

Prepared for FRV Services Australia

Preliminary Social Impact Assessment

Armidale East BESS

Armidale Regional LGA, Metz, NSW

September 2023

Project Number: 230261

Document verification

Project Title: Armidale East BESS

Project Number: 230261

Project File Name: 230261 Armidale East BESS_Scoping_Preliminary SIA_Final V1.0.docx

Revision	Date	Prepared by	Reviewed by	Approved by
Draft V1.0	29/08/2023	Michele Ferguson	Lisa Hamilton	Lisa Hamilton
Final V1.0	28/09/2023	Michele Ferguson	Lisa Hamilton	Lisa Hamilton

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Acronyms and abbreviations

ABS	Australian Bureau of Statistics
BESS	Battery energy storage system
DPE	Department of Planning and Environment (NSW)
EIS	Environmental impact statement
ha	hectare
km	kilometre
LGA	local government area
NE REZ	New England Renewable Energy Zone
NSW	New South Wales
OECC	Office of Energy and Climate Change, NSW Treasury
REAP	Renewable Energy Action Plan
REZ	Renewable Energy Zone
SEIFA	Socio-economic Indexes for Australia
SIA	Social impact assessment
UNE	University of New England
VPA	Voluntary Planning Agreement

1. Introduction

This preliminary social impact assessment (SIA) has been undertaken by NGH Pty Ltd (NGH) on behalf of Fotowatio Renewable Ventures (FRV) for the proposed Armidale East Battery Energy Storage System (BESS) (the Project). This report includes identification of the Project's social locality, a high-level overview of social conditions, and preliminary social impact scoping. It is intended to provide initial insight into the Project's social context and its likely social impacts. Further in-depth assessment will be undertaken as part of the SIA within the environmental impact statement (EIS) phase.

1.1. Project overview

The proposed project would involve the construction, operation and decommissioning of a BESS with a nominal capacity of up to 500 MW / 1000 MWh. It would supply electricity to the national electricity market during peak periods. The BESS would be located on a maximum Development Site of 10 hectares (ha). The project is located on privately owned farmland adjacent to the existing constructed Metz solar farm, which would be leased for the life of the Project.

It is understood the BESS will connect directly to the existing 330kv Transgrid transmission line. Key permanent components of the project are likely to include:

- 500MW BESS including:
 - o Battery containers
 - o Inverters
 - o Transformers
 - o Cooling systems if required
 - o Fire suppressions systems
 - o Switch rooms
- Switchyard
- New access road to the site
- Parking, site office and amenities for operational use.

Temporary infrastructure, including construction facilities, site offices and amenities, tool and material storage sheds, construction staff car parking, component laydown areas and truck parking and unloading would also be required.

1.2. Approach

The SIA analysis has been informed by a site visit and targeted SIA consultation with key local stakeholders, as well as a desktop analysis of the project information provided by the Proponent, broader project engagement findings to date, internet searches of available information relating to the Project and the broader socio-economic context, comparative studies, and publicly available data obtained from government websites, e.g., the Australian Bureau of Statistics (ABS). All population and demographic data presented in this section are derived from the ABS 2021 Census unless otherwise stated.

This analysis has been undertaken in accordance with DPE's *Social Impact Assessment Guideline* (DPE, 2023). As such, potential impacts and opportunities have been evaluated across the following eight categories: way of life, community, accessibility, culture, health and wellbeing, surroundings, livelihoods, and decision-making systems.

In this assessment, direct, indirect, and cumulative impacts have been considered. Through this process, judgements have been made regarding the type and level of further assessment that will be undertaken within the SIA (as part of the EIS) for each potential impact and opportunity. Key factors that have informed this judgement include the extent of cumulative impact and the degree of material social impact.

1.3. Determining the social locality

The social locality 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 by identifying the main place-based or populated communities where people live, work and visit, as well as the existing networks of travel between them, with consideration of the nature and scale of potential impacts arising from the development.

The proposed Project site is situated in the Armidale LGA, approximately 15km east of Armidale, adjacent to the operational Metz Solar Farm. Taking these factors into account, the social locality was determined by identifying:

- Host and adjacent/near neighbour properties.
- Localities/townships likely to be impacted and/or benefit from the Project: Metz and Hillgrove.
- Major towns/cities providing core services to these localities/townships: Armidale.
- The existing networks of travel, the main transportation corridors, and infrastructure and service hubs in the region.

