





BARNEYS REEF WIND FARM

Social Impact Scoping Report

FINAL

July 2021



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Prepared by Umwelt (Australia) Pty Limited on behalf of Renewable Energy Systems (Australia)

Report No. Date:

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Abbreviations

Abbreviation	Description
ABS	Australian Bureau of Statistics
AC	alternating current
BSF	battery storage facility
BSAL	Biophysical Strategic Agricultural Land
CSEP	Community and Stakeholder Engagement Plan
CW-REZ	Central-West Orana Renewable Energy Zone
DC	direct current
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	NSW Environmental Planning and Assessment Act 1979
GP	General Practitioner
GRRR	Gulgong Residents for Responsible Renewables
GW	Gigawatts
the Guideline	NSW DPIE Social Impact Assessment Guideline (draft, 2020)
LEP	Local Environmental Plan
LGA	local government area
MW	Megawatts
MWRC	Mid-Western Regional Council
NSW	New South Wales
PEL	Petroleum Exploration Licence
PV	Photovoltaic
RES	Renewable Energy Systems Group Australia
REZ	Renewable Energy Zone
SEARs	Secretary's Environmental Assessment Requirements
SEIFA	Socio-Economic Indexes for Areas
SIA	Social Impact Assessment
SSC	State Suburb
SSD	State Significant Development
TRRA	Three Rivers Regional Assembly
TSR	Travelling Stock Reserve
Umwelt	Umwelt (Australia) Pty Ltd
VPA	Voluntary Planning Agreement



1.0 Introduction

This Social Impact Scoping Report documents the process and outcomes of the scoping phase of the social impact assessment undertaken by Umwelt for the Barneys Reef Wind Farm (the Project). It forms part of the Project's Request for Secretary's Environmental Assessment Requirements (SEARs) lodged with the New South Wales (NSW) Department of Planning, Industry and Environment (DPIE) by Renewable Energy Systems (RES) Group Australia, as part of the Project's State Significant Development (SSD) application under Part 4 of *the Environmental Planning and Assessment Act 1979* (EP&A Act).

This Report has been prepared in alignment with the DPIE *draft Social Impact Assessment Guideline* (2020) or 'the Guideline' and represents the 'Phase 1 SIA' for the Project. The 'Phase 2 SIA' for the Project will form part of the detailed environmental impact assessment process and will be incorporated in the Environmental Impact Statement (EIS) for the Project.

1.1 **Project Overview**

RES Australia Pty Ltd (RES) is proposing to develop the Barneys Reef Wind Farm in the Central West region of New South Wales (NSW), approximately 12 kilometres (km) north of the town of Gulgong and located within the Mid-Western Regional Local Government Area. The Project is proposed to include up to 440 megawatts (MW) of wind electricity generation and includes the construction and operation of approximately 63 wind turbines with a tip height of approximately 280 metres (m). The Project would include the construction, operation and decommissioning of the proposed wind farm, as well as of associated infrastructure including operations and maintenance buildings, battery storage, civil works, two substations, and electrical infrastructure required to connect to the proposed Central-West Orana Renewable Energy Zone (CW-REZ) Transmission Corridor.

The Project Area encompasses fourteen freehold properties and four parcels of Crown Land, covering an area of approximately 7,548 hectares (ha). RES is also proposing the Tallawang Solar Farm immediately south of the Project Area, which is subject to a separate assessment process.

The Project is expected to create approximately 340 construction phase jobs and 10 permanent jobs throughout the operational and maintenance phases. At the end of its operational life, the wind farm will either be decommissioned, removing all above ground infrastructure, and returning the Project Area to its existing land capability, or repurposed with new wind energy generating equipment subject to technical feasibility and planning consents.

Transportation of construction material and supplies required for the Project is planned from the Port of Newcastle via the Golden and Castlereagh Highways, if necessary. Proposed access to site would be via Merotherie Road (via the Golden Highway) and/or Gingers Lane (from the Castlereagh Highway).

Further Project information and specifications can be found in the Scoping Report (Umwelt, 2021).

1.2 The Proponent

RES is an independent renewable energy company active in onshore and offshore wind, solar and energy storage, as well as transmission and distribution. To date, RES has delivered over 21 gigawatts (GW) of renewable energy projects worldwide and supports an operational asset portfolio of 7 GW. RES has been in Australia since 2004 and has developed several wind and solar farms in New South Wales, Victoria and Queensland. Currently the construction and asset management portfolio under management by RES in Australia is over 1.1 GW.



2.0 Methodology

2.1 Assessment Requirements

This Social Impact Scoping Report has been prepared in accordance with the NSW Government's *draft Social Impact Assessment Guideline* (DPIE, 2020), as part of the environmental impact assessment process, as per **Figure 2.1**. Further detail on the NSW planning framework can be found in the Scoping Report.



Figure 2.1 SIA and EIS process (DPIE, 2020)

This Report forms part of the Scoping Report and accompanies the Request for SEARs to be lodged with the NSW DPIE and includes the following key components:

- Social baseline profiling defining the baseline social context in which the Project is situated.
- Issues scoping preliminary identification and evaluation of social impacts and issues relevant to the Project, to determine the level of assessment required for the EIS, proportionate to the scale of the Project and the potential impacts of importance to the community.

Commencement of social impact assessment (SIA) early in the Project, informed by community and stakeholder engagement, affords opportunities to effectively integrate social outcomes within the detailed Project planning and design. As is the case with any type of change, some individuals or groups within the community may benefit, while others may experience negative impacts. If negative impacts are predicted, it is the role of the SIA to determine how such impacts may be addressed effectively to reduce the degree of disruption to those affected. If positive impacts are predicted, the aim of the SIA is to maximise these opportunities and identify how they might be further enhanced and realised.

Figure 2.2 provides an overview of the key SIA program phases, with this report relevant to 'Phase 1 -Scoping'.





Figure 2.2 SIA Program Phases

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According to the Guideline and as outlined in Figure 2.3, social impacts can involve changes to people's:





way of life

•including how people live, how they get around, how they work, how they play, and how they interact

10-	

community

•including composition, cohesion, character, how the community functions and people's sense of place



accessibility

•including how people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation



culture

•both Aboriginal and non-Aboriginal, including shared beliefs, customs, values and stories, and connections to Country, land, waterways, places and buildings



health and wellbeing

•including physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, and changes to public health overall



surroundings

•including ecosystem services such as shade, pollution control, and erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity



livelihoods

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



decision-making systems

•particularly whether people experience procedural fairness, can make informed decisions, can meaningfully influence decisions, and can access complaint, remedy and grievance mechanisms

Figure 2.3 Social Impact Categories

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2.2 Area of Social Influence

The social baseline profile has been compiled of the Project's social locality or 'area of social influence'. The area of social influence for this Project is defined as:

- The landholdings, property owners and residents situated on or intersecting with the Project Area as well as the footprint of any ancillary infrastructure.
- The State Suburbs (SSC), as per the Australian Bureau of Statistics' (ABS) statistical areas, of Tallawang, Beryl, Mebul, Dunedoo, Birriwa, Stubbo, Gulgong and Merotherie.
- The host local government area (LGA) of the Mid-Western Regional Council (MWRC) and the neighbouring Warrumbungle Shire Council area.

Figure 2.4 visually represents the area of social influence.

The area of social influence may extend beyond these boundaries at subsequent stages of Project planning and assessment, to include locations where construction contractor workforces may be sourced and where materials may be supplied for the Project.



Image Source: Data source: Geoscience Australia; Forestry Corporation of NSW (2019); DSFI (2017); NPWS Estate (2019); ABS (2016)



2.3 Social Profiling

A baseline social profile gathers knowledge from both primary and secondary data sources to increase understanding of the existing social environment in which a project is proposed, and of potentially affected communities. The social baseline profile is a foundational component of SIA, as it provides the basis for which social impacts associated with the Project may be predicted, assessed, monitored, and managed over time.

The Guideline (DPIE, 2020) outlines the key components of a social baseline study, including:

- an understanding of the project's social locality
- initial analysis of the defining characteristics of the communities within the project's social locality, including any vulnerable groups.

Profiling provides a comprehensive summary of the key characteristics of the people of a community or Project Area and is concerned with developing a detailed understanding of the social and economic context of potentially affected communities.

2.3.1 Data Sources

To gain an understanding of the demographic characteristics and composition of communities within the area of social influence, and to ascertain how the Project may change or affect people, socio-economic and demographic data has been gathered and summarised from the ABS Census (2016) and the Social Health Atlas of Australia (PHIDU, 2020), as well as through a review of local media, regional and local government plans and strategies.

Appendix A contains the community profile dataset that has been used to inform the social baseline. The data sources used and key indicators of interest, including a brief explanation of their relevance to the Project are outlined in **Table 2.1**.



Table 2.1 Social Baseline Profile Data Sources

Key Questions	Data Source	Indicators of Interest
What is the demographic composition of the community?	ABS Census (2016)	Current population and trends
What is the proportion of the population that is	Mid-Western LGA	Median age and age distribution
vulnerable to the proposed project/change?	Warrumbungle Shire LGA	Unemployment rate
• What skills exist in the region? Are there relevant skill sets	Tallawang SSC	Key industries of employment
to enable the local and regional population to capitalise	Beryl SSC	Educational attainment
construction/operations?	Mebul SSC	 Ownership and tenure of private dwellings
 Is the Project going to be of value to the local/regional 	Dunedoo SSC	Weekly household income
community? Does the project align with community	Birriwa SSC	 Proportion of vulnerable groups
values, aspirations, needs?	Barneys Reef SSC ¹	(unemployed, low-income families, elderly,
Are there any groups that will require a particular	Stubbo SSC	Aboriginal and Torres Strait Islanders)
engagement approach to facilitate their involvement and	Gulgong SSC	 Cost of living (rental and mortgage navments)
participation (i.e., languages or cultural/ educational barriers, vulnerabilities)?	Merotherie SSC	payments
 Are there any specific social trends evident in the region? 		
What is the socio-economic status of the community?	ABS Census of Population and Housing (2016)	Index of Relative Socio-economic
 What is the level of advantage / disadvantage in the 	Mid-Western LGA	Disadvantage, 2016
community?	Warrumbungle Shire LGA	Index of Economic Resources, 2016
	Tallawang SSC	Index of Education and Occupation, 2016
	Beryl SSC	
	Mebul SSC	
	Dunedoo SSC	
	Birriwa SSC	
	Barneys Reef SSC ²	
	Stubbo SSC	
	Gulgong SSC	
	Merotherie SSC	

¹ ABS Community Profile not available for Barneys Reef SSC due to population size.

² ABS Community Profile not available for Barneys Reef SSC due to population size.



Key Questions	Data Source	Indicators of Interest
What is the level of health in the community?What are the main risk factors?	 Social Health Atlas of Australia (PHIDU, 2020) Mid-Western LGA Warrumbungle Shire LGA 	 Chronic diseases Risk factors Premature death
 What has been the response of the community to similar Projects in the region? How supportive or not are community residents of renewable energy projects? Have community residents expressed concerns regarding current electricity prices? 	Local media review Submissions reports (comparable projects)	 Level of support for renewable projects Number of articles relating to renewable projects Community sentiment regarding wind farms Reported electricity prices Average electricity usage Average electricity usage by energy source
 What are the Council's key priority areas? Is the proposed project aligned with the Council's strategic plan? Are community values, concerns and/or aspirations documented in the Community Strategic Plan? How does the proposed project fit within the broader regional and state planning energy strategy? 	 Government strategic plans or policies: Department of the Environment and Energy (2019) Australian Energy Statistics NSW Transmission Infrastructure Strategy Renewable Energy Action Plan in 2018 Regional Community Energy Fund Towards 2030, Mid-Western Region Community Plan Central West and Orana Regional Plan 2036 State of the Environment Snapshot 2018-19, Mid-Western Regional Council 	 Level of investment in renewable energy infrastructure in NSW Support for and awareness of renewable/ solar energy in the community Number of solar energy and renewables projects in the region
 What are the attitudes and perspectives of local and regional residents – are they likely to be supportive of the project? What are the key concerns of the community in relation to the project? Are there any strategies on how to manage the impacts of the project? To what extent will the project support the community? 	Community and Stakeholder Engagement	 Knowledge of the project Level of support for the project Community sentiment towards renewable infrastructure and energy Concerns related to the project



2.4 Stakeholder Identification

Social impact assessment involves the participation and collaboration of people who have an interest in, or those that are affected by a project. As Burdge (2004) outlines, stakeholders may be affected groups or individuals that:

- live, work, or recreate near the Project
- have an interest in the proposed action or change
- use or value a resource associated with the Project
- are affected by the Project e.g., may be required to relocate as a result of the project.

A stakeholder identification process was undertaken during the scoping phase for the Project to support the planning and delivery of community and stakeholder consultation to inform the SIA. This process involved identifying stakeholders with an interest in the Project, or those directly and indirectly affected by the Project. This included identifying any potentially vulnerable or marginalised groups.

This process considered the interconnectivity with the adjacent Tallawang Solar Farm Project, with the majority mutual stakeholders. Further definition of the stakeholder identification process is outlined in the Community and Stakeholder Engagement Plan in **Appendix G**.

Key stakeholders who were consulted or engaged during the scoping phase (beginning March 2021) are outlined in **Figure 2.5**. Subsequent phases of the SIA will seek broader involvement across the stakeholder groupings identified and will include wider community resident involvement.





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2.5 Community Consultation

RES has undertaken early community and stakeholder engagement to build relationships with near neighbours and key stakeholders in relation to the Project, as well as to inform Project design and development. This has assisted in identifying and understanding the perceived issues and impacts early in the planning and assessment process. RES has led all engagement activities, with the objective of maintaining that stakeholders and communities have direct interaction with the proponent and to hear the input of stakeholders and members of the community i firsthand.

A coordinated approach to community and stakeholder engagement for the Project with the adjacent Tallawang Solar Farm Project has been adopted due to:

- RES being the proponent/applicant for both the Barneys Reef Wind Farm and the Tallawang Solar Farm projects
- the projects being adjacent to each other and in the same locality, and
- the projects being subject to parallel EIS programs.

The approach intends to streamline the two projects' consultation programs and integrate a common approach, aiming to:

- ensure the development and implementation of engagement that is transparent and provides clear and consistent information on both projects
- reduce social risks associated with either project, including stakeholder confusion
- establish and develop trust with key stakeholders
- afford the opportunity for meaningful participation in the assessment phases for both projects, and
- avoid engagement fatigue, particularly for stakeholders potentially affected, or with an interest, across both projects.

Table 2.2 details the range of engagement mechanisms utilised to obtain input from various stakeholder groups for the Scoping Report, as well as mechanisms to be implemented in subsequent phases of the assessment program.

The Discussion Guide used as the basis for undertaking consultation in this phase is contained in **Appendix B**. The Community and Stakeholder Engagement Plan (CSEP) (**Appendix G**) outlines the engagement approach and strategy used to inform this Report and the scoping phase of the SIA.



Table 2.2 Engagement Mechanisms

Mechanisms	Description	First Round of Consultation	Second Round of Consultation	Targeted Stakeholder Group
Website/hotline/ email	Platforms and tools to provide opportunity for the wider community and public to engage with the Projects (information provision and feedback submission) outside of dedicated consultation periods	A website, hotline and email address established in March 2021	The website, hotline and email address will be monitored and updated when required across subsequent phases	Traditional Owners Host landholders Neighbouring/prox imal landholders Community groups Wider community Local businesses and service providers Local media
Media release	Holding statement outlining key messages for local media	The holding statement was developed in April 2021 and distributed to local media agencies in the first round of consultation	Subsequent media releases will be developed when required in the EIS phase	Local Government Traditional Owners Host landholders Neighbouring/prox imal landholders Community groups Wider community Local businesses and service providers Local media
Project Information Sheet	Project information sheets to distribute information about the Project to the broader community	No. 1 – Project overview was distributed from March to May 2021	No. 2 – Project update and outcomes of scoping phase to be distributed in the assessment phase No. 3 – Project update and outcomes of technical assessment studies to be distributed during completion of the EIS and SIA reports	State Government Local Government Traditional Owners Host landholders Neighbouring/prox imal landholders Community groups Wider community Local businesses and service providers Local media



Mechanisms	Description	First Round of Consultation	Second Round of Consultation	Targeted Stakeholder Group
Project briefings	Formal briefings to key stakeholders and government agencies, with Project Information Sheets and/or slide decks to formally introduce the Projects	Initial Project briefings were undertaken in March and April 2021	Further Project briefings will be undertaken across subsequent phases of the Project	State Government Local Government Traditional Owners Community groups Local businesses and service providers
Personal meetings or interviews	Introductions to the Project, semi- structured interview discussions to listen to individual concerns, interests, and issues to gather preliminary feedback, including sensitivities, understanding of information needs and future engagement preferences	One-on-one introductory meetings with nearby and adjacent landholders in March and April 2021	Follow up interviews and meetings will occur during the preparation of the SIA and EIS Interviews with local businesses and services providers will occur during the preparation of the SIA and EIS	Nearby or adjacent landholders and residents Local businesses and service providers Community groups Traditional Owners
Questionnaire/ survey	Scope and assess potential issues, impacts and opportunities	Host landholders provided with a survey/questionnai re to complete in their own time and provide written response	Questionnaire/sur vey to be issued (either through phone interview, face-to-face or email) during preparation of EIS	Host landholders Nearby or adjacent landholders and residents Local businesses and service providers
Community information sessions	Informal public 'drop in' sessions in a community facility or venue to provide Project information and opportunity for the public to pose questions, provide feedback, Project team to visually share results of studies	N/A	To be scheduled in multiple locations/ towns following the issuance of SEARs Second round of sessions to be planned at subsequent Project phases as required (likely pre-EIS lodgement)	Wider community Local businesses and service providers

Table 2.3 outlines the stakeholders who have participated in the scoping phase of the Project's planning and assessment process to date, as well as those who have informed the development of this Report.



Table 2.3 Stakeholders Consulted during Scoping Phase

Stakeholder group	Mechanism used	Number contacted	Number engaged
Host Landholders	Written questionnaire	13	2
Proximal Landholders	Personal meeting	26	19
Traditional Owners	Project briefing and interview	1	1
State Government	Project briefing	2	2
Local Government	Project briefing	2	2
Community & Special Interest Groups	Project briefing and interview	8	4
Local Businesses & Service Providers	Personal meeting / interview	4	2
Local Community ³	Project Information Sheet mail drop	-	1,788
Broader Community	Project website	-	-
Local Media	Media Statement	4	24

Appendix C provides a complete list of stakeholders consulted during this phase. Quantitative and qualitative information collected through these consultation and engagement activities has been analysed to inform the preliminary analysis of social impacts associated with the Project, as outlined in **Section 4.0**. Landholders consulted during this phase (host and proximal) are visually represented in **Figure 2.6**.

³ Including localities of Tallawang, Barneys Reef, Gulgong, Dunedoo, Goolma, Beryl, Leadville, Merotherie, Bungaba, Birrawa, Stubbo.

⁴ The Media Statement will be published during the EIS phase.





2.6 Preliminary Impact Evaluation

A preliminary evaluation of the issues and impacts identified during the Scoping Phase (as outlined in **Section 4.0**) has been undertaken to understand the level of assessment required for each impact in the EIS/SIA-preparation phase, and to inform Project refinements, design, and detailed planning. The significance assessment has been undertaken using the risk matrix provided in the draft NSW DPIE *Social Impact Assessment Guideline Technical Supplement 2020* (refer to **Figure 2.7**) which considers magnitude and likelihood, as well as key characteristics of each impact (extent, duration, severity, sensitivity and level of concern or interest). The significance rating has been assigned from the perspective of the affected stakeholder group and will be further investigated and validated as part of the EIS.

			1	2	Magnitude I 3	evel 4	5
			Minimal	Minor	Moderate	Major	Transformational
	Α	Almost certain	Medium	Medium	High	Very High	Very High
level	в	Likely	Low	Medium	High	High	Very High
pooq	с	Possible	Low	Medium	Medium	High	High
Likeli	D	Unlikely	Low	Low	Medium	Medium	High
	Е	Very unlikely	Low	Low	Low	Medium	Medium

Figure 2.7 Social Impact Significance Matrix

Source: (NSW Department of Planning, Industry, and Environment, 2020)

A key objective of the scoping phase SIA is to identify the level of assessment required for each impact in the assessment phase, as per the SIA Guideline. The level of assessment determines the extent of effort and data required to assess the impact and will fall into one of four categories as outlined in **Table 2.4**.

Table 2.4	Guide to Determining Levels of Assessment for Each Social Impact
-----------	--

Threshold	Level of assessment of the impact	Meaning
Three or more 'yes' or 'unknown' significant characteristics	Detailed assessment	Impact will not be assessed in other EIS technical studies and will be primarily assessed by specialists in the Phase 2 SIA.
Two 'yes' or 'unknown' significant characteristics	Standard assessment	Impact will be partially assessed in other EIS technical studies; however, further information and evaluation is required in the SIA to analyse the social dimensions of the impact.
One 'yes' or 'unknown' significant characteristic	Desktop integration assessment	Impact will be mostly assessed in other technical studies in the EIS, and desktop review will cross-reference and integrate those studies in the SIA Report
No 'yes' or 'unknown' significant characteristics	No further assessment	The social impact is unlikely to be experienced by anyone, although a monitoring framework will incorporate mechanisms to respond to any unanticipated impacts.

