



**NGH**



# **Social Impact Assessment**

## **Glanmire Solar Farm**

**October 2022**

**Project Number: 21-785**



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## Acronyms and abbreviations

ABS	Australian Bureau of Statistics
ACHAR	Aboriginal Cultural Heritage Assessment Report
AES	Accommodation and Employment Strategy
BESS	Battery Energy Storage System
BSAL	Biophysical Strategic Agricultural Land
CSEP	Community and Stakeholder Engagement Plan
DPE	Department of Planning and Environment (NSW)
DPIE	Department of Planning, Industry and Environment (NSW)
DPI	Department of Primary Industries (NSW)
EIS	Environmental Impact Statement
FTE	Full-time equivalent
GRP	Gross Regional Product
km	kilometres
LALC	Local Aboriginal Land Council
LGA	Local Government Area
NIA	Noise and Vibration Impact Assessment
m	metres
NSW	New South Wales
NSW RFS	Rural Fire Service (NSW)
PHA	Preliminary Hazard Analysis
SEARS	Secretary's Environmental Assessment Requirements
SEIFA	Index of Relative Socio-economic Advantage and Disadvantage
SIA	Social Impact Assessment
SSD	State Significant Development
TIA	Traffic Impact Assessment

## Table of definitions

The Project	Glanmire Solar Farm
Proponent	Elgin Energy
Project site	<p>The Project site is the uppermost area of land that would be directly impacted by the project, including all construction, operational and decommissioning impacts. It includes disturbance areas required for the solar arrays, perimeter fence, access roads and upgrades, transmission line footprint and areas used to store construction materials and manage environmental impacts. This area is termed the 'Development footprint' in the EIS.</p> <p>Generous delineation of the size of the Project site allows for flexibility during the final project design stages. The final disturbance is likely to be smaller than the Development footprint.</p> <p>The area of the Project site is 150ha.</p>
Social locality	Bathurst Regional Council LGA, with particular focus on the locality of Glanmire. This is also referred to as the 'Study area'.
Landholder	Host landholder for the Glanmire Solar Farm

## Executive summary

Elgin Energy is proposing to develop the Glanmire Solar Farm (the Project) in the locality of Glanmire, within the Bathurst Regional Council LGA of NSW. The Project will involve the design, construction, operation and decommissioning of a 60MW capacity solar farm, and an associated battery energy storage system.

This Social Impact Assessment (SIA) is one of several technical reports that form part of the Environment Impact Statement (EIS) required as part of the Project approval process. It has been prepared to address relevant requirements of the Secretary's Environmental Assessment Requirements (SEARs) issued for the Project by the NSW Department of Planning and Environment.

Stakeholder engagement for the EIS phase of the Project included both the EIS engagement program, as well as targeted SIA qualitative social research. These two streams of engagement were undertaken in an integrated way, and findings from both, as well as previous engagement undertaken by the Proponent to inform the Scoping Report, have informed this SIA.

Stakeholder engagement with near neighbours, businesses, local community, interest groups and others demonstrated that there is a level of localised concern regarding the Project. However, this is balanced by a high level of support and encouragement for the Project from the broader community (including Bathurst).

Key concerns expressed by near neighbours were primarily centred around:

- visual impacts
- potential impacts on property values
- perceived loss of agricultural outputs
- perceived impacts on neighbour's insurance premiums
- impacts to views of potential future dwellings
- impacts to personal wellbeing
- the perceived limitation on developing renewable energy projects within 5km of Raglan due to recent planning rule changes.

The broader community's sentiment was more supportive, while noting the need to work constructively with near neighbours. Their main areas of focus included:

- the pressures of climate change and the need to support an energy transition (including action within the local area)
- the need to work constructively with the community to share benefits
- the need to support local businesses and build capability to support renewable energy projects
- the need to support environmentally focused projects.

Drawing from this stakeholder engagement, the social impacts and opportunities arising from the Project are summarised in Summary of social impacts and opportunities below:





Summary of social impacts and opportunities

Responding to these impacts and aiming to minimise negative impacts and enhance positive benefits, Elgin implemented several Project design changes throughout the EIS process. These principally related to minimising the visual impacts to the landscape.

In addition, a series of social impact management measures have also been adopted. These measures include:

- Community and Stakeholder Engagement Plan – this will focus both on the short-term engagement needed in the post EIS lodgement phase, and on the longer-term engagement that will be undertaken over the life of the Project.
- Accommodation and Employment Strategy – this will encompass considerations regarding both Local Participation (i.e., maximising the involvement of local people and businesses in the Project) and the accommodation of the construction workforce. This strategy will be developed in partnership with key local stakeholders once the development application is approved.
- Community Benefit Sharing Program – this will be developed in partnership with residents and the broader community. The intention is to create a fund that can support very localised and meaningful community development or other neighbourhood-level initiatives that have strong resident support, throughout the life of the Project.

Together these measures aim to minimise and manage the negative social impacts, and enhance the positive benefits, of the project.

# 1. Introduction

## 1.1. Project overview

Elgin Energy proposes to develop the Glanmire Solar Farm (the 'Project') in the locality of Glanmire, within the Bathurst Regional Council LGA of NSW. The Project will involve the design, construction, operation and decommissioning of a 60MW capacity solar farm and an associated battery energy storage system. The Project is the subject of this SIA.

The Project has been declared a State Significant Development (SSD) under division 4.7 of the Environmental Planning and Assessment Act 1979 (NSW) (EP&A Act). Elgin Energy is seeking approval under both the EP&A Act and the State Environmental Planning Policy (Planning Systems) 2021 to construct and operate the Project.

Elgin Energy was founded in 2009, in the United Kingdom. To date, the company has delivered 21 Projects (230MW) in the UK, and they are currently developing 600MW of solar farms across Victoria and New South Wales. Their Australian office was opened in 2018.

Construction of this Project is expected to take approximately 12 months, ramping up over the initial months to a peak of 150 workers. The expected operational life of the Project is 35 years; however future infrastructure upgrades may extend the operational life. In the decommissioning phase, all above ground infrastructure and shallower underground cabling would be removed from the Project site, excluding the substation. The site would be rehabilitated to a safe, stable and non-polluting state, consistent with future land use requirements.

Key components of the Project are summarised in Table 1-1 below.

Table 1-1 Key components of the Glanmire Solar Farm

Key components	Details
Infrastructure	
Solar panels	128,000 ground mounted solar PV panels (either on a fixed-tilt or single-axis tracking system). Indicative area of panels: 130ha. Approximately 18 inverters installed within the array area.
BESS	An electrochemical BESS with a capacity of approximately 65 MW. Partly grouped in containerised modules near the substation, approximately 0.8ha. Include an additional 17 inverters and transformers in containers, collocated at the site for power storage.
Onsite substation and switchyard	Transfer capacity of approximately 65MVA and host up to 2 transformers. Approx. 0.2ha for the 33/66kV switchyard.
Site access, road and track upgrades	Access is from Brewongle Lane. External road upgrades (subject to final detailed design). Track upgrades to existing internal tracks, and construction of new internal tracks.
Operations and maintenance building, and storage shed	A permanent facility with staff amenities and vehicle parking.
Security fencing,	Barbed wire fencing behind vegetation screening around the solar panels array;

Key components	Details
lighting	security fencing around other key infrastructure. Some night lighting will be used for maintenance and emergency purposes.
Operations workforce	1-3 FTE
Construction elements	
Construction	150 FTE during peak construction
Temporary construction facilities	Approx. 10 transportable offices with associated amenities

## 1.2. Project locality

The Project is located approximately 11km east of Bathurst. It is situated within the small farming locality of Glanmire, within a rural landscape that adjoins industrial, commercial, and residential areas.

The 'Project site' is defined as the uppermost area of land that would be directly impacted by the Project, including all construction, operational and decommissioning impacts. It includes areas required for the solar arrays, perimeter fence, access roads and upgrades, transmission line connection footprint and areas used to store construction materials and manage environmental impacts (including all temporary and permanent impacts). The area of the Project site is 150ha, as seen in Figure 1-1 SIA Project locality Figure 1-1.

The Project site is located at 4823 Great Western Highway Glanmire (Lot 141 DP 1144786), which is a 186-hectare property holding. The property is owned by one private landholder, and it has a gentle undulating terrain which forms a series of small valleys and dams. It is mainly comprised of open grazing country with some sown paddocks, and scattered trees.

The property is bordered by five neighbours. The surrounding land use is predominantly agricultural. However, on the northern side of the highway there is a transport business and animal boarding kennels, with smaller land parcels dominating. On the southern side, agricultural land uses dominate, including grazing, improved pasture and cropping.



Figure 1-1 SIA Project locality

### 1.2.1. Other nearby major projects

Other key infrastructure and energy projects within the local area that are either in the construction process or in the development pipeline are outlined in Table 1-2 below.

Table 1-2 Other significant development projects in the area

Project	LGA	Development type	Stage of delivery
Bathurst Integrated Medical Centre	Bathurst Regional	Infrastructure	Planning and approvals
McPhillamys Gold Project	Bathurst Regional	Gold Mining	Planning and approvals
Central West Pumped Hydro	Bathurst Regional	Pumped Hydro	Planning and approvals
Bathurst Second Circuit	Bathurst Regional	Infrastructure	Planning and approvals
Eglinton Solar Farm	Bathurst Regional	Solar	Planning and approvals
Great Western Highway Upgrade	Lithgow City	Infrastructure	Pre-construction

These projects have been considered in the assessment of cumulative impacts throughout this assessment.

## 1.3. Purpose of this report

This Social Impact Assessment (SIA) is one of several technical reports that form part of the Environment Impact Statement (EIS) required as part of the Project approval process. It has been prepared to address relevant requirements of the Secretary's Environmental Assessment Requirements (SEARs) issued for the Project by the NSW Department of Planning and Environment in September 2021.

Regarding social impacts, the SEARS state that the EIS must address:

- *Socio-Economic – including an assessment of the social and economic impacts in accordance with Social Impact Assessment Guideline (DPIE, July 2021) and benefits of the Project for the region and the State as a whole, including consideration of any increase in demand for community infrastructure services, assessment of impact on agricultural resources and production on the site and region.*

This SIA directly responds to these requirements. It aims to identify, predict and evaluate the likely social impacts and benefits arising from the Project, and to propose appropriate responses to mitigate and manage negative impacts and enhance positive benefits.

## 2. Methodology

This SIA has been undertaken in line with the *Social Impact Assessment Guideline* (DPIE, 2021a) (the guideline) and accompanying *Technical Supplement* (DPIE, 2021b). It has been supported by stakeholder and community engagement activities.

This SIA was informed by the principles of best practice as outlined in the guideline, ensuring that the SIA is evidence-based, precautionary and responsive to the local context.

An overview of the key stages is presented in Figure 2-1.

Background	<ul style="list-style-type: none"> <li>• Desktop review of background information, e.g. Project information, including the Scoping Report, engagement findings</li> <li>• Review of broader information relating to the social context, and the social impacts of comparable Projects</li> </ul>
Impact scoping	<ul style="list-style-type: none"> <li>• Identify and undertake preliminary assessment of likely social impacts of the Project</li> <li>• Define the social locality</li> </ul>
Social baseline	<ul style="list-style-type: none"> <li>• Review of relevant state and local government strategies</li> <li>• Desktop research using ABS data (e.g. 2016 Census) and other data from government or key stakeholder websites</li> </ul>
Targeted SIA qualitative social research	<ul style="list-style-type: none"> <li>• Identify relevant stakeholders and communities</li> <li>• Undertake targeted interviews with key stakeholders via telephone/online</li> </ul>
Impact assessment	<ul style="list-style-type: none"> <li>• Review of relevant technical studies, stakeholder and community engagement findings, and integrate relevant findings</li> <li>• Evaluate the significance of identified potential impacts</li> </ul>
Social impact enhancement & mitigation	<ul style="list-style-type: none"> <li>• Determine management measures and opportunity strategies to minimise any significant negative impacts of the Project and optimise any significant positive effects</li> <li>• Describe residual impacts after effective application of mitigation measures</li> </ul>

Figure 2-1 Overview of assessment methodology

### 2.1. Impact scoping

This analysis builds on the social impact scoping that was undertaken for the Scoping Report. It involved an identification and preliminary assessment of the likely social impacts of the Project. Informing this was Project information, engagement findings from the Project Scoping process, the Project Scoping Report, other technical assessments within the EIS, and other relevant work completed to date.

As per the guideline, 'social impacts' generally refer to the consequences that people experience when a new project brings change. For the purposes of this SIA, 'people' are classed as individuals, households, groups, communities, or organisations



Social impacts and opportunities were identified across the following eight domains:

- **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, resilience, 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, practices, obligations, 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, access to open space and effects on public health
- **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
- **decision-making systems**, including the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms.

In this analysis of social impacts, direct, indirect and cumulative impacts were accounted for.

Through this process, impact scoping set the social locality, and framed the scale and depth of the SIA. Considered judgements – based on the extent of cumulative impacts and the degree of material social impact – were then made regarding the type and level of further assessment to be undertaken for each potential impact.

The impact scoping worksheet is available in full at Appendix A.

## 2.2. Defining the social locality

The social locality (also termed the 'Study Area') describes the social extent of a project and consists of the people who are potentially impacted by a project. Affected peoples can include both 'communities of place' and 'communities of interest'. The social locality is determined with consideration of the nature and scale of potential impacts arising from the development, and review of the characteristics of the affected communities.

Given this, the social locality for this Project has been defined as the Bathurst Regional Council LGA, with particular focus on the locality of Glanmire.

The specific geographical classifications for these areas are outlined in Table 2-1.

Table 2-1 Geographic classifications of the social locality

Geographic areas of the social locality	ABS geographical classifications
Bathurst Regional LGA	Bathurst Regional LGA
Glanmire (or Glanmire locality)	Glanmire Suburb and locality

These are shown in the figure below.





Figure 2-2 SIA Social locality, Bathurst Regional LGA and Glanmire Suburb and locality

## 2.3. Establishing the social baseline

The baseline provides a snapshot of existing social conditions within the social locality, establishing a base case against which potential impacts can be assessed.

Table 2-2 Scoping activities and data sources

Activity	Task/source
Desktop research and data collection	<ul style="list-style-type: none"> <li>Review of the Project's Scoping Report (Premise, 2021)</li> <li>Australian Bureau of Statistics (2016 Census and other relevant socio-economic data)</li> <li>DPE and Bathurst Regional Council population forecasts</li> <li>Review of relevant community service providers and local community organisations websites, including Bathurst Regional Council, Bathurst Chamber of Commerce</li> <li>Social infrastructure and stakeholder mapping</li> <li>Identification of relevant key Projects/developments in the LGA and broader region</li> </ul>
Literature and strategic planning review	<ul style="list-style-type: none"> <li>Review of publicly available research/SIAs on comparable infrastructure Projects</li> <li>Review of relevant public policies, plans and strategies, including:               <ul style="list-style-type: none"> <li>Central West and Orana Regional Plan 2036 (June 2017)</li> <li>Bathurst Region Economic Development Strategy 2018-2022</li> <li>Bathurst 2040 Community Strategic Plan (2020)</li> <li>Vision Bathurst 2040 Local Strategic Planning Statement (2020)</li> <li>Bathurst Regional Council's Renewable Energy Action Plan 2020 (Bathurst REAP)</li> <li>Bathurst Regional Community Participation Plan (CPP, 2021).</li> </ul> </li> </ul>
Stakeholder and community engagement review	<ul style="list-style-type: none"> <li>Review engagement summaries from activities undertaken by the Project Team</li> </ul>

## 2.4. Targeted SIA qualitative social research

To inform and validate the social baseline and assessment of social impacts, the SIA team undertook the following social research activities:

- **Stakeholder mapping** involved identifying key stakeholders with an interest in, or those directly or indirectly affected by, the Project.
- **Targeted phone and online interviews** 14 targeted phone/online interviews with representatives from local community groups, local and state government, industry, and business. Complementing this, SIA interview feedback was received via email from five near neighbours (after an invitation for an interview was forwarded on to other community members).
- **Online survey** a short online survey was developed and made available on the Proponent's website, and the link to this was distributed to stakeholders as part of both the EIS stakeholder and community engagement, and the SIA social research. This survey was live for more than four weeks. Twenty-eight responses to the survey were received, four of these were from residents who lived

less than 1km from the Project site, as seen in Table 2-3 Online survey responseTable 2-3. See Appendix B for detailed online survey findings.

Table 2-3 Online survey respondents (Question: where do you live?)