A high-level social baseline profile of the Project's social locality is presented in the following section.

2. Existing environment

The Project site is situated in the New England North West Region of NSW, on the traditional lands of the Anaiwan people. The region is known for its diverse geology, productive agricultural regions, and natural environment that includes the World-Heritage listed Gondwana rainforests.

The Armidale Regional LGA is centrally located in the New England region, covering an area of 8,621km². The LGA contains significant natural assets including the World Heritage-listed rainforest within the Oxley Wild Rivers and New England national parks, scenic waterfalls and gorges, and rich pastoral lands. The region is known for its agricultural industries, including livestock farming and cool climate vineyards (DPE, 2022).

Renewable energy generation is an emerging sector within the broader region, and the Project site is located within the New England Renewable Energy Zone (NE REZ). A large proportion of the Armidale Regional LGA lies within the REZ and there several utility-scale solar and wind farm projects in development or approved within the LGA and surrounding LGAs, including Uralla and Walcha. The NE REZ will unlock a significant pipeline of large-scale renewable energy and storage projects, and new local opportunities. The Armidale Regional Council's priorities for the LGA include leveraging the REZ and identifying and promoting wind, solar and other renewable energy production opportunities (DPE, 2022). The Council has also expressed an objective to drive its operations to 100% renewable energy by 2030 and its 2022 Renewable Energy Action Plan (REAP) identifies that the capacity exists for Council to participate directly in the ownership and management of renewable energy technology and effectively operate as a 'generator-retailer' (Constructive Energy, 2022).

At the time of the 2021 Census, the population of the Armidale Regional LGA was estimated to be 29,124 people with a median age of 37 years (ABS, 2021). The majority of the LGA's residents live in the city of Armidale, which in 2021 had a population of 23,967 people. Armidale is the administrative centre for the Northern Tablelands region and serves the wider New England area with higher-order education, health, retail and professional services. The city is located on the banks of Dumaresq Creek, approximately 105km northeast of Tamworth and roughly halfway between Sydney and Brisbane on the junction of the New England Highway and Waterfall Way. It is well serviced by air, rail, and road networks. Other towns and smaller settlements in the LGA include Ben Lomond, Black Mountain, Guyra, Ebor, Hillgrove, Llangothlin, and Wollomombi.

Located approximately 15km east of Armidale, the small rural locality of Metz had a population of 177 people with a median age of 43 years, consisting of 44 private dwellings and 36 households. To the east of Metz, approximately 25km east of Armidale and 5km north of the Waterfall Way, the historic goldmining village of Hillgrove and surrounding locality had a resident population of 174 people with a comparatively higher median age of 51 years, consisting of 76 private dwellings and 67 households. All private dwellings in both localities were separate houses. Key industries of employment in both localities included beef cattle and sheep farming.

The Armidale region's diverse economy is reflected in its workforce profile. The largest employers are within the agricultural, health and education industries, with the focus on education founded on the University of New England, numerous public and private schools, the NSW TAFE Digital Hub and the opportunities of the NBN (DPE, 2022). Like many comparable regional areas, there is a tight labour market and a reported shortage of skilled workers (OECC, 2022).

Median weekly household incomes in the Armidale region were well below the NSW average, as shown below in Table 2-1. However, the Armidale Regional LGA has an overall relatively high level of advantage as determined by the ABS Index of Relative Socio-economic Advantage and Disadvantage (IRSAD). The IRSAD is a Socio-economic Indexes for Australia (SEIFA) score, developed from a range of ABS 2021 Census

indicators, that ranks areas in Australia according to relative socio-economic disadvantage, with the lowest 10% assigned a decile of 1 and the highest, a decile of 10. The Armidale Regional LGA and the localities of Metz and Hillgrove were assigned a decile of 7, while the city of Armidale was assigned a slightly lower decile of 5 (ABS, 2023).