Source: (NSW Department of Planning, Industry, and Environment, 2020)



3.0 Social Baseline

This section describes the social baseline profile of the communities in and around the Project. It provides initial analysis of the defining characteristics of the communities considering demographic, social and economic indicators. Further, it considers the natural and physical attributes of the area of social influence and an understanding of how people currently live, work and recreate in the area.

The following components have been considered in the social baseline for this Project, namely:

- geographic and spatial identification of communities of interest and relevant stakeholders
- governance an understanding of the relevant governance structures including those of the Traditional Owners and local, State and Federal government jurisdictions
- development context a review of the recent history of local communities, including cultural characteristics and community values, as well as previous experiences with renewable energy development projects and other development issues to ascertain the response of local communities to these changes
- community capital/assets an assessment of levels of vulnerability or resilience across the communities of interest and their capacity to cope with change
- key community values, issues, and concerns documentation of current community issues, as
 identified in key strategic planning documents, regional plans and/or studies as well as within local and
 regional media.

3.1 Development Context

Both Commonwealth and NSW Governments have made commitments to increase renewable energy generation and reduce carbon emissions across the Australian and NSW economies.

3.1.1 Energy Policy in NSW

Australia's commitment at the international level to the Paris Climate Accord has influenced the growth of and investment in the renewable energy sector across the country.

In 2013, the NSW Government released the *NSW Renewable Energy Action Plan* which consists of 24 actions under 3 goals outlining the Government's intention to work with communities and the renewable energy industry to increase renewable energy generation in the state.

The Plan was implemented alongside the *Energy Efficiency Action Plan*, and the successful implementation of the Plan was completed in December 2018.

The NSW Government's *2019 Electricity Strategy* announced three Renewable Energy Zones (REZ) in the Central-West Orana, New England and South West regions to encourage investment in projects that generate, store, and transmit renewable energy.

In November 2020, the NSW Government announced its plans to invest \$32 billion into renewable energy over the next decade as part of its *NSW Electricity Infrastructure Roadmap*. The Government noted the investment will generate 6,300 construction jobs and 2,800 ongoing jobs, along with \$1.5 billion in lease payments for landowners, especially in regional NSW for wind and solar farms. The government also announced a Manufacturing Renewables Taskforce to "create local jobs and support local industry".



To support the implementation of these projects, and to give communities more certainty around the delivery of energy infrastructure, the Government has provided an opportunity for communities to participate more centrally in the projects' development through the introduction of the NSW *draft SIA Guideline* (DPIE, 2020).

3.1.2 Central-West Orana Renewable Energy Zone

The proposed location of this Project is within the Central-West Orana Renewable Energy Zone (REZ), being the State's first pilot REZ and is one of five REZs being implemented by the NSW government. REZs colocate renewable energy generation, energy storage, and transmission lines with the aim of providing affordable, reliable and low-emissions electricity to the grid. REZs aim to install the transmission infrastructure required to attract private investment, and to enable the transition to an electricity network powered by renewable energy sources. The recent establishment of the Central-West Orana REZ is already attracting significant interest from renewable energy and storage developers (Energy NSW, 2020).

The NSW Government's Central-West and Orana Regional Plan (2017) notes in their vision for the region 'landmark solar, wind and bioenergy projects distinguish the region as a leader in renewable energy development.' The Plan outlines the role renewable energy will have in creating a sustainable future for the region, particularly by promoting local jobs and development opportunities for associated industries. Specifically, Direction 9 of the Plan is aimed at increasing renewable energy generation across the region. **Figure 3.1** outlines the Central-West REZ and currently proposed, approved, or already developed renewable energy projects. These projects are summarised in **Appendix F** to inform an understanding of the cumulative development in the region and to understand the cumulative impacts that a large number of other developments might have on the community in line with the Large-Scale Solar Energy Guideline (NSW Department of Planning, Industry and Environment, 2018).



Figure 3.1 Location of the Central-West Orana REZ

(Energy NSW, 2020)



3.2 Local Setting

Gulgong is the nearest town centre to the Project Area located approximately 12 km south of the Project Area, with the larger centre of Mudgee approximately 40 km south of the Project Area. Both are in the Mid-Western Regional LGA and the town of Dunedoo approximately 18 km north-west of the Project Area is in the Warrumbungle Shire LGA.

The townships of Gulgong and Dunedoo are key communities of interest for the Project given their proximity to the Project Area. Gulgong, home to 2,521 people (as at the 2016 census), can be characterised by its history and heritage buildings and streetscapes that act as a tourist attraction in the region; whereas Dunedoo is home to approximately half the number of residents as Gulgong (1,221 and 2,521 residents respectively) and is classified as a small rural town that acts as a centre for the surrounding rural community. The Warrumbungle Shire LGA's location along the Golden Highway makes it a host of the main transportation and access routes planned for the Project as well as being the neighbouring LGA.

The Project Area is in proximity to the Castlereagh Highway and the Golden Highway which provide the local area access to the Hunter region, the major metropolitan centre of Newcastle as well as inland road links to south-east Queensland.

3.2.1 Governance

The Project Area is within the Mid-Western Regional LGA which is governed by the Mid-Western Regional Council (MWRC, the Council). The LGA is known for its built heritage, food and wine tourism, and mining and is made up of approximately fifteen villages and rural localities. Mudgee is the main town and strategic centre in the LGA, providing key public services, retail, tourism, and recreation facilities. The key industries in the region include coal mining, agriculture, tourism, retail trade, forestry, fishing, and manufacturing (NSW Government, 2018).

The Mid-Western Regional LGA has a focus on looking after the community, protecting the natural environment, building a strong local economy, connecting the region and good government as outlined in their 'Towards 2030' Community Strategic Plan (further outlined in **Appendix E**). In the 'Towards 2030' plan, the community expressed a desire to reduce the consumption of energy and fossil fuels, and to consider alternative resources. As a result, Council has committed to increasing the use of alternative energy sources within the LGA. These community aspirations are reflected in the uptake of small-scale renewable energy, which has increased steadily since 2015 with the capacity of solar systems in the LGA tripling in the 5 years between 2014 and 2019. This rate of uptake is consistent with the trend across regional NSW, with a 64% increase in small-scale solar installations in 2017-18 compared to 2016-17 (Mid-Western Regional Council, 2019).

3.2.2 Traditional Owners

The Project Area is located within the traditional lands of the Wiradjuri nation. Wiradjuri means 'the people of the three rivers', and the nation's traditional and modern-day connections to Country extend over a large area of NSW encompassing the Macquarie, Lachlan and Murrumbidgee Rivers, bounded by the Murray River in the south.

The Project Area is within the boundaries of a Native Title claim submitted in August 2018 by the Warrabinga-Wiradjuri (NC2018/002 - Warrabinga-Wiradjuri #7). This claim is over an area of 13,682 km² that covers 10 LGAs, including the Mid-Western Regional Council and the Warrumbungle Shire Council. There are currently no determined claims or Indigenous Land Use Agreements in place in the Project Area.



The study communities for the Project are in the NSW Aboriginal Land Council boundaries of the Central Region, specifically in the Mudgee Local Aboriginal Land Council. Further information on the traditional owners of the land is provided in **Appendix E**.

3.2.3 Land Use

Land within and surrounding the Project Area has been subject to extensive vegetation clearing associated with historic agricultural land uses and is predominately utilised for grazing activities, with some cropping and horticulture. The Project Area encompasses fourteen freehold properties owned by multiple landowners, including 10 dwellings within 93 land parcels, with the land primarily utilised for cropping, and sheep and cattle grazing.

The Project Area is zoned as RU1 Primary Production under the Mid-Western Regional Council Local Environmental Plan (LEP). The land is classed as moderate to low capability agricultural land; with none of the land within the Project Area classified as Biophysical Strategic Agricultural Land (BSAL).

There is a Petroleum Exploration Licence (PEL) that applies to the eastern portion of the Project Area, held by Hunter Gas Pty Ltd and Santos QNT Pty Ltd. In addition, there are mineral exploration licences (EL8160 and EL8405) held by Bowdens Silver (a Silver Mines Limited company).

3.2.1 Settlement Pattern

In addition to the 14 privately-owned properties, there are 45 residential dwellings located within approximately 3.75 km of the proposed turbine locations.

Table 3.1 outlines the key populations within the area of social influence. Further demographic profiling can be found in **Appendix A**.

Place-based communities	Population
Mid-Western Regional LGA	25,158 ⁵
Town of Gulgong	2,521 ⁶
Town of Mudgee	10,923
Warrumbungle Shire LGA	9,187
Town of Dunedoo	1,221

Table 3.1 Key Populations (ABS, 2016)

3.3 Regional Setting

The Project Area is located within the Central West-Orana Region in NSW, a diverse and productive region with good connectivity to Sydney, Canberra and Newcastle. The key regional cities include Bathurst, Orange and Dubbo, with increasingly popular centres of Lithgow, Mudgee and Cowra.

The population of the region is expected to reach 300,000 people by 2036, and as such, there has been a strong focus from the NSW Government to develop the region into 'the most diverse regional economy in NSW with a vibrant network of centres leveraging the opportunities of being at the heart of NSW' (NSW Government, 2016).

⁵ 2021 Estimate: NSW 2019 Population Projections (DPIE, 2019)

⁶ 2016 Census Data (ABS, 2016) at State Suburb level for Gulgong, Mudgee and Dunedoo



Visions for future development of the region include increasing the diversity of the economy, capitalising on the historic towns and heritage centres for tourism, improved freight, transport and infrastructure, and vibrant healthy communities. Significant industries of employment in the region include the extractives sector, agriculture, health and social care sectors, as well as emerging sectors such as renewable energy (DPIE, 2016). **Figure 3.2** summaries the key industry sectors that the NSW Government's strategic plans focus on for the region.



Figure 3.2 Economic Diversification Strategy for the Central-West Orana Region (DPIE, 2016)

3.3.1 Comparable Developments

This section draws on several data sources to build an understanding of the renewable energy development context of the region, to capture any ongoing social change processes in the area of social influence, and to identify how local communities have responded to change over time.

Given the location of the Project Area, in the Central-West and Orana REZ, there have been several other renewable energy projects that are operating, under construction, or are currently being planned. These projects are summarised in **Appendix F** to inform an understanding of cumulative development in the region, and potential cumulative effects that multiple nearby projects may have on the community.

A select number of comparable projects in the region have been reviewed to identify how relevant stakeholders and communities have responded to these proposed developments, to inform an understanding of the potential concerns and community perceptions in relation to the proposed Barneys Reef Wind Farm. These projects are outlined as follows:

- The Valley of the Winds wind farm proposed location is in the Warrumbungle Shire around the communities of Coolah, Dunedoo and Leadville. The project is currently in the project planning phase, having submitted a scoping report in May 2020. The report indicates general community support for the 175-turbine wind farm.
- The **Bodangora Wind Farm** secured SSD approval in August 2013 and has been operational since 2019. The Community Consultative Committee annual reporting indicates some issues raised in relation to the administration of the Community Fund. There was also significant opposition to the project, at the time of SSD assessment, with 142 of 151 public submissions opposing the project.
- The Liverpool Range Wind Farm secured SSD approval in March 2018 having received a mix of opposition (20 respondents), support (10) and commentary (5) during the public submission phase.



During the assessment process, the number of proposed turbines and substations was reduced, and the transmission line alignment was amended to address stakeholder concerns.

The **Hills of Gold Wind Farm** by Engie is currently in the response to submissions phase of the EIS • process. Whilst the project is 170 km NE in proximity to the township of Nundle, in the New England REZ, it has been analysed due to the significant community opposition it faced, including 633 submissions from the public and the organised opposition group 'Preserve Hills of Gold'.

A review of publicly available documentation, and media coverage of these projects, has highlighted key community sentiments relating to:

- unequal distribution of benefits between host landholders and nearby or proximal residents
- disruption to agricultural activity including aerial tasks (e.g., spraying) •
- possible land devaluation
- loss of accessible agricultural land ٠
- local road disruptions and decrease in road safety during construction •
- noise disturbance from construction, traffic, and the operation of the wind farm •
- visual impacts to the landscape's amenity, including shadow flicker, increase of built infrastructure and ٠ construction activities causing light pollution
- concern for the harm caused to birds.

These sentiments are consistent with some of the early feedback provided by community members in relation to the current Project, which are summarised in Section 4.0.

3.3.2 **Other Major Projects in the Region**

There are several other projects which are recently developed, or currently being considered, which could result in changes to the community, or which may have further cumulative effects across the region, particularly in relation to impacts associated with concurrent construction activities. Major projects in the renewables sector and other sectors, that may result in social impacts and influence social change processes include:

- The Tallawang Solar Farm, also proposed by RES and adjacent to the Barneys Reef Wind Farm.
- A \$70.7 million **Mudgee Hospital upgrade**, including a new emergency department, inpatient unit, operating theatres, maternity unit and outpatient services (NSW Health, 2021).
- A \$1.3 million upgrade to the Castlereagh Highway near Capertee to improve road safety (Lithgow Mercury, 2020).
- Melbourne-Brisbane Inland Rail Project, traversing the Mid-Western Regional LGA (NSW Government, • 2016).
- An extension to Peabody Energy's Wilpinjong Coal Mine in the small community of Wollar approved in 2017.
- The Mid Western Regional Council has noted there are currently nine State Significant Development Applications underway within the LGA, three of which are coal mine developments or expansions.



Such project developments, in combination with the number of renewable projects approved or in the planning phase, may further intensify impacts experienced by local communities across the region.

3.4 Sustainable Livelihoods Approach – Community Capitals

To understand the communities of interest to the Project and to evaluate their resilience and adaptive capacity to change, this social baseline has utilised the Sustainable Livelihoods Approach (U.K. Department for International Development [DFID] 1999) for analysis purposes.

According to this framework, people seek to maintain their livelihood within a context of vulnerability. Specifically, threats to their livelihood include shocks (such as sudden onsets of natural disasters, health problems, conflicts, and economic crises), trends (for instance, those relating to the economy, health, resources, and governance) and seasonality (such as cyclical fluctuations in prices or employment). People draw upon these assets to build and maintain their livelihood. A livelihood is considered sustainable '...when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base'.

The DFID approach draws on broad categories of community capitals as a fundamental basis to identifying and further enhancing community capacity and resilience. This methodology has been further developed by Coakes and Sadler (2011) to reflect the five capitals approach – human, social, natural, physical, and economic/financial. The vulnerability of each capital area can be assessed through the selection of a suite of socio-economic indicators specific to each capital area to assess a community's vulnerability to change or conversely their adaptive capacity; and has been widely applied within the energy project context. Elements of each capital area are further outlined in **Figure 3.3** below.

Using the Capitals framework outlined above, the following sections summarises key community strengths and vulnerabilities of the study areas with additional detailed information provided in **Appendix A**.





Figure 3.3 Capital Framework

Adapted from Coakes & Sadler (2011)

3.4.1 Natural Capital

Natural capital refers to the natural assets and resources that contribute to community sustainability. Natural capital can include resources such as minerals, land, forests, and waterways, which provide benefit to the community, as well as environmental assets that provide social, cultural, or recreational value. A summary of the natural capital in the area of social influence is provided below.



Within the region, there is a strong history of viticulture, with winemaking dating back to the 1850s. Mudgee is a well-known food and wine destination amongst tourists and features an annual Food and Wine Festival.

The primary agricultural industries in the Mid- Western Regional LGA are wool (worth \$28.4 million), cereal crops (worth \$27.4 million), and cattle and calves (worth \$16.3 million). The key agricultural pursuits are similar in the Warrumbungle Shire LGA, with cattle and calves the largest industry (\$46.2 million) followed by cereal crops (\$23.5 million) and wool (\$16.9 million) (NSW Government, 2016).





The region is rich in minerals, with mining (predominantly coal mining) contributing \$270 million to the local economy. Further, the State of the Environment Report (2017-18) suggests in the period between 2014-2018, there has been an increase in the land area covered by mining and exploration titles.

The Goulburn River National Park east of Mudgee, and Warrumbungle National Park west of Coonabarabran are popular tourist destinations. The Warrumbungle National Park is home to the internationally significant Siding Spring Observatory which is a critical piece of national infrastructure that provides jobs and attracts tourists. The region provides habitat for approximately 200 threatened species.





Water supply deficiencies (of more than 50% by 2036) are forecast for the Mid-Western Region. New water security projects and water management initiatives, such as stormwater harvesting and innovative water management approaches, are currently being employed to improve water security (NSW Government, 2016). Above-average rainfall in March 2021 has eased long-term rainfall deficiencies and encouraged optimism in agricultural communities in the region. Extended drought conditions and large-scale

bushfires have negatively affected agricultural communities in recent years (BOM, 2021). The rate of warming in the region has accelerated since 1960, and in the mid- to long-term, the BOM have projected decreases in winter rainfall and harsher fire weather with high confidence (Ekström, 2015).

Natural assets of importance to the community include the critically endangered Grassy Box Woodland⁷ ecological community (e.g., the Dunedoo Woodland Learning Centre), Travelling Stock Reserves (TSRs) (the LGA has 1,378 ha) which supports livestock operations as well as holding other biodiversity, Indigenous and European cultural, heritage and social values, and community-managed environmental reserves including those managed the Mudgee Local Aboriginal Land Council and the Adams Lead Reserve (3.3 ha) managed by the Mudgee District Environment Group. Flirtation Hill is also locally known as a vantage point with extensive views to the north of Gulgong.

⁷ White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland



3.4.2 Human Capital

The level of human capital within a community is assessed by considering population size, age distribution, education and skills, general population health and the prevalence of at-risk groups within the community.

The following provides a summary of the key characteristics of the study areas from a human capital perspective (refer to **Appendix A**):



The population has increased in the Mid-Western Regional LGA since 2006 and is expected to rise until 2041, particularly in the age group of 75 years and over (refer to population trends in **Figure 3.4**). In contrast, the Warrumbungle Shire LGA population has decreased in the same timeframe and is expected to continue to decrease in the coming years with the only age groups projected to rise being those 75 years and over (refer to **Figure 3.5**).

This trend is reflected in the median age of the study communities, with both Mid-Western Regional LGA and Warrumbungle Shire LGA having median ages over the NSW average (42 and 49 years respectively, compared to 38 years for NSW). The suburb with the highest median age is Mebul which has a median age of 63 years.





The local population has a low rate of Year 12 completion compared to the NSW average (35% in Warrumbungle Shire LGA and 39% in Mid-Western Regional LGA, compared to 59% in NSW), with a higher percentage of certificate level qualifications rather than Bachelor level qualifications in all study communities (20% hold certificates and 7% hold bachelor's degrees in Warrumbungle Shire LGA and 25% certificates, 8% bachelor's degrees in Mid-Western Regional LGA, compared to 18% certificates and 16% bachelor's degrees in NSW).

The proportion of the population completing Year 12 and tertiary education has increased in both LGAs since 2006 (an increase of 6% in Warrumbungle Shire LGA and an increase of 9% in Mid-Western Regional LGA).



Both LGAs have a higher proportion of Aboriginal and Torres Strait Islander residents than the NSW average (Mid-Western Regional LGA 5%, Warrumbungle Shire LGA 10%, compared to 3% in NSW). The suburb of Mebul has a significantly higher Aboriginal and Torres Strait Islander population (18%), whilst Tallawang and Merotherie recorded no Aboriginal-identifying residents within the population. Mudgee is also the administrative centre of the Mudgee Local Aboriginal Land Council.

The Mid-Western Regional LGA falls within the Three Rivers Regional Assembly (TRRA) area which extends from Lithgow in the east of NSW through to Nyngan in the west and represents the interests of Aboriginal people across the communities of Bathurst, Dubbo, Gilgandra, Mudgee, Narromine, Nyngan, Orange, Parkes, Peak Hill, Trangie, Warren and Wellington. The TRRA facilitates the involvement of Aboriginal communities in setting regional priorities and strengthening the capacity of leaders and community members.

To preserve the history and culture of the Wiradjuri people, five memorials are currently being established in the Mudgee area as part of the Wiradjuri Mudgee-Dabee Stories Project (Mudgee Guardian, 2015). Scattered through the community, these memorials are located at sites of cultural significance to the Wiradjuri people.





Figure 3.4 Mid-Western Regional LGA Population Projections



Figure 3.5 Warrumbungle Shire LGA Population Projections



By way of summary, **Figure 3.6** outlines the Socio-Economic Indexes for Areas (SEIFA), prepared by the ABS. A low score indicates a greater degree of disadvantage, with the lowest 10% of areas receiving a decile of one, and the highest, a ten. It should be noted that no comparison can be made between LGAs and state suburbs on ranking, as rankings are only comparative within each geographic classification.

The SEIFA Index of Education and Occupation (IEO) for each of the SSCs reflects the general level of education and occupation-related skills of people within an area, indicative of relative disadvantage compared to other areas in NSW. The highest IEO index across the communities is within the 5th decile, indicating that approximately half of the other SSCs and LGAs in NSW have a higher level of education and occupation-related skills in comparison. Specifically, Gulgong has the lowest level of education and occupation-related skills compared to the other study communities, and is within the lowest 10% of NSW, with Warrumbungle Shire having a higher level than Mid-Western Regional LGA, though still relatively low within NSW broadly.



Figure 3.6 SEIFA Index of Education and Occupation

Source: SEIFA 2016

3.4.3 Social Capital

Various indicators can be used to examine and assess social capital. Such indicators include the level of volunteering, population mobility, crime rates, and the demographic composition of the community, such as the percentage of people born overseas, language proficiency etc. The following provides a summary of the key characteristics of the study areas from a social capital perspective (refer to **Appendix A**).

