Tathra Wind Farm

Social Impact Assessment

Final

August 2025

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Social Impact Assessment

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Prepared by
Umwelt (Australia) Pty Limited

On behalf of
Synergy Renewable Energy Development

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Acknowledgement of Country

Umwelt acknowledges the Traditional Owners of Country throughout Australia and their continuing values, culture and connection to the land, waters and sky.

We pay our respects to Elders past and present.

The below image is from the artwork *Yapung Maryiyang* (Pathway Forward) by Saretta Fielding.

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Executive Summary

Synergy Renewable Energy Development Pty Ltd (SynergyRED) propose to develop the Tathra Wind Farm (the Project) located approximately 15 kilometres (km) east of Eneabba with the Project area covering approximately 15,830 hectares (ha) and encompassing 14 private landholdings. The Project is located within the Shire of Carnamah LGA.

The Project will include the construction, operation and decommissioning of up to 140 wind turbine generators with a capacity of 1,000 MW, up to 500 MW capacity in solar and 500 MW in Battery Energy Storage Systems (BESS) and associated infrastructure.

Umwelt has been engaged by SynergyRED to undertake a Social Impact Assessment (SIA) in relation to the development of the Project.

Methodology

The SIA program has been designed to identify, assess and address potential social impacts of the Project on neighbouring and local communities, and more specifically to:

- Identify potential social impacts and opportunities, including cumulative impacts.
- Identify relevant management and enhancement strategies to address social impacts.
- Allow for effective integration of study outputs with other technical study outputs to inform broader Project planning and design.

In the absence of a prescribed approach to SIA in Western Australia, this SIA has been prepared with consideration of best practice social impact assessment approaches including the *International Principles for Social Impact Assessment* (Vanclay, 2003) the *Social Impact Assessment: Guidance for assessing and managing the social impacts of projects* (IAIA, 2015) and the NSW Department of Planning, Housing and Infrastructure's (DPHI) *SIA Guideline* (Vanclay, 2003; DPHI, 2023).

Preparation of this SIA report has followed the following key methodological steps:

- Definition of the social locality.
- Stakeholder analysis and mapping to ascertain those likely most affected by the Project.
- Development of a social baseline profile, including compilation of community characteristics, analysis of existing social conditions and trends and opportunities and challenges across the social locality.
- Community and stakeholder consultation to ensure participatory social assessment methods.
- Impact identification and evaluation, including an impact significance assessment.
- Consideration of potential Project design refinements in response to identified social impacts.
- Development of mitigation, enhancement and management measures to address social impacts.
- Preparation of a social impact management framework to guide the implementation of the proposed social impact management strategies.

Social Baseline Summary

The social baseline provides an overview of the existing social characteristics, conditions and trends in the social locality. The social baseline draws on various sources of data, such as Australian Bureau of Statistics (ABS) census statistics, stakeholder consultation outcomes, and literature reviews, to describe the key characteristics of the social locality.

A summary of the social baseline findings includes:

- **Political Capital**: The Project is located within the federal electorate of Durack, represented by Liberal MP Melissa Price, who supports nuclear energy alongside renewables and gas, reflecting her mining background. At the state level, it falls within the Moore district, held by Nationals WA leader Shane Love, a supporter of renewable projects like the Badgingarra Wind Farm. Locally, the Shires of Carnamah, Three Springs, and Coorow govern the area, with councils encouraging public participation through monthly meetings. The Yamatji Nation, represented by the Yamatji Southern Regional Corporation, holds native title rights in the region.
- **Cultural Capital**: The Yamatji Nation have a rich cultural heritage, with the social locality containing a number of significant cultural heritage sites such as Wunneroo Cave and Gum Tree Bay Mound. Aboriginal tourism is a regional priority, with initiatives at sites like Walga Rock. European heritage in Eneabba and Carnamah dates back to the 19th century, with notable settlers and heritage-listed sites like the Macpherson Homestead. Carnamah also celebrates its agricultural legacy. Demographically, there is a high proportion of Australian-born residents and English speakers, with small communities speaking Wangkatha and Spanish.
- **Human Capital**: The social locality surrounding the Project is marked by an aging and declining population, raising concerns about workforce availability and service provision. Aboriginal and/or Torres Strait Islander residents make up a slightly higher proportion of the population than the state average, particularly within Eneabba and Three Springs. Education levels are generally lower than the state average, with high rates of vocational qualifications but low university attainment. Health outcomes in the region are poorer than the state average, with elevated rates of hospital admissions, chronic conditions, and mental health issues, suggesting potential strain on local health services if the Project attracts a large workforce.
- **Economic Capital**: The social locality has a lower median household income than the state average. Agriculture is the dominant industry, with some areas having over 90% of the workforce employed in farming, while mining also plays a significant role in Eneabba and Leeman. Climate change has impacted agricultural productivity, prompting a push for economic diversification, including tourism and renewable energy. Unemployment rates are relatively low, but healthcare workforce shortages persist. Housing affordability and availability are major concerns, with rising prices and limited rental options. Economic diversity varies across Local Government Areas (LGAs), with Carnamah showing greater resilience, while Three Springs is more reliant on agriculture.
- **Social Capital**: Communities in the social locality have strong social connections and high rates of volunteerism with Carnamah LGA reporting 24.5% volunteer participation—nearly double the state average. Population mobility is relatively low again reflecting high levels of connection in the community, and fewer households have children compared to the state average. Crime rates are generally low, although Carnamah has seen a recent rise in property-related offences. Concerns are growing over the rapid rollout of renewable energy projects, prompting calls for clearer government guidelines and benefit-sharing frameworks.

- **Physical Capital**: The Shire of Carnamah is investing around $2 million annually in infrastructure upgrades between 2023 to 2031, including roads, parks, and community facilities. Health services are limited, with small clinics in Eneabba and Three Springs, and the nearest major hospital in Geraldton over 1.5 hours away. Education options are minimal, with only one primary and one high school in the Shire. Power outages and road safety remain concerns, and any population influx from the Project could place strain on local services. Short-term accommodation near the Project is scarce, and rental stock is critically low across Carnamah, Coorow and Three Springs, contributing to rising rents and long public housing waitlists. Although Iluka Resources operates two nearby worker camps with capacity for 948 people, broader housing options are constrained, especially during peak tourism seasons. These limitations in services and housing suggest that any population influx from the Project could place strain on local infrastructure and community resources.

Outcomes of Assessment

The SIA has identified and assessed potential impacts of the Project collectively drawing on the outcomes of engagement, secondary data analysis, social research, outcomes of technical studies, and practitioner expertise on other project developments. Positive impacts / benefits that are likely to be of high significance are likely to include:

- Generation of local employment, training and procurement opportunities.
- Livelihood benefits for landholders due to improved income security and diversification.
- Increased opportunities for economic diversification enhancing community sustainability.
- Increased economic activity and spend in local towns.
- Intergenerational equity and improved liveability due to contribution of the Project to renewable energy generation.

The SIA has also identified and assessed potential negative impacts of the Project. Impacts that are likely to be of high significance include:

- Limited potential for long-term economic benefits, e.g. employment, training, procurement and local spend.
- Inequitable distribution of project benefits and impacts.
- Change in the rural landscape resulting in impacts on visual amenity.
- Reduced public safety due to increased bushfire risk.
- Safety concerns due to potential glint/glare.
- Concerns regarding Project decommissioning and associated waste management.
- Reduced public safety due to further deterioration of local roads and increased volume of traffic.
- Decreased access to affordable housing and accommodation due to construction workforce influx.
- Increased stress and anxiety due to uncertainty associated with project development and changes to way of life.

In response to these identified impacts, a number of mitigation and enhancement strategies are proposed to manage social impacts effectively and enhance project benefits.

Social Impact Management Planning

A social impact management planning framework has been outlined to guide the implementation of proposed strategies relating to management of key social impacts (positive and negative).

The strategies in the framework include SynergyRED developing and implementing the following strategies:

- Accommodation and Employment Strategy (AES).
- Renewable Community Benefit Fund and Neighbour Agreements.
- Community Engagement Action Plan (CEAP).