Response	n	%
Less than 1km from the proposed Project	4	14%
Between 1-2km from the proposed Project	1	4%
Between 2-5km from the proposed Project (excluding Bathurst)	0	0%
More than 5km from the proposed Project (excluding Bathurst)	5	18%
I live in Bathurst	12	43%
I don't live here but I own land/property	1	4%
I don't live here but visit the area for recreation	3	11%
I don't live here but visit the area for work	2	7%
Other (please specify)	0	0
<b>Total</b>	<b>28</b>	<b>100%</b>

## 2.5. Evaluation of social impacts

The evaluation built on the impact scoping, and involved further review of relevant inputs e.g., relevant EIS technical reports, stakeholder and community engagement findings, and comparative studies. An assessment was then carried out to determine the likely significance of each potential impact, based on its predicted magnitude and likelihood (see Table 2-4).

Table 2-4 Social impact significance matrix (DPIE, 2021a)

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

## **2.6. Identification of management, mitigation, and enhancement options**

Measures to avoid, minimise or mitigate potential negative impacts and enhance positive benefits have been developed to address impacts identified as being of medium or higher significance. A brief assessment of residual impacts post-application of mitigation measures was then undertaken.

## **2.7. Assumptions and limitations**

This SIA has been developed based on several assumptions and limitations, including:

- This SIA has been undertaken with information that is known about the Project and the social context at the time of writing, and social impacts have been predicted based on this information
- This was principally a desk-top exercise. The SIA interviews were carried out either online or via telephone. The SIA heavily relied on engagement findings from the EIS engagement program.
- Despite heavy promotion and a long time in the field, the number of responses to the survey was moderate (twenty-eight responses)
- Some stakeholders were engaged multiple times through multiple engagement mechanisms, so their views may have been expressed more than once
- The 2016 Census data has been used where more recent Census data is not available; however, it is now 6 years out of date.

### 3. Stakeholder and community engagement

Stakeholder and community engagement for the EIS phase of the Project included two components:

1. The EIS engagement program
2. Targeted SIA qualitative social research

These two streams of engagement were undertaken in an integrated way. Findings from both, as well as previous engagement undertaken by the Proponent to inform the Scoping Report, have informed this SIA.

#### 3.1. Overview of the EIS engagement program

The Proponent's engagement intent for this Project has been strongly influenced by past local experiences with solar farm proposals in the area and the Project SEARs. This Project is one of three proposed solar farms that have been the subject of community and stakeholder engagement near Bathurst in recent years. In 2017, a community driven action group was formed in response to the Brewongle Solar Farm proposal. Concerns about that proposal were voiced by a range of stakeholders, including elected representatives and community leaders in a highly publicised way, and this created a heightened level of awareness regarding solar farms in the area.

Based on this situation, the EIS engagement program included a broad range of engagement activities aimed at broadening awareness of the Project, responding to concerns, working through issues, and capturing opportunities. As such, the level of engagement undertaken exceeded what would normally be undertaken for a project of this scale.

Additionally, the Project SEARS required a Community Consultative Committee (CCC) be undertaken. CCCs are currently mandated for wind farm developments in NSW; however, no other solar farm has required a CCC during the planning phase in NSW. The Project CCC was administered by an independent chair and it comprised participants selected by DPE (in response to applications) including neighbours, nearby neighbours, community representatives and a Bathurst Regional Council representative.

Other key engagement actions undertaken as part of the engagement program included information sessions, near neighbour consultation, social media outreach, traditional media coverage, digital tools (i.e., website), stakeholder group briefings, and agency consultations.

This engagement program demonstrated that while there is localised concern regarding the Project that is balanced by a high level of support and encouragement from the broader community (including Bathurst).

The strong concern expressed by near neighbours was primarily focused on the following topics:

- the change of land use and the perception that the soil quality is too high to host a solar farm
- the visual change a solar farm would bring, including change to the character of the area
- perceived potential impacts on property values
- perceived loss of agricultural outputs
- perceived impacts on neighbour's insurance premiums
- impacts to views of potential future dwellings
- the perceived limitation on developing renewable energy projects within 5km of Raglan due to recent planning rule changes.

The broader community's sentiment was more supportive, while noting the need to work constructively with near neighbours. Their main areas of focus were:

- the pressures of climate change and need to support an energy transition, including supporting renewable energy projects in the Bathurst area

- the need to move with greater speed to do this and to work constructively across communities, business, developers and government
- the suitability of the site based on the topography, a setback from the highway concealing the development area, and the disturbed nature (from its natural state) of the land
- the need to work constructively with the community to share benefits
- the need to support local businesses and build capability to support renewable energy projects
- the need to support environmentally focused projects.

Refer to EIS Section 5.1.4 for more details.

### 3.2. Summary of SIA qualitative research findings

Findings from the SIA qualitative research strongly reiterated the findings from the engagement program outlined above. This was in terms of both the general sentiments regarding the Project, as well as the key areas of focus that emerged from near neighbours, the broader community, and agency and business representatives.

In addition to the near neighbour sentiments expressed above, near neighbours also highlighted the stress and distress that they have felt due to the Project, and that they feel distrust towards to the Proponent. In summary, they feel that the Project would be better situated somewhere else. They suggested it be relocated to within the Central West Orana REZ - where they believe all new renewable energy projects are meant to be located.

More broadly, there appears to be support for renewable energy projects in the region generally, as well as support for this Project in particular. The online survey revealed that 19 of the 28 survey respondents (70%) 'strongly' or 'somewhat' support the Glanmire Solar Farm, while 4 respondents (15%) strongly oppose it, as seen in Figure 3 1.

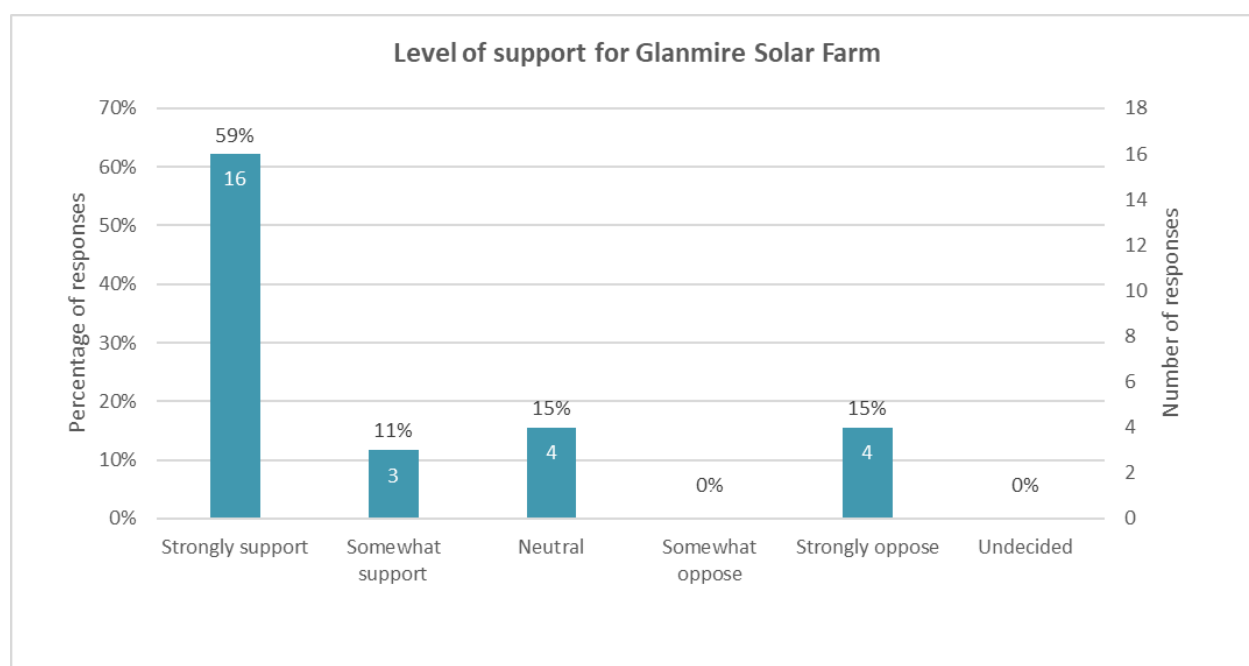


Figure 3-1 Online survey findings – Level of support for the Project

In terms of the Project specifically, three-quarters of respondents reported that the development of renewable energy and action on climate change were the most important environmental, social and economic factors. To a lesser extent, native vegetation impacts and waste management procedures were also important environmental factors.



Other important social and economic factors were community benefit opportunities from the Project and the equitable distribution of benefits, along with the potential for land use and income stream diversification. Temporary construction impacts (i.e., noise, traffic, dust) and the potential for visual impacts for near neighbours were the more important amenity factors. These sentiments are expressed in Figure 3-2.

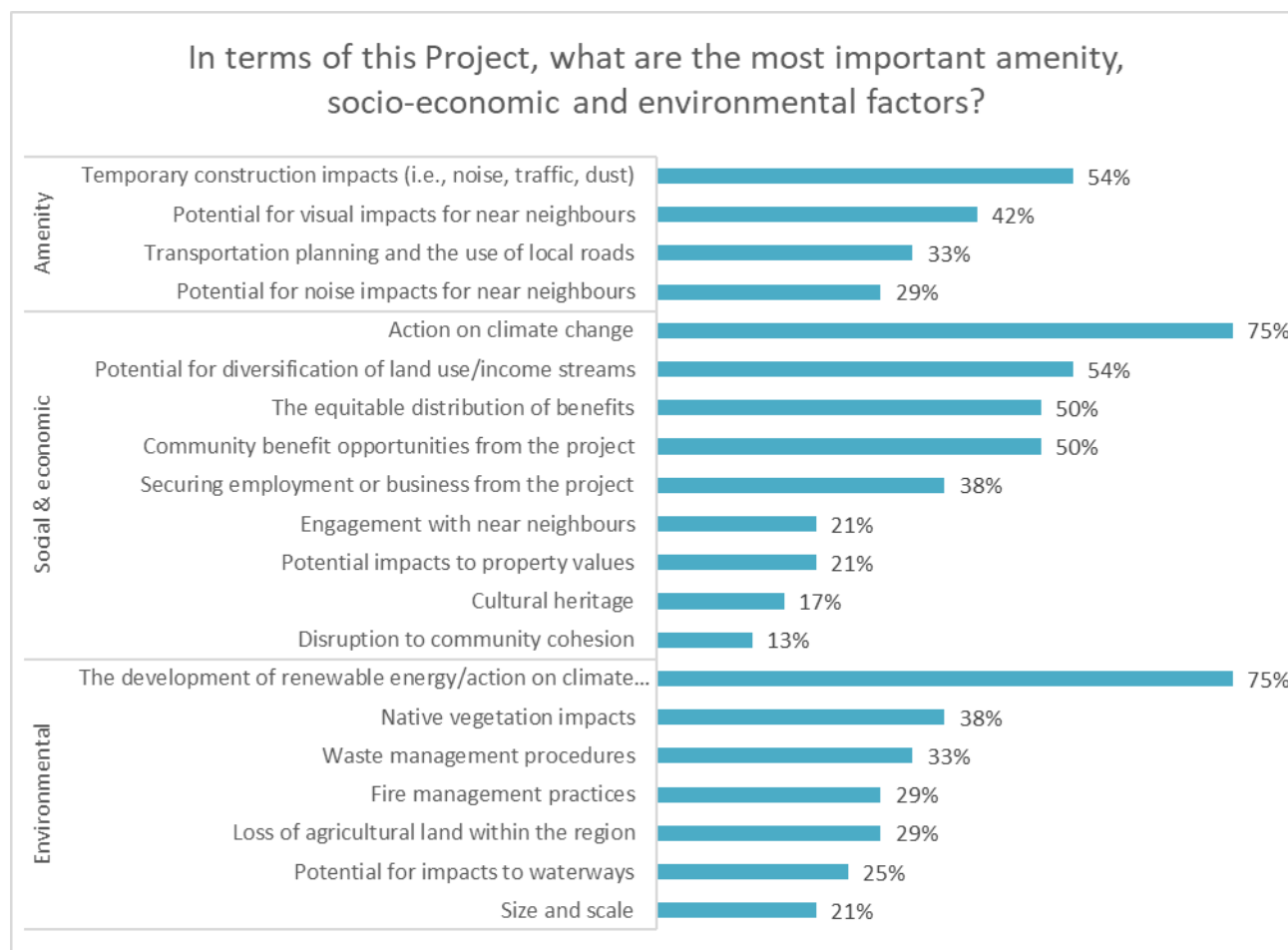


Figure 3-2 Online survey responses – Most important amenity, socio-economic and environmental factors of the Project

In general, most stakeholders welcomed the jobs and economic opportunity that the construction of the Project will bring. Despite this, some stakeholders noted that solar projects do not return enough to the local community: the construction workforces are not large; local construction labour is difficult to attain; and the operational workforce is very small. In addition, the existing labour shortages and housing availability issues were commonly cited as potential issues for the construction of the Project.

Most stakeholders noted that a community benefit sharing scheme would be highly valued by the community and it would help to demonstrate the Proponent's support of the community. This was investigated by the Project Team and a summary of the proposed benefit sharing model is included in Section 2.5 of the EIS.

## 4. Social baseline

This section provides an overview of the existing socio-economic conditions within the study area. All population and demographic data presented here is from the 2021 or 2016 Census, unless otherwise stated. Detailed demographic and industry data relating to the study area is also presented at Appendix C.

### 4.1. Local and regional context

The Project site is situated in the locality of Glanmire, in the Central West region on NSW. It is approximately 11km east of Bathurst, within the Bathurst Regional Council LGA. Glanmire is a small farming locality situated just off the Great Western Highway. Land use in the area is predominantly agricultural, with a small number of lifestyle blocks.

Neighbouring localities include Napoleon Reef to the northeast, Walang to the east, and Brewongle to the south. It is noted that the subdivision patterns differ between the north and south of the Great Western Highway, with the area to the south noticeably less dense (at this stage) in its residential developments.

The Bathurst council area covers a total land area of 3,820km<sup>2</sup>, on Wiradjuri Country. The LGA is bounded by the Mid-Western Regional Council to the north, the City of Lithgow and Oberon Councils to the east, Upper Lachlan Shire to the south, and Blayney Shire, Cowra and Cabonne Councils to the west.

Located approximately 200km west of Sydney and 212km north of Canberra, Bathurst is the largest town in the region and it's an important service centre providing health, tertiary education, and other services to its broader regional catchment (DPIE, 2021). Bathurst is Australia's oldest inland colonial settlement and was the site of the first gold discovery and gold rush.

Bathurst is located on the western edge of the Great Dividing Range on the Bathurst plains. Built on the banks of the Macquarie River, the town sits at the junction of the Great Western, Mitchell and Mid-Western Highways. It's also on the Main Western railway line. Mount Panorama (also known as 'Wahluu') is located 3km from the CBD.

To the north of Bathurst, centred around Dubbo and Dunedoo, the NSW Government has recently declared Central-West Orana as NSW's first Renewable Energy Zone (REZ). REZs are intended to unlock new renewable energy capacity within the grid by concentrating power generation, transmission, and storage in prescribed areas. This Project is not within this REZ; however, the NSW Government has clearly stated that it will be necessary that new renewable energy projects will be located outside of the REZ areas. Renewable energy is an emerging sector within the Central West region, and this Project is proposed amid a growing number of renewable energy proposals, as well as several large regional development projects.

#### 4.1.1. Socio-economic planning setting

Land-use planning at the regional level is guided by the *Central West and Orana Regional Plan 2036*. In this, diverse and productive agricultural land, distinct landscapes, and the natural environment are highlighted as key regional assets. The area's close connections and ease of access to Sydney, Canberra, and Newcastle are also highly valued. Important industry sectors are agriculture, agribusiness, transport and logistics, tourism, manufacturing, mining, healthcare, and technology and education. Increasing the generation of renewable energy is part of the goal to become NSW's most diverse regional economy (DPE, 2017).

At the local level, socio-economic strategic planning is guided by the following BRC plans:

- *Bathurst Region Economic Development Strategy 2018-2022* (BRC, 2018)
- *Bathurst 2040 Community Strategic Plan* (BRC, 2020a).

Both plans are anchored in the environmental, social, cultural and economic assets of the local community and area. Promoting alternate sustainable energy sources and practices, while maintaining a balance between growth, development and environmental protection are key directions of both plans.



In addition, BRC's *Renewable Energy Action Plan 2020* (REAP) (BRC, 2020b) sets out Council's strategy to minimise its dependence on fossil fuels. It includes targets for 25% of Council's electricity consumption to be from renewable sources by 2023, and 50% by 2025.

## 4.2. Population and demography

### 4.2.1. Population and growth

As at 2021, 43,567 people lived in the Bathurst LGA (ABS, 2022). Over the ten-year period 2011-2021, the area experienced steady population growth. This is predicted to continue, with the population expected to increase by 12,690 people (8%) from 2021-2041. Migration into the area by younger families and students moving from Sydney and the surrounding region is predicted to be the key driver of growth (DPE, 2022).