The proportion of the community with a different address one year ago (10% in Warrumbungle Shire LGA and 14% in Mid-Western Regional LGA), and five years ago (28% in Warrumbungle Shire LGA and 37% in Mid-Western Regional LGA), is consistent with or lower than the state average (14% and 39% respectively), meaning residents have less mobility. Furthermore, the level of mobility of Mid-Western Regional LGA residents has remained consistent since 2006, with mobility of Warrumbungle Shire LGA residents decreasing since 2006.





Across the broader Mid-Western Regional LGA (22%) and Warrumbungle LGA (28%), volunteerism is higher than the state average (18%) which is reflective of other regional areas in NSW, however, the rate of volunteerism has decreased in both LGAs since 2006. The rate of volunteerism in the suburbs of Tallawang, Stubbo and Merotherie is lower than the state average.



There are significantly fewer people born overseas in all the study community than the NSW average (30%). The most diverse community is Stubbo with 9% of the population born overseas, in contrast, the suburbs of Mebul, Birriwa and Merotherie have 0% of their population born overseas.





Both LGAs have a higher number of single parent families than the state average (10% for Warrumbungle Shire LGA and 9% in Mid-Western Regional LGA compared to 8% in NSW), however, a number of the study communities have no single parent families including Tallawang, Beryl, Mebul, Birriwa, and Merotherie.

The majority of the population in each study area are family households (a range between 66% - 100% across the study communities, with 67% in Warrumbungle Shire LGA and 69% in Mid-Western Regional LGA), with very little presence of group households and less than a third of each community being lone person households. However, the number of lone person households is increasing whilst the number of family households is decreasing (refer to **Appendix A**).

The prevalence of crime is higher in the Warrumbungle Shire LGA than Mid-Western Regional LGA (922.7 incidents per 100,000 residents in Mid-Western Regional LGA compared to 1045.5 incidents per 100,000 residents in Warrumbungle Shire LGA), however, both LGAs are in the bottom third of LGAs in NSW for most prevalent crimes, suggesting low crime rates in comparison with the broader state (refer to **Appendix A**).



Figure 3.7 provides the overall socio-economic status and level of disadvantage within each community, as determined by the Index of Relative Socio-economic Disadvantage (IRSD) - a SEIFA score prepared by the ABS which ranks areas in Australia according to relative socio-economic disadvantage. A low score indicates a greater degree of disadvantage, with the lowest 10% of areas receiving a decile of one, and the highest, ten. It should be noted that no comparison can be made between LGAs and state suburbs on ranking, as rankings are only comparative within each geographic classification.

When considering the relative socio-economic disadvantage of the study communities, Dunedoo and Gulgong SSCs have the most disadvantage in comparison to the other study communities, with Mebul having the least socio-economic disadvantage. Mid-Western Regional LGA has a lower level of relative socio-economic disadvantage than Warrumbungle Shire LGA).



Figure 3.7 SEIFA Index of Relative Socio-economic Disadvantage

Source: SEIFA 2016
Examining a community's economic capital involves consideration of several indicators, including industry and employment, workforce participation and unemployment, income levels and cost of living pressures, such as weekly rent or mortgage repayments. The following provides a summary of the key characteristics of the study areas from an economic capital perspective (refer to **Appendix A**).

The proportion of the labour force employed full-time in both Mid-Western Regional and Warrumbungle Shire LGAs has decreased since 2006, the unemployment rate in the LGAs has also decreased since 2006 however remains above the state average (6.5% and 7.9% respectively compared to 6.3%). In contrast the number of part-time workers has increased (refer to **Appendix A**). This trend is not uncommon in an ageing population.

The unemployment rate is highest in Beryl SSC (15.6%, compared to the NSW rate of 6.3%) and aligns with Beryl having the highest median age of the study communities (63 years of age), whereas Stubbo has the highest rate of full-time employees (63.2%, compared to 59.2% in NSW).

As a result of these employment patterns, the median weekly household income is below the NSW average across both LGAs and all the study communities except for Merotherie, which has a median of \$2,125. The suburb with the lowest median weekly household income is Stubbo (\$609 a week). Despite the lower-than-average income, median weekly household income has increased in both LGAs since 2006.

In most cases, the cost of living in the study communities is lower than the state, with the median monthly mortgage repayments in all study communities except for Tallawang being lower than the NSW average. Similarly, mortgage prices have also been on the rise in both LGAs since 2006.

The same trend has been experienced in regard to rental prices, with the weekly median rent for a 3-bedroom house all below the state median and rental costs in the LGAs rising since 2006. Beryl has the highest median weekly rent at \$270 in comparison to the NSW median of \$380.

The low median household income in Mebul means that it has the highest cost of living, on par with NSW, with the median weekly rent equalling 26% of the median weekly household income. The suburb with the lowest cost of living is Stubbo at 16%. Cost of living has been rising across both LGAs since 2006, with the Mid-Western Regional LGA (24%) nearing the NSW figure (26%).

As at the 2016 ABS Census, approximately 9% of workers in the Mid-Western Regional LGA reported the census category of 'agriculture, forestry and fishing' as their industry of employment, compared with 2% across NSW more broadly. Whilst the agriculture industry has been perceived as a key industry of employment in the LGA, it has not been the top industry of employment in recent times (2006-2016).

In 2006, retail trade was the top industry of employment (13.4%), with mining overtaking the industry in 2011 to be the top industry of employment for residents in the Mid-Western Regional LGA in both 2011 and 2016. Retail trade remained the second highest employer of residents in 2011 and 2016, with agricultural consistently being the third highest employer in 2011 and 2016.













The agricultural industry is the top employer in all the study communities, except for Gulgong (where mining is the top employer) (refer to **Appendix A**). The closure of several resource extraction Projects in surrounding communities has created key changes in these localities, specifically, the closure of the Sibelco Tallawang magnetite mine in 2016 led to a reduction in the availability of mining jobs in the Mid-Western Regional LGA. Prior to closure, all employees working at the mine were based in Mudgee (MiningLink, 2019).

In the Warrumbungle Shire LGA, agriculture, forestry and fishing has consistently been the top industry of employment since 2006, with approximately a third of the population employed in the industry (27.6% in 2016). Health care and social assistance is the industry that employs the second highest proportion of people (12.2% in 2016), followed by education and training (11.5% in 2016).





The Mid-Western Regional LGA attracts over 573,000 visitors each year through its viticulture, food, sport and cultural events (Mid-Western Regional Council, 2019). Deemed the gateway to the Central West and Far West regions of the State, and 3-4 hours' drive from Sydney and Newcastle, Mudgee is also easily accessible from the surrounding regional centres. According to Tourism Research Australia, visitors to the Mid-Western Regional LGA spent on average three nights in the area, with a total annual

spend of \$148 million dollars (Tourism Research Australia, 2017). According to the Mudgee Region Annual Report (2018), the tourism industry in the Mudgee tourism region generated \$924,083 in revenue for the year 2018. This was an increase of \$44,116 (5%) from 2017 (\$879,967 revenue).

The SEIFA Index of Economic Resources (IER) reflects the economic resources of households within an area and includes variables such as household income, housing expenditure (e.g., rent) and wealth (e.g., home ownership). A low score indicates a relative lack of access to economic resources in general, while a high score indicates greater access to economic resources.

When considering the study communities, Dunedoo and Gulgong are again the most disadvantaged, whereas Mebul has the highest access to economic resources. Mid-Western LGA has a higher access to economic resources than Warrumbungle Shire LGA (refer to **Figure 3.8**).



Figure 3.8 SEIFA Index of Economic Resources

Source: SEIFA 2016.

The Mid-Western and Warrumbungle Shire local government areas compare to others across the region as outlined in **Figure 3.9**.



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Figure 3.9 Local economic profiles in the Central-West Orana Region (DPIE, 2016)

3.4.5 Physical Capital

Physical or built capital includes provision of infrastructure and services to the community. Within this capital area, it is important to consider the type, quality, and degree of access to public, built and community infrastructure (including amenities, services, and utilities), as well as housing. The Project's area of social influence can be characterised as having a wide range of community services (refer to **Appendix A**).

The study a mortgag propertie

The study communities have a higher proportion of dwellings that are fully owned (without a mortgage) than the NSW average, which is common in farming communities in which properties are passed down through the generations, however, this trend is decreasing in line with rising mortgage prices.

The proportion of houses owned with a mortgage is rising except for in Birriwa and Merotherie, where there are no houses owned with a mortgage (refer to **Appendix A**). Similarly, the proportion of rented dwellings is increasing, however, remains below the NSW proportion (31.8%) in all suburbs except for Mebul (35.7%).



Whilst the proportion of households in mortgage stress in both the Mid-Western Regional LGA and Warrumbungle Shire LGA have decreased since 2006, the proportion remains similar to NSW (9.4% and 9.5% in 2016 respectively, compared to 9.6% in NSW), with the proportion of households experiencing rental stress increasing within the Mid-Western Regional LGA surpassing NSW (32.3% and 27.9% respectively in 2016). This is a sign of high demand in the rental market and can often result in increasing rental prices.

The majority of the study communities have a lower proportion of dwellings with internet access when compared with NSW (69% in Warrumbungle Shire LGA and 77% in Mid-Western Regional LGA compared to 85% in NSW), with Birriwa having the lowest access at 58%; except for Merotherie which has a 100% of dwellings with internet access and Beryl which is on par with NSW.





Regarding the provision of social infrastructure, there has been much controversary in recent years relating to the under supply of health care in the region. The town of Gulgong has been reliant on telehealth services since June 2020, when the contract for the towns one doctor was not renewed. The Mid-Western Regional LGA has a below average rate of transport (3.9 ASR per 100) and cost (2.1 ASR per 100) affecting access to healthcare in comparison to NSW (4.3 ASR per 100 and 2.5 ASR per 100 respectively).

In terms of connectivity, the Castlereagh Highway transverses the region and is a main route of travel for inland residents, connecting Lithgow in the south to south-east Queensland in the north. The highway is part of the Great Inland Way connecting Sydney and Cairns. The Castlereagh Highway meets the Golden Highway at Dunedoo which is a key route of travel from Dubbo to Newcastle, giving the region access to the Hunter region and the major metropolitan centre of Newcastle. Railway lines at Binnaway and Mendooran provide opportunities to expand the freight network and support the local agricultural industry, particularly for the Warrumbungle LGA.

> As a result of the proximity to major national highways, the *Central West and Orana Regional Plan 2036* outlines a vision to capitalise on the location to grow the freight industry which may result in opportunities for new intermodal facilities and support rail infrastructure (NSW Government, 2016).

The Gwabegar railway line also runs through the Mid-Western Regional LGA, however, the portion of the railway between Kandos and Gulgong has not been operational for several years. Transport for NSW have been investigating reopening the line, with a feasibility study published in August 2020 outlining positive economic benefits. The project is now in the design and planning stage. Mudgee has a commuter airport with Fly Pelican operating two return flights a day on weekdays between Mudgee and Sydney.

> Based on service capacity assessments undertaken in the region, strain on accommodation services is evident, due to the large influx of seasonal and itinerant workers for mining and agribusiness, such as in the viticulture, pome fruit, nut, cotton, and stone fruit industries, particularly during harvest periods (DPIE, 2016). A range of accommodation options is needed to meet this temporary workforce demand, particularly in the context of growth in

other sectors such as renewable energy. The NSW Government has outlined a number of actions to support the capacity building of the region, including producing guidelines to help councils plan for and manage seasonal and itinerant worker accommodation, and preparing planning guidelines for the short-term accommodation of mining employees to support workforce needs during mining construction, operation or shutdown.

3.5 Local Challenges and Opportunities

Table 3.2 outlines the key challenges and opportunities for the host LGA as acquired from the review of local, regional, and state government reports, strategies and plans, ABS Census data and other secondary sources of data, local media and community consultation.

In summary, the key challenges faced by the Mid-Western Regional LGA include the need to provide for an ageing population with limited health services and addressing the existing strain on short-stay accommodation provision. The redevelopment of Mudgee Hospital is a response in place to partially overcome the first matter. The abundant natural resources and strong tourism sector, combined with the growth in renewable energy projects, however, position the LGA well to further diversify the local and regional economy.













The increasing number of transient workforces caused by multiple major projects either in construction, or proposed in the area of social influence, results in some flow-on challenges for the region in maintaining an existing strong sense of community and decreasing anti-social behaviour. However, the low mobility of the community is suggestive of a sustained sense of community, and the high rate of volunteerism indicates that the community is willing to participate in community initiatives. This coupled with Council's plans to increase housing provision, will likely result in positive social development for the community more broadly.

To further support regional development, issues such as traffic congestion and the emerging strain on local service provision need to be addressed, as well as upgrades needed to road infrastructure and the mobile network. Some of these identified constraints are already being considered by Council.

 Table 3.2 outlines identified local challenges and opportunities according to the five key capital areas.

Table 3.2 Local Challenges and Opportunities

Challenges	Capital	Opportunities
 Traffic congestion Road infrastructure and road surfaces require upgrade Lack of public transport options Broadband and mobile coverage need upgrading Expansion of the mining industry – potential strain on infrastructure Shortage of short and long-term accommodation, seen to be connected to growth in mining industry Limited commercial flights per week 	Physical	 Continued investment in road upgrades including Wollar Road Hospital expansion Historic character of region Upgrades and development of recreational infrastructure for youth including a water park, skate park upgrades and district adventure playground Improvement in footpaths and shared cycleways Food and Garden Waste collection service being implemented
 Water security and drought prone Impacts of mining on natural environment require management and regulation 	Natural	 Area has quality agricultural land Community values the beautiful natural environment Area has been identified as having favourable natural resources for renewable energy development (sun and wind) Area has rich mining resources Region hosts 101,000 ha of national park including Goulburn River and Warrumbungle National Parks



Challenges	Capital	Opportunities
 Temporary workers accommodation facilities are available, however can have unintended detrimental social consequences, such as segregation from the existing community 	Social	 Support arts and cultural development across the Region Council's plan to increase housing options in the region Thriving tourism, arts and cultural sectors The Mid-Western Regional Arts and Cultural Centre in Mudgee is under construction Tight-knit community Representation of Aboriginal and Torres Strait Islander people in the community Low prevalence of crime Low mobility of residents resulting in sustained sense of community
 Potential for labour force competition due to mining activity Increasing retirement age population leading to decrease in skilled employee base Low median weekly household income resulting in less spending in the local economy Increasing rental housing prices 	Economic	 Region has strong and diverse industries including mining, tourism, and agriculture Council supports Projects that create new jobs in the region and help to build a diverse and multi-skilled workforce Council supports the expansion of essential infrastructure and services to match business and industry Strong business services sector Low cost of living
 Limited health services Difficulties in attracting and retaining General Practitioners (GPs) Limited tertiary education options Ageing population 	Human	 Population increasing Proportion of residents undertaking tertiary education increasing

Compiled from the following: MWRC Community Plan Towards 2030, 2017; MWRC Delivery Program 2017/18 – 2020/21 Operational Plan 2018/19; MWRC Workforce Strategy 2017/2021; MWRC Asset Management Strategy 2017/2021; MWRC Community Engagement Summary of Findings, 2017

3.5.1 Identification of Vulnerable Groups

Through the development of the social baseline profile, the following population groups within the area of social influence have been identified as potentially having vulnerability to the social or economic changes that the Project, and the cumulative effects of other developments across the region, may bring:

- property owners may be affected by the Project
- regular users of short-stay accommodation and tenants within the private rental market
- local job seekers
- local Aboriginal and Torres Strait Islander residents.



4.0 Perceived and Likely Social Impacts

This section analyses and discusses the scoped issues and impacts (positive and negative) in relation to the Project. Analysis has been framed in accordance with the social impact categories outlined in the Guideline and standard SIA practice, and has distinguished community consultation responses that were independently raised or top of mind (unprompted), as compared to those that were prompted as per the Consultation Discussion Guide in **Appendix B**.

4.1 Summary of findings

Graph 4.1 lists the key issues and impacts associated with the Project in order of frequency, as identified by members of the community consulted; these key issues are further defined in **Table 4.1**.



Graph 4.1 Perceived impact themes (unprompted)

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Impact Category	Impact	Frequency	Total Frequency
Mov of life	How people get around	4	G
way of file	How people work	2	O
Community	Community cohesion	1	2
Community	Community composition	1	2
	Access and use of infrastructure	4	
Accessibility	Access to property	1	9
	Strain on services	4	
	Stress and anxiety	1	2
Health and wellbeing	Safety	2	3
	Use of natural environment	5	
Companyation	Land use conflict	5	20
Surroundings	Noise amenity	5	20
	Visual amenity	5	
	Capacity to sustain themselves	3	
	Compensation for property or asset loss	1	
Livelihoods	Distributive equity	3	11
	Employment	2	
	Property values	2	
	Ability to meaningfully influence decisions	1	
Decision-making systems	Inability to make informed decisions	1	3
	Procedural fairness	1	
Cumulative	Change caused by multiple concurrent projects	6	6

Table 4.1 Perceived Issues and Impacts with Frequency (unprompted)

When community members were asked directly about perceived or potential impact categories of the Project, their top concerns were somewhat similar with those reported as top of mind (unprompted) (refer to **Graph 4.2**). Land use change and conflict (n=10, prompted; n=5 unprompted) and cumulative impacts (n=8, prompted; n=6 unprompted) were amongst the most frequently raised impacts (prompted and unprompted). Impacts to visual amenity and noise were both matters raised when prompted (both n=7), whereas impacts to the natural environment and livelihood were more frequently mentioned as top of mind (unprompted) impacts.





Graph 4.2 Perceived Issues and Impacts (prompted)

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Table 4.2 and **Graph 4.3** outline the community-identified positive social impacts, benefits and/or opportunities associated with the Project and their frequency, as gathered through community consultation. These outcomes are discussed further in **Section 5.0**.





Graph 4.3 Perceived Positive Impacts and Community Benefits

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Impact Category	Impact	Frequency	Total Frequency
Way of life	How people work	2	2
Community	How the community functions	1	1
Accessibility	Infrastructure improvements	4	0
Accessibility	Access to knowledge, expertise and skills	5	9
Culture	Aboriginal culture	1	1
	Benefit to the natural environment	6	
Surroundings	Aesthetic value and amenity	1	8
	Access to and use of the natural environment	1	
	Ability to sustain oneself financially	8	
the all the second s	Community investment	1	
Livelinoods	Local business opportunities	2	13
	Local employment and training	2	
	Empowering decision-making	1	
Decision-making	Facilitating research	1	3
systems	Distributive equity	1]

Further description of the issues noted within each SIA category or theme are further described in the following sections.



4.2 Way of Life

Some respondents raised that their overall way of life could be affected by the Project (n=6). Impacts to patterns of work were identified in relation to the potential disruption to agricultural activities and the tourism sector. One respondent noted that the potential dissection of agricultural lands by transmission infrastructure could significantly impact upon agricultural activities that require tall vehicles or aerial equipment.

Several other responses related to potential traffic impacts, road closures, and disruptions to road travel and land access – these aspects are discussed in **Section 4.4**.

Further, respondents identified that the potential impacts to livelihoods (discussed in **Section 4.8**), can flow on to alter people's patterns of living, plans for their future and the feasibility of certain lifestyle choices.

4.3 Community

Some stakeholders raised concern for the Project's benefits to unequally benefit some people over others; that is property owners who receive financial compensation for hosting project infrastructure, compared to neighbours who live on or own adjacent properties but who do not receive benefits. One community group noted the potential damage to interpersonal and neighbourly relations that such distributive inequities could cause, the emergence of a 'winners and losers' effect, and the growth of mistrust and speculation across the community. Negative experiences associated with other development projects in the region led this stakeholder to describe that "projects like this can tear people apart". In addition to this, some responses have noted a distaste at the perceived inequality of renewable energy generation, benefitting urban energy consumers but impacting rural communities.

Based on comparable projects with large temporary workforces in regional settings, communities can also experience changes to the composition and character of local towns due to transient workforces. Over time, this can potentially cause a level of income disparity between differing groups of the population and lead to a shift in gender relations within the community.

4.4 Accessibility

The accommodation needs of the Project workforce was raised as having the potential to cause changes to the local tourism sector, which is a key industry for the towns of Mudgee and Gulgong. Related, accessibility to local services and facilities was also raised as a matter of concern by stakeholders (n=10), namely, the potential strain on local accommodation and housing (both affordability and availability) during the Project's construction period. Respondents noted that demand for accommodation in the area is already high from tourism and the mining industry, and that additional pressure on service provision could limit access for others or compete with tourism. One resident queried: *"is there going to be enough accommodation ? Our town is a tourist town and is usually booked out"*. Although competition for accommodation was raised as a concern, it was also described that the Mudgee community is accustomed to hosting workforces employed on major projects and local services providers have structured their businesses to meet this need.

The Mid-Western Regional Council raised as a priority that the Project should consider its workforce accommodation strategy. Council currently restricts the establishment of accommodation camps for construction workforces across the LGA. This policy is understood to be an effort to encourage the integration of incoming populations associated with major projects with local communities, and to ensure that the economic benefits associated with the presence of a workforce are received by local businesses and service providers.



Several respondents raised concerns over the use of local roads, particularly during construction, and the disruption associated with traffic and potential roads closures. The Warrumbungle Shire specifically wanted to understand the Project's proposed use of local roads and one community member referred to a specific experience with another wind farm project in the region to illustrate people's concern. The referenced project involved road closures and speed limits that were perceived as unnecessarily disruptive as they were a result of inadequate planning of transport routes and subsequent unscheduled road upgrades.