The region is experiencing negative housing affordability and availability impacts attributed to the Covid-19 pandemic and exacerbated by an influx of workers on renewable energy and other major infrastructure projects, including the New England Solar Farm (Tsaousis, 2022). The median weekly rent in Armidale (postcode 2350) over the quarter to 30 March was \$390, which was slightly higher than the median for the LGA (\$383), representing an annual increase of 8% (DCJ, 2023). Rental market conditions have been tight in the 2350 postcode over the past several years. A rental vacancy rate of 2.6%-3.5% is generally considered a healthy balance between supply and demand (REIA, 2022). In the first half of 2021, the rental vacancy rate began to decline below 2.6 and reached a record low of 0.6% in May 2022. More recently conditions have started to ease somewhat, and the rental vacancy rate averaged above 2% in the six months to June 2023 (SQM Research, 2023a).

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Table 2-1 Key demographic and employment indicators (ABS, 2021)

Indicator (ABS 2021)	Metz (SAL)	Hillgrove (SAL)	Armidale (SAL)	Armidale Regional (LGA)	NSW (State)
Population (no.)	117	174	23,967	29,124	8,072,163
Median age (years)	43	51	36	37	39
Aboriginal and/or Torres Strait Islander people (%)	3.4	1.7	7.9	7.6	3.4
Top three occupations (%)	Managers (49.2) Professionals (27.9) Community & personal services workers (14.8)	Managers (28.2) Labourers (19.7) Professionals (16.9)	Professionals (26.8) Community & personal services workers (13.3) Managers (12.5)	Professionals (24.2) Managers (15.5) Technicians & trades workers (11.5)	Professionals (25.8) Managers (14.6) Clerical & administrative workers (13.0)
Top three industries of employment (%)	Beef cattle farming (13.1) Sheep farming (11.5) Sheep-beef cattle farming (6.6) Higher education (6.6)	Beef cattle farming (14.1) Aged care residential services (11.3) Sheep farming (5.6) Primary education (5.6)	Higher education (10.3) Hospitals (4.2) Other social assistance services (3.4)	Higher education (8.9) Hospitals (3.9) Beef cattle farming (3.4)	Hospitals (4.2) Supermarkets & grocery stores (2.5) Other social assistance services (2.4)
Median weekly household income (\$)	1,874	1,021	1,432	1,404	1,829
Unemployment rate (%)	0.0	4.0	5.7	5.3	4.9
SEIFA IRSAD (decile)	7	7	5	7	n/a

3. Social impacts and need for further assessment

A preliminary social impact scoping exercise has been undertaken to gain initial insight into the likely social impacts and benefits of this Project. Social impact scoping involved an initial identification and preliminary assessment of the likely social impacts using the Social Impact Scoping Worksheet (Appendix A). These potential impacts were informed by Project information, field work that included several semi-structured SIA interviews, a site visit and attendance at the community information session, broader project engagement findings to date, other technical assessments included in this report, a desktop review of the social locality, and other renewable energy projects both in the surrounding region and more broadly across NSW.

Key potential benefits of the Project include local employment, training, and skills development as well as local procurement and associated economic benefits. The Armidale Regional Council expressed a strong focus on ensuring that the local community benefits from renewable energy developments and associated enabling infrastructure, including BESSs, in the region via mechanisms such as a Voluntary Planning Scheme (VPA) to deliver a long-term positive impact. Key industry stakeholders suggested exploring educational partnerships opportunities with local and regional education providers, such as the University of New England (UNE) and TAFE.

Construction workforce impacts with the potential to exacerbate existing pressures on housing and short-term accommodation emerged as a concern during SIA consultation with key stakeholders. While noting that the construction workforce for this project would be relatively small, given the scale of planned development in the NE REZ, cumulative impacts are likely. The negative housing and accommodation impacts of recent renewable energy project construction workforces on Armidale and Uralla were raised during early consultation. One key stakeholder described anecdotal reports of construction workers booking all available short-term accommodation rooms, which has driven away repeat tourists who are unlikely to return.

A summary of findings from this preliminary SIA is presented in Table 3-1 below, which outlines the key social impacts and benefits that will be assessed in more detail within the SIA in the EIS phase. The SIA will allow for a more comprehensive understanding of the potential social impacts and benefits of the project and will be undertaken in accordance with the *Social Impact Assessment Guideline* (DPE, 2023).

The SIA will also examine any other social issues perceived by the community to be of concern that are raised during further project engagement. Project community and stakeholder engagement to be undertaken during the EIS phase is outlined in Section 5 of the Scoping Report.

