERY ENERGY STORAGE SYSTEM

MAY 2024

Indicative only, subject to detailed design

Gransolar Development Australia (GDA) is currently preparing a Development Application to construct and operate a Battery Energy Storage System (BESS) near the existing Deniliquin substation.

The proposal aims to contribute to supporting Australia's transition to a renewable energy future and increased reliability to the network.

This newsletter provides an overview of the proposal, information on where you can find out more information and details about how you can provide feedback.

WHAT IS A BESS AND HOW DOES IT WORK?

A BESS is a battery energy storage system that stores excess energy from the grid. This excess energy may come from renewable energy sources such as solar power.

The stored excess energy is redistributed to the grid during low supply and high demand periods.

BESS technology self-sufficiently manages the storage and discharge of power.

Batteries most commonly use lithium to store the electricity.

ABOUT THE PROJECT

The proposed site is located approximately 12km south-east of Deniliquin, NSW, at 21356 Riverina Highway. The proposed development area is approximately 3.5 hectares.

If approved, the proposal will include:

- Installation of up to 80 lithium-ion batteries, housed within 20-foot shipping containers approximately 2.5m wide and 2.8m high, powering up to 28,000 homes
- Cabling and collector units, a storage area, internal access tracks and two new irrigation channel crossings connecting Riverina Highway to the site
- Overhead transmission pylons to connect the BESS to the existing Deniliquin substation
- Safety features such as security fencing, lightning masts, and firefighting water tanks
- Landscaping and tree planting to offset visual impact.

Delivering a new BESS at the proposed Deniliquin site means:

Up to 50 locally sourced jobs during construction and two jobs anticipated when the BESS is operational.

A reliable supply and more affordable source of energy for the region.

Contributing positively to Australia's clean energy transition.

MANAGING POTENTIAL IMPACTS

Gransolar is committed to understanding and managing potential impacts during installation and operation of the proposed BESS.

The Development Application will be submitted to the NSW State Government and is referred to as a State Significant Development Application (SSDA). It includes an Environmental Impact Statement (EIS) which will assess any potential impacts from installation and operation of the BESS and suggest mitigation measures if they are required. This will include a bushfire assessment and preliminary hazard analysis as well as assessments of potential traffic, noise, dust, overshadowing and visual impacts.

If the proposal is approved, GDA will develop and implement an Operational Management Plan. This will outline how the site will be managed, including ensuring potential impacts on neighbours are minimised.

Indicative only, subject to detailed design

ABOUT GDA

GDA has an extensive global presence spanning over 17 countries and a strong track record of 7 years of operation in Australia.

GDA specialises in renewable energy and battery systems, and is committed to supporting the transition to a sustainable energy system.

GDA will be working with Council under a Voluntary Planning Agreement to deliver community benefits as identified during the engagement period. Examples of this may include:

- Funding for essential community services
- Education programs for local schools
- Sponsorships for local sporting teams.

NEXT STEPS

GDA is seeking approval for the proposal from the Department of Planning, Housing and Infrastructure (DPHI) through the SSDA process.

SEPTEMBER 2023

The first step in the SSDA process is lodging a request with DPHI for the Secretary's Environmental Assessment Requirements (SEARs). The SEARs ensure government agencies and relevant service providers are informed and given the opportunity for specific details to be addressed within the SSDA.

WE ARE HERE

The next step is to prepare the EIS which will assess any potential impacts from the installation and operation of the proposal and suggest mitigation measures. As part of developing the EIS, GDA is engaging with site neighbours and the wider community.

JUNE 2024

Community feedback will be collated in an Engagement Outcomes Report and included in the submission to DPHI to inform future planning.

JULY 2024

Formal SSDA lodgement. Following this, DPHI will publicly exhibit the proposal. At this point, the community can make formal submissions to DPHI.

FOLLOWING 12 MONTHS

GDA is expecting a determination within 12 months of lodging the SSDA.

PROVIDE YOUR FEEDBACK

Pop-up information session

To find out more about the proposal and provide your feedback, you are invited to speak to the project team at an upcoming pop-up information session.

The project team will be outside Deniliquin Coles on:

- Friday 17 May, 4:00–6:00pm
- Saturday 18 May, 10:00am–12:00pm

Other ways to provide feedback

Urbis is supporting GDA to engage with the local community.