However, several stakeholders identified potential infrastructure upgrades as one of the key possible benefits (n=4, unprompted) that could come about because of the Project; respondents specifically identified improvements to roads, bridges and local property access routes as opportunities that had the potential to benefit the wider community.

4.5 Culture

Local Aboriginal organisations consulted during this phase shared their interest and concern for:

- land rights, land uses and land management
- preservation of cultural sites and traditional practices
- cultural connection to Country
- community programs and representation of Aboriginal people in the local area.

The need to be involved in any local road upgrades associated with the Project was raised as a matter of importance, to carry out Aboriginal cultural heritage monitoring and land surveys.

It was also described that there is a high expectation upon developers and operators of large-scale projects in the region to support or provide resourcing for the continued and improved delivery of local community programs, and that the level of social acceptance of projects are linked to the approach companies take to working with, and sharing benefits with, local communities.

Other elements of cultural effects have been raised and addressed in other sections, such as those relating to community values and connections to the land and surroundings the Project. Impacts upon culture and on local Aboriginal communities, will be further explored during further preparation of the EIS and SIA.

4.6 Health and Wellbeing

One respondent identified a potential increase in anxiety and stress that the Project could cause for nearby residents, due to a fear of the unknown, feelings of uncertainty, and of losing control over one's futures and local surroundings.

The Mid-Western Regional Council specifically raised concerns about the potential for elevated fire risks associated with wind turbines and transmission lines, acknowledging that this could be mitigated through measures such as in-built fire detection systems.

Respondents also recognised the potential Project benefits to broader environment values arising from generation of low emission energy, and implicitly, mitigation of climate change. Some community members characterised wind energy as 'necessary' in the transition away from fossil fuels and recognised the long-term environmental and health benefits to people more broadly.



4.7 Surroundings

The likely visual changes to the landscape were another concern identified through community consultation (n=12). The Warrumbungle Shire Council noted that the Project would be visible for some residents within the LGA, however did not express particular concerns.

An increase of built infrastructure and associated changes to the rural character of the landscape was described as a concern by some respondents due to their lifestyle choices being affected. This was raised particularly if the Project could impact upon natural features of the landscape that are of high community value, or upon people's continued ability to access these areas. The following landscape features were identified as local community values by six respondents:

- native vegetation
- grazing, bushland, rivers/creeks, vegetation, townships
- productive farming land
- grassy box woodlands
- Travelling Stock Routes (TSR)
- Adams Lead Reserve (Mudgee District Environmental Group (MDEG) run reserve)
- Goulburn River National Park (identified as a place with community value and is a sacred Aboriginal site, where local kids swim in the waterhole)
- a ridgeline (at the top of a private property)
- Flirtation Hill (Gulgong).

Further, some respondents emphasised the need to avoid impacts to key natural features and ecological values, including nearby Travelling Stock Routes, threatened ecological communities, and marshes situated on private properties. Impacts to fauna were not specifically raised as a Project-associated impact. However, community responses to comparable Projects in the wider region have included concerns about impacts to fauna particularly birds and bats (see **Section 3.3.1**).

The potential noise impact from Project activities was raised as a key concern by some stakeholders (n=3 unprompted, n=7 prompted). One landholder expressed concern about noise from the wind farm specifically because their "property is very flat" such that there are "no terrain features to mitigate the sound". Several respondents did not specify whether they were concerned about noise from construction or operation of the Project, though community responses to other wind farms in the region indicate that the public are typically concerned about both sources and impacts on their social amenity.

Another concern raised by one nearby resident was the potential conflict with the planned construction of new houses on private properties and the instalment of wind turbines "within 2 km of proposed dwelling locations". This response highlights the importance of consultation with individuals living nearby the Project to understand and consider each household or property owner's unique circumstances in planning Project infrastructure. Other comments relating to impacts on people's surroundings included the uncertainties around the decommissioning process and the recycling of wind farm components.

One respondent identified the opportunity for the Project to contribute to public infrastructure improvements which would in turn benefit the overall amenity of the local area, positively affecting the wider community who may not otherwise be the receivers of Project benefits.



4.8 Livelihoods

Respondents frequently identified impacts to livelihoods associated with the Project (n=11, unprompted), and a range of ways in which their livelihoods could be impacted. Conversely, positive impacts to livelihoods were the most identified benefit that stakeholders associated with the Project. This illustrates the central importance that community members place on sustaining their livelihoods and the land-dependent livelihoods of most community members.

Most concerns raised relate to the changes to land use which is seen as conflicting with existing uses, and concerns over potential impacts to the land and the ability for local farmers to sustain their livelihoods. Land use change and conflict was one of the most frequently raised impacts (n=10 prompted, n=5 unprompted). It was stated by one community group that "*the community is strong... and the land is our livelihood*"; and that any effect of the Project on the ability to farm the land would be detrimental.

Most land use concerns were associated with the impact of transmission infrastructure on agricultural activities. Such impacts are closely related to patterns of work and people's ability to sustain their livelihoods through economic activities, as well as concerns for the cumulative impact of multiple renewable energy generation projects (refer to **Section 4.10**). In this regard, it was highlighted that transmission infrastructure can dissect productive agricultural land and make farming "*problematic*". Numerous stakeholders have raised this due to the high land dependency across the community and the local values associated with the land and the local surrounds. For instance, a landowner expressed concern over the potential for a "*spider web*" of transmission lines and poles across their property should other projects be proposed in the area.

One landholder mentioned a desire for compensation, and another expressed concern over potential devaluation of properties due to the proximity of the Project infrastructure. Similarly, a community group identified an opportunity for the Project to support their *"end goal of sustaining the livelihoods of farmers and their families"* by improving understanding and investigating the options for co-locating agriculture and renewable energy infrastructure.

Further, the perceived reduction in rural property values associated with land, houses, or property adjacent to, or within eyesight of Project infrastructure, is perceived to be detrimental to people's livelihoods and their futures. In this area of social influence, being a drought-prone region, land values are particularly susceptible to external forces.

Some respondents mentioned the positive impact to their livelihoods from potential financial benefits, arising from both hosting of Project infrastructure, and potential compensation for neighbouring landholders or hosts of ancillary infrastructure and access routes. The Project has the potential to benefit multiple landowners as the proposed site is hosted by several properties, with the Project not only increasing but also serving to diversify household income streams. One neighbouring landholder stated that they wanted to *"see adjacent landholders financially benefit from the projects"* too. Following on from this, it was suggested that a pool of money could be distributed amongst adjacent landholders to see broader benefits provided to the local area.

Respondents also highlighted the opportunity for local employment and contracting services, particularly during construction, to increase the commercial activity for local businesses and job security for local job seekers. Council, local businesses and residents focussed on the economic benefits the Project could provide to the local community, and the Project's potential role in providing employment and contracting opportunities for service providers and businesses. One stakeholder described the potential social benefit that the Project could offer through diversification of skills and vocational training, and the establishment of a new industry sector with opportunity for workers to specialise, re-skill or upskill. The indirect impacts on people's livelihoods such as an anticipated increase in commercial activity for local service providers and suppliers in nearby townships during the construction period, has the potential to bring about positive flow-on social benefits and improved community wellbeing.



Several community groups highlighted that the Project has the potential to expand access to knowledge, expertise, and skills in the region, and expressed enthusiasm for the capacity-building opportunities this could provide to the local community. One stakeholder group identified the opportunity for the Project to provide on-the-job training particularly during construction, that would have a wider benefit of 'building the local skills base'.

Despite this, one community member raised that employment opportunities during operation and maintenance were perceived as low and the nature of infrastructure components being manufactured internationally infers that the benefits to the local community are minimal. Further, some stakeholders were also concerned about who would receive the employment opportunities associated with the Project. Respondents raised the risk of the Project failing to provide local employment and procurement, which would potentially reduce social acceptance of the development: *"some local people have been frustrated and even opposed to other solar or wind projects in the area recently for bringing in labour such as backpackers to construct the farms"*. One stakeholder acknowledged that non-local workers with specialised expertise may need to be employed from outside the region to meet the Project's construction and operation demands.

4.9 Decision-Making Systems

It was recognised by several respondents, that the Project, while still in its early planning stages, would require more detailed information before concerns or benefits could be identified and discussed.

Community members have underscored the value placed on engagement that is open, transparent, and responsive, and which focuses on listening to the concerns and experiences of individual and local stakeholders. Several respondents expressed appreciation for the early-stage engagement undertaken by the proponent, and an approach which sought input from a range of community members to guide Project planning. Some community members contrasted this with negative experiences they had experienced with other renewable energy companies, where it was felt that project plans were proposed on the community. One community group stated the view that developers such as RES "need to be doing a lot of listening".

4.10 Cumulative Effects

The rate of change across the Central West and Orana region, due to the growing number of proposed and active development projects, and the associated cumulative changes caused by these activities, was mentioned by several respondents (n=6). The adverse impacts experienced by communities in the region were raised as examples of how major projects can cause community division and reduce levels of social cohesion and trust. There was also a view that the rate of development may cause a growing opposition to major projects and large-scale industrial development in general amongst some groups in the community.

Some community groups and residents expressed interest in understanding the plans for the Central-West Orana REZ more broadly to inform their position on the Project. One stakeholder highlighted the sense of uncertainty associated with development in the region and that community views on the Project were formed in light of this broader context. One respondent asked *"how many projects like this need to be developed in the region to replace the Liddell power station? What does that look like for our area longer term?"*. Furthermore, one community member stated that wind energy generation should be prioritised over solar.

A community organisation expressed a desire for proponents of renewable energy projects in the region to exercise "thought leadership" and to demonstrate creative thinking in facilitating the local community's ability to participate in the energy transition. Another community group showed an interest in accessing ecological knowledge and expertise, through collaboration with specialists involved in ecological studies and environmental management aspects of the Project. Related, several community groups expressed interest in collaborating with RES to enable decarbonisation efforts at a household or community level and in sharing knowledge about the region's biodiversity and areas of conservation importance.



5.0 Community Identified Strategies and Opportunities

Community identified strategies to mitigate or respond to issues and impacts, as well as opportunities for the Project and ways in which the proponent could positively contribute to the local community have been compiled. This knowledge supports the development of community benefit sharing schemes or initiatives during subsequent phases of the Project (further discussed in **Section 6.0**), which identifies preliminary project refinements or management measures.

Alignment of Project-led strategies to support local communities and to collaborate with host communities, through a participatory identification process of local needs and opportunities can bring about greater social outcomes. Local benefit sharing schemes and targeted supports can over time generate improvements in a community's sense of place, social cohesion, and the capacity of local organisations.

Impact/Issue	Community Identified Strategy / Opportunity					
Disruption to agricultural practices	 Community awareness or education around how wind farms and agriculture can continue side-by-side, using Barneys Reef Wind Farm Project as a case study, to demonstrate to broader community the ability for both to co-exist. 					
	 Water resource sharing for neighbouring or nearby properties who struggle to source water for irrigation and livestock (referred to as an example in Forbes of local farmers that established such an arrangement bringing equal advantage to a large group of farmers). 					
	 Need for open and transparent engagement with RES in the development of the Project to bring about support for agricultural pursuits near the Project. It was suggested that through strong consultative processes, there would be a higher likelihood of the Project realising co-existence of both agriculture and renewable energy projects. 					
Distributive equity and local benefit sharing	Stakeholders raised that the Project would have a positive contribution to the region: "If they provide support to things the local area is lacking. Real support".					
	Local employment, procurement, and training					
	• Young people who could establish themselves with strong experience and a specialised skillset through the Project – an opportunity not to be overlooked – "It would be great for RES to consider supporting local apprentices during the construction periods, even if just a handful of people, these construction periods are huge opportunities for young trainees to skill up and get experience and build the local skills base, they could even be employed in maintenance moving forward".					
	 Proactive support for the establishment of programs that encourage and incentivise skilled workers to remain in the region, or to otherwise relocate to the region. 					
	 RES to provide structured opportunities for workers to specialise, re-skill or upskill. 					
	• RES to strategically target local businesses and service providers to supply and service the Project.					

Table 5.1 Community-Identified Potential Strategies and Opportunities



Impact/Issue	Community Identified Strategy / Opportunity						
	Infrastructure and service provision improvements						
	 Road and access route upgrades that can be used by local road users in the long-term. 						
	 Local schools, children's playgrounds, as well as road upgrades which would benefit school bus routes. 						
	Water infrastructure for communal access to water for livestock.						
	Community development funding scheme						
	 Neighbourly benefit programs such as through provision of a pool of money to be distributed amongst adjacent landholders to ensure broader benefits are experienced in the locality. 						
	 Capacity-building or resourcing support for local environmental restoration and protection programs, including possum and bird boxes, weed control and restoration works for community-owned nature reserves. 						
	 Support for local Aboriginal businesses, targeted Aboriginal community programs and local social enterprises. 						
	Sponsorship of local sporting teams.						
	 Facilitation of, or support for, decarbonisation efforts by residents and landholders. 						
Partnerships and participation in decision-	 Collaboration between RES and local community groups to enable and enhance emissions reductions initiatives and environmental protection. 						
making processes	 Proactiveness in multi-stakeholder or regional collaboration initiatives to support local organisations to reach their own decarbonisation targets. 						
	• Support research or further industry investigation into the merits of small- scale, household participation in the transition to renewable energy: "It would be nice to see companies like REScome up with creative ways to develop projects whereby people can contribute to energy generation too."						
	 Knowledge sharing – a local community group raised a desire to collaborate and be involved in ecological studies and environmental management aspects of the Project to share knowledge about the local environment and areas of conversation importance. 						



6.0 Preliminary Social Impact Evaluation

The scoping phase has identified key issues of relevance to near neighbours, key stakeholders and local communities in relation to the Project. A preliminary evaluation of the likely social impacts has been developed in **Table 6.1**, which will be explored further and confirmed during subsequent phases of the planning and assessment process.



Table 6.1 Preliminary Impact Evaluation

Project aspect/ activity	Potential impact on people	Timing/ duration	Affected stakeholder groups	Perceived stakeholder significance	Possible Project refinements/ management measures	Residual impact significance	Phase 2 Assessment level
Establishment of Project infrastructure including ancillary infrastructure	Competing land uses, particularly agricultural operations and any fragmentation of farming practices or restricted access to sections of farms	Construction and operational phases	Host and proximal landholders	High (Likely, Moderate)	 Identify and site infrastructure on properties: whose landholders have given formal consent to host project infrastructure where property characteristics and agricultural activities are compatible with Project infrastructure Plan and site transmission lines and access routes with sensitivity for existing land uses and landholder needs Consider refinement to design and layout planning that allow for continued farming use of the land, in consultation with host landholders on a case-by- case basis Construction and operational management controls to be developed in consultation with landholders to ensure maintained access across the Project Area with minimal 	Low	Standard assessment



Project aspect/ activity	Potential impact on people	Timing/ duration	Affected stakeholder groups	Perceived stakeholder significance	Possible Project refinements/ management measures	Residual impact significance	Phase 2 Assessment level
					disturbance associated with construction activities Open, transparent, and accessible communication of Project information Investigate broader options for project to facilitate co- existence with agriculture.		
Payments to host landholders	Reduced community cohesion, speculation of project benefits affecting interpersonal relationships, and distributional inequity. A positive impact of payment's is the ability to diversify household income streams leading to improved social and economic capital.	Project lifecycle including planning phase	Host and proximal landholders, broader community	Medium (Likely, Moderate)	Further consultation to characterise and assess specific circumstances and extent Open, transparent, and accessible communication of Project information Development of participatory local benefits scheme or good neighbour programs including financial compensation	Medium (Possible, Minor)	Detailed assessment
Payments to host landholders, establishment of Project infrastructure, public release of Project plans	Perceived devaluation of adjacent or nearby properties	Project lifecycle including planning phase	Host and proximal landholders	Medium (Possible, Moderate)	Commission research to validate or provide evidence base in response to this concern and publicise results Open, transparent, and accessible communication of Project information Development of participatory local benefits	Medium (Possible, Minor)	Detailed assessment



Project aspect/ activity	Potential impact on people	Timing/ duration	Affected stakeholder groups	Perceived stakeholder significance	Possible Project refinements/ management measures	Residual impact significance	Phase 2 Assessment level
					scheme or good neighbour programs		
Establishment of Project infrastructure particularly turbine towers and blades	Changes to the landscape's visual character causing social amenity disturbance and effect to areas of community value	Construction and operational phases	Host and proximal landholders, local residents, tourists and tourism operators	High (Almost certain, Moderate)	Selecting the project site away from urban or settled areas, major travel routes, public viewpoints, or lookout areas Consideration of neighbour/adjacent property impacts and mechanisms to address personal issues on a case-by-case basis	Medium (Likely, Minor)	Standard assessment
Public release of Project plans and documents	Increase in anxiety and stress in response to planned development	Planning phase and construction	Local landholders and nearby residents	Medium (Possible, Moderate)	Open, transparent, and accessible communication of Project information Community feedback is demonstrably considered in Project planning	Medium (Possible, Minor)	Standard assessment
Construction of Project infrastructure	Increased traffic causing increased road safety risks for local users	Construction phase	Residents, broader community	Medium (Possible, Minor)	Development and implementation of a Construction Environmental Management Plan (CEMP) in consultation with local communities and key stakeholders Detailed planning transport routes with public safety considerations and information disclosure, consulting with and notifying	Medium (Possible, Minor)	Standard assessment



Project aspect/ activity	Potential impact on people	Timing/ duration	Affected stakeholder groups	Perceived stakeholder significance	Possible Project refinements/ management measures	Residual impact significance	Phase 2 Assessment level
					residents, considering any sensitive user groups Consider supporting upgrades to local roads or transport infrastructure		
Construction of Project infrastructure	Increase in noise and traffic in the locality which could cause day-to-day amenity disruption for nearby residents or increase to commuter travel times	Construction phase	Nearby residents, broader community	Medium (Likely, Moderate)	Development and implementation of a Construction Environmental Management Plan (CEMP) in consultation with local communities and key stakeholders Detailed planning transport routes, local user consideration and information disclosure, consulting with and notifying residents, considering any sensitive user groups (e.g. local school buses) Open, transparent, and accessible communication of Project information	Medium (Possible, Minor)	Standard assessment
Employment during construction	Changes to local population and the composition and character of the community	Construction phase	Broader community	Medium (Possible, Moderate)	Develop local employment and procurement plan Open, transparent, and accessible communication of Project information	Medium (Possible, Minor)	Detailed assessment
Employment during construction	Increased pressure on local facilities and services particularly	Construction phase	Broader community,	Medium (Likely, Moderate)	Develop local participation plan and workforce accommodation strategy	Medium (Possible, Minor)	Detailed assessment



Project aspect/ activity	Potential impact on people	Timing/ duration	Affected stakeholder groups	Perceived stakeholder significance	Possible Project refinements/ management measures	Residual impact significance	Phase 2 Assessment level
	housing and accommodation (affordability and availability)		service providers		Coordinate efforts and liaise with key stakeholders to coordinate provision of accommodation and other services or suppliers		
Establishment of Project infrastructure (cumulative)	Multiple concurrent and nearby major projects could cause community division or reduced levels of social cohesion	Construction and operational phases	Broader community, political and interest groups	High (Possible, Major)	Multi-stakeholder liaison to ensure widespread integration and prioritisation of social acceptance across various projects Multi-stakeholder collaboration to jointly develop or contribute to local benefit scheme across planning and delivery of Central-West Orana REZ	Medium (Possible, Moderate)	Detailed assessment



7.0 Conclusion

This Social Impact Scoping Report has documented the SIA process undertaken during the Scoping Phase of the Barneys Reef Wind Farm Project and forms part of the Scoping Report to inform the issue of SEARs by the NSW DPIE.

This Report has included the compilation of a social baseline profile for the Project, early-stage community, and stakeholder consultation to inform the scoping of Project-related social impacts and opportunities, and preliminary social impact prediction and evaluation. The preliminary impact evaluation has been undertaken to inform and support the refinement of Project design and plans to reduce negative project impacts and achieve greater positive project benefits.

This Report has understood that a detailed assessment of social impacts is required as part of the EIS and should be informed by an ongoing process of community consultation. As part of the EIS, future stages of the SIA for this Project will include a comprehensive prediction and assessment of social impacts and development of relevant strategies to mitigate the negative and enhance the positive impacts associated with the Project. Further SIA and technical environmental impact studies will address perceptions of impacts raised by key stakeholders during this phase.

Subsequent phases of the SIA program will involve the following key activities:

- A detailed update of the baseline social profile to ensure that any further baseline data relevant to the impacts identified is obtained.
- Further validation of the area of social influence and identification of affected communities and vulnerable groups.
- Provision of feedback to near neighbours, community members and key stakeholders on the outcomes of the issues raised in the scoping phase and communication of the Project's SEARs (once issued), including an outline of the next steps in the assessment process and opportunities for community input.
- Further engagement with near neighbours, community members and other key stakeholders on key
 impact areas as noted above. This will involve feedback on the outcomes of EIS technical studies and
 will provide opportunities for input to the development of appropriate mitigation and enhancement
 measures to address social impacts and residual effects.
- A comprehensive assessment and evaluation of social impacts against existing baseline conditions.