Consultation confirmed this, with some stakeholders noting a perceptible increase in people moving to Bathurst and the region for a 'tree-change' over recent years. This trend has been exacerbated since the COVID-19 pandemic.

At the time of the 2021 Census, the locality of Glanmire had an estimated population of 186 people.

### 4.2.2. Age, households and cultural diversity

The locality of Glanmire has a moderately aged population profile. In line with this, it has a slightly lower proportion of children 0–14 years (17.5%) compared to the broader Bathurst region (18.7%) and NSW (18.2%). In terms of households that are family households, Glanmire has a high proportion (83.6%) compared to the wider Bathurst region (69.0%) and NSW (71.2%), which reflects its rural setting.

2021 Census data suggests a very high rate of Australian-born residents in Glanmire (89.2%). The proportion of Aboriginal and Torres Strait Islander residents in Glanmire is 4.3%, compared to 7.2% in the Bathurst region and NSW (3.4%).

### 4.2.3. Socio-economic advantage and disadvantage

In 2021, the median household weekly income in Glanmire was high at \$1,958, which was higher than Bathurst LGA (\$1,585) and NSW (\$1,829). The ABS 2016 Social-Economic Indexes for Areas (SEIFA) is an aggregated score reflecting relative socio-economic advantage and disadvantage within an area. A decile score of 1 indicates an area of greater relative disadvantage, and a decile score of 10 indicates an area of greater relative advantage.

Given this, the Glanmire locality (decile 8 across the indexes of economic resources, education and occupation) shows that residents experienced a high level of access to employment, income, and living conditions. The Bathurst LGA similarly scored high (deciles of 6 and 7) across these indexes.

## 4.3. Housing and accommodation

Reflecting its rural setting, in 2021 all Glanmire residents lived in separate houses, which compared to 84.8% of residents in the Bathurst LGA. The locality also had a significantly higher rate of home ownership (81.9%) compared to the Bathurst LGA (66.8%) and NSW (64.0%).

For the December 2021 quarter, median weekly rents in the Bathurst region (\$440) were only slightly lower than that for NSW (\$495). There were strong increases in rents (15.8%) over the preceding year (NSW DCJ, 2022).

Regarding rental vacancies, vacancy rates of 3% are regarded as representing a balance between supply and demand. Within Bathurst city and surrounding area, vacancy rates have been below 3% since July 2018; the rate in March 2022 was 0.4% (SQM Research, 2022). These data indicate a very tight rental market and a lack of supply of private rental accommodation. Compounding this are the adverse impacts of

the pandemic on renters in regional areas generally, causing declining vacancy rates and increasing median rental rates (Pawson, Martin, & Thompson et al., 2021).

Reflecting this, consultation indicated it is a challenge for people to find rental housing in Bathurst. A case was revealed whereby a construction company recently secured housing for its non-resident workers in a competitive context by paying the annual rental fee for a house upfront as a lump sum. Another construction company is reported to be buying houses in Bathurst for its staff. Given these conditions, some people who experience insecure housing utilise short-term accommodation while looking for permanent housing in Bathurst.

Regarding short-term accommodation, within 25km of the Project there is a good supply and mix of options including motels, hotels, apartment-style, self-contained and dormitory-style options, guest houses, and cabins in caravan parks. Consultation with Council indicated that there are approximately 3,500 standard beds in the region, and an estimated 350–400 short-term rental options (e.g., Airbnb). Most accommodation options are in and around Bathurst, close to regional-level services.

Consultation indicated that short-term tourist accommodation is often at capacity during most weekends.

#### 4.4. Employment and industry

The economic outlook for the Bathurst and the wider region is strong, with a range of major projects, infrastructure developments, and sector diversification either in progress or in the pipeline. This is all contributing to jobs growth (BRC, 2022). These projects include IBM Bathurst, Central West Pumped Hydro, Great Western Highway Upgrade and the Inland Rail.

Accordingly, the region is currently experiencing low unemployment. Recent labour market data for the Bathurst LGA suggests an average unemployment rate of around 2.6% across the four quarters to December 2021 (National Skills Commission, 2022), which was low compared to NSW (5.0%) (ABS, 2022a).

The skills base of the LGA is reflected in its occupational structure. The most common industries of employment in 2016 were hospitals (3.4%), higher education (3.3%), and primary education (2.7%). The four most common occupations of employment in the LGA accounted for more than half of all occupations. These were professionals (18.9%), technicians and trades workers (14.5%), community and personal services workers (13.5%), and clerical and administrative workers (12.0%) (ABS, 2016).

The Bathurst LGA's Gross Regional Product (GRP) was \$2.53B for the year ending June 2021 (.idcommunity, 2022a). The highest contributing industry was education and training (\$288m, 13.8%), followed by manufacturing (\$269m, 12.9%), and construction (\$233m, 11.2%) (.idcommunity, 2022b).

ABS data shows there were 722 registered construction businesses in 2021, and a further 631 businesses associated with agriculture, forestry and fishing, with these two sectors contributing 1,353 businesses or 38.6% of all businesses located in the council area (.idcommunity, 2022c).

Consultation with local business community stakeholders indicated that there is a huge shortage of skilled tradespeople in the Bathurst area, and that businesses are struggling to get staff.

#### 4.5. Land tenure, use and local agricultural values

The Project is situated within a small farming locality situated just off the Great Western Highway. Land use in the area is predominantly agricultural, with a small number of lifestyle blocks. The Project sits within a 186-hectare property holding, owned by one private landholder.

The Project site is primarily zoned RU1 Primary Production under the Bathurst Local Environmental Plan 2014 (LEP), and it's currently principally used as grazing country and growing fodder crops associated with grazing. Surrounding land uses are predominantly agricultural. The surrounding landscape is characterised by open paddocks with corridors of vegetation along boundaries, roads and creeks, ornamental gardens surrounding scattered rural dwellings, and cleared drainage lines and ridgelines.

There are existing transmission lines in the vicinity of the Project site. In particular, a 66kV line runs past the site adjacent to the Highway and towards Raglan.

Land adjoining the property to the west has been subject to relatively recent acquisition and approved subdivision. In March 2021, BRC approved the subdivision of this 406.7ha property into four lots ranging from 96ha to 110ha in size. Two of these lots have existing dwellings (3 in total) and these landowners have stated their intentions to build future dwellings on those lots. However, no DAs have yet been lodged for these additional dwellings, although the landowner has indicated the proposed dwelling sites. Similarly, two lots recently purchased on the eastern side of Brewongle Lane are 119ha and 123ha in size respectively. Under the provisions of the LEP, both lots could secure dwelling entitlements, subject to DAs and securing development consent. The landholder has stated this is the intention for these lots.

This reflects an assumed ongoing transition of the area from broad agricultural use to more of a lifestyle focus. This has been considered in the panel layout and screening arrangements proposed in the site design.

Rural areas in the LGA support livestock grazing and wool production, agriculture, as well as the forestry industry (DPIE, 2021). More broadly, agriculture occupies 90% of the landscape within the Central West and Orana region, with grazing native vegetation being the most common land use (DAWE ABARES, 2022). Agricultural production within this region contributes to 10% of NSW's total gross agricultural production value. In 2018–2019, the most important agricultural commodities in the region were cattle and calves (\$289 million), sheep and lambs (\$248 million), and wool (\$235 million). These three commodities contributed 74% of the total value of agricultural production in the region. In 2018–2019, there were 2,950 farms within the region, making up 12% of all farm businesses in NSW (DAWE ABARES, 2022).

## 4.6. Social infrastructure and services

Social infrastructure encompasses the key services and resources that sustain the liveability of communities, and strongly influences perceived and real quality of life (Australian Urban Observatory, 2021). These extend from health, education and essential services to community support and development resources, and leisure and recreational opportunities. Regional areas often experience social infrastructure gaps, compounded by distance and cost of service provision.

Existing key social infrastructure within the Study Area is summarised below.

- **Education facilities:** Charles Sturt University, Western Sydney University, Western Institute of TAFE, and both public and independent primary and high schools.
- **Health facilities:** Bathurst Base Hospital and Health Service, and a range of GP and specialist health and community support services.
- **Key services:** banks, Australia Post, Chamber of Commerce, Police, Rural Fire Brigade (RFS) and SES all have services in Bathurst, and there is additionally a local Glanmire-Walang RFS.
- **Transport:** bus, rail, coach and air services are available in Bathurst.
- **Recreational and sporting facilities:** including Bathurst Sportsground, Bathurst Indoor Sports Stadium, Mount Panorama motor racing circuit, over 70 different sporting clubs, public swimming pools, skateboard parks, hiking and bike trails, and numerous ovals/parks.
- **Community facilities:** Libraries, Bathurst Memorial Entertainment Centre, Mitchell Conservatorium, Bathurst Regional Art Gallery, museums, and a range of churches and community/social association facilities, including Country Women's Association (CWA), Lions, Rotary and Probus Clubs, Bathurst Scout and Girl Guides, Bathurst PCYC, and Bathurst Senior Citizens Centre.

## 4.7. Health and wellbeing

Bathurst faces challenges in terms of how it responds to the health needs of its population, given a growing and ageing population, pressure on workforce, a change in the educational industry, and housing shortages (Destra Group, 2019).

Key health data for the Bathurst LGA is available from a health needs assessment undertaken by the Western NSW Primary Health Network (NSW Department of Health, 2020). In 2018–2019, the LGA had slightly higher rates of hospitalisation for cardiovascular disease and intentional self-harm, and lower rates of alcohol attributable hospitalisations than NSW averages (HealthStats NSW, 2021). The LGA also had lower rates of dementia hospitalisations in people aged 65 and over (HealthStats NSW, 2021), and lower prevalence rates for disability among persons aged 65 years and above compared to the state average (ABS, 2020). The average annual rates of potentially avoidable deaths in the Bathurst LGA between 2010–2015 were similar to those for NSW (NSW Department of Health, 2020).

The community survey that informed this health needs assessment identified issues around equitable distribution of, and access to, GP and mental health services in regional areas, although this was more likely in the large rural and remote regions in the Western PHN. As a major regional centre, Bathurst is comparatively well-resourced and has higher concentrations of specialist teams providing child and adolescent mental health services, mental health professionals and services, and psychosocial support services. Nonetheless, several barriers to seeking help exist, including cost, particularly for newly arrived migrants, and long waiting times (National Mental Health Commission, 2019).

## 4.8. Community culture, values, and decision-making processes

The heritage city of Bathurst and surrounding rural villages and areas are defined by their rich historical and cultural legacy and diverse natural landscapes. Also important are its education, manufacturing, tourist, and agricultural industries. The Bathurst region is characterised by a community that appreciates the benefits of living in a place with a family-friendly atmosphere, a natural landscape and clean environment, and a small country town appeal.

The BRC Community Strategic Plan outlined the following as valued characteristics of the local community: resilient, inclusive, safe, and healthy communities; the natural environment; and the richness of the arts and cultural heritage (BRC, 2020a). In addition, consultation highlighted that the scenic views of the expansive and iconic entrance to Bathurst and the Bathurst plains (locally termed the 'Bathurst Gateway') from the east are highly valued landscape features.

Bathurst hosts a rich and vibrant cultural community, with museums, art galleries, and arts organisations. Bathurst is also a key tourist destination, with multiple sporting, racing, arts, and cultural events throughout the year. For example, the annual sixteen-day Bathurst Winter Festival includes light shows across historic buildings, live music, food and wine events, outdoor ice skating and show rides, during the winter school holidays.

Bathurst is particularly well known for motorsport, and the Mount Panorama motor racing circuit hosts several annual races, including the Bathurst 12 Hour motor race (February), the Bathurst Motor Festival (Easter), and the Bathurst 1000 motor race (October). More than 200,000 people visit the motor racing circuit during events (DPIE, 2021).

When asked what respondents value most about the local area, the top responses were the landscape and views (71%), historic values (61%) and community ties (61%). Recreational opportunities and natural values were also important, and to a lesser extent, work opportunities. Views and landscape characteristics in the region that were important to respondents centred around two main themes: 'the general landscape, hills and mountains', and 'the rural/agricultural landscape'.

Bathurst Regional Council is the principal decision-making authority at the local government level.

### 4.8.1. Attitudes about renewable energy

Broadly, it can be said that the development of the renewable energy sector enjoys community support. NSW government research (OEH, 2015) showed that 92% of people support renewable energy use, and 83% believed that NSW should increase its production over the subsequent five years. The main perceived benefits were positive environmental impacts and lower long-term costs.

However, support differs regionally, and lowers with proximity to projects. While people in regional NSW were found to be amenable to solar farms (91%), support retracted slightly when located within their local region (84%), and further when within 1–2km of people's homes (78%) (OEH, 2015). Also, as projects accumulate in suitable regions, concern over local character loss and local agricultural impacts can emerge (Ipsos, 2015).

The Climate of the Nation 2021 Report shows a majority of Australians (73%) support a federal government plan to transition the electricity sector away from fossil fuels. Three-quarters (74%) of survey respondents in NSW agreed that governments need to implement a plan to ensure the orderly closure of old coal plants and their replacement with clean energy such as solar (The Australia Institute, 2021).

As outlined in Section 3.1, the local area has a history of community concern and interest in solar farms. In 2017, the Brewongle Solar Farm encountered targeted community push back on their proposal and an action group formed to rally against it. Concerns about the Project centred around visual amenity, impacts on property prices (particularly for the non-productive lifestyle residential blocks), and loss of prime agricultural land. The application was withdrawn in 2019. While this sentiment was limited in terms of the number of people involved, it did set a tone of caution around this type of development.

Alongside this, BCCAN is a local grass-roots climate action group, with 350 local members. They are a strong and active local group, focused on increasing the use of renewable energy within the Bathurst area.

Consultation for the Project indicated that the local community is generally supportive of renewable energy projects. However, many of the community members who signed the petition opposing the Project suggested that solar projects should be sited in the REZ and not around the city of Bathurst or surrounding localities. The NSW Government's recognition that the majority of renewable energy developments will occur outside the REZ areas (as discussed in the CCC meetings) was noted as part of this discussion.

Online survey respondents were asked about what they liked and what concerns they had about potential impacts of solar farms in general. Renewable energy generation and the reduction of greenhouse gas emissions/helping to combat climate change, as well as local economic opportunities and diversification of land use/income streams were the most popular responses for what they liked. Around half of respondents indicated that they had no concerns about solar farms, while around a quarter of respondents were concerned about effects on natural areas and habitats, effects on land values, visual impacts, and traffic during construction or operation.

## 5. Impact assessment

Potential impacts have been identified through stakeholder and community engagement and from comparative studies. Key issues and concerns that emerged from the consultation process have been presented in Section 3 and are addressed in the following section.

The significance of impacts has been identified using the risk matrix outlined in Table 2-4 taking into consideration the likelihood and magnitude of impacts.

### 5.1. Community

#### 5.1.1. A local response to climate change

Many community members within the Bathurst region highly value local action on climate change. This is demonstrated by the presence and strength of the BCCAN, which was represented, and actively participated, within the CCC.

Within the Bathurst area, responding to climate change can be seen as a commonly held community value. Community members who hold this value, in general, have a strong interest in the Project and view it as having a significant positive impact. They view the Project as a key demonstration of local commitment to action on climate change. Consultation highlighted this strong interest in and support for the Project by the BCCAN. This support was also reflected in the online survey, with 70% of respondents saying they support the Project.

Project opponents are also generally supportive of renewable energy. However, they argue that this and other renewable energy projects are better located within the REZ. In this conflict of values, these community members regard renewable energy development in the region as a threat to the environment (i.e., due to changes to the character of the rural landscape, loss of agricultural land, and the potential for hazardous materials to leach into the environment).

Given the balance of perspectives, and the strong interest shown by many community members, this impact has been assessed as a positive impact of high significance.

#### 5.1.2. Community cohesion at the local level

Proposed development projects can be grounds for contestation within local communities. Contestation surrounding Projects within local communities can negatively impact on community cohesion. This can affect whole communities, and/or different distinct groups within communities. Conversely, development projects can also bring together groups with a shared identity.

This has occurred to a large extent with this Project in the pre-development phase. Consultation revealed that within Glanmire, surrounding localities, and Bathurst more generally, there are several distinct groups of individuals united in support of, or opposition to, the Project. Due to the presence of strong opposing interests and values, the proposed change in land use has created conflict between the Proponent and a targeted section of the community, as well as within the community itself. This context of conflict surrounding the Project was recognised in the SEARs, which required the establishment of a CCC during the EIS phase.

Support for the Project varies amongst the residents of Glanmire and the neighbouring localities of Napoleon Reef and Brewongle and within the Bathurst area more broadly.