Find out more information and provide feedback via:

https://deniliquinbess.com.au/

engagement@urbis.com.au

1800 244 863

Urbis Community Planning, a team of specialist social planners and social scientist practitioners, is also preparing a Social Impact Assessment (SIA) as part of the SSDA. The SIA process is being guided by the DPHI's Social Impact Assessment Guideline (2023). The SIA will be submitted to DPHI and available to view on the DPHI website when the proposal is placed on public exhibition in late 2024.

To inform the SIA, we are seeking feedback to better understand the needs of the local community, potential positive and negative social impacts of the proposal (including enhancement measures for positive impacts and mitigation measures for negative impacts), and community benefit opportunities to inform the Voluntary Planning Agreement. You can provide your feedback by filling in a short online survey. The survey is open until 5pm on Monday 3 June 2024.

Please scan the QR code with your phone or access the survey here:
https://urbis.questionpro.com.au/deniliquinbess

GDA will consider all feedback received as the design of the proposal is finalised.

APPENDIX C SOCIAL IMPACT SURVEY QUESTIONS

A Battery Energy Storage System (BESS) development is proposed at 21356 Riverina Highway, Deniliquin (the subject site), which is approximately 6kilometres south-east of Deniliquin and is within in the Edward River Local Government Area (LGA). Urbis Ltd (Urbis) is undertaking a Social Impact Assessment (SIA) on behalf of BESS Arctic Pty Ltd c/o Gransolar Development Australia Pty Ltd (Gransolar; the Proponent) to inform the state significant development application (SSDA) for the BESS.

What is a BESS and why is it needed?

Battery Energy Storage System (BESS) technology is a key component for Australia's clean energy transition and has become an increasingly popular solution for the integration of renewable energy and power grid stability.

A BESS consists of lithium-ion batteries that store electrical energy generated from another source (such as solar or wind power) for later use. When the grid requires electricity, such as during peak hours, the BESS discharges the stored electricity back into the grid. Once the battery is full, it stores the electricity until it is needed. BESS technology is commonly used in electricity grids, electric vehicles, solar power installations, and smart homes.

Benefits of BESS technology includes increasing energy efficiency by storing excess energy during low-demand periods and releasing it during peak-periods, reducing carbon and greenhouse gas emissions and reliance on fossil fuel by integrating renewable energy sources into the grid and providing fast and reliable response times to prevent blackouts and other electricity network disruptions.

The proposed BESS will connect to the Deniliquin substation located approximately 400m south west of the subject site via an overhead electrical cable. The proposed BESS can power up to 28,000 homes.

About the proposal

The proposed SSDA seeks consent for the construction and operation of the Deniliquin East BESS. Specifically, the proposal includes:

- Installation of up to 80 lithium-ion batteries with a capacity of up to 100 megawatts and 200 megawatt-hours. The batteries will be housed within containers.
- Power conversion systems, switchgear, and a control building to convert the power from the batteries to electricity for the grid.
- Internal access tracks and on-site car park with two car spaces.
- Associated infrastructure, including two new access bridges connecting Riverina Highway and the subject site, landscaping (including plantings to provide visual screening), security fencing, lightning protections and a firefighting water tank.

Subject to approval, construction is expected to commence in Q1 2025 and will occur for 18 months. Approximately 52 full time equivalent (FTE) jobs will be required during the construction peak, which is expected to be 3 months. Outside of this period, 10-15 workers will be required at any one time. The proposal will accommodate two FTE operational jobs.

More information is available on the proposal website here: https://deniliquinbess.com.au/

What is a Social Impact Assessment

A Social Impact Assessment (SIA) is an objective independent study undertaken to identify and assess potential positive and negative social impacts associated with a proposed development. Social impacts can be understood as the consequences that people (individuals, households, groups, communities and organisations) experience when a new development brings change. Social impacts can be direct and indirect, and short term (construction) and long term (operational).

A SIA considers social impacts in relation to your: way of life; community; accessibility; culture; health and wellbeing; surroundings; livelihoods; and decision-making systems. When completing this survey, please consider how each of these elements may be impacted for you or your community.

The SIA process is being guided by the NSW Department of Planning, Housing and Infrastructure's Social Impact Assessment Guideline (2023). Additional information about each of the social impact categories can be found in DPHI's Guideline.

About this survey

This survey aims to gather insights on how the proposal may impact you. Your response will feed into the preparation of the SIA for the SSDA.