Cumulative impacts of other proposed developments in the area will also be considered. Where significant impacts are found, mitigation and enhancement measures will be developed, and expected residual impacts post-application of these measures will be described.

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Table 3-1 Impacts and benefits to be further assessed in the SIA

Project phase & activity	Potential social impacts	Affected stakeholder group	Phase 2 level of assessment	Justification
Project lifecycle, including Project planning phase (pre-construction Project conception, assessment, and engagement)	Negative impacts on community cohesion	Nearby residents Broader community	Standard	Proposed development projects can be grounds for contestation within local communities which can negatively impact on community cohesion. This has not been identified as a concern during early consultation, however, it should be considered a potential impact.
	Real or perceived lack of procedural fairness in decision-making and planning processes, including capacity to make informed decisions and influence Project decisions	Nearby residents Key stakeholders Broader community	Standard	Initial engagement feedback suggests satisfaction with community engagement to date and requests for clear and regular communication. However, a real or perceived lack of procedural fairness has been reported for multiple similar projects in NSW and should be considered a potential impact.
	Adverse impacts to personal wellbeing (e.g., stress, anxiety) in people who are directly impacted and/or oppose the Project	Local residents Broader community	Standard	This has not been identified as a concern during initial consultation; however, it has been reported for other BESS projects in NSW and should be considered a potential impact.
	Adverse impacts on people's values, customs and beliefs associated with the site or locality. Negative impacts on Aboriginal cultural heritage, including the potential for intangible harm through 'cultural or spiritual loss'	Nearby residents Broader community First Nations peoples	Detailed	Potential impacts on local cultural values (e.g., agricultural/rural culture) will require consideration in the SIA. Potential negative impacts on Aboriginal cultural heritage will be fully explored in the Aboriginal Cultural Heritage assessment and Aboriginal community consultation within the EIS and considered from a social impact perspective.

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Project phase & activity	Potential social impacts	Affected stakeholder group	Phase 2 level of assessment	Justification
Construction - Project demand for labour, goods, and services	Local employment, training, and upskilling opportunities Commercial benefit through procurement opportunities for local business and service providers Increase in economic activity within the local and regional area	Job seekers Students Local and regional employment and training service providers Local and regional businesses, contractors, and suppliers Local government Broader community	Detailed	This has the potential to be a key benefit of the Project, particularly if construction and procurement prioritises local job seekers and the local and regional trades and services sectors. Identifying enabling factors to maximise this benefit will require more specific consideration in the SIA.
Construction - influx of non-resident construction workers	Constrained availability of short-term accommodation and rental housing	Residents Vulnerable populations utilising short-term accommodation Local businesses Seasonal workers Tourists and visitors Broader community	Detailed	Any influx of construction workers is likely to increase pressure on the availability of both short-term accommodation options and rental housing affordability and availability. Even though the estimated workforce for this Project is relatively small, given the existing pressures on housing and accommodation in the local area and wider region, the seasonal workforce, and the number of proposed and developing projects in the area, cumulative impacts are likely.
	Increased demand for local social and community services and facilities	Residents Broader community Service providers	Detailed	This has not been identified as a concern during initial consultation. However, given the existing pressures on health and other community services and the number of proposed and developing projects in the area, cumulative impacts are likely.

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Project phase & activity	Potential social impacts	Affected stakeholder group	Phase 2 level of assessment	Justification
	Impacts on community composition	Residents Broader community	Minor	An influx of construction workers into Armidale and surrounds may change the composition of the local community, and so change the local and community feel of the city and nearby towns during construction. This was not raised as a concern during initial consultation, however, given the scale of proposed development in the region, cumulative impacts may apply.
Construction - intensive construction activity at the Project site	Way of life, social amenity, road access, road condition and safety, and livelihood impacts due to increased traffic during construction	Nearby residents Broader community Agricultural producers Local businesses Haulage route residents Road users	Standard	Early consultation has indicated some community and stakeholder concern related to increased traffic and proposed haulage routes, and negative impacts on road conditions, commuting time, and safety. These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.
	Health and wellbeing impacts, social amenity impacts during construction (e.g., noise, air quality, quiet enjoyment)	Nearby residents Broader community	Detailed	These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.
Operations – an operational BESS located at the Project site	Benefits resulting from contribution to electricity grid stabilisation and enhancing reliable energy supply	Broader community NSW Electricity system	Detailed	These benefits will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.