There is a small number of directly impacted and nearby residents who strongly oppose the Project. This group has united through the reconvened and re-badged 'Glanmire Action Group' (GAG) (see EIS Section 5.1.4), and this group is driving the Project's opposition movement. It is unclear how many members are in



the group at this stage, but it is assumed that it is primarily made up of local farmers, residents and family members who have held an interest in this Project, in addition to the Brewongle Solar Farm proposal.

Key reasons for opposition to the Project include perceptions that it would be better located within the REZ; loss of productive agricultural land and rural amenity; impacts to the highly valued rural landscape character; potential financial impacts on surrounding property values; and potential insurance impacts for neighbouring landholders. These perceptions of negative impacts have resulted in some opponents expressing strong negative emotions, and at times, hostility towards this Project. Contributing to some of this opposition was that there was a general misconception within the Glanmire Action Group that all new renewable energy projects were intended to be located within REZs. Note: the department's need to accommodate the majority of renewable energy developments outside the REZ areas (due to the scale required overall) was discussed at the CCC meetings using feedback from departmental representatives.

Exacerbating this opposition is that there is now again interest being shown by another proponent to develop a solar farm on the Brewongle site. As a result, the two action groups (Brewongle and Glanmire), comprising many of the same residents, are now jointly opposing both projects.

The GAG has taken an active, organised and vocal approach to their opposition. This has included creating Facebook and change.org pages; putting up signs along the highway; organising a petition; and having a presence on local radio. The leader of the group was participating within the CCC at the beginning of the process but declined to continue after the first meeting (see EIS Section 5.1.1). Similarly, other GAG members who were part of the CCC did not stay on for all of the CCC meetings – noting that replacements were always sought via the Independent Chair.

More broadly, outside of Glanmire, consultation highlighted that people are generally supportive of renewable energy projects, including this one. There are then some groups of people (particularly BCCAN, but also other community members and groups) who are highly supportive of the Project. As a result of these differing values and perceptions of potential impacts, a degree of division within the community has emerged. A sentiment that was commonly expressed by near neighbours was that:

*...the proposal has driven a wedge between environmental groups in the area and neighbours of the proposed project.*

Another stakeholder noted that, given past local experiences with proposed projects, they believe that there are unlikely to be lasting negative impacts on community cohesion.

Conversely, a couple of near neighbours have described that the Project has also brought them together, with one neighbour stating:

*I feel Elgin's proposal has united the Glanmire Community in opposing this solar plant but has created unnecessary division between different Environmental Groups that are all working towards the same goal, a greener future.*

Given the presence of these issues, this negative impact is evaluated as being of high significance.

This context of conflict needs to be addressed to reduce the risk of ongoing antagonism or worse, an escalation of conflict. Research highlights the importance of communication in managing conflict, with effective engagement building trust and legitimacy, and creating the space to address community concerns and negotiate mutually beneficial outcomes (Franks, 2012). There is a strong need for continued communication with the community regarding project progress. Post approval, the emphasis of this communication would need to shift to providing updates on construction, screening plantings, local workforce engagement and benefit sharing.

### 5.1.3. Change in community feel

Major development projects can result in demographic changes due to non-resident workers coming into areas during construction. This can change the composition of the local community, and so change the local and community feel of the towns.

For this Project, the construction phase is of a relatively moderate scale and duration, and the workforce strategy targets local resident labour. There will be workers coming into Bathurst and other areas. However even with the potential for cumulative effects, Bathurst is a regional city and there have been several large development projects in recent years (e.g., the Great Western Highway upgrade). Consultation indicated that people in Bathurst are accustomed to the presence of construction workers within their community, and that this is unlikely to be an issue of concern.

Given the relatively short duration of the construction phase, the moderate scale of the non-resident construction workforce, and the findings from consultation, this impact is deemed of low significance.

#### **5.1.4. Increased community investment**

There is potential for increased community investment at the local level through community benefit sharing.

The Project represents an opportunity for increased community investment in localised initiatives. The Project Team has consulted many groups to request and compile opportunities for benefit sharing. Typically, a Project Team will look for areas of agreed need and established initiatives that the Proponent can invest in to amplify their impact.

Consultation highlighted that in general, local stakeholders highly value benefit sharing schemes. Many noted the visible community benefit schemes of other major projects in the area, and the positive impact that this has had on community acceptance of those projects. Stakeholders also noted the need for transparency relating to any community scheme.

Based on discussions held at CCC meetings, discussions with the local Councillors and feedback from information sessions, the preferred Community Benefit Sharing arrangement will include a Voluntary Planning Agreement administered by BRC. It is proposed to make contributions towards local initiatives based on the following selection criteria:

- Contributes to increased resilience for the Glanmire and Bathurst communities
- Demonstrates strategic alignment with the Council Plans and Strategies for the area (CSP, LSPS, LEP)
- Supports development of local skills and capabilities
- Supports the conservation of the local environment (flora and fauna)
- Supports a transition to a more sustainable Australia.

Elgin Energy is proposing to invest \$25,000 per annum for the first 10 years of the Solar Farm's operation to fund agreed community benefit sharing initiatives. This impact is deemed to be of high significance.

## **5.2. Health and wellbeing**

### **5.2.1. Uncertainty and stress**

Development projects and contexts of conflict surrounding them can create psychological stress, uncertainty, and anxiety in people who oppose the project and/or are directly impacted (Prenzel & Vanclay, 2014).

This stress can relate to many aspects of projects, including fears about potential health impacts surrounding construction activity (e.g., noise, lighting). It can also extend to fears about the future, including potential changes to people's home environment and surrounding landscape. These fears have been described as 'solastalgia', which describes the distress caused by environmental change that people experience while directly connected to their home environment. It can be exacerbated by a sense of powerlessness or lack of control over the unfolding change process (Albrecht, et al., 2007).

Evidence from consultation indicates that these types of stresses and fears have arisen for a small number of near neighbours, relating to the Project. Four of the near neighbours who provided written SIA interview feedback have reported increased stress and distress. This has been due to the uncertainties relating to the



Project, the changes to the rural landscape due to the Project, and by perceptions about the Proponent's engagement with them. The near neighbours are highly invested in their properties, both emotionally and financially. Feedback from near neighbours included:

- *[My husband and I] are dedicated to our picturesque rural property in the green belt that completely surrounds Bathurst. We are dedicated to tree planting, conservation and the environment. This attempted interference to develop a solar plant has taken and is taking a big toll on my health. Large scale solar in the wrong location has caused me to be mentally exhausted.*
- *The long-drawn-out plans by Elgin have caused immeasurable stress to neighbours which is ongoing. This has been detrimental to both physical and mental health and is also causing ongoing sleep disturbance which necessarily means we are unable to work efficiently during the day.*
- *My husband and I have our hearts and souls invested in our picturesque property, we are pro renewables we have solar panels on our buildings, we are dedicated to our farm and conservation, but every day I feel anxious and concerned about our livelihood. This is affecting my health and my family life in ways I could not have imagined.*

However, these contested contexts can be complex, and during consultation, a number of community members expressed the view that some of the actions of the GAG have contributed to stress and uncertainty for some residents. This was seen to include actions such as the spreading of what they perceive to be misinformation about the Project.

Based on the comments above, these adverse health and wellbeing outcomes have been experienced by some near neighbours. These stresses can be seen as being typical of this stage of the Project, and in many cases, this stress can subside once decisions are made regarding the Project's next steps. Given that these impacts have been experienced by a small number of directly impacted near neighbours, this impact is assessed to be of medium significance.

It is also pertinent to note that climate anxiety is a recognised phenomenon within populations (Schwartz, et al., 2022), and that projects such as this one can act to moderate this, by being a tangible local response to climate change.

The Proponent will continue to address these concerns through providing clear updates on Project progress and next steps.

## 5.3. Livelihoods

### 5.3.1. Employment and labour opportunities

Employment and labour impacts are expected to be a key benefit of the Project, particularly during the construction period. To a lesser degree, there will also be employment benefits during the operational phase.

Construction of the project is expected to take 12 months, with a peak construction workforce of approximately 150 people. The workforce strategy is to use local contractors (where possible) to deliver most of this work. Construction will lean on the local and regional trades and services sectors.

Consultation suggested that a project of this size would generally employ approximately 30-50 local people, mostly in labouring roles. Complementing this, some technicians and other resources will be brought in to work with the specialist technologies required to construct the Project. The main contractor during construction will be looking to a number of different skills and suppliers, which are likely to include: earthworks and plant operators, labourers, mechanical and electrical engineers, building contractors, heavy vehicle operators, welding and fitting, accommodation, mechanics and maintenance, equipment hire, freight, fencing, and waste management.

During construction, the project will also create employment and labour opportunities across its supply chains. This may include specific opportunities for local residents, Aboriginal people, young people, apprentices and trainees.

In terms of ongoing employment during the operations phase, it is likely that there will be 1-3 full-time equivalent (FTE) jobs created.

The extent to which local people, and local and regional businesses, will be able to capture the opportunities that will arise depends upon several factors; the first of which is how 'job ready' or 'project ready' they are. Local people and small businesses need to have the necessary capabilities and compliance measures in place to be able to work or sub-contract within larger construction contexts.

The Bathurst region has an established construction and manufacturing labour force. However, there is currently great demand for these services, and a shortage of skilled tradespeople across the Central West, especially post-COVID-19. A recent report found that labour and skills shortages are likely to become a significant factor for the build-out of renewable generation and transmission infrastructure, especially in regions with tight labour markets, and high competition across infrastructure sectors (Briggs, et al., 2021). Consultation with agencies and industry confirmed this, highlighting the difficulties with securing a workforce (local or non-resident) amid a competitive labour context, with multiple renewable energy and large regional infrastructure projects in the pipeline. One agency stakeholder noted:

*Biggest problem for the Central West is manpower...getting people to work on all these projects.*

Responding to these issues are government funded agencies and initiatives, such as the Industry Capability Network (ICN), Skillset, Regional Development Australia (RDA), and Training Services NSW, that are focused on developing the capabilities of local people and businesses, and on connecting local businesses to development projects. To encourage local participation, industry stakeholders suggested that the Proponent engage with these organisations to leverage their local industry knowledge and networks. For example, the local RDA works with CSIRO to encourage high school students to enrol in STEM subjects; and this could be a partnership potential for the Proponent.

Elgin Energy has also had some early discussions with Charles Sturt University in relation to its Renewable Energy Centre of Excellence and this will be explored further post approval in terms of how local skills can be developed and utilised for this project and the many renewable energy developments required in the future.

Many stakeholders perceive that these employment benefits are a key Project benefit. However, some expressed that there are few positive economic benefits associated with large-scale solar developments, with only a small and temporary construction workforces and limited jobs during operations.

Nonetheless, given the importance that many stakeholders place on this benefit, it has been assessed as a high significance. The development of a **Local Procurement Policy** (as part of the Accommodation and Employment Strategy) is proposed to enhance this positive benefit.

### 5.3.2. Increase in economic activity

An increase in economic activity within the local and regional areas is expected. The Project will directly and indirectly - through its supply chains - create demand for goods and services, such as accommodation, food, construction materials, freight, and local labour. It is likely that local businesses will be able to supply some of these goods and services, and so the construction of the Project will help support local businesses in the region. The increased income and spending of the construction workers and others across the supply chains, will also add to the stimulation of the local economies more broadly, as income circulates through the economy.

Although the total economic value of these direct and indirect economic outputs is unknown, consultation with local agencies and business representatives highlighted the importance that local people place on seeing tangible outcomes for local business, even over the short term. Some stakeholders noted:

*In-flows of construction workforce and use of short-term accommodation have a positive impact for accommodation providers.*

*Bringing in people is good for the economy.*

Consultation also highlighted that there may be opportunity for eco-tourism associated with this Project. Currently BRC is developing strategy and branding of Bathurst region as an eco-destination, including EV tourism. It was noted during consultation that renewable energy developments like this tie in with Council's broader renewable energy aims.

Given the importance that agency stakeholders place on this positive impact for the local and regional area's businesses and economies, it has been assessed as being of high significance.

### 5.3.3. Concern about potential impacts to property values and insurances

The potential impact that renewable energy developments may have on surrounding land and property values is a common source of tension between proponents and residents. This has been a cause of concern for near neighbours, who are worried that a Solar Farm would devalue their properties. This concern has been expressed during property visits and captured in GAG and local resident written concerns.

It has been noted that some concerns relate to the ability for some near neighbours to subdivide their properties and to place future dwellings in these subdivided blocks. While the future dwelling sites are not yet formalised through development applications, photos were taken from the rough locations as part of the Visual Impact Assessment.

However, changes in land and property values are complex as they are subject to a range of interplaying influences, making it near impossible to pinpoint individual causal factors. There is also no definitive research that clarifies whether the presence of large-scale renewable energy projects negatively impacts upon nearby property values.

A key Australian study examining the impacts of wind farms on property prices found there to be insufficient sales data to make definitive conclusions (Urbis, 2016) and no Australian research examining the impacts of solar farms is available. An earlier Australian study conducted by CSIRO examining community acceptance of rural wind farms found that property prices had not been found to increase or decrease, although the potential market for buyers may be decreased (Hall, Ashworth, & Shaw, 2012). However, a Dutch study examining the impacts of wind and solar farms on houses prices using Dutch data concluded that within that context, there may be small decreases in house prices for houses located within 1 km of solar farms (Dröes & Koster, 2021).

Given that there is no definitive and directly relatable research regarding the impacts of solar farms or battery energy storage systems on nearby property values or insurance, it is not possible to make an evidence-based assessment about the impact of this Project on the property values of the surrounding properties.

Some adjacent landholders have also expressed a high level of concern about the potential impacts on their property insurance. They have been concerned about large increases in their premiums (particularly public liability insurances) or that their properties may become uninsurable, due to the proximity of the solar farm. The example given in the CCC discussions was focused on a situation where an accidental fire was created during harvesting activities on a nearby property and this in turn damaged the solar farm. GAG representatives asserted that this situation could not be covered through an affordable insurance premium due to the typical \$20 million cap on Public Liability policies.

Responding to these concerns, the Proponent gained advice from the Insurance Council of Australia (IAC), which stated that "the IAC have investigated the views of insurers and are not aware of any position of escalated risk focus being placed on neighbouring properties solely as a result of solar facilities being established" (IAC, 2022).

Given that there is such strong resident sentiment about potential negative impacts to property values, yet paucity of supporting evidence, this impact is assessed as a low significance.

The Proponent will continue to address these concerns through the ongoing stakeholder and community engagement activity.

#### 5.3.4. Loss of agricultural land

The land is currently used as lamb and wool production grazing fodder crops for wool and lamb production. A key concern for some near neighbours and community members is that a solar farm at the Project site would result in the loss of prime agricultural land. This has been a key stated belief of the GAG. They have argued that this loss of agricultural use of the land will be a financial loss to the Bathurst region, due to lost local production of an annual grain crop and associated employment income from the site over multiple decades.

However, as noted in EIS Section 6.4, soil surveys have been undertaken to confirm the soil class at the site. The Land and Soil Capability Assessment found most of the site is classified as land and soil capability class 4, with the exception of some areas which are classified as class 5 due to the presence of sodic subsoils. As such, the use of the site to host solar farm infrastructure would not impact the utilisation of high-quality agricultural land in the region.

The GAG had expressed concerns regarding the soil assessment process and the specialist who completed this work explained the process and findings to the CCC group in May (with GAG members in attendance). This discussion also included an outline of how the Agricultural Impact Statement (AIS) would be delivered.

Questions were also answered on potential impacts of concern including soil disturbance during construction, water runoff from panels, weed management and the potential for agricultural use at the end of life for the solar farm. As outlined by the specialist in the CCC meeting, the level of soil disturbance during the piling required for the panel structures is not detrimental to the soil structure and the panels do not increase the level of water flow and associated erosion.

Additionally, the AIS found that the following impacts of the solar farm combined with operational management to protect groundcover may result in improved soil health and grazing production, particularly in drought conditions. Upon completion of decommissioning stage, the site would be in the same or better condition as it is today, in terms of potential agricultural productivity. The AIS also found that there to be negligible impact expected to watercourses, and weeds will be managed as part of the Project's environmental management system.

The AIS also assessed the economic impacts of this change of land use. The AIS concluded that there will be a temporary removal of 180ha of arable land from its current agricultural use, which has a nominated potential annual gross margin of \$105,282. Given the annual agricultural production for the Bathurst LGA is valued at \$45 million, this represents approximately 0.2% of the total agricultural revenue. As such, any impacts to regional agricultural resources or enterprises from the Project are expected to be negligible.