The survey is structured in three parts:

- Part One: Seeks your feedback on what you value about Deniliquin and the surrounding area.
- Part Two: Seeks your feedback on how the development may impact you, both positively and negatively. It will also ask your ideas on how positive social impacts can be enhanced and negative impacts can be reduced.
- Part Three: Seeks your feedback on how the proposed Voluntary Planning Agreement (VPA) could benefit the community.

The survey should take approximately 5 – 10 minutes to complete, and all responses will be kept anonymous. Please contact the Urbis Engagement Team on 1800 244 863 or engagement@urbis.com.au if you have any questions or would like to speak with us directly about the SIA.

Thank you in advance for your contribution.

Survey Questions

Part One: About the Surrounding Area

The following questions relate to what you value in the local area, including the types of social infrastructure and open space you use.

1. What best describes you?

   (i) Resident within 300m of the proposed Deniliquin East BESS subject site (21356 Riverina Highway, Deniliquin)

   (ii) Local resident of Deniliquin

   (iii) Local resident of Warragoon

   (iv) Worker or business owner in Deniliquin and/or surrounding suburbs

   (v) Regular visitor to Deniliquin and/or surrounding suburbs

   (vi) Other, please specify: Comment box

   Select all that applies.

Question 2a is for respondents to i and ii only

Question 2b is for respondents to iii only

Question 2c is for respondents to iv only

Question 2d is for respondents to v only

2.

(a) In a few words, what do you value about living in Deniliquin?

(b) In a few words, what do you value about living in Warragoon?

(c) In a few words, what do you like about working in Deniliquin and/or surrounding suburbs?

(d) In a few words, what do you like about visiting Deniliquin and/or surrounding suburbs

Comment box

(e) Part Two: Social impacts

Part Two: Social impacts

The following questions relate to understanding how the proposed development of the Deniliquin East BESS may impact you to inform the assessment of potential social impacts.

3. In what way do you anticipate the proposal will mainly impact the community?

(a) Positively

(b) Negatively

(c) Both positively and negatively

(d) Neither positively nor negatively

(e) Unsure

Select one that applies

4. Please tell us why you feel this way.

Comment box

5. Please describe any **positive** impacts you anticipate will be generated by the proposal.

These could include:

- *Impacts to you, your family or other members of the community*
- *Short- and long-term impacts*
- *Impacts during construction and/or impacts during the operation of the solar farm.*

Positive impacts may be in relation to:

- *Way of life: How you live, work, play and interact with others*
- *Community: How your community looks and functions*
- *Accessibility: How you access services and facilities*
- *Culture: How you express your beliefs and customs (including First Nations Connection to Country)*
- *Health and wellbeing: Your health and wellbeing (physical and mental)*
- *Surroundings: Your access and use of the natural and built environment*
- *Livelihoods: Your work / employment*
- *Decision-making systems: Your ability to have a say in decisions that affect your life*

Comment box

6. How could these positive impacts be enhanced?

Comment box

7. Please describe any **negative** impacts you anticipate will be generated by the proposal.

These could include:

- *Impacts to you, your family or other members of the community*
- *Short- and long-term impacts*

- *Impacts during construction and/or impacts during the operation of the solar farm.*

Negative impacts may be in relation to:

- *Way of life: How you live, work, play and interact with others*
- *Community: How your community looks and functions*
- *Accessibility: How you access services and facilities*
- *Culture: How you express your beliefs and customs (including First Nations Connection to Country)*
- *Health and wellbeing: Your health and wellbeing (physical and mental)*
- *Surroundings: Your access and use of the natural and built environment*
- *Livelihoods: Your work / employment*
- *Decision-making systems: Your ability to have a say in decisions that affect your life*

Comment box

8. How could these negative impacts be reduced?

Comment box

9. On a scale of 1 (not at all) to 10 (very much), please indicate what extent you think that you will be impacted by the construction works associated with this project?

Not at all (1) *Neutral (5)* *Very much (10)*

10-point scale

10. If you answered 6 or above for Question 9, please describe how the construction may impact you:

Comment box

Question 10 is for Question 9 responses that are 6 or above.

Part Three: Community Benefits

11. As part of the Deniliquin East BESS SSDA, the Proponent (Gransolar) will develop a Voluntary Planning Agreement (VPA) in consultation with Edward River Council. The VPA will contain details on funding and/or works for infrastructure, services and programs that provide a benefit to the community.