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Community profile

Indicators	Tallawang SSC	Beryl SSC	Mebul SSC	Dunedoo SSC	Birriwa SSC	Stubbo SSC	Gulgong SSC	Merotherie SSC	Warrumbungle LGA Mid-Western L				l-Western LGA		NSW		
Year	2016	2016	2016	2016	2016	2016	2016	2016	2006	2011	2016	Change	2006	2011	2016	Change	2016
Human Capital																	
Population Size	168	132	40	1,221	49	232	2,521	24	9,810	9,588	9,384	<	21,085	22,318	24,076	~	7,480,228
Proportion Indigenous Population (%)	0%	2%	18%	8%	6%	2%	8%	0%	8%	9%	10%	^	3%	4%	5%	^	3%
Median Age	45	44	63	49	54	46	41	47	43	45	49	~	41	41	42	~	38
Year 10 highest year of schooling (%)	45%	41%	44%	34%	49%	47%	38%	50%	37%	37%	37%		39%	38%	36%	\checkmark	23%
Year 12 highest year of schooling (%)	37%	38%	28%	36%	23%	34%	33%	50%	29%	32%	35%	~	30%	35%	39%	^	59%
Bachelor degree (%)	7%	12%	15%	6%	0%	9%	5%	0%	6%	6%	7%	^	6%	8%	8%	^	16%
Certificate (%)	16%	29%	21%	17%	18%	30%	25%	14%	17%	19%	20%	~	21%	23%	25%	~	18%



Indicators	Tallawang SSC	Beryl SSC	Mebul SSC	Dunedoo SSC	Birriwa SSC	Stubbo SSC	Gulgong SSC	Merotherie SSC		War	rumbungle LGA		Mid-Western LGA			NSW	
Social Capital																	
Proportion of population with a different address 1 year ago (%)	6%	5%	9%	8%	6%	8%	13%	0%	14%	12%	10%	>	14%	16%	14%		14%
Proportion of population with a different address 5 year ago (%)	23%	29%	27%	25%	18%	29%	34%	0%	36%	29%	28%	\checkmark	40%	37%	37%	$\mathbf{\mathbf{\vee}}$	39%
Proportion of population aged 15+ who volunteer (%)	13%	23%	27%	29%	33%	16%	21%	14%	30%	29%	28%	>	24%	21%	22%	>	18%
Proportion of population born overseas (%)	4%	6%	0%	6%	0%	9%	7%	0%	-	6%	7%	<	-	9%	8%	>	30%
Proportion of single parent families (%)	0%	0%	0%	10%	0%	8%	12%	0%	15%	10%	10%	>	15%	9%	9%	<	8%
Proportion of family households (%)	70%	80%	79%	68%	69%	70%	66%	100%	69%	68%	67%	>	71%	70%	69%	>	72%
Proportion of group households (%)	0%	0%	0%	2%	0%	0%	2%	0%	-	2%	2%		-	3%	3%		4%
Proportion of lone person households (%)	25%	8%	29%	31%	25%	29%	31%	0%	-	30%	31%	<	-	27%	29%	<	24%
Crime rate (incidents per 100,000 population)	-	-	-	-	-	-	-	-	-	-	922.7	-	-	-	1045.5	-	
Top 3 Crime Rankings	-	-	-	-	-	-	-	-	-	-	Sexual offences (1/119), Drug offences – cannabis (17/119), Malicious damage to property (29/119)	-	-	-	Drug offences (26/119) – Cannabis, Assault - Non-Domestic violence (32/119), Steal from a Dwelling (33/119)	-	-



Indicators	Tallawang SSC	Beryl SSC	Mebul SSC	Dunedoo SSC	Birriwa SSC	Stubbo SSC	Gulgong SSC	Merotherie SSC	Warrumbungle LGA					NSW			
Economic Capital																	
Proportion of the labour force employed full-time (%)	57.1%	62.2%	56.5%	55.4%	38.1%	63.2%	53.6%	60.0%	57.6%	57.5%	55.7%	$\mathbf{\mathbf{v}}$	57.1%	58.0%	56.4%	\checkmark	59.2%
Proportion of the labour force employed part-time (%)	36.5%	26.7%	39.1%	28.8%	38.1%	26.3%	32.4%	0.0%	27.5%	29.1%	30.6%	^	29.8%	30.4%	31.6%	^	29.7%
Proportion of the labour force who are unemployed (%)	0.0%	15.6%	0.0%	8.6%	14.3%	3.2%	8.6%	0.0%	8.3%	7.1%	7.9%	\sim	7.3%	5.7%	6.5%	\sim	6.3%
Median household income (\$/week)	1,145	1,312	769	871	1,062	1,109	1,086	2,125	609	689	878	^	700	929	1,131	^	1,486
Median mortgage repayment (\$/month)	2037	1200	0	967	0	1690	1517	0	693	870	923	^	1083	1551	1690	^	1986
Median rent for a 3- bed house (\$/week)	250	270	200	175	0	180	250	0	100	120	160	^	145	200	270	^	380
Median rent as a proportion of median household income (weekly)	22%	21%	26%	20%	-	16%	23%	-	16%	17%	18%	^	21%	22%	24%	^	26%



Indicators	Tallawang SSC	Beryl SSC	Mebul SSC	Dunedoo SSC	Birriwa SSC	Stubbo SSC	Gulgong SSC	Merotherie SSC	Warrumbungle LGA					NSW			
Physical Capital																	
Proportion of occupied private dwellings that are fully owned (%)	37.7%	37.5%	50.0%	49.2%	56.3%	44.6%	37.3%	37.5%	48.8%	47.7%	46.4%	$\mathbf{\mathbf{\vee}}$	42.8%	40.5%	38.0%	\sim	32.2%
Proportion of occupied private dwellings that are being purchased/ owned by a mortgage (%)	35.8%	22.5%	35.7%	21.2%	0.0%	39.8%	30.5%	0.0%	21.9%	22.6%	23.0%	^	27.9%	29.3%	30.6%	^	32.3%
Proportion of occupied private dwellings that are being rented (%)	18.9%	25.0%	35.7%	28.7%	18.8%	13.3%	28.2%	0.0%	24.4%	24.9%	25.8%	^	25.5%	26.5%	27.4%	^	31.8%
Proportion of dwellings with internet access (%)	80%	85%	80%	66%	58%	81%	75%	100%	47%	65%	69%	^	51%	72%	77%	^	85%
Proportion of households in mortgage stress (%)	-	-	-	-	-	-	-	-	11.4	14.2	9.5	\checkmark	12.9	11.1	9.4	~	9.6
Proportion of households in rental stress (%)	-	-	-	-	-	-	-	-	20.2	19.2	24.2	^	29.3	27.4	32.3	>	27.9



Health status

Category	Health Indicator	Source	Measure	Mid-Western Region LGA	Warrumbungle Shire	NSW
Chronic diseases	Estimated number of people with mental and behavioural problems (modelled estimates)	PHIDU 2017–18	ASR per 100	23.9	21.8	18.8
	Estimated number of people with heart, stroke and vascular disease	PHIDU 2017–18	ASR per 100	5.3	4.9	4.9
	Estimated number of people aged 15 years and over with fair or poor self-assessed health	PHIDU 2017–18	ASR per 100	16.8	15.5	14.1
Risk factors	Estimated number of males aged 18 years and over with high or very high psychological distress, based on the Kessler 10 Scale (K10)	PHIDU 2017–18	ASR per 100	12.6	12.4	12.4
	Estimated number of people aged 18 years and over who had high blood pressure	PHIDU 2017–18	ASR per 100	23.4	22.2	23.1
	Estimated number of people aged 18 years and over who were obese	PHIDU 2017–18	ASR per 100	41.0	43.1	30.9
	Estimated number of people aged 18 years and over who were current smokers	PHIDU 2017–18	ASR per 100	21.0	22.0	14.4
Premature death	Total deaths, 0 to 74 years	PHIDU 2017–18	ASR per 100	282.0	320.6	238.4



Population Projections



Mid-Western Regional LGA

Warrumbungle LGA

2041





Meeting agenda

- 1. Introductions
- 2. Projects briefing
- 3. General Q&A and core questions
- 4. Targeted questions

Interview/meeting details:

Time/Date	
Location	
Interviewer(s)	

Respondent/interviewee contact details:

Full name and position of attendee(s)	
Organisation/group name	
Contact number	
Postal address	
Email address	

Introduction:

I am ______ from RES and this is ______ from Umwelt.

RES is an independent and family run renewable energy development company who are looking at two proposed projects in your local area - the Tallawang Solar Farm and Barneys Reef Wind Farm.

Both sites are within the Mid-Western Regional Council area on land to the north of Gulgong.

Umwelt is working closely with RES this year to undertake the social and environmental assessments for both projects.

As part of our activities at the moment during this early scoping phase, we have been meeting with people living nearby the proposed sites as well as groups/people/agencies like yourselves to introduce ourselves and for you to get to know the projects.

We see these meetings as important for us to also understand your perspectives and views on the projects, and to help us better understand the local community that you are a part of and/or represent. This helps us with our project planning and is a way for you to participate in the project planning too.

Based on this, we have put together some discussion items, however we understand that in this early stage of the projects we'd like to focus on introducing the project and then gathering any initial feedback or insights that you may have.



We are also able to outline the planning process that we are looking to go through for these projects and to better understand how you might like to be involved or be consulted in the future.

Thank you for taking the time to meet with us.

All information you provide to us is confidential and only reported in aggregate form.

The **Project Information Sheet** provides background and introductory information on the projects. Otherwise you can visit our recently launched website:

Tallawang Solar Farm and Barneys Reef Wind Farm (barneysreef-renewableenergy.com)

Core interview questions

Knowledge and awareness

- 1. What knowledge do you have of RES as a company prior to now?
- 2. What is your level of understanding of renewable energy projects and renewable energy generally?
- 3. Do you know that the Central West has been nominated as a REZ, along with other zones across the state e.g., Hunter, Illawarra, New England? What are your thoughts about this zone?
- 4. Have you had any previous contact with other renewable energy companies or heard about other projects in the area? Detail.

Sense of community

- 1. How would you describe your community (in general/to help us get to know your community)? What do you like most about living in the area? What is important to you and why?
- 2. What do you see as the key strengths/assets of the community? (social, economic or environmental)
- 3. What do you see as the key needs of your community (or matters that your community wants to see/aspirations)? What would make your community a better community or place? (see prompts below)
 - Historical aspects
 - Greening and beautification
 - Local business/employment growth or opportunities
 - Services and infrastructure housing, education, retail, health care, transport etc.
 - Cultural and recreation community volunteering, sport and leisure, tourist attractions, cultural events etc.
 - Other ways to improve social cohesion.

Perceived impacts and benefits

- 1. What do you think the development of these two projects within the REZ would mean for the region?
- 2. What do you see as the main impacts or issues to people as a result of each project and who do you think would experience the impact? Detail.



- 3. Do you feel that the proposed projects have the potential to contribute positively to the locality/region/state? Detail.
- 4. What do you think RES can consider to enhance project benefits, in collaboration with local community groups or with yourselves?

Use table where appropriate.

Impact type	Description	Tallawang Solar Farm (Y/N)	Barneys Reef Wind Farm (Y/N)
Social amenity and surroundings	Visual changes to the rural character of the landscape, increase in industrial infrastructure		
Way of life	Changes to land use		
Surroundings	Effects to local flora and fauna or natural environment or reduced access to recreational areas		
Social amenity and surroundings	Increase in noise in the local area from construction, operation of turbines, or otherwise project-related activities		
Social amenity and surroundings	Construction impacts – air quality and dust		
Social amenity and surroundings	Traffic congestion, public/tourist/road user safety, nuisance/delay caused by construction activities		
Way of life	Land or site access on private agricultural properties		
Accessibility	Construction workforce accommodation and housing		
Accessibility	Local services, infrastructure and facilities utilisation in town (construction workforce)		
Health and wellbeing	Health (physical/ emotional/mental) effects of the project including perceived levels of public safety		
Community	Intergenerational equity and the effect on climate change		
Community	Local benefit sharing opportunities and community fund ideas		
Livelihoods	Employment and local procurement		
Livelihoods	Compensation for land acquisition or leasing		
Culture	Changes to the cultural values of the community and local area		
Community	Sense of community, sense of place and levels of cohesion in the local area		
Decision-making systems	Engagement or consultation processes and decision- making abilities of community members		
Cumulative	Matters relating to other REZ projects, or other recent development projects nearby		
Other	Specify		

Engagement preferences

- 1. Are there particular aspects of the projects/process that you would like further information about?
- 2. How would you like to be consulted in the future?
- 3. Is there anyone else that you think we should be talking to?




Stakeholder Register

Stakeholder Group	Organisation/Individual	Mechanism	Purpose of Engagement	Date	Location
Proximal Resident	Individual	Phone call	Introduction	26-Mar-21	Phone
Proximal Resident	Individual	F2F meeting	Introduction	29-Mar-21	-
Proximal Resident	Individual	Phone call	Introduction	29-Mar-21	Phone
Local Government	Mid-Western Regional Council	F2F meeting	Project briefing	29-Mar-21	Mudgee
Local Government	Warrumbungle Shire Council	F2F meeting	Project briefing	29-Mar-21	Coonabarabran
Local Government	Mid-Western Regional Council	F2F meeting	Project briefing	29-Mar-21	-
Adjacent landholder	Individual	F2F meeting	Project briefing	29-Mar-21	House
State Government	Local Land Services Central West	Letter	Aboriginal consultation notice	29-Mar-21	Email
Local Government	Mid-Western Regional Council	Letter	Aboriginal consultation notice	29-Mar-21	Email
Aboriginal Stakeholder	Mudgee Local Aboriginal Land Council	Letter	Aboriginal consultation notice	29-Mar-21	Email
Aboriginal Stakeholder	National Native Title Tribunal	Letter	Aboriginal consultation notice	29-Mar-21	Email
Aboriginal Stakeholder	Native Title Services (NTS) Corp	Letter	Aboriginal consultation notice	29-Mar-21	Email
State Government	Heritage Office	Letter	Aboriginal consultation notice	29-Mar-21	Email
State Government	Office of the Registrar Aboriginal Land Rights Act (ORALRA)	Letter	Aboriginal consultation notice	29-Mar-21	Email
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	House
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	Shed next to house
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	House
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	-
Proximal Resident	Individual	Phone call	Introduction	30-Mar-21	Phone
Proximal Resident	Individual	Phone call	Introduction	30-Mar-21	Phone & email
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	Merotherie
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	-
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	-
Proximal Resident	Individual	F2F meeting	Introduction	30-Mar-21	-
Proximal Resident	Individual	F2F meeting	Introduction	31-Mar-21	House
Aboriginal Stakeholder	Mudgee Local Aboriginal Land Council	F2F meeting	Project briefing	07-Apr-21	Mudgee
Community & Special Interest Group	Mudgee District Environment Group	F2F meeting	Project briefing	07-Apr-21	Mudgee
Community & Special Interest Group	NSW Farmers Association - Mudgee Branch	F2F meeting	Project briefing	07-Apr-21	Mudgee
Community & Special Interest Group	Mudgee Chamber of Commerce	F2F meeting	Project briefing	07-Apr-21	Mudgee



Stakeholder Group	Organisation/Individual	Mechanism	Purpose of Engagement	Date	Location
Community & Special Interest Group	Dunedoo & District Development Group	Email	Introduction	12/04/2021	Email
Community & Special Interest Group	SOS Central West NSW	Email	Introduction	15-Apr-21	Email
Community & Special Interest Group	NSW Farmers Association	Online meeting	Project briefing	16-Apr-21	Online
State Government	DPIE - Biodiversity, Conservation and Science Directorate	Project briefing	Project overview, overview of biodiversity assessment results and scope of biodiversity assessment for EIS phase	16-Apr-21	-
Host Landholder - Barneys Reef	Individual	Questionnaire		19-Apr-21	Email
Host Landholder - Barneys Reef	Individual	Questionnaire		20-Apr-21	Email
Community & Special Interest Group	Gulgong Chamber of Commerce	Email	Introduction	20-Apr-21	Email
Local Media	Mudgee Guardian	Email	Introduction	12-May-21	Email
Local Media	Mid-Western Mail	Email	Introduction	12-May-21	Email
Local Media	Dunedoo Diary - Outback Express	Email	Introduction	12-May-21	Email
Federal Government	National Party - Federal Member for Calare	Email	Request for meeting	12-May-21	Email
Local Media	Gulgong Gossip	Email	Introduction	12-May-21	Email
Proximal Resident	Individual	Phone call	Introduction	21-May-21	Phone
Proximal Resident	Individual	Email	Introduction	21-May-21	Email
Proximal Resident	Individual	Phone call	Introduction	24-May-21	Phone
State Government	National Party - State Member for Dubbo	Email & meeting	Project briefing	26-May-21	Dubbo
Proximal Resident	Individual	Phone call	Update	28-May-21	Phone
State Government	DPIE	Project briefing	Project overview and overview of environmental assessment scope	04-Jun-21	-
Proximal Resident	Individual	Phone call	Update	07-Jun-21	-
Proximal Resident	Individual	F2F meeting	Introduction	07-Jun-21	-
Proximal Resident	Individual	F2F meeting	Introduction	08-Jun-21	House
Proximal Resident	Individual	Email	Update	25-Jun-21	Email





Table D1 below outlines the consolidated consultation outcomes gathered from community and stakeholders undertaken during the Project's scoping phase. Stakeholders include local government, nearby landholders, host landholders, community groups, traditional owner representative organisations, as well as local businesses and service providers. Outcomes from these consultation activities have also informed the social baseline and the preliminary impact evaluation as relevant.

Stakeholder	Summarised outcomes
Local	Asked about:
Government	 The potential for the Tallawang Solar Farm and Barneys Reef Wind Farm to be co- located
	The approach to decommissioning, including solar panel recycling.
	Raised concerns over:
	 the potential use of labour from outside the area, a fear that is based on experiences with renewable energy projects in the region
	Supportive of:
	 the consideration of community feedback to previous proposals to guide selection of the Project location
	 renewable energy projects when sited with sensitivity for community needs and preferences and the need for projects such as Tallawang Solar Farm to be located "in the right place".
	Described their requirement for projects to be set back at a minimum distance from highways and noted setbacks from certain landscape features as an ongoing topic of discussion.
	Expressed a desire to have the Project support sustainable employment in the region.
	Noted the pressure from multiple proposed major developments in the LGA.
	A neighbouring Council expressed interest in the Project as it would be visible for some residents within their LGA and that the road networks within their LGA would likely be used to transport material from port to site as well as likely use by construction workers commuting daily.
	Raised their interest in developing a formal Voluntary Planning Agreement (VPA) with RES.
Host landholders	 Host landholder views were broadly consistent with neighbouring landholders and nearby residents.
	• Individual host landholders highlighted concern over the strain on accommodation provision in the area and potential competition with tourism. With regard to the accommodation for the Project's construction workforce it was stated the " <i>is there going to be enough accommodation? Our town is a tourist town and is usually booked out this is something that may need to be done ASAP as tourists have been booking accommodation</i> "
	 When prompted host landholders were the only consulted stakeholder to specify 'health (physical/emotional/mental) effects of the project including public safety' as a potential Project impact.
	 Host landholders focused on opportunities for positive Project impacts through additional income to host landholders and increased employment and commercial opportunities for local residents and businesses.

Table D1 Community Consultation Outcomes by Stakeholder Group



Stakeholder	Summarised outcomes
Neighbouring landholders and nearby residents	 Interviewed landholders typically both owned and farmed the land. The most frequently noted concerns (prompted) were conflicts with agricultural land use and the cumulative impacts of other developments.
	 Visual changes to the rural character of the landscape and the impacts of construction on roads, demand for accommodation and noise from were also identified as key concerns.
	 Impacts to visual amenity were only raised when prompted.
	 Concerns around cumulative impacts largely related to the concerns that transmission infrastructure would dissect agricultural properties and limit farming activity
	 Several landholders identified Project benefits through compensation and local benefit sharing opportunities as well as potential community funding initiatives.
	 Some mentioned that potential road upgrades would benefit them and the wider community.
	 The majority of respondents had not heard of RES before; however, one respondent had had previous contact and one respondent noted receiving a pamphlet.
	 Several respondents felt positively about the proactive and early engagement and consultation on the Project. There were no respondents expressing a negative opinion over the project consultation to date, although some respondents described negative experiences relating to how they had been consulted (or not) by other renewable energy proponents active in the locality.
Community groups	 Several stakeholders have raised their appreciation of RES seeking input by a range of members of the community to guide Project planning. Some contrasted this with negative experiences they had had with other renewable energy companies.
	• A primary concern raised is the ability for local farmers to sustain their livelihoods. It was stated by one community group that "the community is strong and the land is our livelihood"; and that any effect of the Project on the ability to farm the land would be detrimental.
	 Concerns for any property devaluation leading to diminished ability for farming families to secure finance, and therefore hindering the ability to purchase necessary equipment and supplies.
	 Reiterated the concern that transmission infrastructure in the region can fragment and reduce availability of already limited agricultural land.
	 Noted a distaste at the perceived inequality of renewable energy generation benefitting urban energy consumers but impacting rural communities.
	 Nearby communities have recently had adverse experiences with other wind farm projects which has led to the erosion of interpersonal relationships and community cohesion and are likely to affect the community's perceptions of future proposed development projects.
	 TransGrid and Inland Rail projects in the region were noted as contentious due to their dissection of private agricultural properties and perceived poor consultation processes with local communities.
	• Two nearby proposed mining projects were also seen to be polarising and divisive in the community, whereby land acquisition processes and perceived unclear communication bred mistrust, confusion, and speculation, as well as impacting the community structure and level of cohesion as residents left the area following property purchasing.
	 Highlighted the risk of disruption to travel patterns and road use for local users arising from poor planning, and the associated opportunity to benefit the wider community through road upgrades.