The land surrounding the facility can continue to be used for agricultural purposes, most likely through sheep grazing. Grazing sheep under and around solar panels is known as 'solar grazing' and it is the most prevalent form of complementary land use for utility-scale solar farms. It is likely to be implemented as a 'ground cover management' strategy to ensure vegetation cover is retained beneath the panels, rather than for generation of a reliable farm income.

Many solar farms in NSW utilise solar grazing and the following resilience and productivity benefits have been identified through solar grazing over the last 10 years (Clean Energy Council, 2021). Agency consultation revealed that this is particularly successful where there are stock corridors, and stock can be moved between paddocks.

Solar farms are also considered highly reversible, in terms of their impact on agricultural land. In decommissioning, the majority of the land will be affected only by the removal of solar array mounts and underground cables. Small footings installed for inverters and operational buildings can be removed. Some tracks are likely to be retained if this is desired by the owner. A commitment to retain the agricultural capacity and productivity of the land will can be removed at the end of their operational life and agricultural activity (on top of solar grazing) can continue. be expected and is considered highly achievable. The only infrastructure

that is likely to permanently remain on the site is the substation which is typically gifted to the network service provider as part of the grid connection process.

This Project would have a low impact upon agricultural production on the property and the region over the life of the project. Given these factors, the overall potential negative social impact has been evaluated as of low significance.

## 5.4. Accessibility

### 5.4.1. Accommodation and rental housing

It is expected that some construction workers will come in from outside the area to work on the construction of the project. This non-resident construction workforce will likely utilise both short-term accommodation and rental housing in Bathurst, and also possibly in surrounding towns, including Lithgow, Oberon, and Orange.

This will bring a positive economic benefit for rental housing and accommodation providers. However, given the rental availability and affordability issues experienced within Bathurst and the broader region, this workforce influx may constrain the availability of accommodation options for both residents and tourists. This becomes a particular concern when considering cumulative impacts.

Consultation confirmed this, indicating that any further influx of construction workers would contribute to short-term accommodation and rental housing pressures. Some agency stakeholders view the current housing shortage as a key potential issue for the roll-out of the many proposed projects within the region. With respect to this Project, some stakeholders noted the need to 'bring your own housing'. Consultation highlighted that construction workforces tend to out-compete other people looking for accommodation. Regarding short-term accommodation in particular, supply may become constrained if construction coincides with peaks in tourism numbers, which occur at times of local festivals and events such as the motor events.

This Project has a moderately sized construction workforce that will be active over a relatively short duration. However, given the potential for cumulative impacts, the acute nature of the housing affordability and availability issues within the region, and the vulnerability of the potentially affected population groups, this potential negative impact has been assessed as being of high significance.

To mitigate competing interests regarding accommodation, it is recommended to develop and implement an **Accommodation and Employment Strategy (AES)**, working closely with Bathurst Regional Council and accommodation providers to avoid negatively impacting on tourism opportunities, vulnerable populations who are utilising temporary accommodation, and residents seeking housing.

As part of this, the Proponent will continue to engage with Council to discuss and adaptively respond to any emerging community and business concerns.

### 5.4.2. Social infrastructure

Major development projects can result in demographic changes due to non-resident workers coming into areas during construction. This can change place pressure on local social infrastructure and community services.

For this project, the construction phase is of a relatively moderate scale and duration, and the workforce strategy targets local resident labour. There will be workers coming into Bathurst; however, it is a larger regional city and there have been several major projects in recent years, so people would be accustomed to the presence of construction workers within their town.

The project will access emergency and health services when required, however the potential for undue pressure on the Bathurst area's social infrastructure is deemed unlikely to become an issue of concern. Although Bathurst is experiencing increased strain on health services, including longer waiting times for GP appointments, consultation suggested that even with the potential for cumulative effects, the city is of a size



that can absorb the increased demand from non-resident workers without much difficulty. This is also true of potential pressures on childcare services and primary education from workers with young families who may relocate to Bathurst for the construction phase.

Given these factors, this negative impact has been evaluated as being of low significance.

Despite this, the Proponent will continue regular engagement with council, particularly during the construction phase, to discuss and adaptively respond to any emerging community and business concerns.

#### 5.4.3. Access to renewable energy

The Project represents an opportunity to increase access to renewable energy. As discussed in Section 5.1.1, many community members are supportive of renewable energy, even some of those who are opposed to the Project. Conveying this sentiment, some survey respondents noted:

*I love the initiative to improve the environment and making more use of reusable energy.*

*We're keen that the central west becomes a hub for renewable energy.*

Eighty-two percent of survey respondents (23 responses) stated that the production of renewable energy is what they like about solar farms. Further, 75% of respondents (18 responses) stated that the production of renewable energy and responding to climate change were the most important environmental factors relating to the Project.

The development of renewable energy projects strongly aligns with federal, state and local government energy policies and land use plans. The Glanmire Solar Farm will support these plans, assisting with the broader transition to renewable energy production, and improving the capacity and security of the electricity grid. On an average annual basis, the Project would provide energy for 28,000 homes in NSW per annum, displacing approximately 130,000 metric tonnes of CO<sub>2</sub> per annum.

The Project will be one of the first solar farms within the region, assisting the Bathurst region to meet local and regional goals for growing its renewable energy sector.

Given these factors, this impact is deemed a high positive significance.

### 5.5. Way of life

#### 5.5.1. Changes to amenity due to traffic, noise, air quality

During construction, there may be adverse amenity impacts associated with traffic, noise, and air quality for neighbours near the Project site and/or along the proposed haulage route. These may include impacts on nearby residents' way of life, including commuting or travelling time, their experience of travel, and their ability to move around freely. There may also be impacts on nearby residents' privacy, peace, and quiet enjoyment. These impacts may also have secondary health impacts; however, this was not raised as a concern during consultation.

Traffic impacts were not highlighted as one of the primary concerns during consultation. However, the discussions held during property visits and the CCC site visit did include concerns regarding increased traffic on Brewongle Lane and the impacts this may have on safety and condition of the road itself.

During the CCC site visit, the need to manage dust created by the construction traffic was raised by group members in relation to both local resident amenity, and the functionality of the solar panels. The Proponent noted that a binding agent would be applied to the road during the construction period to limit dust, and during operations, the panels would be cleaned intermittently to remove any build-up of dust.

The Traffic Impact Assessment (TIA) found that the Project impacts could include damage to the road assets, delays or increased risks to road users, and that these impacts are most relevant to peak construction, when Project traffic volumes would be at their highest (see EIS Section 6.8)). These impacts will be mitigated through a Construction Traffic Management Plan (CTMP)

Noise impacts have been assessed through a Noise and Vibration Impact Assessment (see EIS Section 6.6). It was found that construction noise emissions may exceed the nominated criteria at six of the nearest receiver locations when the loudest plant and equipment or up to three plant and equipment are operating concurrently. Safeguards and mitigation strategies are provided to limit the potential impact of the noise generated by construction activities to acceptable levels.

Furthermore, it is typical that any development consent granted for the Project will require the preparation and approval of a Construction Environmental Management Plan (CEMP) for the Project prior to the commencement of works. This plan will outline a range of management and mitigation measures to minimise the impact of the Project on the environment including traffic, noise and air quality, including integration of the management measures outlined in the Traffic and Noise and Vibration Impact Assessments.

## 5.6. Surroundings

### 5.6.1. Visual amenity and landscape characteristics

The Project will involve a change of land use from rural (with some grazing and cropping), to land being used to site electricity infrastructure with ancillary grazing, during the operational phase. The solar farm will be sited within a mostly rural landscape. This will create a change to the visual and landscape character within the local area, impacting on the local scenic values as perceived by some members of the community.

Management and mitigation measures to reduce visual impact have been incorporated into the project design throughout the planning process. However, visual amenity impacts, created through the siting of the solar farm in this location are key concerns for residents. Survey results indicated that the local landscape and views are highly valued by many people in the area.

Some residents have expressed strong concerns about the visual impacts of the Project. One near neighbour stated:

*The Bathurst Plains and Glanmire is a unique landscape represented by a patchwork of paddocks, stands of trees, dams and rural homes. The inclusion of a large scale solar development removes the rural amenity from the Glanmire locality as it will introduce a concentrated mass of black PV panels and associated high voltage transmission and storage infrastructure.*

The property owners to the south who are closest to the site noted concerns regarding the impact to their everyday outlook. Some broader community members highlighted the impact to the entry to Bathurst from the range (the approach from Sydney). It is worth noting that the level of visibility of the solar panels from the Great Western Highway when driving towards Bathurst would be very minimal and brief due to the panel layout being pulled back from the Highway, effectively using the topography and proposed screening to avoid impacts on this entry. Additional landscape screening is proposed as part of the Project to further minimise any views of the Project of from the Highway.

A Visual Impact Assessment (VIA) has been undertaken (EIS Section 6.1). In this, key relevant findings included:

- given the low magnitude of change within a landscape that has a moderate ability to absorb change there would be a low landscape character impact to the Bathurst Plains area.
- Moderate visual impact was found for views south from Brewongle Lane, yet with intended tree plantings, this impact was assessed as low.
- Three properties were identified as having a very low visual impact, which all would be mitigated by vegetation screening, which would act to further screen the solar farm infrastructure over time.
- A low glare impact from one dwelling.

Despite this, given the high degree of concern expressed by the nearest neighbours, visual amenity impacts resulting from having a solar farm sited within the rural-residential landscape have been assessed as medium significance.

### 5.6.2. Safety and hazard risks

Environmental concerns have been raised by some stakeholders about bushfire risk and environmental impacts relating to the potential for hazardous chemicals to leach into the surrounding landscape.

A Preliminary Hazard Analysis (PHA) has been undertaken, and this did not identify any major offsite consequences or societal risk from identified potential hazards.

As such, given the low level of concern noted through consultation, these issues have been deemed a low social significance. These issues will be addressed in the Bush fire Emergency Management and Operations Plan, Fire Management Plan, Emergency Response Plan and Fire Safety Plan.

## 5.7. Decision-making and governance

### 5.7.1. Project engagement process

As outlined in Section 5.1.4 of the EIS, dynamics within the existing groups meant that there were challenges for the Project Team in holding meaningful discussions with community members. This included the GAG directing community members to only engage with the Project team via them or stating that they would only engage with the Project Team as a group. This constraint has the potential to impact community members' ability to form independent decisions through open dialogue with the Proponent.

Some CCC members noted the dominant role that certain GAG leaders played in the meeting discussions and the way this reduced the ability for other group members to participate in the discussions.

Conversely, some near neighbours and GAG members have expressed distrust of the Proponent; they perceive a lack of openness and transparency in the process to date. In early CCC meetings, the GAG expressed that they perceived that their concerns about the Project had not been answered appropriately. This prompted the CCC members to request GAG leaders to table all of their concerns for the Proponent to respond to. This response was provided in writing through a detailed Frequently Asked Questions document (Appendix D.3.3 of the EIS) and this was tabled for discussion at the following CCC.

The GAG has also repeatedly questioned the Proponent's longer-term interests in the Project and their financial capacity to deliver the Project, given that they are a foreign company. This relates to concerns and uncertainty about how the Project will be managed in the future. The Proponent responded to this query through the early CCC meetings, the FAQ document and through ongoing discussions. The Proponent noted that any commitments made during the planning phase (i.e., relating to construction and operations management, in addition to benefit sharing) would be included in the specifications for Project delivery. The Proponent also noted that decisions around the long-term operation of the solar farm had not been taken, but, if the Project were to be sold on (as is common in large scale renewable energy developments in NSW) the community commitments and requirements of any Development Consent would be upheld.

More broadly within the community, stakeholders responded in a positive way to the deeper and broader level of engagement that characterised the Project stakeholder and community engagement program. These stakeholders noted that they felt that they were adequately informed about the Project, with one stakeholder noting that:

*Elgin's consultation so far has been good and that they've been doing all the right things. They've delivered sufficient information in a timely manner and the drop-in sessions have been really good...kept up-to-date with project emails and is on top of the EIS process.*

Stakeholders noted their desire to continue to be kept informed about the Project:

*A continued flow of information from the proponent would be good – keep up the display of information.*

Given the conflicting views about Project engagement to date, this impact is deemed of low significance.



## 1.1 Social impact summary

Table 5-1 Impact summary

Social impact domain	Project phase	Potential impact	Positive / negative	Significance	Potentially affected stakeholder group	Mitigations / enhancement measures	Residual impact
Community	Planning and assessment	Community cohesion at the local level	Negative	High	Near neighbours and local community	Stakeholder and Community Engagement Plan	Low
Community	Operations	A local response to climate change	Positive	High	Broader community Some community and environmental groups	NA	NA
Community	Construction	Change in community feel	Negative	Low	Bathurst community	NA	NA
Community	Operations	Increased community investment	Positive	High	Broader community Some community and / or environmental groups	Community Benefit Sharing Scheme	NA
Health and wellbeing	Planning and assessment & Construction	Uncertainty and stress	Negative	Medium	Some near neighbours	Stakeholder and Community Engagement Plan	Low
Livelihoods	Construction	Employment and labour opportunities	Positive	High	Local / regional people and businesses	Accommodation and Workforce Strategy	NA
Livelihoods	Construction	Increase in economic activity	Positive	High	Local / regional people and businesses	Accommodation and Workforce Strategy	NA

Social impact domain	Project phase	Potential impact	Positive / negative	Significance	Potentially affected stakeholder group	Mitigations / enhancement measures	Residual impact
Livelihoods	All	Concern about potential impacts to property values and insurances	Negative	Low	Near neighbours	NA	NA
Livelihoods	Operations	Loss of agricultural land	Negative	Low	Glanmire Action Group Broader community	NA	NA
Accessibility	Construction	Pressure on accommodation and rental housing	Negative	High	Tourists Residents Vulnerable populations utilising temporary accommodation	Accommodation and Workforce Strategy Community and Stakeholder Engagement Plan	Medium
Accessibility	Construction	Social infrastructure	Negative	Low	Bathurst community Local service providers	Despite low impact, this will be managed through the Community and Stakeholder Engagement Plan	NA
Accessibility	Operations	Increased access to renewable energy	Positive	High	NSW community	Community and Stakeholder Plan	NA
Amenity and way of life	Construction	Traffic, noise, air quality	Negative	Medium	Near neighbours	Community and Stakeholder Engagement Plan Also managed through: Construction Traffic Management Plan, Visual Impact Management Plan, Noise Management Plan.	Low
Surroundings	Operations	Visual amenity and	Negative	Medium	Near neighbours	Community and Stakeholder	Low

Social impact domain	Project phase	Potential impact	Positive / negative	Significance	Potentially affected stakeholder group	Mitigations / enhancement measures	Residual impact
		landscape characteristics			Broader community	Engagement Plan	
Surroundings	Operations	Safety and hazard risks	Negative	Low	Near neighbours Broader community	Managed through Bush fire Emergency Management and Operations Plan, Fire Management Plan, Emergency Response Plan and Fire Safety Plan.	NA
Decision making and governance	All	Project engagement	Negative	Low	Near neighbours Broader community	Community and Stakeholder Engagement Plan	NA

## 6. Social Impact management framework

These enhancement and mitigation measures directly respond to the potential positive and negative social impacts associated with the Project that have been identified as being of medium or higher significance. They have been identified through consideration of Project impacts, along with community and stakeholder engagement. These measures respond to multiple identified social impacts.

Key elements of the social impact management framework include:

- Community and Stakeholder Engagement Plan
- Accommodation and Employment Strategy
- Community Benefit Sharing Program.

In addition, the management of some social impacts will be managed through mitigation measures enacted through other relevant project management plans. These include the Construction Traffic Management Plan, Visual Impact Management Plan, Noise Management Plan and the Construction Environmental Management Plan.

### 6.1. Community and Stakeholder Engagement Plan

It is recommended to update and extend the existing EIS Engagement Action Plan, so that it details engagement intentions and actions throughout the life of the Project.

During the exhibition period, the CSES should deliver:

- a targeted, benefits and issues focused Engagement program that is conflict-aware
- Specific engagement materials and activities that directly address existing issues.

More broadly, and over the longer term, the objectives of the CSES should be to:

- ensure ongoing and transparent engagement with those who are directly impacted, as well as the broader community and other key stakeholders
- build trust and relationships with those who are directly impacted, and well as other key stakeholders
- deliver an agreed and clear Community Benefits Scheme through a participatory approach with residents and the broader community
- ensure provision of an effective complaints process
- adaptively respond to emerging community concerns and changes in the social environment.

### 6.2. Accommodation and employment strategy

This strategy will encompass considerations regarding both Local Participation, and the accommodation of the construction workforce.

The strategy will be developed in partnership with key local stakeholders including:

- Bathurst Regional Council
- Bathurst Local Aboriginal Land Council
- economic development and industry support agencies (e.g., Regional Development Australia, Bathurst Business Chamber, Industry Capability Network, Charles Sturt University)
- training and employment support agencies (e.g., TAFE, Skillset, Joblink Plus).