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Project phase & activity	Potential social impacts	Affected stakeholder group	Phase 2 level of assessment	Justification
	Increased community investment opportunities	Local community Broader community	Detailed	Community investment opportunities, e.g., a Community Benefit Scheme (CBS) or similar, has the potential to be a key benefit of this Project. Identifying potential opportunities to maximise this benefit in alignment with Council expectations will require more specific consideration in the SIA.
	Health and wellbeing concerns, e.g., noise from the BESS, particularly at night.	Nearby residents	Detailed	This has been identified as a concern for similar BESS projects. These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.
	Impacts on safety of surroundings, i.e., the risk of BESS fire or bushfires	Nearby residents Emergency services Broader community	Detailed	These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.
	Impacts on surroundings because of changing land use, including visual amenity and aesthetics	Nearby residents Broader community	Standard	These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.
Operations & decommissioning	Sustainability impacts resulting from materials used and plans for disposal/recycling	Nearby residents Broader community	Detailed	Some concerns were raised during early consultation. These impacts will be fully explored in other technical assessments within the EIS and considered from a social impact perspective.

4. References

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Appendix A Social impact scoping worksheet

Social Impact Assessment (SIA) Worksheet																			Project name: 230261 Armidale East BESS					Date: 27/09/2023				
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											
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													
community	Proposed development projects can be grounds for contestation within local communities which can negatively impact on community cohesion, trust and cooperation, relationships, and sense of place. This can affect communities as a whole, and/or different distinct groups within communities. No concerns were raised during early consultation and local community members reported that this had not been an issue in relation to the nearby Metz Solar Farm. They noted that while there had been a variety of views on renewable energy development in the local area, it hadn't resulted in negative impacts on community cohesion.	Negative	Yes - other project	Orana BESS SIA; Lismore BESS Scoping report; Glamire Solar Farm SIA	Unknown	Potential for cumulative impacts due to overall NE REZ development.	No	Yes	No	Unknown	No	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	No	Implement robust and transparent community engagement as per Community and Stakeholder Engagement Strategy (CSES).											
decision-making systems	With many renewable energy projects, there may be a real or perceived lack of inclusion in the planning, assessment and consultation process. This can translate into real or perceived inability to make informed decisions, and/or inability to influence project decisions, including elements of project design, as well as reduced levels of trust in the rigour and impartiality of the assessment process. This has been a key issue of concern for many renewable projects in the region and should be considered a potential impact, especially in light of NE REZ development.	Negative	Yes - other project	Thunderbolt Wind Farm SIA; Wallaroo Solar Farm SIA; Glamire Solar Farm SIA	Yes	Potential for cumulative impacts due to overall NE REZ development.	No	Yes	No	Unknown	No	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	Yes	Implement robust and transparent community engagement as per Community and Stakeholder Engagement Strategy (CSES). Open and transparent communication and provision of multiple opportunities for the community to engage with the project and proponent. Proponent received feedback from a near neighbour with regard to potential confusion over the original name of the project and a request for it to be changed. The proponent has subsequently changed the name of the project to Armidale East BESS.											
health and wellbeing	Development projects can create stress and anxiety in people who oppose the project and/or are directly impacted. This can partly stem from uncertainty about the future, and for some neighbouring residents, include concerns about property values and impacts on insurance. This has been observed in other BESS projects elsewhere in NSW and should be considered as a potential impact.	Negative	Yes - other project	Orana BESS SIA; Lismore BESS Scoping report	Unknown		No	Yes	No	Unknown	No	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	No	Implement robust and transparent community engagement as per Community and Stakeholder Engagement Strategy (CSES).											
culture	Potential negative impacts on people's values, customs, and beliefs associated with (or embedded in) the site or locality, e.g. as secondary effects of changes to scenic quality, landforms, or water flows. For Aboriginal cultural heritage, this includes potential for intangible harm through 'cultural or spiritual loss' (i.e., loss or diminution of traditional attachment to the land or connection to country, or loss of rights to gain spiritual sustenance from the land).	Negative	Yes - other project	Metz Solar Farm CHA	Unknown	Potential for cumulative impacts related to existing Metz Solar Farm.	No	Yes	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending cultural and heritage assessments. Recommend to implement culturally appropriate community engagement as per the CSES.											