(a) Who should be the main beneficiaries of the VPA?

12. Please rate the following beneficiaries (where 1 is the highest priority beneficiary and 5 is the lowest priority beneficiary)

(i) Those people living adjacent to the development

(ii) The broader community

(iii) Local businesses

(iv) Local community organisations

(v) Local council

Use a rating scale of 1 to 5, where 1 is the highest priority beneficiary and 5 is the lowest priority beneficiary.

13. What types of community benefits would you like to see supported by this VPA?

Please select the top five (5) options that you would like to see VPA funding go towards.

(i) Renewable energy and energy saving programs (e.g. subsidies or initiatives to reduce energy bills)

(ii) Sponsorship or grants programs for community groups or events (e.g. local sporting teams, community interest groups, festivals)

(iii) Local employment and training programs (e.g. programs and partnerships with local schools and TAFE)

(iv) Community services for targeted groups (e.g. early childhood, youth, older persons, people with a disability)

(v) Arts and cultural initiatives (e.g. public art, maker spaces, annual art shows and events)

(vi) Environmental and nature education programs

(vii) Provision of affordable or social housing

(viii) Additional health or wellbeing programs e.g. healthy ageing

(ix) Additional community services e.g. youth, early childhood

(x) Improvements to parks, walking trails and bushland areas

(xi) Improvements to recreation facilities (e.g. sports fields, indoor recreation centres, swimming pools, skate parks)

(xii) Improvements to community facilities and libraries

(xiii) Improvements to digital infrastructure (e.g. mobile phone and internet connectivity)

(xiv) Improvements to water and sewage infrastructure

(xv) Other (please describe) _____

Ranking (selection) question – top 5 options

14. Who do you think should be involved in choosing the programs to be supported by the VPA? *Choose one or more from the list below*

(i) People selected by the community

(ii) Local community groups or not-for-profit organisations

(iii) Local councillors

(iv) Employees of the local council

(v) NSW Government agencies

(vi) The developer (Gransolar)

(vii) Local businesses

(viii) Other (please describe) _____

Select all that applies

15. Would you like to see employees and contractors of the developer (Gransolar) volunteer and participate in these community benefit programs?

Yes / No / Don't know

Select one that applies

Please select the age group you are in:

(i) 12 to 17 years old

(ii) 18 to 34 years old

(iii) 35 to 49 years old

(iv) 50 to 64 years old

(v) 65 to 79 years old

(vi) 80+ years old

Select one that applies

If you would like to subscribe to project updates, please enter your email address below:

Comment box

Survey end

Thank you for your participation. Please contact the Urbis Engagement Team on 1800 244 863 or engagement@urbis.com.au if you have any questions or would like to speak with us directly about the SIA.

APPENDIX D SURROUNDING RENEWABLE ENERGY PROJECTS

Table 31 Renewable energy projects within 200kilometres of the subject site

Map reference	Project name	Suburb	State	Status
0	Berrimal Wind Farm	Wedderburn	VIC	Approved
1	Gannawarra Solar Farm	Kerang	VIC	Generating
2	Limondale Solar Farm	Balranald	NSW	Generating
3	Mooroopna Solar Farm	Mooroopna	VIC	Approved
4	Sunraysia Solar Farm	Balranald	NSW	Generating
5	Wangaratta Solar Farm	Wangaratta	VIC	FID/Under Construction
6	Coonooer Bridge Wind Farm	Coonooer Bridge	VIC	Generating
7	Coleambally Solar Farm	Coleambally	NSW	Generating
8	Yawong Wind Farm	Yawong	VIC	Generating
9	Leeton Solar Farm	Leeton	NSW	Generating
10	Finley Solar Farm	Finley	NSW	Generating
11	Numurkah Solar Farm	Drumanure	VIC	Generating
12	Swan Hill Solar Farm	Swan Hill	VIC	Generating
13	Hay Solar Farm	Hay	NSW	Approved
14	Darlington Point Solar Farm	Darlington Point	NSW	Generating
15	Glenrowan Solar Farm	Glenrowan	VIC	FID/Under Construction
16	Tatura East Solar Farm	Tatura East	VIC	Approved
18	Lemnos Solar Farm	Lemnos	VIC	Approved
20	Mulwala Solar Farm	Mulwala	NSW	Approved
21	Corowa Solar Farm	Corowa	NSW	Generating
22	Moama Solar Farm	Moama	NSW	Approved