#### 6.2.1. Local Participation

The Local Participation element of the strategy will focus on maximising the involvement of local people and businesses in the Project. It will include specific focus on people and businesses within the Bathurst LGA,

but also include consideration of the wider regional area. It will consider specific opportunities for Aboriginal people and businesses, women, and young people.

The strategy will detail a Local Procurement Policy, outlining the Proponent's commitment to providing local and regional businesses the opportunity to supply goods and services to meet Project needs during all project phases. This will include specific focus on Aboriginal businesses.

Specific mechanisms will be outlined that will be used to ensure that local people and businesses are given full, fair, and reasonable opportunity to participate in the project. It will also detail how the Proponent will link in at the local level with government and agency programs that assist people and businesses improve their capability.

### **6.2.2. Accommodating the construction workforce**

This element of the strategy will respond to the potential social impacts and opportunities relating to the construction workforce.

The strategy will provide detail to ensure that there is sufficient accommodation for the Project's construction workforce, including consideration of cumulative impacts. It will also outline measures that avoid potential negative impacts on local services and social infrastructure and manage positive social integration with existing communities. The strategy will also look to ways to limit and avoid adversely impacting on tourism opportunities, any vulnerable populations who are utilising temporary accommodation, and community members who are seeking rental housing.

## **6.3. Community Benefit Sharing Program**

It is recommended to develop a Community Benefits Sharing Program in partnership with residents and the broader community. The intention is to create a fund that can support very localised and meaningful community development or other neighbourhood-level initiatives that have strong resident support, throughout the life of the Project.

The preferred Community Benefit Sharing arrangement will include a Voluntary Planning Agreement administered by BRC and it is proposed to make contributions towards local initiatives based on the following selection criteria:

- Contributes to increased resilience for the Glanmire and Bathurst communities
- Demonstrates strategic alignment with the Council Plans and Strategies for the area (CSP, LSPS, LEP)
- Supports development of local skills and capabilities
- Supports the conservation of the local environment (flora and fauna)
- Supports a transition to a more sustainable Australia.

Based on community feedback to date, the following opportunities have been identified for further exploration and clarification should the Project be approved:

- Contribution to roadside weed spraying in the Glanmire/Bathurst area
- Contribution to the Glanmire RFS
- Contribution to the Rotary Youth Driver Awareness (RYDA) program
- Contribution to the Innovation Hub via Charles Sturt University (CSU)
- Contribution to the local WIRES organisation
- Contribution to the Bathurst Upstairs Start-up Hub
- Contribution to the CSU Renewable Energy Centre of Excellence (focused on local initiatives)
- Funding of a scholarship for a local resident to study a relevant degree at CSU – such as electrical engineering, sustainability, environmental management. Focus on students that may be disadvantaged and unable to otherwise access the course.

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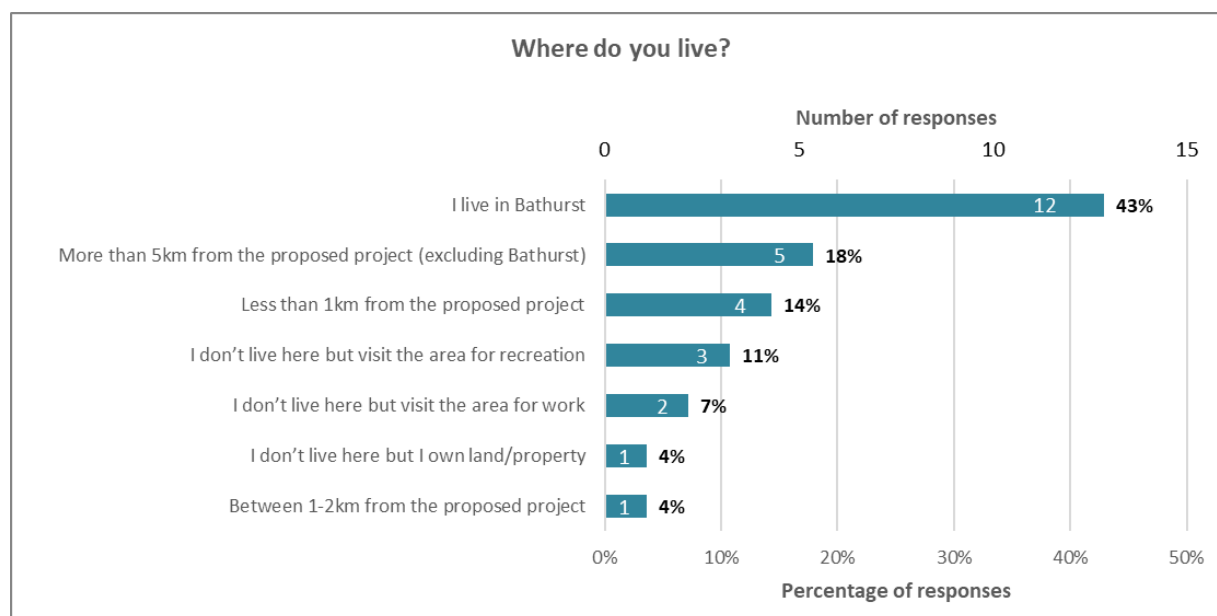
Appendix A Impact scoping worksheet

Social Impact Assessment (SIA) Worksheet																		
Project name: Glanmire Solar Farm																		
Project Activities	Categories of Social Impacts	Potential Impacts on People	Previous Investigation of Impact		Cumulative Impacts	Elements of Impacts - Based on preliminary investigation					Assessment Level for Each Impact				Project Refinement	Mitigation / Enhancement Measures		
Which project activity / activities could produce social impacts ?	What social impact categories could be affected by the project activities	What impacts are likely, and what concerns/aspirations have people expressed about the impact? Summarise how each relevant stakeholder group might experience the impact. NB. Where there are multiple stakeholder groups affected differently by an impact, or more than one impact from the activity, please add an additional row.	Is the impact expected to be positive or negative	Has this impact previously been investigated (on this or other project/s)?	If "yes - this project," briefly describe the previous investigation. If "yes - other project," identify the other project and investigation	Will this impact combine with others from this project (think about when and where), and/or with impacts from other projects (cumulative)?	If yes, identify which other impacts and/or projects	Will the project activity (without mitigation or enhancement) cause a material social impact in terms of its: You can also consider the various magnitudes of these characteristics					Level of assessment for each social impact	What methods and data sources will be used to investigate this impact?			Has the project been refined in response to preliminary impact evaluation or stakeholder feedback?	What mitigation / enhancement measures are being considered?
		extent i.e. number of people potentially affected?						duration of expected impacts? (i.e. construction vs operational phase)	Intensity of expected impacts i.e. scale or degree of change?	sensitivity or vulnerability of people potentially affected?	level of concern/interest of people potentially affected?	Secondary data		Primary Data - Consultation	Primary Data - Research			
Pre-construction - Initial project engagement within the community	community	Contestation within the local Glanmire community has <b>negatively impacted on community cohesion</b> .  Community responses to this Project have been strongly influenced by community responses to a previous solar farm (SF) proposal in the locality. The previous proposal (Brewongle SF, Photon Energy) was sited a short distance from the current Project, and it resulted in disharmony in the local community. The Brewongle Action Group formed in opposition to that proposal, and the mayor and state Member were also opposed. However, not all nearby landholders and community member were opposed, and the host landowner experienced some negative impacts from others in the local community.  Concerns about the Brewongle SF centred around visual amenity, impacts on property prices (particularly for the non-productive lifestyle residential blocks), and loss of prime agricultural land. The application was withdrawn in 2019. First Solar are currently considering whether to develop the Brewongle SF.  The same concerns as for the Brewongle SF proposal have been raised, as well as issues relating to traffic, community benefit and financial loss to the Bathurst community.	Negative	Yes - this project	See Project Scoping Report	Yes	Several renewable energy projects are at different stages of approval within 25km of the Project (e.g., Eglinton SF, Central West Pumped Hydro Project). First Solar are currently assessing the viability of the SF site at Brewongle. Other major developments in the area are the Bathurst Second Circuit, McPhillamys Gold Project, Kempfield Silver Mine, and Bathurst Integrated Medical Centre.	Yes	Yes	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Yes (e.g. development set-back due to visual impact)	Recommend to implement robust community engagement as per the proposed <b>Community and Stakeholder Engagement Action Plan</b>  Other recommendations TBD
	health and wellbeing	Development projects can <b>create stress and anxiety</b> in people who oppose the project and/or are directly impacted. Evidence from the field and secondary sources (i.e. media articles, GAG submission to ISEPP and other submissions) suggest that this is the case for this Project.  There have been ongoing mental health impacts relating to the pressure of the situation at the local level, for a small group of landholders and residents in the immediate area. Some of this stress is cumulative, resulting from their previous experiences with the Brewongle SF proposal.  People are worried about the divisions within the community, the uncertainties relating to the planning process and the development itself, concerns about Elgin Energy's governance, business model and intentions once the solar farm is built, decommissioning surety, and critically, the potential for impacts to land/property values and economic loss.	Negative	Yes - this project	As above	Yes	Brewongle Solar Farm (Photon Energy) - proposal withdrawn 2019, however First Solar are currently assessing the viability of the nearby site.	No	Yes	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Elgin has investigated insurance issues for neighbours.	Recommend to implement robust community engagement as per the proposed <b>Community and Stakeholder Engagement Action Plan</b>  Other recommendations TBD
	decision-making systems	Some people within the Glanmire community are <b>feeling disempowered</b> by the proposed project and the planning and approval process. There have been marked ongoing tensions between neighbours and nearby residents and the Proponent throughout the engagement process.  Communications between the residents in the immediate vicinity and the Proponent have been characterised by the presence of tension and mistrust.  In response to the current project proposal and the possibility of the nearby Brewongle Solar Farm, those opposed have united again to form the Glanmire Action Group, and merged with the Brewongle Action Group (BAG) in July 2021. There are around 12 people in the neighbouring area (not necessarily adjacent landholders) who are active in the group.  The SEARS required a Community Consultative Committee be set up for the Project, and required consultation with the committee during the EIS preparation phase. A member of the BAG was initially involved with the CCC, but has since declined to be involved. Also, some members of the community have been reluctant to be involved with the CCC or other Project engagement activity due to the presence of these divisions within the community.	Negative	Yes - this project	As above	Yes	Proposed Brewongle Solar Farm (First Solar)	Yes	Yes	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	The SEARS set out the requirement for a Community Consultative Committee to enable procedural fairness and for the community to have power to influence decisions.	Recommend to implement robust community engagement as per the proposed <b>Community and Stakeholder Engagement Action Plan</b>
Construction - project demand for labour, goods and services	livelihoods	<b>Employment and labour impacts</b> - During construction, which is expected to take approximately 12 months, the project will directly generate employment, with a peak construction workforce of around 150 FTE jobs. Construction of this project will lean on the local and regional trades and services sectors. The main contractor during construction will likely be looking to a number of different skills and suppliers including: earthworks and plant operators, labourers, mechanical and electrical engineers, building contractors, heavy vehicle operators, welding and fitting, accommodation, mechanics and maintenance, equipment hire, freight, fencing, and waste management.  This may include specific opportunities for local residents, Aboriginal people, young people, apprentices, trainees, including the potential for scholarships. During construction, the project will also create employment and labour opportunities across its supply chains.  During operations, the project is expected to employ around 3 FTE workers.	Positive	Yes - this project	Project Scoping Report	Yes	Other renewable energy projects and developments in the area, e.g Eglinton Solar Farm, Central West Pumped Hydro project, Bathurst Second Circuit, McPhillamys Gold Project, Kempfield Silver Mine, and Bathurst Integrated Medical Centre	Yes	No	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Recommend to develop an <b>Accommodation and Workforce Strategy</b> , which will focus on maximising the involvement of local people and businesses in the project. It will include specific focus on people and businesses within the Bathurst Regional LGA, and potentially the wider region. It will also consider opportunities for Aboriginal people and businesses, and young people. This will be developed through consultation with the local community and the key local economic development stakeholders.  The strategy will take into account local labour and supply demands, and consider the potential negative impact of the Project in this context.  Recommend that during the construction and operational phases, contractors will work with the local Aboriginal Land Council and local Indigenous organisations to provide increased opportunities for local Indigenous populations.	
	livelihoods	An <b>increase in economic activity within the local and regional area</b> is expected. The project will directly and indirectly (through its supply chains) create demand for goods and services such as accommodation, construction materials, freight and local labour. The increased income and spending of the construction workers and others across the supply chains, will also add to the stimulation of the local economies more broadly.	Positive	Yes - other project	McPhillamys Gold Project EIS - SIA	Yes	As above	Yes	Yes	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Recommend to develop an <b>Accommodation and Workforce Strategy</b> , which will focus on maximising the involvement of local people and businesses in the project. It will include specific focus on people and businesses in the Bathurst Regional LGA, and also the wider regional area. It will also consider opportunities for Aboriginal people and businesses, and young people. This will be developed through consultation with the local community and the key local economic development stakeholders.  As part of this, recommend to develop a Local Procurement Policy, which will outline the Proponent's commitment to providing local and regional businesses the opportunity to supply goods and services to meet project needs during all phases of the project. This will be developed through consultation with the local community and with key local economic development stakeholders.	
Construction - influx of non-resident construction workers	access	It is expected that workers will come in from other areas to work on the construction of this project. Some of these workers are likely to be housed in temporary accommodation in Bathurst. This may <b>constrain the availability of accommodation for tourism</b> . Care will need to be taken to avoid adverse impacts on major tourism events.  Cumulative impacts may also apply.	Negative	Yes - other project	McPhillamys Gold Project EIS - SIA	Yes	As above	Yes	No	No	No	Unknown	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	Recommend to implement robust community engagement as per the proposed <b>Community and Stakeholder Engagement Action Plan</b> .  Recommend to develop an <b>Accommodation and Employment Strategy</b> , which will include engagement with accommodation providers to avoid negatively impacting on tourism opportunities and any vulnerable populations who are utilising temporary accommodation.	
	way of life	It is expected that workers will come in from other areas to work on the construction of this project. These workers will be housed in temporary accommodation and likely also in rental houses in Bathurst and surrounding areas. This may further <b>constrain the availability of affordable housing/rental housing for local residents and temporary accommodation for vulnerable groups</b> .  The population groups most at risk include low income households; renters; other temporary, transient or seasonal workforces.  Cumulative impacts may also apply.	Negative	Yes - other project	As above	Yes	As above	Yes	No	No	Yes	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	Recommend to implement robust community engagement as per the proposed <b>Community and Stakeholder Engagement Action Plan</b> .  Recommend to develop an <b>Accommodation and Employment Strategy</b> , which will include engagement with accommodation providers to avoid negatively impacting on tourism opportunities and any vulnerable populations who are utilising temporary accommodation.	
	access	An influx of construction workers may <b>increase demand for local social and community infrastructure</b> (e.g. health and community services).  Given the short duration of the construction phase, this is unlikely to have significant impacts, however, cumulative impacts may apply.  The SEARS state a specific requirement to focus on this issue.	Negative	Yes - other project	As above	Yes	As above	Unknown	No	No	Unknown	Unknown	Standard assessment of the impact	Required	Broad consultation	Targeted research	Recommend to develop an <b>Accommodation and Employment Strategy</b> , which will include engagement with Council and key social and health service providers to avoid and adaptively respond to any emerging community concerns.	
	community	An influx of construction workers into Bathurst may <b>change the composition of the local community</b> , and so change the local and community feel of the town, during construction.  Given the short duration of the construction phase, this is unlikely to have significant impacts, however, cumulative impacts may apply.	Negative	Yes - other project	As above	Yes	As above	Yes	No	No	No	Unknown	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	Recommend to develop an <b>Accommodation and Employment Strategy</b> , which will include engagement with Council to avoid and adaptively respond to any emerging community concerns.	
Construction - Intensive construction activity at the project site during construction	way of life	Impacts on people's daily routines caused by construction activities and/or operational arrangements. Impacts on people's commuting/travelling times, their experience of travel, and their ability to move around freely.  Impacts on people's experience of <b>privacy, peace, and quiet enjoyment</b> . Impacts on people's general experience of life in their community	Negative	Yes - other project	Brewongle Solar Farm (Photon)	Unknown		No	No	Yes	Yes	Yes	Standard assessment of the impact	Required	Broad consultation	Targeted research	TBD - As part of the EIS, traffic and noise impacts will be assessed through specialist impact studies.	
	health and wellbeing	During the construction period, there may be adverse amenity impacts (i.e. impacts on noise, air quality, lighting), which may have secondary impacts on <b>people's health and wellbeing</b> , particularly for landholders/neighbours near the Project site and/or along the proposed haulage route.	Negative	Unknown		Unknown		No	No	Yes	Yes	Unknown	Standard assessment of the impact	Required	Broad consultation	Targeted research	TBD - As part of the EIS, traffic, noise, visual impacts will be assessed through specialist impact studies.	
	access	Construction-related traffic may <b>impact on local or major roads</b> as a result of construction heavy vehicles increasing the volume of heavy vehicles on the public road network and construction workforce traffic movements.  An issue that has been raised so far is that the intersection of Brewongle Lane and the highway is perceived to be unsafe for use during the construction process.	Negative	Unknown		Unknown		Unknown	No	No	No	Yes	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	TBD - As part of the EIS, traffic and road impacts will be assessed through specialist impact studies.	
	surroundings	Solar farms can potentially create <b>visual impacts related to glare and reflectivity</b> for neighbouring and nearby residents.  Concerns have been raised about glare impacts for motorists on the Great Western Highway.	Negative	Unknown		Unknown		Unknown	Yes	No	Unknown	Unknown	Standard assessment of the impact	Required	Broad consultation	Targeted research	TBD - As part of the EIS, visual impacts will be assessed through a specialist impact study.	