Stakeholder	Summarised outcomes
	 Considerations to be given regarding the cumulative long-term impacts of renewable energy development on the region.
	 Support for renewable energy generation in a broad sense, however, wanting developers to support small-scale, domestic participation in low-carbon transition as well as large-scale projects.
	 Want to investigate opportunities for co-existence of agriculture and renewable energy to benefit farming livelihoods and families, suggested that the Project could support water provision to surrounding properties.
	 Need for engagement that is open, transparent, and responsive, and which focuses on listening to the concerns and experiences of individual and local stakeholders, noting that developers "need to be doing a lot of listening".
	 Expressed appreciation for open and early consultation on this Project conducted to date.
	 Underscored the importance of understanding the needs of individual community members, particularly landholders, addressing their needs and concerns in a personalised and tailored way, and openly communicating the reasons for site selection and design.
	Another community group provided commentary and feedback on wind energy projects in the region more broadly:
	 perception that wind farms and associated infrastructure industrialises and visually pollutes the rural landscape
	 the loss of visual amenity was perceived as part of a broader set of adverse impacts experienced by landholders that included potential reduction in property values and tension with host landowners that benefit from the project
	 employment opportunities during operation and maintenance were perceived as low and the international manufacturing of infrastructure components was seen as not benefitting the local community
	 uncertainty around the decommissioning process and the return to agricultural land
	 viewed wind farms as a preferable energy source than solar, and wanted to see wind energy project prioritised over solar in the Central-West Orana region, partly because wind energy more closely matches the daily pattern of energy demand and can compensate for the changes in solar energy output at night and in the winter months
	 expressed concern for concentration of wind farms "on the slopes and tablelands of NSW" which have concentrated energy outputs due to exposure to the same prevailing wind conditions.
	Environmental groups were generally supportive of the Project and eager to collaborate with RES through:
	 Knowledge sharing around the local environment and areas of conversation importance such as the Travelling Stock Reserves that may be situated on or nearby the Project
	 Concern generally that the extent or condition of native vegetation in the Project area is unknown due to occurrence on privately held land that is inaccessible for survey
	 Support that could be offered for a community managed reserve or funding of environmental protection initiatives in the area
	 Concerned about effects to areas of high and threatened biodiversity, specifically Travelling Stock Routes and Grassy Box Woodlands, and that the group would be interested in collaborating with the ecological or biodiversity surveys for the Project to share knowledge and learnings
	 Highlighted the significant community dissatisfaction with a recently announced TransGrid project and the potential for similar issues to apply to this Project



Stakeholder	Summarised outcomes
	 Wanted the proponent to be sensitive to the context of fragmented native vegetation and significant environmental impacts already being experienced from mining in the area
	Welcomed further consultation as the Project progresses.
Local businesses and service providers	 Highlighted that a key issue for the Project and effect on the community could be additional demand for workforce accommodation Outlined a community desire to promote integration of workforces with the local community by limiting accommodation camps Local accommodation service providers are typically at capacity and are already experiencing demand from tourists and mining sector workers Although competition for accommodation was raised as a concern, the Mudgee community is accustomed hosting workforces employed on major projects and local services providers have structured their businesses to meet this need Local business representatives acknowledged that the local labour force would not be able to provide all the required skills and expertise needed for this Project, yet the consequent use of non-local workers could lead to some level of community opposition to the Project: <i>"some local people have been frustrated and even opposed some other solar or wind projects in the area recently for bringing in labour"</i>. Expressed a desire to provide labour and services to the Project. Would like to see the Project provide opportunities for local young people for training, sector experience, and upskilling, particularly during construction. The Project provides a positive opportunity to develop the local labour force and
	prepare workers for future demand from the renewable energy sector, as well as diversifying and developing the commercial opportunities of existing businesses.
Aboriginal organisation	 Shared their general interest and concern for: land rights, land uses and land management preservation of cultural sites and traditional practices cultural connection to Country community programs and representation of Aboriginal people in the local area. Highlighted the need to be involved in any local road upgrades in order to carry out Aboriginal cultural heritage monitoring and land surveys Expectation on developers to support community programs, and that other projects nearby have not provided any benefit to Aboriginal communities, or their organisation, at all. Identified opportunities for the Project to support them or work together, through initiates such as: resourcing and seed purchasing for the community managed nature reserve Indigenous food initiatives, specifically around the promotion of native bees, Indigenous grasslands (e.g., a Kangaroo Grass crop underneath the solar panels) or collaborate with locally based Aboriginal social enterprises.





Governance

Traditional Owners

The Project area is located within the traditional lands of the Wiradjuri nation. Wiradjuri means 'the people of the three rivers', and nation's traditional and modern-day connections to Country extend over a large area of NSW encompassing the Macquarie, Lachlan and Murrumbidgee Rivers, bounded by the Murray River in the south. The traditional lands of the Wailwan and Kamilaroi nations are situated to the north and north west of the project area. Material found at archaeological sites shows evidence of this occupation dating back some 18,000 years (Landskape, 2020).

The Wiradjuri were hunter-fisher-gatherers, living semi-permanently and living off a variety of native food sources, including fish, animals, insects, and plant foods (Landskape, 2020). Initially peaceful early interactions between Europeans and Wiradjuri people led to violent conflict when crop sharing was misinterpreted as theft by a settler. Following this outbreak of violence, Aboriginal people were shot, poisoned and displaced by pastoral settlements. In turn, livestock, stockmen, and shepherds were speared in retaliation (Landskape, 2020). Further incursion of settlements led to intense conflict, termed the Bathurst Wars (Landskape, 2020).

Over the years, the Wiradjuri people were increasingly displaced from their traditional lands and cultural practices. This and the introduction of European diseases caused significant reduction in the Wiradjuri population and led to many Wiradjuri people settling close to pastoral homesteads and working as shepherds and labourers.

In NSW, there are two key mechanisms by which Aboriginal people can have their rights in land formally recognised – Native Title and Land Rights. The two systems operate under different laws and differ in the rights they can provide. Through these processes, Indigenous communities are re-establishing their connection to Country and in particular to important Wiradjuri places.

Native title rights and interests are those rights in relation to land or waters that are held by Aboriginal or Torres Strait Islander peoples under their traditional laws and customs and recognised by the common law. The Project site is within the boundaries of a Native Title claim submitted in August 2018 by the Warrabinga-Wiradjuri (NC2018/002 - Warrabinga-Wiradjuri #7). This claim is over an area of 13,682 km² that covers 10 LGAs, including Dubbo Regional Council, Mid-Western Regional Council, and the Warrumbungle Shire Council.

Land rights for Aboriginal and Torres Strait Islander peoples refers to the process to gain legal and moral recognition of ownership of lands and waters they called home, prior to colonisation of Australia in 1788. The NSW Aboriginal Land Council (NSWALC) is the State's peak representative body in Aboriginal Affairs and is constituted by Part 7 of the *Aboriginal Land Rights Act 1983* No 42.

The study communities for the Project are in the modern-day NSWALC boundaries of the Central Region, specifically in the Gilgandra and Mudgee Local Aboriginal Land Councils. Every four years, voting members of Local Aboriginal Land Councils (LALC) vote for a Councillor (Cr) to represent their region. The current Councillor of the Central Regional is Grace Toomey, a Wiradjuri woman from Dubbo, having previously been a board member of the Dubbo LALC for 10 years. Grace Toomey is also the Secretary of the Dubbo Aboriginal Community Working Party of the Three Rivers Regional Assembly.

Federal Government

The Mid-Western LGA is represented by National Party MP Andrew Gee who holds the federal seat of Calare. Andrew Gee is the Minister for Decentralisation and Regional Education and the Minister Assisting the Minister for Trade and Investment. The division of Calare stretches from Mudgee, Gulgong, Dubbo and Wellington in the north-west, to Orange, Bathurst, Lithgow and Oberon in the south-east.



State Government

The Project site is within the State electoral district of Dubbo, but closely borders the districts of Barwon and Upper Hunter. The seats of Dubbo and Barwon are held by respectively by National Party MP Dugald Saunders, Shooters Fishers and Farmers MP Roy Butler. The Upper Hunter seat is currently vacant following the resignation of the Nationals MP Michael Johnsen on 31 March 2021. A byelection will be held for the Upper Hunter district on 22 May 2021.

Local Government

The Mid-Western Regional Council is composed of nine Councillors, including the Mayor and Deputy Mayor, elected proportionally as a single ward for a fixed four-year term of office.

Strategic Planning Review

Towards 2030, Mid-Western Region Community Plan

The Council's 'Towards 2030 Community Plan' outlines the strategic direction for the LGA. This plan was developed in collaboration with the local community and identifies five areas of focus which are outlined in the document, including:

- Looking after our Community activities and initiatives that produce vibrant, healthy and proud towns
- Protecting our Natural Environment conserving and promoting the natural beauty of the region
- Building a Strong Local Economy a focus on industry diversification, employment and economic growth
- Connecting our Region linking towns and villages and connection to the rest of NSW; and
- Good Government ensuring Council is representative of the community and effectively meeting community needs.

Community consultation with over 2,500 residents to inform the 'Towards 2030 Community Plan' indicated that the community would allocate resources to the five focus areas as follows:

- Looking After our Community 27%
- Connecting our Region 24%
- Protecting our Natural Environment 19%
- Building a Strong Local Economy 19%
- Good Government 11%

Community engagement also identified the infrastructure assets that the community would like upgraded or built; top responses included Mudgee Hospital, recreational facilities such as an indoor aquatic centre/outdoor water park or entertainment centre and return passenger trains. Approximately 18% of respondents identified road upgrades outside urban areas as a priority infrastructure need; the sixth most frequent infrastructure need mentioned.



Although Protecting Our Natural Environment is a key goal of the council's community plan, there is limited reference made to renewable energy use by the Council or in the LGA, in order to meet this goal. The Mid-Western Region Community Plan places the onus of reducing energy use and considering alternatives to fossil fuels on the council residents.

Our Place 2040, Mid-Western Regional Local Strategic Planning Statement

The Council's 'Our Place 2040' guides land use planning for the LGA by identifying the regional values and characteristics, and priority actions for enhancing and conserving these values in line with the community's needs. The Local Strategic Planning Statement is based on the same five themes as the 'Towards 2030' Community Plan under which 12 planning priorities are organised. The planning priorities most relevant to the Project are:

- Planning Priority 4: Provide infrastructure and services to cater for the current and future needs of our community
- Planning Priority 7: Support the attraction and retention of a diverse range of businesses and industries
- Planning Priority 8: Provide leadership on economic development initiatives and identify resources and infrastructure required to drive investment and economic growth in the Region
- Planning Priority 9: Support the expansion of essential infrastructure and services to match business and industry development in the Region

The Project is consistent with the Council's planning strategies and actions providing activities do not limit agricultural production or adversely impact visual amenity. The emphasis of local planning is on enabling and preserving existing economic activities, namely agriculture. That said, Council:

- makes provision for consideration of renewable energy developments that do not adversely impact agricultural production and scenic landscape
- identifies the construction phase of solar and wind projects as offering short-term opportunities for local businesses
- aspires to place sustainability at the centre Council activities and new developments
- recognises the benefits provided by State Significant Developments.

Mid-Western Regional Local Environmental Plan 2012

Council operates under the Mid-Western Regional Local Environmental Plan 2012 (current version 1 February 2021) which details a number of key objectives with regard to land use, including management and conservation of natural resources and heritage items of significance, securing the agricultural future of the region, and increased availability of urban and community services and infrastructure. Specifically, the plan also identifies the protection of the settings of Mudgee, Gulgong, Kandos and Rylstone through management of the urban and rural interface, limiting land use conflict and conserving key visual elements that contribute to the character of the towns.

State of the Environment Snapshot 2017-18, Mid-Western Regional Council

The strategic centre of Mudgee has grown in recent years due to the mining boom. It services other towns including Rylstone, Kandos, Ilford, Bylong and the historic town of Gulgong.

The Local Government Area is well known for its built heritage, food and wine tourism, and mining. The Castlereagh and Great Western highways connect Mudgee with Sydney, and the Golden Highway connects to Dubbo and Newcastle. These connections provide opportunities to move agricultural and mining products to domestic and export markets. Priorities:

- Support appropriately located and serviced land for residential development.
- Support the mining and resources sector and associated businesses.



- Leverage opportunities from the Local Government Area's location and rural character to support the established food and tourism market.
- Protect agricultural land from encroachment from residential development.
- Support the provision and continued development of major regional sports, recreation and cultural facilities.

Central West and Orana Regional Plan 2036, NSW DPIE

The key NSW State Government policy of relevance to Mid-Western Regional LGA, and the Project site, is the 'Central West and Orana Regional Plan 2036' which outlines the goals and actions for the Central West and Orana Region to achieve a sustainable future. This plan applies to 19 local government areas that cover an area of 125,666 square kilometres, including the Mid-Western Regional LGA. The Project site is in the Orana area and the plan recognises the distinct characteristics of the Central West and the Orana as two parts of the overall region. Dubbo is identified as the geographic, functional and economic centre of the Central West and Orana, and a central hub connecting rural communities, such as Mudgee. The plan sets out an aspiration for the Central West and Orana to be:

'The most diverse regional economy in NSW with a vibrant network of centres leveraging the opportunities of being at the heart of NSW'

The 'diverse regional economy' part of the vision includes 'Mining and Renewables' as one of its five key components. Renewable energy projects are important drivers of employment for smaller communities (such as Gulgong, Tallawang, Dunedoo) that can also support the development of other industries. The Orana is specifically identified as a priority area for solar energy generation.

The vision for the Central West and Orana Region closely reflects the vision and priorities identified in the 'Towards 2030 Community Plan'. The four goals established by the Regional Plan are:

- Goal 1 The most diverse regional economy in NSW
- Goal 2 A stronger, healthier environment and diverse heritage
- Goal 3 Quality freight, transport and infrastructure networks
- Goal 4 Dynamic, vibrant and healthy communities.

The Project is consistent with all four but is particularly relevant to the Goal 1, and specifically Direction 9 to 'Increase renewable energy generation'. The plan identifies the region's significant potential to support renewable energy projects, including large-scale solar, and states that co-generation (of electricity and heat) should be incorporated into project designs wherever possible. The Project site is specifically highlighted as a potential solar project in the 'Mineral Resources and Renewable Energy' map. Proposed actions to address Direction 9 are:

- 9.1 Identify locations with renewable energy generation potential and access to the electricity network.
- 9.2 Facilitate small-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or other innovative storage technologies through local environment plans.
- 9.3 Promote best practice community engagement and maximise community benefits from all utilityscale renewable energy projects.

The Project is also relevant to Goal 3 and specifically Direction 21 to 'Coordinate utility infrastructure investment'. Direction 21 identifies off-grid renewable systems as a cost-effective alternative to system upgrades and extensions to provide reliable energy in remote communities.

The Plan outlines the following key opportunities as relevant to the Project:

• Importance of tourism in historical towns and villages such as Gulgong



- Potential for coal seam gas extraction is concentrating mainly in the Orana region around Pilliga in the Warrumbungle Shire
- Early and effective community engagement will be promoted on these projects. New renewable energy projects require a strategic approach and should, where possible, incorporate small-scale co-generation measures into their design
- Action 9.3 Promote best practice community engagement and maximise community benefits from all utility-scale renewable energy projects.
- Direction 12: Plan for greater land use compatibility largely focusing on residential and rural residential development
- Action 12.1 Conduct a pilot study with Central NSW Councils (CENTROC) to investigate practical onground mechanisms to help avoid land use conflict between intensive agricultural uses and other sensitive uses.



Literature Review: Renewable Energy Industry Context

This section presents a summary of attitudes and perceptions of renewable energy at the state, region and local level, which aims to inform the SIA for the Tallawang solar farm by placing the community feedback in this broader context. This summary draws on state-wide community consultation commissioned in 2014 by the Office of Environment and Heritage (now DPIE) to understand community awareness, knowledge and attitudes to renewable energy (OEH, 2015).

Acceptance of the Renewable Energy Industry

As shown in the figure below, production of wind and solar energy specifically has increased significantly over the past two decades.



Figure E1 Energy produced by renewable source

Source: Department of the Environment and Energy (2020) Australian Energy Statistics, Table O.

A recent community survey undertaken by Energy NSW indicates a high level of support for renewable energy projects, particularly for solar farms, and a high level of knowledge, in particular relating to wind farm developments (refer to **Figure E2**). Suggesting that there is a role for developers to play in education the community on solar farms and their technology and impacts.





Figure 2.4: Overall support for generating electricity in NSW using renewable energy technologies.

Figure E2 Community sentiment relating to Renewable Energy Projects in NSW

Source: Energy NSW Community Survey

However, despite this support at a State level, the survey outcomes support the hypothesis that there is a lower level of support locally, with the study outlining that main concerns raised by key proximal stakeholders (1-2 km from proposed developments centred on property rights and access (including project compensation), noise and visual impacts; with some dialogue evident around the issue more broadly through prominent state and national groups such as NSW Farmers and Lock the Gate. As shown in Figure E3, there appears to be more support from proximal residents for solar farms than wind farms, with a significantly larger amount of strong opposition to wind farms.



Figure E3 Support and opposition for Renewable Energy Projects

Source: Energy NSW Community Survey





Overwhelmingly, the main benefit reported for both wind and solar projects was the benefit to the environment of renewable energy production, followed by the potential decreased cost of energy, followed by local economic benefits (refer to **Figure E4**).

benefits identified by those who support wind or solar farms within 1–2 kilometres
 benefits identified by those who oppose wind or solar farms within 1–2 kilometres

Figure E4 Proximal Stakeholder Identified benefits of Renewable Energy Projects in NSW

Source: Energy NSW Community Survey

The key issues proximal residents reported in relation to wind farms were noise and visual amenity, with noted concern regarding health and location of turbines in comparison to residences. Whereas concerns around solar farms primarily related to the location of solar modules, the space they take up and the impact on the environment (refer to **Figure E5**).

There has also been concern expressed regarding the loss of important agricultural land in the Central West, with the NSW Energy and Environment Minister making a commitment to balancing the land-use in the region to ensure renewable energy projects aren't being built on prime agricultural land. Furthermore, in the Mid-Western Regional Council's State of the Environment Snapshot (2017-2018), the Council identify one of their priorities as protecting agricultural land from encroachment from residential development, however, do not cite other threats to agricultural land use.



Figure E5 Proximal stakeholder identified concerns of Renewable Energy Projects in NSW

Source: Energy NSW Community Survey



At a community level, there is also concern regarding the use of productive agricultural land for renewable energy projects, noting that whilst they aren't opposing renewable energy as a whole, they want to see land of lesser agricultural importance considered for solar farm projects.

But now that there is so much money available to develop solar farms, if that money destroys rich farmland... isn't that missing the point? Perhaps we could find some of our other boundless plains (or roofs...) so that solar and agriculture can both contribute to Australia's prosperity? (Gulgong Residents for Responsible Renewables, 2019).

It is evident whilst there is an aspiration within the community for renewable energy, the drive for renewable energy projects in the region appears to be rooted in the NSW Government policies such as the development of the Central-West and Orana REZ. Furthermore, whilst there is support in the community for renewable energy, there are still a number of concerns in relation to the industry that is relatively new within the region.





Proximal Renewable Energy Projects

Project Name	Developer	Timing/Phase	Proximity to Barneys Reef Wind Farm	Brief Description
Central-West Orana REZ Transmission	TransGrid	Scoping Reports and Environmental Impact Statements	Sections are expected to be adjacent to the Site	Installation of transmission lines, substation(s) and related infrastructure to support the delivery the Central-West Orana REZ.
Beryl Solar Power Plant	First Solar	Operating commercially since June 2019	Approximately 15 km SE	29 of the 31 public submissions raised objections, the top 3 issues being Socio-economic and community impacts, noise and visual amenity.
Stubbo Solar Farm	UPC\AC Renewables Australia	Scoping report submitted Consultation and preparation of planning documents	15 km SE	400 MW 100 GWh per year Expected to create up to 400 jobs during construction, up to 10 ongoing jobs
129 Old Mill Rd, Gulgong	Vena Energy	Development Application unanimously refused by Western Regional Planning Panel 3 August 2020	20 km S	6MW-DC Significant community opposition including meetings and petitions organised by Gulgong Residents for Responsible Renewables (GRRR)
Valley of the Winds	UPC\AC Renewables Australia Joint venture between UPC Renewables Group and AC Energy (a subsidiary of the Ayala Corporation).	Early stages of planning Scoping report submitted to DPIE May 2020	25 – 45 km NE	800 MW 2,500 GWh per year Turbines to be sited on ridgelines within cleared land currently used for livestock grazing Up to 175 wind turbines
Bodangora Wind Farm	Infigen Energy	Operating since 2019	40 km SW	113.2 MW 33 Turbines
Burrundulla Mini Sustainable Energy Park	IT Power (Australia)	Development Application unanimously refused by Western Regional Planning Panel December 2020	50 km S	10 MW solar farm off the Castlereagh Hwy Faced significant community opposition
Liverpool Range Wind Farm	Tilt Renewables, acquired from Epuron in early 2019 Initially developed by Epuron beginning in 2009	Approval for 267 turbines and 1000 MW capacity in March 2018. Application is being prepared to amend approval to enable use of latest technology including larger turbines.	Wind turbines: between Coolah and Cassilis, 50 km NE – 60 km ENE Transmission line: between Cassilis and Ulan, 60 km ENE – 30 km ESE	1000 MW 267 turbines 33 wind farm host landowners



Project Name	Developer	Timing/Phase	Proximity to Barneys Reef Wind Farm	Brief Description
Wellington Solar Farm	Lightsource BP	Construction commenced December 2019	55 km SW	200 MW 420 GWh per year Across 316 ha of grazing land
Wellington North Solar Farm	Lightsource BP	Planning application under assessment by NSW DPIE	55 km SW	350 MW 700 GWh per year Across 970 ha of cropping and grazing land
Maryvale Solar Farm	Photon Energy Group	Construction expected to commence Q4 2021	55 km SW	196 MW 345.9 GWh per year 450 ha
Burrendong Wind Farm	Epuron	SEARs issued for the EIS in late 2020	56 km SSW	400 MW 69 Turbines
Wollar Solar Farm	Wollar Solar Development Pty Ltd	Development Consent provided February 2020	60 km SE	290 MW AC 621 GWh Includes a battery storage facility with a proposed storage capacity of 30 MWh
Suntop Solar Farm	Canadian Solar	Construction commenced Q4 2020 Early generation target Q3 2021	70 km SW	189 MW DC 395 GWh per year
The Crudine Ridge Wind Farm	CWP Renewables	Currently under construction, expected to be complete by early 2021	90 km S	135 MW 37 wind turbines Included an upgrade of Aarons Pass Road (in the MWRC)
Hills of Gold Wind Farm	Engie	Proponent is currently responding to submissions made to the EIS	175 km NE Nundle, in the New England REZ	420 MW 1,100 GWh per annum Up to 70 wind turbines and associated infrastructure Significant community opposition, including 633 submissions from the public







Community & Stakeholder Engagement Plan Tallawang Solar Farm and Barneys Reef Wind Farm



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1 Introduction

The proposed Tallawang Solar Farm and Barneys Reef Wind Farm (the Project) by RES Australia Pty Ltd (RES) (the proponent), comprises the construction and development of a large-scale solar farm and an adjacent large-scale wind farm with associated battery storage in the Central West Region of New South Wales (NSW), Australia.