A number of additional commitments have also been made by Synergy, in response to assessment studies, to reduce impacts of the Project, including project design changes.

Abbreviations

Abbreviation	Description
ABS	Australian Bureau of Statistics
AES	Accommodation and Employment Strategy
AGL	Above ground level
AMC	Australian Marine Complex
APP	Aboriginal Procurement Policy
APZs	Asset Protection Zones
ASR	Average Standardised Rate
BAL	Bushfire Attack Level
BBUS	Bird and Bat Utilisation Surveys
BESS	Battery Energy Storage System
BMP	Bushfire Management Plan
BYAC	Bundi Yamatji Aboriginal Corporation
CEAP	Community Engagement Action Plan
CEC	Clean Energy Council
CEMA	Community Engagement Management Approach
CFA	Country Fire Authority
CSWMP	Construction Soil and Water Management Plan
DBCA	Department of Biodiversity, Conservation and Attractions
DPHI	Department of Planning, Housing and Infrastructure's
EOI	Expression of interest
FTE	Full-time equivalent
GP	General Practitioner
GW	Gigawatt
IAIA	International Association for Impact Assessment
ILUA	Indigenous Land Use Agreement
IEO	Index of Education and Occupation
Kms	Kilometres
KV	Kilovolt
LGA	Local Government Area
MW	Megawatts
MWCEP	Mid West Clean Energy Project
NIMBY	Not in My Backyard
NSW	New South Wales
OEMP	Operational Environmental Management Plan
PHN	Public Health Network
RCBF	Renewables Community Benefit Fund

Abbreviation	Description
RSA	Rotor swept area
SAL	Suburb and Locality
SA3	Statistical Area Three
SEIFA	Socio-Economic Indexes for Areas
SIA	Social Impact Assessment
SynergyRED	SynergyRED Pty Ltd
SRE	Short-range Endemic
SWIS	South-West Interconnected System
TIS	Traffic Impact Statement
TO	Traditional Owner
UCL	Urban Centre and Locality
Umwelt	Umwelt (Australia) Pty Ltd
UTS	University of Technology Sydney
WA	Western Australia
WALGA	WA Local Government Association
WTG	Wind Turbine Generators
YEL	Yamatji Enterprises Limited
YFML	Yamatji Funds Management Limited
YMAC	Yamatji Marlpa Aboriginal Corporation
YSRC	Yamatji Southern Regional Corporation
YTD	Year to Date

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Appendices

1.0 Introduction

This report documents the process and outcomes of a Social Impact Assessment (SIA) undertaken by Umwelt on behalf of Synergy Renewable Energy Development Pty Ltd (SynergyRED or the Proponent) for their proposed renewable energy project located within the Shire of Carnamah, Tathra Wind Farm (the Project).