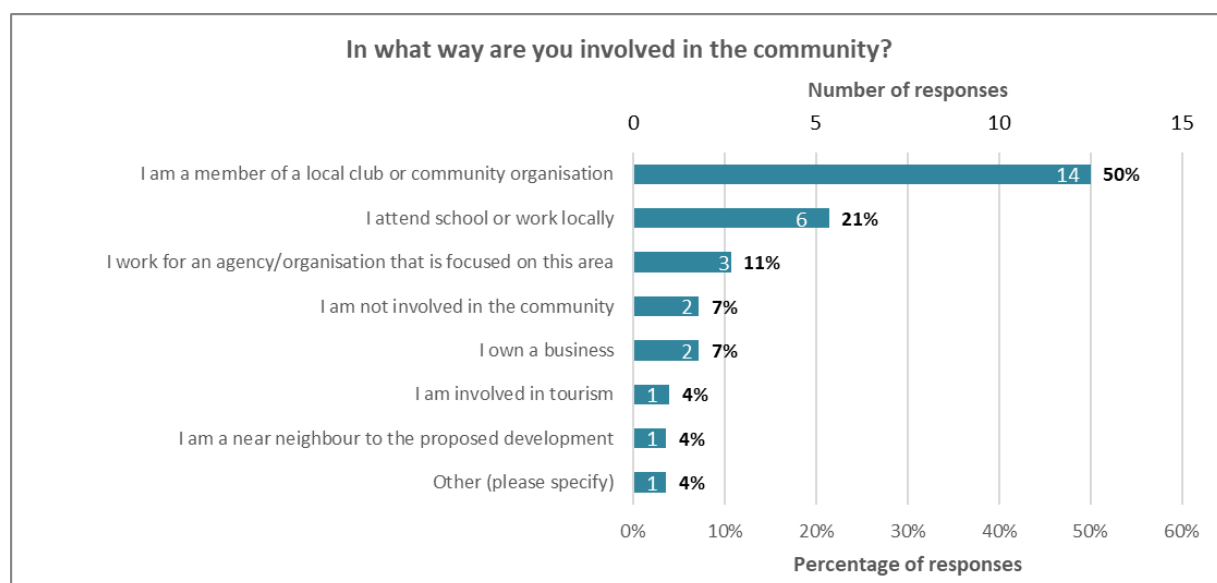
PROJECT ACTIVITIES	CATEGORIES OF SOCIAL IMPACTS	POTENTIAL IMPACTS ON PEOPLE		PREVIOUS INVESTIGATION OF IMPACT		CUMULATIVE IMPACTS		ELEMENTS OF IMPACTS - Based on preliminary investigation					ASSESSMENT LEVEL FOR EACH IMPACT				PROJECT REFINEMENT	MITIGATION / ENHANCEMENT MEASURES
Which project activity / activities could produce social impacts ?	what social impact categories could be affected by the project activities	What impacts are likely, and what concerns/aspirations have people expressed about the impact?  Summarise how each relevant stakeholder group might experience the impact. NB. Where there are multiple stakeholder groups affected differently by an impact, or more than one impact from the activity, please add an additional row.		Has this impact previously been investigated (on this or other project/s)?	If "yes - this project," briefly describe the previous investigation. If "yes - other project," identify the other project and investigation	Will this impact combine with others from this project (think about when and where), and/or with impacts from other projects (cumulative)?	If yes, identify which other impacts and/or projects	Will the project activity (without mitigation or enhancement) cause a material social impact in terms of its: You can also consider the various magnitudes of these characteristics					Level of assessment for each social impact	What methods and data sources will be used to investigate this impact?			Has the project been refined in response to preliminary impact evaluation or stakeholder feedback?	What mitigation / enhancement measures are being considered?
			Is the impact expected to be positive or negative					extent i.e. number of people potentially affected?	duration of expected impacts? (i.e. construction vs operational phase)	Intensity of expected impacts i.e. scale or degree of change?	sensitivity or vulnerability of people potentially affected?	level of concern/interest of people potentially affected?		Secondary data	Primary Data - Consultation	Primary Data - Research		
Operational - an operational solar farm at the site	surroundings	Concern also raised about <b>lighting at night time</b> , and effects on receptor's astronomy/observatory at his property (2-3km from project)	Negative	Unknown		Unknown	As above	No	Yes	No	No	Unknown	Minor assessment of the impact	Required	Targeted consultation	Potentially targeted research		TBD
	livelihoods	Concern has been expressed about distributive equity. Some stakeholders perceive that there is an <b>uneven distribution of benefits and impacts</b> from this Project. There is a perception held by some stakeholders that the host landowner, and the Proponent benefit from this Project, and the community bears the costs.  There are generally positive attitudes towards renewable energy within the community, including members of GAG, however those opposed don't want a renewable project in that location, and argue that renewable energy projects should be in the REZ.	Negative	Unknown		Unknown	As above	Unknown	Yes	Unknown	Unknown	Yes	Standard assessment of the impact	Required	Broad consultation	Targeted research		TBD
	way of life	Impacts on people's experience of <b>privacy, peace, and quiet enjoyment</b> resulting from an operational solar farm and BESS. No community concerns have been raised for this project to date.	Negative	Unknown		Unknown	As above	No	Yes	No	No	Yes	Minor assessment of the impact	Required	Broad consultation	Targeted research		TBD - As part of the EIS, noise impacts will be assessed through a specialist impact study.
	community	There is potential for <b>increased community investment</b> at the local level through Project community benefit sharing.	Positive	Yes - other project	Thunderbolt Energy Hub SIA	Unknown		Unknown	Yes	Unknown	Unknown	Unknown	Standard assessment of the impact	Required	Broad consultation	Targeted research		A <b>Community Benefits Sharing Scheme</b> will be developed, through broad engagement with the community, particularly local residents and local community groups.
	community	The Project will <b>create renewable energy</b> in the local area. Many local community members highly value the potential that this Project has as an active response to climate change at the local level.	Positive	Yes - other project	Coleambally Solar Farm	Yes	Other renewable energy projects and developments in the area	Yes	Yes	Yes	Unknown	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research		TBD
	livelihoods	The Project will result in the <b>loss of agricultural land</b> . The Project will see a diversion of land use away from agricultural production, to land being used for the siting of the solar farm.  There is community concern about this issue, particularly there has been a perception that this Project will cause loss of high level agricultural land.  It is worth noting that the potential for co-existence of solar with continued grazing will be explored as part of the Project design.	Negative	Yes - this project	Coleambally Solar Farm	Yes	Potentially if the Brewongle SF goes ahead.	Unknown	No	Unknown	Unknown	Unknown	Detailed assessment of the impact	Required	Targeted consultation	Targeted research		TBD - As part of the EIS, agricultural impacts will be assessed through a specialist impact study.
	surroundings	This Project will create a change to the <b>visual and landscape character</b> within the local area, impacting on local scenic values.  This has been a key issue of concern for some neighbours and nearby landholders. It has also been expressed as an issue more broadly, due to potential impacts to the view and landscape as part of the approach to Bathurst from the east, known as the 'Bathurst Gateway'.	Negative	Yes - this project	Project Scoping Report	Yes	Potentially if the Brewongle SF goes ahead.	Unknown	Yes	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	The design and layout of the Project has been amended through the planning process, responding to visual and landscape impact concerns. Vegetation screening is also proposed.	TBD - As part of the EIS, visual impacts will be assessed through a specialist impact study.
	surroundings	<b>Impacts on safety.</b> Concerns have been expressed about Fire Hazard Management and fuel load management, access, and the need for consultation with the Glanmire-Walang Rural Fire Service (RFS) brigade.	Negative	Unknown		Yes		Unknown	Yes	Unknown	Unknown	Yes	Minor assessment of the impact	Required	Broad consultation	Targeted research		TBD - As part of the EIS, bush fire risk will be assessed within the <b>Bush Fire Management Plan</b> .
	culture	There is potential for adverse impacts to <b>Aboriginal cultural heritage</b> .	Negative	Yes - other project	Thunderbolt Energy Hub SIA	Unknown		Unknown	Unknown	Unknown	Unknown	Unknown	Minor assessment of the impact	Required	Broad consultation	Targeted research		TBD - As part of the EIS, an Aboriginal Cultural Heritage Assessment Report will be completed; impacts and mitigation measures will be outlined within.
All project phases - Change of land use - from rural land, to land being used for the siting of electricity infrastructure	livelihoods	Some nearby and neighbouring residents are concerned about <b>potential negative impacts to property values</b> . Some neighbouring landholders are trying to subdivide blocks to the east and west. Neighbouring blocks have the right to build residences in the future, and rural landscape views are important to lifestyle blocks.	Negative	Unknown		Unknown	Potentially if the Brewongle SF goes ahead.	No	Unknown	No	No	Yes	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	Ongoing amendments are being made to project design to address visual impacts of the Project	TBD - As part of the EIS, visual impacts will be assessed through a specialist impact study.

## Appendix B Online survey results

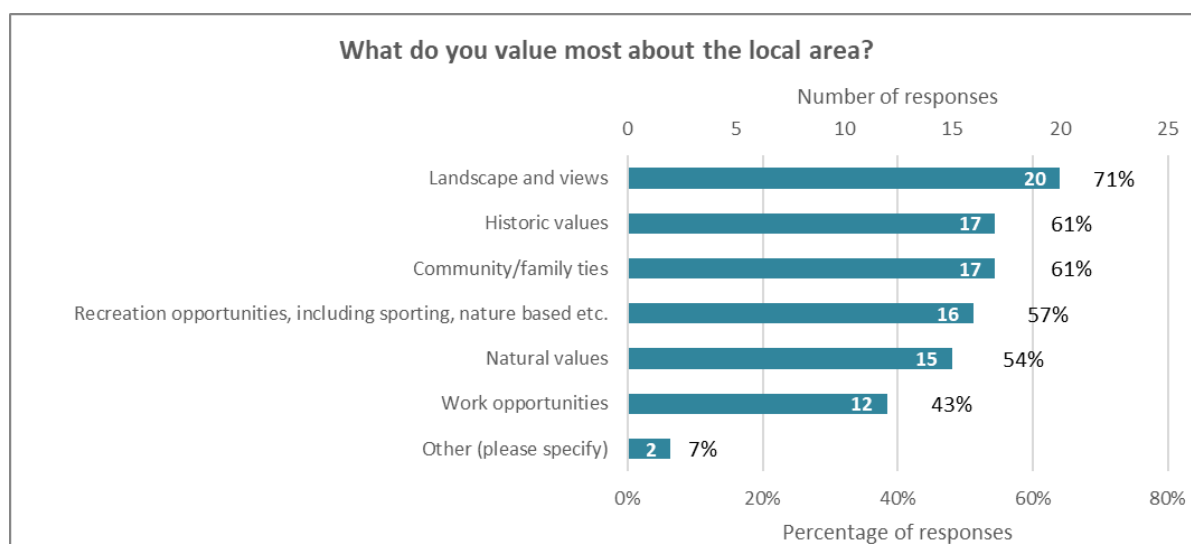
This section presents responses to the Glanmire Solar Farm online survey.



Appendix figure B-1 Q.2 What best describes where you live (Choose one response only) (n=28)



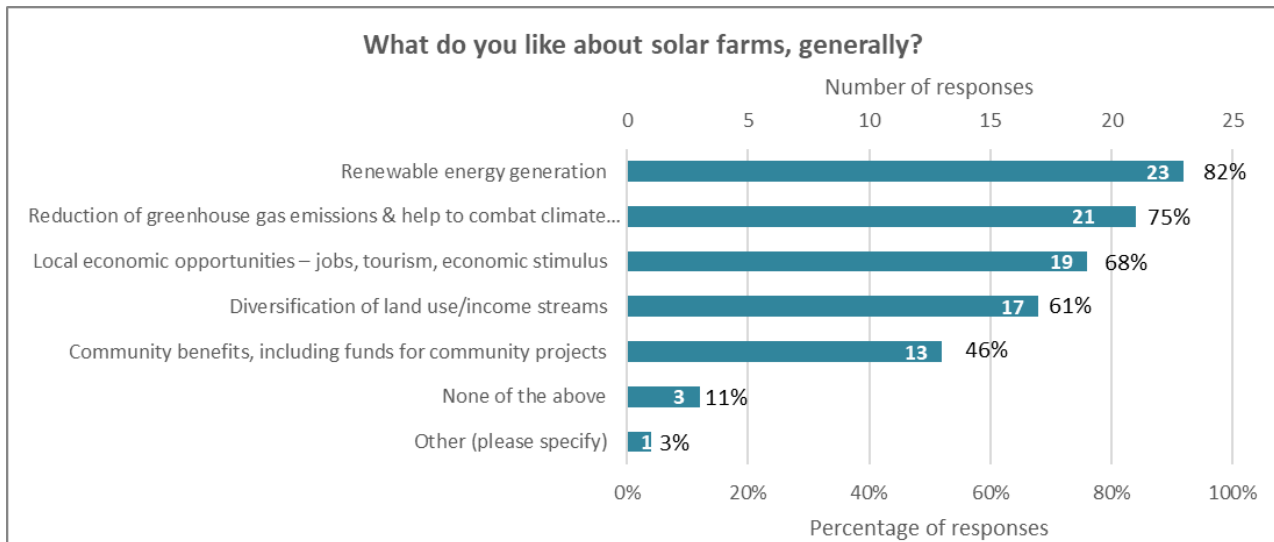
Appendix figure B-2 Q.3 In what way are you involved in the community? Choose all that apply. (n=28)  
(‘Other’: Family)



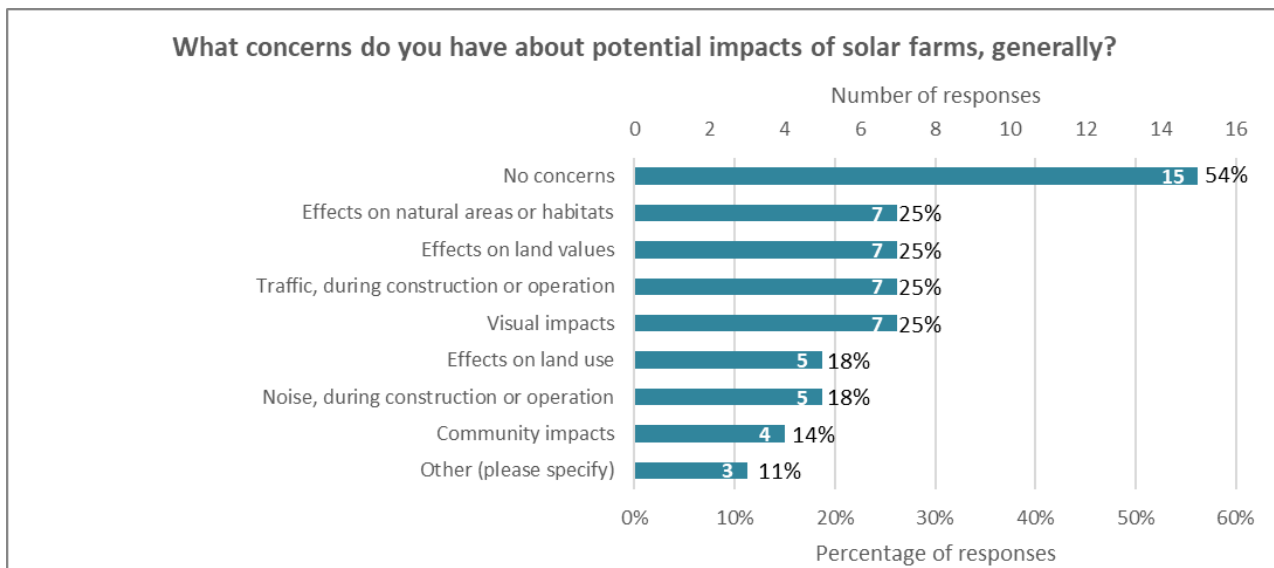
Appendix figure B-3 Q.4 What do you value most about the local area? Choose all that apply. (n=28)  
(‘Other’: My privacy at home; Close to Sydney)