1.1 Purpose and objectives

This Community and Stakeholder Engagement Plan (CSEP) outlines the approach, strategy, and implementation program to inform the Request for Secretary's Environmental Assessment Requirements (SEARs) and the Environmental Impact Statement (EIS) for the State Significant Development Application (SSDA) of each project, to be lodged with the NSW Department of Planning, Industry and Environment (DPIE).

The purpose of this document is to outline the approach and strategy for community and stakeholder engagement across the Project's planning and approvals phase, to inform the preparation of relevant Scoping Reports (as part of the Request for SEARs) and completion of the Project's technical studies (as part of the EIS).

As noted in the NSW DPIE draft SIA Guideline (2020), respectful, inclusive, and meaningful engagement is a fundamental part of project planning and development. Engagement with affected communities and stakeholders provides first-hand insight into what people value and how they expect a project to affect them. Community and stakeholder engagement is a key component of the EIS processes, with the DPIE draft SIA Guideline (2020) outlining the following objectives to guide engagement:

- To ensure those potentially affected by a project understand the project and how it will affect them.
- To collect relevant data, evidence, and insights for scoping the SIA to maximise diversity and ensure representativeness of views.
- To understand the interests that people have and how impacts may be experienced (from their perspective).
- To consider the views of people in a meaningful way and use these insights to inform project planning and design.
- To provide opportunities for people to collaborate on project design matters and input to preferred solutions to address impacts.
- To confirm data, assumptions, findings, and recommendations.
- To ensure people know how their input has been considered, and what strategies will be put in place to address their concerns.
- To help understand how other specialist studies prepared for the EIS assist in addressing social impacts.
- To respect people's privacy, allowing them to communicate their views anonymously if requested.

The specific objectives of this CSEP are to:

- Support the building of strong relationships with local stakeholders to establish a socially sustainable project.
- Guide and support a strategic and coordinated approach to engagement, including specific mechanisms, timeframes and responsibilities during the planning and assessment phase of the Project.
- Facilitate transparent and meaningful information exchange on the Project.



- Identify key stakeholders and communities relevant to the development of the project.
- Support the Project's understanding of its local context, identification of stakeholders, including vulnerable community groups, stakeholder expectations and project alignment with local aspirations.
- Facilitate the genuine involvement of stakeholders in the planning and approvals process as well as in developing responses to impacts.
- Ensure that community and stakeholder inputs are effectively integrated into the technical assessments within the EIS and inform refinements to project design and plans.
- Meet regulatory requirements for public, stakeholder and community consultation.
- Collaborate with local stakeholders on local benefit sharing strategies to ensure they are co-designed, targeted, and appropriate to the Project's operating context.

Furthermore, RES is committed to:

- Facilitating the early engagement of local stakeholders to understand potential social impacts and opportunities that may arise from the Project.
- Keeping the community informed throughout the development phase of the Project, in turn allowing the views of local stakeholders to inform project planning and design.
- Providing access to up-to-date information on project progress and demonstrate where applicable, how the design of the Project has been adapted to take account of community participation and the findings of feasibility studies.
- Listening and responding to any concerns raised.
- Giving stakeholders clear and timely information on how and when they can participate in decision making.

1.2 Approach

The NSW Government's draft SIA Guideline (2020) proposes to make SIA applicable to all SSDs in NSW, with proponents required to commission standalone Social Impact Scoping Reports as part of the Request for SEARs. These studies are informed by, and rely on, the outcomes of early, and ongoing community and stakeholder engagement through the assessment phase. The approach to stakeholder engagement for the Project will also be informed by the NSW Government's draft SIA Guideline (2020), the Large-Scale Solar Energy Guideline for State Significant Development (2018) and the Wind Energy Guideline (2016). Furthermore, best practice engagement design and delivery will also be guided by the International Association of Public Participation (IAP2) Public Participation Spectrum as per Figure 1.

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	INCREASING IMPACT ON T						
	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER		
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.		
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.		
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Figure 1 IAP2 Public Participation Spectrum

Further, this CSEP recognises the unique development context of the Tallawang Solar Farm and Barneys Reef Wind Farm, being situated adjacent to each other within the Central-West Orana Renewable Energy Zone (REZ), undergoing planning and approvals process simultaneously, and by the same proponent. As a result, the CSEP embeds the following integrated approach to streamline engagement and scoping for the two side-by-side projects to deliver separate reports as required by DPIE, as outlined in Figure 2Error! Reference source not found..



Figure 2 Integrated approach



1.3 Process

This CSEP has been developed as a key output of the Community and Stakeholder Engagement Strategy Workshop held between RES and Umwelt Environmental & Social Consultants on 17 March 2021. The workshop covered the following items in developing this CSEP:

- confirm objectives of the CSEP
- share key outcomes of community profiling activities to inform and refine engagement plans and mechanisms
- identify key social issues or risks
- validate key stakeholders to be involved and engaged
- co-develop Project messaging
- discuss recommended mechanisms for engagement
- assign responsibilities per activity
- Implementation Plan confirm actions, timing and staging.

The CSEP will be revised following RES review for the Request for SEARs phase. It will remain an iterative document throughout the Project planning and approvals phase and will be updated post the EIS preparation period.

1.4 Key Project milestones

Table 1Error! Reference source not found. outlines the key Project milestone dates throughout the two EIS programs.

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Phase	Indicative timing					
Preparatory planning	February 2021					
Landholder consultation and agreements	February 2021					
CSEP development and workshop	Mid-March 2021					
Round 1 engagement	March 2021					
Scoping Report (Tallawang)	April - May 2021					
Scoping Report (Barneys Reef)	April - May 2021					
Hold point - SEARs (June 2021)						
Detailed environmental investigations commence	June - July 2021					
Round 2 engagement	July - August 2021					
Reporting (Tallawang)	September 2021					



EIS lodgment (Tallawang)	October 2021
Round 3 engagement (Barneys Reef - TBC)	October - November 2021
Public exhibition period (Tallawang)	November 2021
Response to submissions (Tallawang)	December 2021 - January 2022
Reporting (Barneys Reef)	December 2021
EIS lodgment (Barneys Reef)	January 2022
Public exhibition period (Barneys Reef)	February 2022
Response to submissions (Barneys Reef)	March - May 2022
Project updates, impact management and monitoring	Ongoing

2 Project overview

2.1 Project background

The proposed Tallawang Solar Farm and Barneys Reef Wind Farm comprises the construction and development of a large-scale solar farm and an adjacent large-scale wind farm in the Central West Region of New South Wales (NSW), Australia. The Project is in the vicinity of a number of other active and planned RES Projects in the Central West Orana REZ.

Landholder agreements have been executed for both Projects and a number of environmental and social studies have been commenced in line with the requirements in the EP&A Act (1979).

2.1.1 Tallawang Solar Farm

The proposed Tallawang Solar Farm comprises a solar farm and battery infrastructure located 8 kilometers northwest of Gulgong, New South Wales (NSW), in the locality of Tallawang in the Mid-Western Regional Local Government Area (LGA).

The Tallawang Solar Farm involves the construction, operation, and maintenance of a 390MW solar farm on a 920-hectare site. It involves approximately 1,144,600 solar photovoltaic (PV) modules with a maximum height of 5m located across the Project site. The site would also include a system of inverters and voltage step-up transformers that would be positioned throughout the PV modules to allow for the transfer of electricity to an onsite Battery Storage Facility (BSF). The BSF would comprise 72 battery units positioned throughout the solar farm. In addition, there would be an onsite switchyard, a 132kV substation and an overhead 132kV line connecting the solar farm to a proposed 330kV transmission line which would cross the Wallerawang Gwabegar Railway.

In regard to supporting infrastructure, the site will contain temporary construction site offices, construction vehicle parking areas, and material laydown areas for the construction phase; site office, and operations and maintenance building with parking for the operations team; and a storage shed.

The site will be accessed from Puggoon Road that connects to Castlereagh Highway that travels to Gulgong in the south and joins the Golden Highway in the north.

Exclusivity agreements are in place with two host landholders to develop the Project.



2.1.2 Barneys Reef Wind Farm

The proposed Barneys Reef Wind Farm site is located approximately 15km north of Gulgong in the Mid-Western Regional LGA in the suburb of Barneys Reef.

The Barneys Reef Wind Farm Project would have a capacity of 340MW and will include the construction and operation of approximately 60 wind turbines that are approximately 220m tall.

To allow for the transfer of energy, electrical connections between the proposed wind turbines consisting of a combination of underground cables and overhead powerlines would be developed that would connect to the shared onsite substations and subsequently the 330kV transmission line network.

Agreements are in place with 13 host landholders within Barneys Reef to develop the Project.

2.2 Governance

Both Project sites are located within the Mid-Western Regional Council area of the Central West Region in NSW. Within the broader LGA, there is an apparent community desire to reduce the consumption of energy and fossil fuels, and to consider alternative resources (Council Community Survey, 2013) and as such, there has been a commitment from Council to increasing the use of alternative energy sources in the LGA (Council Community Plan, 2013). However, there is reported concern regarding use of prime agricultural land for renewable energy projects and lack of community involvement in recent projects. Therefore, some level of support is anticipated from the community in response to the benefit of clean energy, with a potential level of opposition as a result of potential land-use conflicts.

The key industries in the Central West have historically been agriculture, transport and logistics, with community and tourism value stemming from the historical towns and villages in the area such as Gulgong; with a particular economic contribution from mining in the Mid-Western Regional LGA. In recent years there has been a redirected focus on renewable energy, including the approval of the large-scale Liverpool Range Wind Farm in the neighbouring Warrumbungle Shire Council area.

2.3 Policy setting

The NSW Government's current energy security policy and approach to a clean energy transition is being delivered through the strategic development of the renewable energy sector, as outlined through the NSW Government's *Renewable Energy Action Plan* (2013), *Electricity Strategy* (2019) and the *Electricity Infrastructure Roadmap* (2020). This policy context is relevant to inform the public positioning and key messaging for the planning and development of the Projects.

The Central West Region has been determined a pilot for the NSW Government's Renewable Energy Zones (REZ) announced in the 2019 Electricity Strategy. This Strategy also includes the New England REZ and South West REZ. The Projects' sites being located within the Central-West and Orana REZ will be a consideration for cumulative effects on the community, due to other renewable projects being planned and developed nearby.



2.4 Community profile

The community¹ can be characterised by the following observations, shown in Figure 3 and Figure 4Error! Reference source not found.:

- An older population than the NSW average, particularly in the suburbs proximal to the Projects (NSW median age is 35)
- A higher Aboriginal and Torres Strait Islander population than the NSW average (3.4%)
- A slightly higher unemployment rate in the Mid-Western Regional LGA in comparison to NSW (6.3% in NSW)
- High motor vehicle usage, particularly in the host suburb of Tallawang, from which we can assume a high level of road use
- A low level of property occupation in the suburb of Tallawang however, a high number of people per household
- A low level of internet access across the LGA with one third of residents unable to access the internet from their homes
- A low level of residents born outside Australia; therefore the community is not expected to be culturally and linguistically diverse.



Figure 3 Community demographics

¹ No data available for Barneys Reef State Suburb due to small population size





Figure 4 Social indicators

Figure 5 outlines the Area of Social Influence for the Projects. The Social Impact Scoping Report will further detail the social baseline for the Projects, including the community values, natural and built characteristics and key socio-demographic conditions.





Figure 5 Tallawang Solar Farm and Barneys Reef Wind Farm Area of Social Influence



2.5 Known stakeholder issues and social risks to the Projects

This section provides an overview of identified local concerns, issues, and interests in the form of social risks as relevant to the Project. This information is important in focusing the assessment process on matters of concern and interest to relevant stakeholder groups, for further consideration in Project planning and development.

In recent years, proposed renewable energy projects across NSW have had diverse responses from local communities on their perceived impacts. Following an initial review of Project information and plans, as well as submissions received on comparable or nearby projects, local media, and other publicly available documentation, we have understood the following issues to be of relevance for consideration in planning and developing the Project.

Firstly, matters relating to the level of information sharing and community participation in project development, including the opportunity for stakeholders to be involved in decision-making processes that affect them:

- Lack of community representation in project planning and development
- Confusion regarding two projects in one locality
- Lack of knowledge or experience of renewables, resulting in mistrust or scepticism.
- Community division / polarisation
- Recent experiences with other projects, resulting in misinformation.
- Consultation fatigue due to multiple concurrent projects

Secondly, matters relating to broader community effects:

- Strain on local infrastructure, facilities, and services
- Cumulative effect on cohesion in townships caused by the presence of multiple concurrent projects
- Lack of local long-term benefit
- Detraction from historic and tourist attraction of Gulgong
- Climate change adaptation and intergenerational equity
- Unequal distribution of project benefits

And thirdly, matters relating to the Project footprint:

- Social amenity factors such as levels of noise, visual impact, and other amenity impacts
- Changes to local road conditions, increased traffic, and concern for public safety due to the construction workforce
- Land use conflict with renewables development in food production and other agricultural areas
- Perceived property devaluation
- Disruption to farming operations and livelihoods
- Health and wellbeing of workers.

The cumulative nature of renewable energy projects must also be considered in the case of this project given the NSW Government's NSW Electricity Infrastructure Roadmap and other proximal development projects.

From a social perspective, matters as described above are often inter-related and may be perceived both positively and negatively by different stakeholder groups.



3 Engagement strategy

3.1 Principles of engagement

RES believes that community engagement creates mutual benefits for both the developer and the communities in which they operate. RES is committed to clear, honest, and transparent community engagement through all stages of a project lifecycle from initial site selection through to planning, construction and operations. The company's approach to engagement is heavily influenced and consistent with, the Clean Energy Council's (CEC) Best Practice Charter for Renewable Energy Development 2018. RES is a founding signatory of this Charter.

The principles underpinning community engagement adopted by RES align with the '*Community Engagement Guidelines for the Australian Wind Industry*' developed by the Clean Energy Council (CEC, 2012). In adopting the principles of the Guideline, RES commits to the following with respect to the development of the Project:

- **Openness.** Relevant information will be shared with the community in a format that is clear, accurate, timely and honest.
- Inclusiveness. RES will work with project stakeholders to ensure their perspectives are considered.
- **Responsiveness.** All community concerns will be listened and responded to.
- Accountability. The project will continue to monitor, evaluate and disclose information about project activities and the identified positive and negative impacts of the project.

RES has a dedicated and experienced team which can draw on its learnings from other projects in Australia to establish respectful relationships with local communities. In this way, RES aims to foster social licence to plan, construct and operate projects, striving for best practice, and early engagement with communities to develop an understanding of the community and the project's stakeholders. We understand that no two communities are the same and our investment in early engagement allows us to tailor our communications approach to the community we are working in. In turn, this supports the ability for communities and local stakeholders to participate in and inform project planning and development. RES acknowledges that a robust community and stakeholder engagement process can further inform the assessment process and project technical studies to bring about positive project and community outcomes.

3.2 Stakeholder identification

A stakeholder identification process has been undertaken to further define relevant stakeholders for the project within each of these stakeholder groupings:

- Group 1: high priority stakeholders who require proactive and collaborative engagement.
- **Group 2:** moderate priority stakeholders who will require information provision and/or may be interested in the project.
- **Group 3:** low priority stakeholders who will be given the opportunity to participate but will not necessarily be engaged directly.
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A breakdown of Group 1 stakeholders is presented in Table 2 with further definition of stakeholders and their respective groupings outlined in the Projects' <u>Stakeholder Database</u>.



Table 2 Project Stakeholders

Stakeholder group	Priority	Level of engagement (IAP2)	Potential interest or concern
Host Landholders	1	Collaborate	Accessibility, social amenity, land acquisition, livelihoods, and personal advantage/ disadvantage
Proximal Landholders	1	Involve	Accessibility, land use conflict, social amenity, personal advantage/ disadvantage
Traditional Owners	1	Involve	Aboriginal rights and interests, native title, cultural heritage, and land access, development opportunities
State and Local Government	1	Involve	Cumulative impacts, land use/ intergenerational equity, community or public perceptions, opportunities for collaboration, economic benefits, local infrastructure, and services
Environmental Groups	1	Consult	Cumulative impacts, land use/ intergenerational equity, climate change adaptation, ecological/ environmental impacts
Community & Special Interest Groups	1	Consult	Cumulative impacts, land use/ intergenerational equity, local benefit, impact on heritage or tourism, climate change adaptation, community and economic changes
Local Businesses & Service Providers - Accommodation, Education, Emergency Services, Employment & Training, Health	1 2	Consult	Cumulative impacts, demand and capacity, opportunities for collaboration, economic benefits, community and economic changes, local infrastructure, and services
Broader Community	2	Inform	Cumulative impacts, potential change to sense of community / community cohesion, climate change adaptation, local benefit, local infrastructure, and services
Local Media	2	Inform	Cumulative impacts, opportunities for collaboration, community or public perceptions, local benefits, community and economic changes

3.3 Engagement mechanisms

The engagement of stakeholders and community groups will include a combination of:

- **Consultation and engagement:** to facilitate stakeholder involvement in the identification of issues/impacts, areas of interest/concern and strategies to address the issues raised.
- Information provision: to improve knowledge and awareness of the company, its activities, the project, and key issues/impacts as they arise.

Various methods will be used to engage with the different stakeholder groups based on the type of information being conveyed, level of feedback required, understanding of stakeholder needs regarding engagement, and identified stakeholder engagement preferences identified in Table 3Error! Reference



source not found. below. This will include existing or previous mechanisms utilised by RES as well as additional mechanisms.

Table 3 Engagement Mechanisms

Mechanism	Description
Website/hotline/email	Platforms and tools to provide opportunity for the wider community or public to engage with the Projects (information provision and feedback submission) outside of dedicated consultation periods
Media release	Holding statement outlining key messages in local media
Project Information Sheet	No. 1 - Project overview No. 2 - Project update and outcomes of scoping phase No. 3 - Project update and outcomes of technical studies
Project briefing	Formal briefings to key stakeholders and government agencies, with Project Information Sheet and/or slide deck to formally introduce the Projects
Personal meeting / interview*	Introductions to the Projects and team, semi-structured discussion to listen to individual concerns, interests, issues and gather preliminary feedback, scope potential impacts and opportunities, including sensitivities, to inform mitigation / enhancement strategies, understand future engagement preferences
Community information and feedback sessions	Informal 'drop in' sessions to provide information (interactive), to provide a 'face' of the project, opportunity for members of the public to pose questions, project team to visually share results of technical studies, and collect community feedback (Round 2 only)

*Personal meetings can also be undertaken in small groups, noting that the focus of these meetings is to understand and scope local concerns, interests, issues, and priorities, not only to provide information on the Projects.

Table 4 outlines the mechanisms that are planned be used to engage each stakeholder group for the Projects.