Map reference	Project name	Suburb	State	Status
23	Sandigo Solar Farm	Sandigo	NSW	Approved
24	Wunghnu Solar Farm	Wunghnu	VIC	Approved
25	Naring Solar Farm	Naring	VIC	Proposed
26	Avonlie Solar Farm	Sandigo	NSW	Generating
27	Winton VIC Solar Farm	Winton	VIC	Generating
28	Cohuna Solar Farm	Cohuna	VIC	Generating
29	Girgarre Solar Farm	Girgarre	VIC	FID/Under Construction
30	Macorna North Solar Farm	Macorna North	VIC	Approved
31	Yarrabee Solar Project	Morundah	NSW	Approved
32	Lancaster Solar Farm	Lancaster	VIC	Approved
33	Kerang Solar Farm	Kerang	VIC	Approved
34	Prairie Solar Farm	Mitiamo	VIC	Approved
35	Wunghnu 2 Solar Farm	Wunghnu	VIC	FID/Under Construction
36	Yanco Solar Farm	Yanco	NSW	Approved
37	West Mokoan Solar Farm	Benalla	VIC	Approved
38	Koorangie Solar Farm	Gannawarra	VIC	Approved
39	Stanhope Solar Farm	Stanhope	VIC	Proposed
40	Barnawartha Solar Farm and Energy Storage	Barnawartha	VIC	Approved
41	Glenrowan West Solar Farm	Glenrowan	VIC	Generating
42	Langs Crossing Solar Farm	Hay	NSW	Approved
43	Goorambat Solar Farm	Goorambat	VIC	Approved
44	Mokoan Solar Project	Lake Mokoan	VIC	Proposed
45	Corop Solar Farm	Rushworth	VIC	Approved
46	Tragowel Solar Farm	Tragowel	VIC	Approved
47	Kerang 2 Solar Farm	Kerang	VIC	Approved

Map reference	Project name	Suburb	State	Status
48	Kerang East Solar Farm	Kerang	VIC	Approved
49	Gannawarra Solar Farm Stage 2	Gannawarra	VIC	Approved
50	Gannawarra Energy Storage System	Kerang	VIC	Generating
51	Mulwala Ski Club Energy Park	Mulwala	NSW	Proposed
52	Lockhart Microgrid Energy Project	Lockhart	NSW	Approved
53	Hay 2A Solar Farm	Hay	NSW	Approved
54	Derby Solar Farm	Loddon,	VIC	Approved
55	Goorambat East Solar Farm	Goorambat	VIC	Approved
56	Echuca Solar Farm	Echuca	VIC	Generating
57	Katamatite Solar Farm	Katamatite	VIC	Generating
58	Stanhope 1 Solar Project	Stanhope	VIC	Generating
59	Girgarre 1 Solar Farm	Girgarre	VIC	Generating
60	Numurkah Solar Farm APSU	Numurkah	VIC	Generating
61	Carag Carag Solar Farm	Carag Carag	VIC	Approved
62	Greentech 3 Solar Farm	Rochester	VIC	Approved
63	Greentech 5 Solar Farm	Shepparton	VIC	Approved
64	Greentech 6 Solar Farm	Tatura	VIC	Approved
65	Kerang Aerodrome Solar Micro Grid	Kerang	VIC	Proposed
66	Fivebough Solar Farm	Leeton	NSW	Generating
67	Southdown Solar Farm	Deniliquin	NSW	Proposed
68	Laceby Solar Farm	Laceby	VIC	Approved
70	Carawatha Solar Farm	Finley	NSW	Approved
71	Viewbank Solar Farm	Stanhope	VIC	Proposed
72	Raywood Solar Farm	Raywood	VIC	FID/Under Construction