livelihoods	During construction, which is expected to take approximately 12 months, the project will directly generate employment, with a construction workforce of up to 70 FTE workers. There are potential positive impacts if construction of this project prioritises the local and regional trades and services sectors. This may include specific opportunities for local residents, Aboriginal people, young people, apprentices, and trainees. During construction, the project will also create employment and labour opportunities across its supply chains. During operations, the project is expected to employ 5 to 8 FTE workers.	Positive	Yes - other project	Orana BESS SIA; Wellington South BESS SIA; Eathorpe BESS Scoping report	Yes	Multiple cumulative impacts depending on timing of projects currently in various stages of the planning process, including: Armidale BESS, Eathorpe BESS, Oxley Solar Farm, Olive Grove Solar Farm, and other developments related to the NE REZ	Unknown	No	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	Recommend to develop a draft Local Participation Plan (LPP) during the EIS process, incorporating a First Nations Participation Plan (FNPP) codeveloped with Aboriginal stakeholders, 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 Armidale Regional LGA, and a secondary focus on the wider region. Recommend that the LPP be developed in consultation with the local community and key stakeholders including Armidale Regional Council, Armidale LALC, local education, training and skills development bodies, and local business networks.											
livelihoods	Potential impacts on local businesses and employers resulting from competition for skilled workers and labourers. Early consultation revealed existing shortages of skilled labour and concerns that businesses will find it difficult to retain and/or attract staff if unable to compete on salaries. Cumulative impacts are possible.	Negative	Yes - other project	Middlebrook Solar Farm SIA; New England Solar Farm SIA	Yes	As above	Unknown	No	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	The Local Participation Plan (LPP) will take into account local labour and supply demands, and consider the potential negative impact of the Project in this context.											
livelihoods	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, 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. It can be reasonably expected that this would extend from Armidale to other nearby regional centres including Tamworth.	Positive	Yes - other project	Orana BESS SIA; Wellington South BESS SIA; Eathorpe BESS Scoping report	Yes	As above	Unknown	No	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	Recommend to develop a Local Procurement Policy within the Local Participation Plan (LPP), 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 Armidale Regional LGA, and a secondary focus on the wider region The LPP 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.											
access	Even with the development of a Local Participation Plan, it is expected that non-resident workers will come to work on the construction of this project. These workers will be housed in short-term accommodation and likely also in rental houses in Armidale and possibly other regional towns. The rental housing market across New England is very tight, and an influx of workers may further constrain the availability of rental housing/affordable housing for local residents. The population groups most at risk include low income households; renters; students; other temporary, transient or seasonal workforces; tourists or visitors. Cumulative impacts were raised as a concern during early consultation.	Negative	Yes - other project	New England Solar Farm SIA	Yes	As above	Yes	No	Unknown	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	Implement robust and transparent community engagement as per Community and Stakeholder Engagement Strategy (CSES). Recommend to develop a draft Accommodation and Employment Strategy (AES) during the EIS phase, working closely with Armidale Regional Council and accommodation providers.											
access	An influx of construction workers staying in Armidale and other nearby towns may increase demand for local social and community infrastructure (e.g. health and community services). Health services in Armidale are already under considerable strain. Despite the relatively short duration of the construction phase and relatively small construction workforce, given the scale of development in the region associated with the NE REZ, cumulative impacts are possible.	Negative	Yes - other project	As above	Yes	As above	Unknown	No	Unknown	Unknown	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	Implement robust and transparent community engagement as per Community and Stakeholder Engagement Strategy (CSES).											
community	An influx of construction workers into Armidale and surrounds may change the composition of the local community, and so change the local and community feel of the town, during construction. This was not raised as a concern during early consultation. While the Project has a relatively small construction workforce and relatively short duration of construction, given the scale of proposed development in the region, cumulative impacts may apply.	Negative	Yes - other project	As above	Yes	As above	Unknown	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required	No	Recommend to implement a Workforce Management Plan to manage positive social integration with existing communities.											
access	Construction-related traffic may impact on local or major roads and road conditions as a result of construction heavy vehicles increasing the volume of heavy vehicles on the public road network and construction workforce traffic movements. Cumulative impacts may apply.	Negative	Yes - other project	Eathorpe BESS Scoping report	Yes	As above	Yes	No	No	No	Unknown	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	No	To be determined, pending traffic impact assessment											
health and wellbeing	During the construction period, there may be adverse health impacts associated with noise, air quality (dust) and lighting for landowners/neighbours near the Project site and/or along the proposed haulage route. Local community members noted that there are higher-than-background levels of arsenic in the soil and rock in the area and that locals exercise caution, e.g., grow edible foods in raised beds.	Negative	Yes - other project	Orana BESS SIA; Wellington South BESS SIA; Eathorpe BESS Scoping report	Yes	As above	No	No	Unknown	Unknown	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending noise and air quality impact assessments.											