Table 4 Mechanism Matrix

Stakeholder group	Information p	provision	_	Engagement mechanism			
	Website/ hotline/ email	Media release	Project Information Sheet	Project briefing	Personal meetings/ interview	Community information and feedback session	
State Government			\checkmark	\checkmark			
Local Government		\checkmark	\checkmark	\checkmark			
Traditional Owners	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Host landholders	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	



Stakeholder group	Information p	provision		Engagement mechanism			
	Website/ hotline/ email	Media release	Project Information Sheet	Project briefing	Personal meetings/ interview	Community information and feedback session	
Neighbouring / proximal landholders	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
Community groups	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Wider community	\checkmark	\checkmark	\checkmark			\checkmark	
Local businesses and service providers	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Local media	\checkmark	\checkmark	\checkmark				

3.4 Instrument Toolkit development

Umwelt will draft and prepare instruments, materials, and tools to be used to support engagement in accordance with this CSEP. These will be prepared following RES's confirmation of the Implementation Plan (Section 5). Instruments to support engagement activities will include the following:

- **Run sheets and/or agendas** for formal project briefings for RES to hold with government agencies, and for key stakeholder meetings that the Umwelt team may facilitate in the local or regional area.
- Interview discussion guides a suite of discussion guides including a standard discussion template/survey question set, as well as targeted guides for specific stakeholder or community groups/specific activities such as talking points and questions for community information sessions. Each guide will likely include up to 5 open ended questions.
- **Project information sheets** to communicate key information visually and concisely on the project to the wider community, to be distributed in multiple means such as a resident mail drop, online format, and in hard-copy at community information/drop-in sessions
- Record-keeping templates including interview note taking templates and meeting minutes templates
- Stakeholder engagement database set up of template in an Excel spreadsheet.

3.5 Discussion topics for engagement

The NSW Government's *Large-Scale Solar Energy Guideline* (2018) requires that proponents address the following components of their stakeholder engagement program through the appropriate project planning and development phases:

- To engage with host and proximal landholders about the proposed project area, the likely infrastructure layout, access routes and potential location of ancillary infrastructure
- To listen to the community's concerns and suggestions
- To discuss potential noise impacts, the potential visual impacts and landscape changes, the proposed siting, and potential alternatives



• To discuss issues for landholder agreement if the project is approved, including siting, access, compensation, responsibility for decommissioning and rehabilitation.

3.5.1 Round 1 (Scoping Phase)

It is expected by DPIE under the draft SIA Guideline (2020) that the scoping phase will include community engagement activities to understand likely stakeholder issues and concerns to inform the SIA.

Engagement in Phase 1 provides an opportunity to gauge and understand stakeholder issues/concerns/interests in relation to the project; to identify possible strategies/solutions to address topics raised; and to then use this information gathered to proactively inform project design and planning.

In this regard, the SIA process calls for likely social impacts to be appropriately scoped and identified through consultation with potentially affected people and mitigation and enhancement options preliminarily explored.

To satisfy the SIA requirements, proposed engagement activities to be undertaken in this phase need to be targeted at identifying perceived issues of concern and/or positive impacts in relation to the proposed project, to be further considered in the subsequent EIS/SIA phase.

Questions to include in the interview discussion guides appropriate to this phase will include topics relating to:

- Awareness and attitudes towards solar and wind farm development (and other industry development in the local or regional area)
- Awareness and public perceptions of RES
- Potential issues, concerns or interests related to the proposed Projects
- Community values, identity, local needs, and aspirations
- Areas of value and use within and near the Projects
- Sense of community in the area
- Potential sensitive receivers and/or vulnerable community groups
- Preferred engagement mechanisms, frequency, and content.

The information gathered in the scoping phase will be used to inform EIS preparation, by focusing the assessment on key social and environmental issues/impacts of importance to key stakeholder groups; and by identifying project design refinements that may seek to avoid or minimise negative impacts and/or enhance positive impacts. This is an important process in the project development process and records of changes made will be kept and discussed in the EIS.

3.5.2 Round 2 (EIS preparation)

Proposed engagement activities undertaken during Round 2 will be focused on responding to questions, concerns or issues that arose during the scoping phase with environmental issues resolved and project refinements to be integrated where possible as a result. Further, this round of engagement is an opportunity to further explore and validate the social issues, interests, and impacts, that were identified during the scoping phase. The EIS program and preliminary insights or findings gathered through the various technical studies will also be further communicated during this phase, to assist in gathering feedback from key stakeholders and the wider community, on predicted project impacts (positive and negative).

Therefore, engagement in this phase, to inform the EIS and SIA will focus on:

- Assessment of perceived issues, impacts and opportunities associated with the project
- Existing capacity of local service provision and projected future demand
- Responding to, addressing, and integrating environmental and project design matters raised during the scoping phase
- Potential strategies to address and respond to issues, impacts and opportunities
- Enhancement measures to improve collaboration between RES and community or stakeholders, including potential community investment and benefit-sharing opportunities.

3.6 Record-keeping and stakeholder database management



A dedicated Stakeholder Database will be established in Microsoft Excel format to track stakeholders and related information throughout the Project's planning and approvals phase. This will include an Engagement Register, whereby team members will record the contact details of stakeholders, summaries of each consultation or contact with the stakeholder, and any actions that may arise from these meetings. This database will be established by Umwelt on an interactive and accessible platform (such as SharePoint) and maintained through the life of the Project by RES, as required.

Outcomes and records of each engagement activity will be documented by the team member(s) in attendance. The Engagement Register will be maintained throughout the delivery of the Implementation Plan to ensure consistent tracking and recording of all community or stakeholder engagement activities and outcomes. Information to be recorded includes:

- Activity details (including stakeholder engaged, attendees, time and place, mechanism used)
- Discussion points
- Summary of key outcomes, including any actions
- Stakeholder contact details
- Preferences for future engagement.

Following completion of engagement for each phase, outcomes and data obtained will be collated and analysed to identify key impact themes and impact prioritisation. Identified issues or impacts may also be mapped to identify any spatial patterns.

Outcomes of the engagement undertaken will then be summarised in the Scoping Report, the Social Impact Scoping Report and Social Impact Assessment Report respectively. Relevant EIS technical studies will also receive consultation outcomes as relevant to inform their respective study outcomes. Furthermore, the EIS will consider project design refinements based on stakeholder and community consultation outcomes.

3.7 Complaints handling and issue tracking

RES will maintain a Project complaint register throughout each phase of the Projects. This will be informed through activities and outcomes of this CSEP in addition to future engagement activities related to the Projects.



4 Key Messages

4.1 Overview

As the project evolves RES will develop and adapt key messages for communication to targeted stakeholders and communities. Key messages will be developed in line with the principles and commitments outlined within **Section 1** of this document and will be developed to share information related to the Project and its current activities, as well as to respond to stakeholder issues, concerns and interests as identified throughout development of the Project.

Key messages will be developed to address the following key objectives:

- Provide clear and consistent information relating to the two projects
- Afford meaningful participation and avoid misinformation and confusion
- Clearly articulate aspects of the project.

For the EIS process, key messages (for external purposes) have been developed and refined, around four message categories. These will be used to inform the engagement strategy and associated material development.

- 1. **The proponent** who is RES?
- 2. **The Project** what is Tallawang and Barneys Reef? Including details on the site and plans, 'quick facts' and profiles of the proposed Projects
- 3. The process the development planning and EIS process, including community consultation and key milestones
- 4. **Impacts and opportunities** key issues in relation to the Project i.e., social and environmental effects, stakeholder concerns, opportunities and benefits, engagement preferences and information requirements.

Notably, the unique positioning of the two 'sibling' projects should be carefully considered (i.e. Tallawang and Barneys Reef are adjacent projects, however with two differing technologies). A streamlined planning and development process between the Projects can lead to maximised community benefit, parallel community and stakeholder engagement programs and a coordinated approach to planning with local stakeholders.

4.2 Who is the proponent - Renewable Energy Systems (RES)?

- RES is the world's largest independent renewable energy company active in both onshore and offshore wind, solar, energy storage and transmission and distribution. RES has delivered over 20GW of renewable energy projects across the globe and supports an operational asset portfolio of 7GW worldwide.
- RES is a family-run business, committed to the principles of openness and transparency across its projects and their operations.
- RES is committed to understanding each project's local setting and ensuring that this knowledge informs the development of its projects. Further, RES understands that each and every project is different and that integrating local considerations is essential in developing successful projects for both the community and RES.



- RES has stood at the forefront of renewable energy for nearly 40 years and was established in Australia in 2004 with a proud history. This includes the successful development of the Taralga Wind Farm (NSW), Ararat Wind Farm (VIC), Murra Warra Wind Farm (VIC) and Emerald Solar Farm (QLD).
- Currently the construction and asset management portfolio under management by RES in Australia is over 1.1GW.
- RES has a pipeline of wind farm and solar projects across Australia and has recently gained approval for a number of renewable assets; solar projects include Springdale (NSW) and Avonlie (NSW), and wind projects include Dulacca (QLD) and Twin Creek (SA).
- Our specialist wind, solar and storage teams both in Australia and globally includes highly experienced professionals in development, technical, engineering, construction, network / grid connection and commercial areas of development and construction.
- RES offers development and construction of wind and solar projects, as well as ongoing asset management for both RES and third-party assets.

4.3 What are the Projects - Tallawang Solar Farm and Barneys Reef Wind Farm?

- The proposed Tallawang Solar Farm comprises a solar farm and battery storage infrastructure located in the locality of Tallawang, NSW, approximately 8 kilometres northwest of Gulgong.
- RES has identified the two potential sites within the Central-West Orana REZ as having the potential to host both a solar farm and a wind farm, each with associated battery storage facilities.
- If developed, the Tallawang Solar Farm would involve the construction, operation, and maintenance of a 390MW solar farm. The solar farm's energy storage infrastructure would have a capacity of up to 780 MWh. The potential site for the Tallawang Solar Farm is 920-hectares and would generate enough electricity to supply approximately 250,000 NSW homes. This site is located approximately 8km northwest of Gulgong town and is hosted by two properties.
- The potential site of the Barneys Reef Wind Farm would generate enough electricity to supply approximately 265,000 NSW homes. This site is located approximately 15km north of Gulgong and is in the Mid-Western Regional Council LGA. The site is approximately 18km from Dunedoo town which in the neighbouring Warrumbungle Shire Council area. The Barneys Reef Wind Farm will have a capacity of approximately 340MW and at this early stage of planning would likely include around 60 wind turbines. The proposed site extends over 13 free-hold properties of which RES has recently formed agreements with the host landholders. Infrastructure on the site may include two substations and transmission connections, which will enable connection of the proposed turbines to the Central-West Orana REZ Transmission Corridor. This is expected to traverse the northern end of the Project Area.
- The Projects would contribute to Australia's domestic and international commitments of renewable energy development, including NSW's target of 50% renewable energy by 2030.
- To enable the transfer of energy, other relevant infrastructure will be positioned across the site, such as inverters, transformers, and battery units, as well as a number of temporary construction and permanent operational and maintenance buildings.
- Access to the two sites for construction would likely be from either the Golden Highway or Castlereagh Highway and associated local roads. The access plans will be developed throughout the EIS technical assessments.



4.3.1 Reasons for site selection

RES has selected the two sites for the following reasons:

- The Central-West Orana REZ has been identified by the NSW Government as a priority area to target for renewable energy development due to its natural resources that suit solar and wind farm development
- The collaboration from host landholders
- Through the REZ, the sites would be proximate to future grid connection and associated electricity infrastructure
- The sites are deliberately located in areas at a distance from towns to minimise impact on local populations
- The locality has strong road transportation links, including connectivity to the Port of Newcastle
- The sites are understood to require relatively minimal earthworks and vegetation clearance as well as for Tallawang, an area that is not visible on approaches to town.

4.3.2 The Central-West Orana Renewable Energy Zone (REZ)

- The Projects are located adjacent to each other, within the Mid-West Regional Council area and area also both located within the Central West-Orana Renewable Energy Zone (REZ).
- The NSW Government has identified five Renewable Energy Zones (REZ) within the State. This REZ is one such, that are anticipated to play a vital role in delivering affordable, reliable energy generation to help replace the State's existing power stations as they come to their scheduled end of life. Other zones are located in the New England, South-West, Hunter-Central Coast and Illawarra regions.
- A REZ can be understood as a modern-day power station. They intend to combine renewable energy generation such as wind, solar and battery storage solutions. By connecting multiple generators in the same location, REZs can better support the delivery of cheap, reliable, clean electricity to homes and businesses in NSW.
- The Central-West Orana REZ in particular, is anticipated to open up a significant pipeline of large-scale renewable energy projects that will support private investment and provide flow on economic benefits to communities in these regions.

4.4 What is the approvals process?

- RES is currently assessing the feasibility of both the Tallawang Solar Farm Project and the Barneys Reef Wind Farm Project. As part of this, RES is undertaking preliminary environmental and social assessments to understand both the impacts and opportunities the Projects presents to local communities and the environment. Through this, RES is wanting to seek feedback on the Projects from key stakeholders and local community members. This information, along with impacts identified through community and stakeholder consultation will feed into the Scoping Report in quarter 2 (Q2) of 2021 and thereafter into the Environmental Impact Statement which accompanies the planning application for the Projects.
- The Projects will each require development consent under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act).
- Two separate development applications accompanied by two detailed Environmental Impact Statements (EIS) would be prepared and submitted to the NSW Department of Planning, Industry and Environment



(DPIE). Two separate EISs are required under the EP&A Act, as well as RES wanting to allow a better evaluation of risks and opportunities for the two different technologies.

- The EIS would include a Social Impact Assessment, in addition to several specialist studies including assessments on effects to visual changes, noise, biodiversity, heritage, water, traffic, hazard and risk, aircraft risk, soils and land use.
- Comprehensive assessments will be completed to identify the potential impacts of both Projects, including the cumulative impacts that they may have collectively, and how best to manage these impacts.
- The detailed design of each Project will be informed by these studies to ensure that impacts are mitigated as far as reasonably and feasibly possible.
- The two SIAs will include a community engagement program and be prepared considering the NSW DPIE's draft SIA Guideline (2020). This engagement program will be conducted concurrently for both projects and will include consultation with interested parties, affected communities and local representative groups. The outcomes of the engagement program will inform the development of both EISs.
- The first round of community engagement will be in March April 2021. The second round is expected in mid-2021. People can also learn about the Projects through the two project websites. Further, people can raise queries, receive feedback, and generally express an interest in being informed via the dedicated hotline and email.

4.5 What are the impacts and opportunities?

- RES is committed to building strong local relationships with key stakeholders and communities as part of their early planning and understands the importance of ensuring local participation and community input, to achieve positive local and regional community benefits.
- RES is committed to working with the community and key stakeholders to identify environmental and social impacts associated with their proposed projects and to explore relevant strategies to mitigate negative impacts and enhance positive impacts. RES will work to ensure that through the EIS, SIA and associated community engagement process, that community issues are well understood and are addressed, where possible, in project design and planning.
- RES recognises that the siting of the projects may result in community and landscape impacts (both positive and negative) and that impacts may be experienced differently across stakeholder groups.
- RES is committed to the development of community benefit sharing programs (e.g. neighbourhood benefit programs, the development of community grant funds and community co-investment/co-ownership programs) in line with the Clean Energy Guidelines for Benefit Sharing (2019), in the areas where their projects are located.
- Across the global portfolio, RES is committed to supporting community schemes that demonstrate lasting impact and legacy.
- For the Tallawang Solar Farm and Barneys Reef Wind Farm, RES plans to work with the local community to explore benefit sharing options and target areas for contribution and support through an integrated approach bringing together the two projects. This would support the maximising of local benefits through the potential combining of funds across the two projects, which could bring about greater positive social outcomes. This approach would be informed by community engagement undertaken for the two projects, and would focus on meeting local community needs and aspirations.
- Across the global portfolio, RES is committed to supporting community schemes that demonstrate lasting impact and legacy.



- RES is committed to local employment and procurement, where possible, and would work to ensure this commitment is reflected in the policies of the nominated Engineering, Procurement and Construction (EPC) contractor.
- Where possible, construction workers for the two projects would be accommodated in towns within 1hour of the site. The findings of the SIA will support RES in further assessing potential accommodation options to reduce related project impacts.
- For the Tallawang Solar Farm and Barneys Reef Wind Farm, RES hopes to work with local property owners to allow for the ongoing use of the land for grazing or other existing agricultural activities. In this way, RES is interested to explore and promote new partnerships and models for complementary solar and wind energy with food production and agriculture, working with local farmers to support the co-existence of land uses.



5 Implementation Plan

An overview of planned engagement activities and associated staging across the planning and approvals phase for both the Tallawang Solar Farm and Barneys Reef Wind Farm is outlined in **Table 5** and **Table 6**Error! Reference source not found..



5.1 Scoping Phase

Table 5 Scoping Phase (Round 1 Engagement)

ltem	Detail	Responsibility /		Attendees	Timing
		Umwelt	RES		
Preparation					
Community and Stakeholder		Prepare	Review and approve	N/A	REV 01: 19/03/2021
					REV 02: 24/03/2021
Project description		Review and integrate	Prepare	N/A	19/03/2021
Key messages and set up script		Prepare	Review and approve	N/A	Draft 19/03/2021
					Final 24/03/2021
Project Information Sheet (1)	To be distributed via mail	Prepare, design, and	Provide critical inputs, e.g.,	N/A	Draft 22/03/2021
	drop around 2 x Projects	distribute	contact details to include, review and approve		Final 26/03/2021
					Print w/c 29/03/2021
					Distribute via Aus Post April
					2021 - TBC
Instrument Toolkit (Round 1)		Prepare and design	Review, approve and	N/A	Draft 24/03/2021
			distribute		Final 26/03/2021
Meetings schedules and set up	Including compilation of	Organise	Approve	N/A	By 26/03/2021
	proximal) contact sheet				
Webpage/botline/email address	Separate LIRL for	Provide input into	Prepare set up and manage	N/A	26/03/2021
development and set up	Tallawang to Barneys Reef	content development	Trepare, set up and manage	IV A	20/03/2021
Delivery	1	1	1		1

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ltem	Detail	Responsibility		Attendees	Timing
		Umwelt	RES		
Project briefing: DPIE, Tallawang Solar Farm	Online (MS Teams/Zoom)	Organise and attend	Confirm timing, prepare presentation/material, conduct and attend	RES Umwelt	TBC - April or May 2021
Project briefing: DPIE, Barneys Reef Wind Farm	Online (MS Teams/Zoom)	Organise and attend	Confirm timing, prepare presentation/material, conduct and attend	RES Umwelt	TBC - April or May 2021
Website launch			Prepare, set up and manage	RES	End March 2021
Aboriginal consultation advertisement	Regulation to advertise notice for Aboriginal cultural heritage study in local newspaper	Prepare and organise with local paper	Review and approve		End March 2021
Project briefing: Mid-Western Regional Council	F2F in Mudgee, with General Manager and/or Mayor	Organise, receive meeting minutes/outcomes	Prepare presentation/material, conduct, and attend	RES	End March 2021
Project briefing: Warrumbungle Shire Council	F2F in Coonabarabran, with General Manager and/or Mayor and/or Councillors *Note this is the neighbouring council	Organise, receive meeting minutes/outcomes	Prepare presentation/material, conduct, and attend	RES	End March 2021
Host landholder SIA meetings (2 x Tallawang; 13 x Barneys Reef)	Email out questions and invite for phone meeting	Co-facilitate or receive/record outcomes	Organise and facilitate responses	RES Umwelt	April 2021
Proximal landholder meetings	F2F; requirement of visual assessment for BR to consult with residents	Identify landholders, supply contact sheet, provide	Organise, conduct and attend	RES	End March 2021

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ltem	Detail	Responsibility		Attendees	Timing
		Umwelt	RES		
	within a 4.5km radius of the Project footprint; can suggest neighbour group meetings, can follow up with phone meeting; acknowledge cropping season may affect people's availability	questions/discussion guide, receive outcomes			
Media statement		Provide input	Provide input, review, and approve, contact local media		TBC - April 2021
Agency Project briefings	TfNSW; LLS; SES; RFS; BCD; Heritage; mix of F2F and online	Supply agency list and contact details, provide input into presentation, attend as required, receive and review outcomes,	Prepare presentation, conduct and attend, record outcomes	RES Umwelt	April 2021
Mudgee Local Aboriginal Land Council	F2F or phone; timing to align with Aboriginal cultural heritage notification	Organise, attend, record outcomes	Conduct and attend	RES Umwelt	April 2021
Chamber of Commerce (Mudgee and Gulgong)	F2F	Organise, attend, conduct, record outcomes	Receive and review outcomes	Umwelt	April 2021
NSW Farmers Association - Mudgee Branch	F2F	Supply run sheet, organise, receive outcomes	Conduct and attend	RES	April 2021



ltem	Detail	Responsibility /		Attendees	Timing			
		Umwelt	RES					
Community groups	F2F	Organise, facilitate, record outcomes	Attend as required	Umwelt	April 2021			
Local environmental groups	F2F	Organise, facilitate, record outcomes	Attend as required	Umwelt	April 2021			
Local accommodation providers	F2F or phone	Organise, conduct, attend, record outcomes	Review outcomes	Umwelt	April 2021			
Community Information and Feedback Session (1)		Review outcomes and integrate into SIA and EIS	Prepare posters, storyboards and run sheet, book venue, advertise and organise, conduct, attend, record outcomes		TBC			
Outcomes	Outcomes							
Stakeholder Database and Engagement Register	Document all Round 1 engagement activities and outcomes	Compile records and undertake outcomes analysis and summaries	Review		Ongoing - April 2021			

5.2 EIS Preparation Phase

The detailed Implementation Plan for Round 2 Engagement will be developed following the completion of Round 1 and in alignment with the issuance of SEARs. The table below is for template purposes only.

Table 6 EIS Preparation Phase (Round 2 Engagement)

ltem	Detail	Responsibility		Attendees	Timing
		Umwelt	RES		
Community and Stakeholder					ТВС
Engagement Plan					
Project Information Sheet (2)					ТВС
Community Information and Feedback					ТВС
Session (2)					
Community Information and Feedback					ТВС
Session (3)					
Project Information Sheet (3)					ТВС





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