Appendix table B-1 Q.5 What views or landscape characteristics in the region and local area are important to you? (Valid responses included, n=22)

Related theme	Response
<b>General landscape, hills &amp; mountains</b>	<ul style="list-style-type: none"> <li>• The landscape in general especially the hills</li> <li>• The surrounding hills, the changing climate and colour palette</li> <li>• The distant hills, open space, wide views</li> <li>• Trees and mountains, the wildlife</li> <li>• Mountains around the area</li> <li>• Blue Mountains backdrop, the view from Mt Panorama, access to nature areas (creeks, parks etc.)</li> <li>• Mt Panorama</li> <li>• Open spaces, gentle slopes</li> <li>• Open space, mountains surrounding, local flora and fauna</li> <li>• The natural areas bordering Bathurst</li> <li>• Mixed forest, farms, rivers and mountains</li> <li>• The hills, the river, the mix of old &amp; new buildings in Bathurst &amp; on properties, the villages, woodland, farmland, woodland...</li> <li>• Trees &amp; green space</li> </ul>
<b>Rural</b>	<ul style="list-style-type: none"> <li>• Dams, natural</li> <li>• Variety of agriculture, forestry and other uses.</li> <li>• All the beautiful rural farmland I look over &amp; are surrounded by</li> <li>• Rural land with trees and good grass cover</li> <li>• Rural views...trees...bush walking areas...nature reserves...history of the area</li> <li>• combined rural and natural environment</li> <li>• Trees stock grazing</li> </ul>



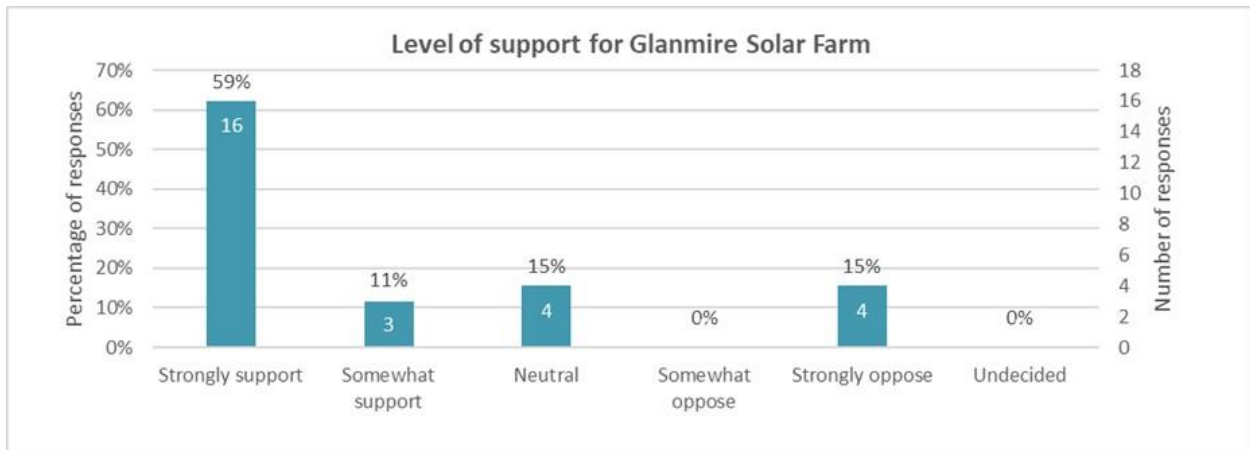
Appendix figure B-4 Q.6 What do you like about solar farms, generally? Choose all that apply. (n=28)  
(‘Other’: Dual use - solar plus grazing or solar plus farming is excellent)



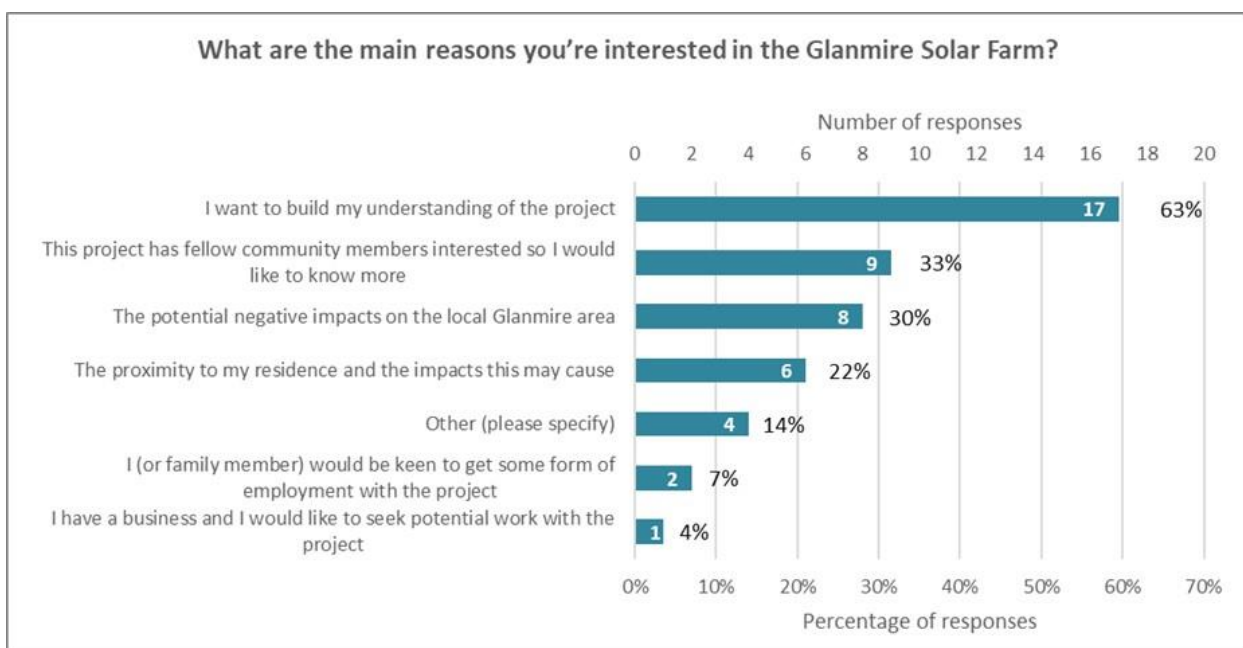
Appendix figure B-5 Q.7 What concerns do you have about potential impacts of solar farms, generally? Choose all that apply. (n=28)

(Other: If solar farms are on existing farmland, I'm not concerned about impact on natural habitats. I'm only concerned about noise & traffic during construction, not ongoing, and there's always roadworks somewhere on the highway; But it doesn't affect me directly; Dazzling reflection if you are in the way.)

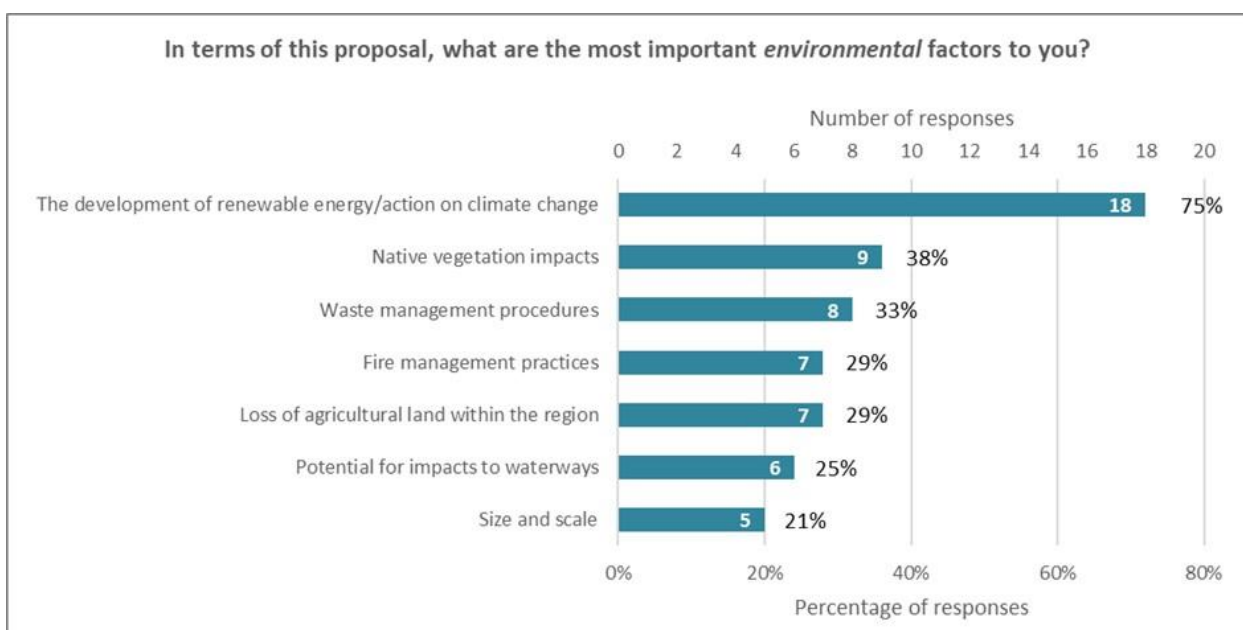




Appendix figure B-6 Q. 8 How would you rate your attitude towards Glanmire Solar Farm? (n=27)

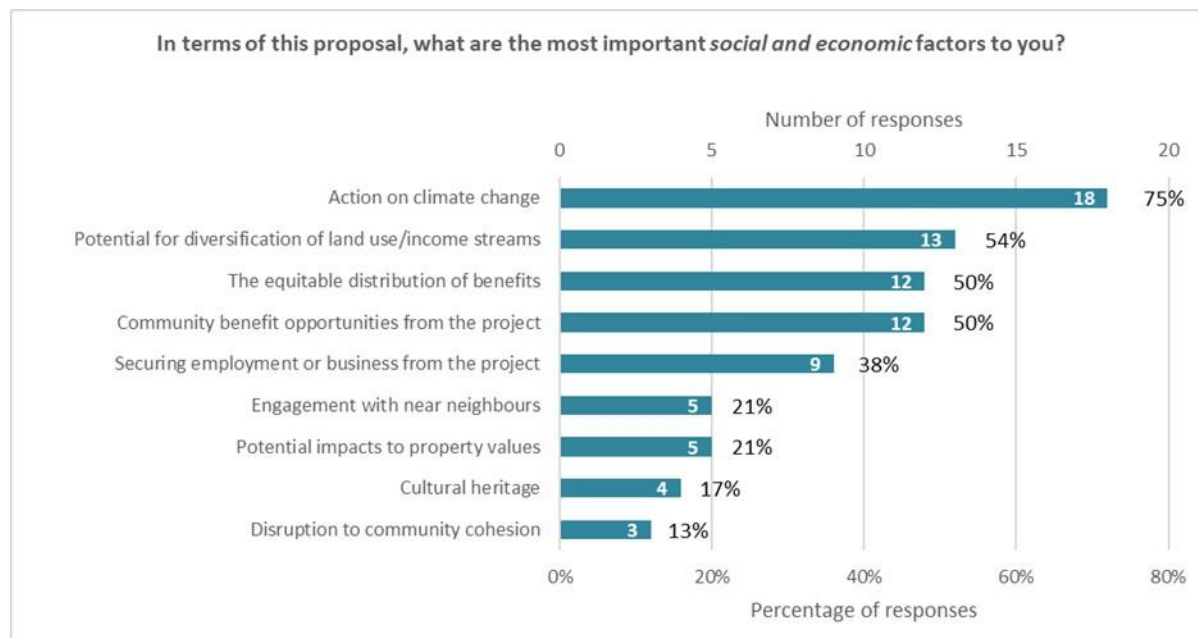


Appendix figure B-7 Q.9 What are the main reasons you're interested in the Glanmire Solar Farm? Choose all that apply (n=27)

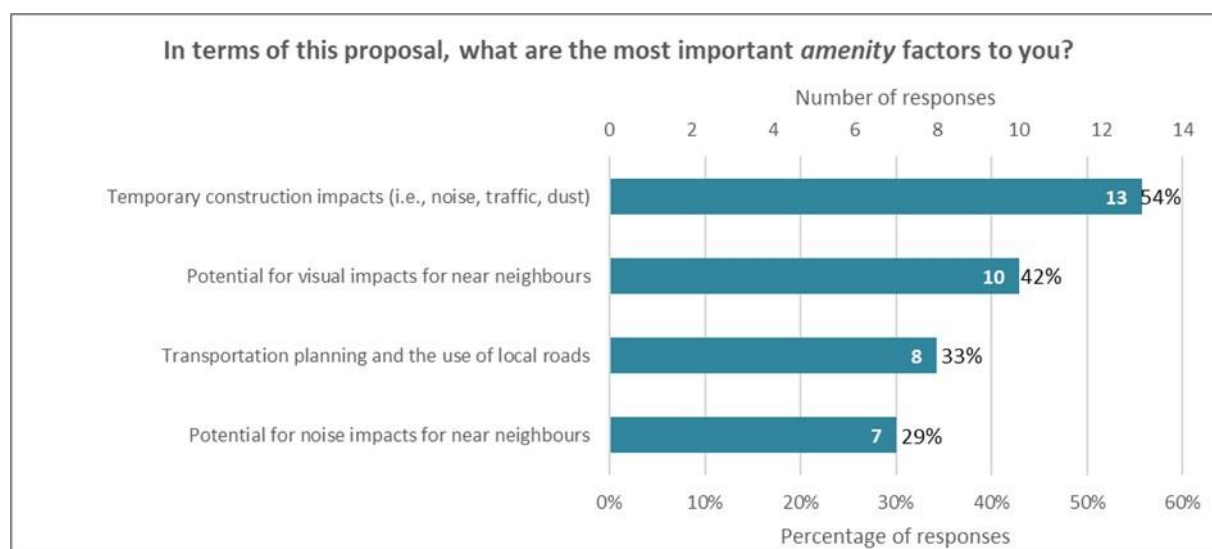


Appendix figure B-8 Q.10 In terms of this Project, what are the most important environmental factors to you? Choose all that apply. (n=24)

(Other: Just how Bathurst can be more involved in the transition to renewables; It's green energy; The need to diversify our power production capacity; I want to see more renewable energy generation and I welcome the opportunity for the local area to benefit from it.)



Appendix figure B-9 Q.11 In terms of this Project, what are the most important social and economic factors to you? Choose all that apply. (n=24)



Appendix figure B-10 Q.12 In terms of this Project, what are the most important amenity factors to you? Choose all that apply

## Appendix C Community profile dataset

### Demographic and industry dataset of the Study Area and NSW

Appendix table C-1 Demographic overview of the Study Area and NSW (ABS Census 2021, unless otherwise stated)

Indicator	Glanmire (Suburb and locality)	Bathurst Regional Shire (LGA)	NSW
Population (no.)	186	43,567	8,072,161
Projected population 2041 (no.)*	n/a	57,060	10,572,700
Median age (years)	40	38	39
Aboriginal and Torres Strait Islander (%)	4.3	7.2	3.4
Born in Australia (%)	89.2	84.7	65.4
Households where a non- English language is spoken (%)	0.0	7.1	29.5
Family households (%)	83.6	69.0	71.2
Median weekly household income	1,958	1,585	1,829
Home ownership (owned or mortgaged) (%)	81.9	66.8	64.0
SEIFA decile**	8	7	n/a
Households paying greater than or equal to 30% household income on rent (%)	21.4	30.0	35.5
Households paying greater than or equal to 30% household income on mortgage payments (%)	0	10.7	17.3
Largest occupation of employment (%)***	Professionals (25.6) Managers (22.2) Technicians and trades (20.0)	Professionals (18.6) Technicians and trades (14.5) Community and care (13.5)	Professionals (23.6) Clerical (13.8) Managers (13.5)

Top 5 industries of employment***	Beef cattle farming (9.5) Site prep services (9.5) Electrical (9.5)	Hospitals (3.4) Higher education (3.3) Primary education (2.7)	Hospitals (3.5) Cafes and restaurants (2.4) Supermarkets (2.2)
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\* NSW Population Projections (DPE, 2022)

\*\* SEIFA Index of Relative Socio-economic Advantage and Disadvantage (ABS, 2018) decile (1=greater relative disadvantage to 10=greater relative advantage)

\*\*\*ABS Census data 2016