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
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		
way of life	During the construction period, there may be adverse impacts on people's commuting/travelling time, their experience of travel, and their ability to move around freely. There is a reliance on car travel as a consequence of living in a regional area. There may also be impacts on privacy, peace, and quiet enjoyment, especially if affected by increased noise for landowners/neighbours near the Project site and/or along the proposed haulage route. Cumulative impacts are likely.	Negative	Yes - other project	As above	Yes	As above	No	No	Unknown	Unknown	Unknown	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending traffic impact assessment
access	Potential benefits resulting from project contributions to electricity grid stabilisation and enhancing reliable energy supply, supporting the clean energy transition.	Positive	Yes - other project	Muswellbrook BESS SIA; Eathorpe BESS Scoping report	Yes	Potential cumulative benefits when combined with other NE REZ developments.	Yes	Yes	No	Unknown	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	N/A
community	Potential benefits to local and broader community resulting from community benefit sharing initiatives, e.g. a Community Benefit Scheme (CBS). Early consultation identified a range of suggestions that included stabilising energy supply to Hillgrove village, upgrading local community facilities and infrastructure, exploring educational partnerships, and contributing to Council renewable energy and long-term community benefit objectives.	Positive	Yes - other project	Blind Creek Solar Farm EIS; Wallaroo Solar Farm EIS;	Yes	Potential cumulative benefits when combined with other NE REZ developments.	Unknown	Yes	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	Recommend to implement robust engagement as per the Community and Stakeholder Engagement Strategy (CSES), including with Armidale Regional Council and the local Metz and Hillgrove communities. Recommend to develop a draft Community Benefit Scheme (CBS) during the EIS phase in alignment with Armidale Regional Council's expectations/policy requirements, including a Voluntary Planning Agreement (VPA). Recommend exploration of educational partnership opportunities with local and regional education providers.
health and wellbeing	There may be concerns about perceived adverse health impacts for nearby residents from operational noise, particularly at night. This has been identified as a concern by nearby residents for other BESS projects in NSW.	Negative	Yes - other project	Orana BESS SIA	No	Not required	No	Yes	Unknown	Unknown	No	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending noise impact assessment.
surroundings	There may be concerns about safety, i.e., risk of BESS fire or bushfires.	Negative	Yes - other project	Muswellbrook BESS SIA; Eathorpe BESS Scoping report	Yes	Potential perceived cumulative impacts with existing Metz Solar Farm	Unknown	Yes	No	Unknown	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending preliminary hazard and bushfire assessments and required consultation with relevant authorities.
surroundings	The project will involve a change of use of the land from rural, to land being used for the siting of energy infrastructure. Perceived or actual visual amenity impacts for a small number of nearby residents are possible although this was not raised as an issue of concern for this project during early consultation.	Negative	Yes - other project	Orana BESS EIS; Eathorpe BESS Scoping report	Yes	Potential perceived cumulative visual impacts with existing Metz Solar Farm	No	Yes	No	Unknown	No	Standard assessment of the impact	Required	Targeted consultation	Potentially targeted research	No	To be determined, pending visual impact assessment
surroundings	Some concerns about project sustainability, including the recyclability and/or disposal of materials during operations and decommissioning, were raised during early consultation.	Negative	Yes - other project	Wallaroo Solar Farm EIS	Yes	Potential perceived cumulative impacts with existing Metz Solar Farm and cumulative impacts resulting from NE REZ development	No	Yes	No	Unknown	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research	No	To be determined, pending relevant EIS assessments.



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