Map reference	Project name	Suburb	State	Status
73	Finley 2 Solar Farm	Finley	NSW	Approved
74	Mokoan 2 Solar Farm	Winton	VIC	Approved
75	Numurkah 2 Solar Farm	Numurkah	VIC	Generating
76	Winton North Solar Farm	Winton North	VIC	Approved
77	Corobimilla Solar Farm	Corobimilla	NSW	Proposed
78	Corobimilla Micro Solar Farm	Corobimilla	NSW	Proposed
79	Riverina Energy Storage System	Darlington Point	NSW	Generating
80	Gillenbah Solar Farm	Gillenbah	NSW	Approved
82	Dinawan Wind Farm	Jerilderie	NSW	Proposed
83	Mulwala Waters Solar Farm	Mulwala	NSW	Generating
84	Coleambally BESS	Coleambally	NSW	Approved
85	Junction Rivers Wind Farm	Balranald	NSW	Proposed
86	Goorambat West Solar Farm	Benalla	VIC	Proposed
87	Barnawartha Solar Farm 2	Barnawartha	VIC	Approved
88	Benalla Solar Farm	Benalla	VIC	Proposed
89	Moama 2 Solar Farm	Moama	NSW	Proposed
90	Stanhope 5 Solar Project	Stanhope	VIC	Generating
91	Bamawm Solar Project	Bamawm	VIC	Generating
92	Yarroweyah Solar Project	Yarroweyah	VIC	Generating
93	Yanco Delta Wind Farm	Jerilderie	NSW	Approved
94	Baldon Wind Farm	Moulamein	NSW	Proposed
95	Bullawah Wind Farm	Hay	NSW	Proposed
96	Limondale BESS	Balranald	NSW	Proposed
97	Charlton Solar Farm	Charlton	VIC	Approved
98	Pine Lodge BESS	Pine Lodge	VIC	Approved
99	Numurkah Solar Farm G/G	Numurkah	VIC	FID/Under Construction

Map reference	Project name	Suburb	State	Status
100	Koorangie Energy Storage System	Kerang	VIC	FID/Under Construction
101	Meadow Creek Solar Farm	Meadow Creek	VIC	Proposed
102	The Plains Wind Farm	Hay	NSW	Proposed
103	Indigo Solar Farm	Barnawartha North	VIC	Approved
104	Wilan Wind Farm	Keri Keri	NSW	Proposed
105	Hay GGE Solar Farm	Hay	NSW	Proposed
106	Woodland BESS	Darlington Point	NSW	Proposed
107	Deniliquin Solar Farm	Deniliquin	NSW	Proposed
108	Barham Solar Farm	Barham	NSW	Proposed
109	Pottinger Wind Farm	Hay	NSW	Proposed
110	Dinawan Solar Farm	Jerilderie	NSW	Proposed
111	Dinawan BESS	Mabins Well	NSW	Proposed
112	Pottinger Solar Farm	Hay	NSW	Proposed
113	Kerarbury Orchard Solar Farm and BESS	Darlington Point	NSW	Approved
114	Tchelery Wind Farm	Moulamein	NSW	Proposed
115	Cooba Solar Project	Colbinabbin	VIC	Proposed
116	Winton BESS	Winton	VIC	Approved
117	Canally Orchards Microgrid	Balranald	NSW	Approved
118	Deniliquin East BESS	Deniliquin	NSW	Proposed
119	The Plains Solar Farm	Hay	NSW	Proposed
120	Normanville Energy Park	Normanville	VIC	Proposed
121	Argoon Wind Farm	Jerilderie	NSW	Proposed
122	Devlins Bridge Wind Farm	Narrandera	NSW	Proposed
123	Macorna Wind Farm	Macorna	VIC	Proposed
124	Yanco BESS	Yanco	NSW	Proposed
125	Kerang BESS	Kerang	VIC	Approved

Map reference	Project name	Suburb	State	Status
126	Romani Solar Farm	Booroorban	NSW	Proposed
127	Romani Solar Farm BESS	Booroorban	NSW	Proposed
128	Avenis BESS	Deniliquin	NSW	Proposed

Source: AltEnergy Australia; Cordell Connect; Urbis

Note: Projects that are generating energy do not require further workforce accommodation and, therefore, have not been included in the workforce demand analysis.

APPENDIX E RELEVANT OCCUPATIONS

Relevant Occupations
Land planners and surveyors
Engineers (electrical and other)
Builders
Manager, Superintendents, supervisors
General civil work (grader, dozer, excavator operators, etc.)
HSE personnel
Electricians
Fencing Specialist
General labourers
Vegetation Management
Logistics
Management, Superintendents, Supervisors
Metal manufacturers
General civil work (grader, dozer, excavator operators, etc.)
Security
Telecommunication

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