1.1 Project Overview

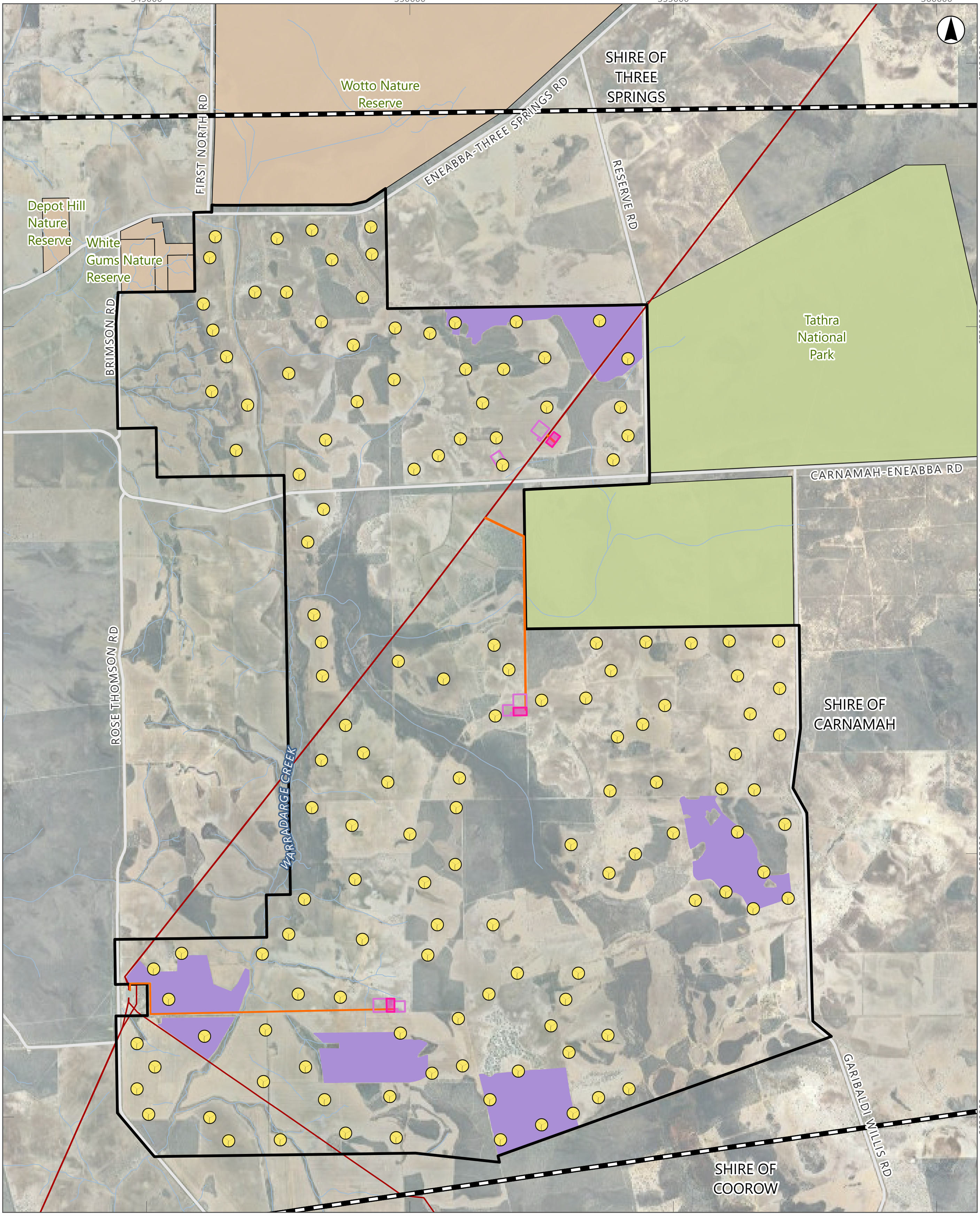
The proposed Tathra Wind Farm (the Project) is located approximately 15 km east of Eneabba within the Shire of Carnamah. The Project will extend across up to 15,830 ha of predominantly cleared land currently used for agriculture between the townships of Eneabba, Warradarge, Carnamah, Kadathinni and Arrowsmith East in the Mid-West Region of Western Australia (refer to **Figure 1.1**).

The Project specifically proposes the construction of up to 140 WTGs, generating approximately 1,000 Megawatts (MW) of renewable energy, with construction of these being split across three phases. Project infrastructure would include:

- Up to 140 wind turbine generators (WTGs) with a total capacity of up to 1,000 MW.
- Up to 500 MW capacity in solar and 500MW in Battery Energy Storage Systems (BESS), including associated roads, foundations and drainage.
- Associated turbine foundations and hard stand areas.
- A turbine design comprising:
  - Blade length up to 90 m
  - Tower/hub height between 110 m and 160 m
  - Turbine tip height up to 250 m.
- Site entrances from public roads and internal access roads between wind turbines and supporting infrastructure.
- Overhead transmission poles or towers and power lines, and underground electrical cables.
- Electrical substations and switchyards, including ancillary electrical equipment (e.g. STATCOM).
- Operations and maintenance buildings, workshops, and associated car parking.
- Temporary construction facilities, including site offices, construction compounds, laydown areas, gravel borrow pits and concrete batching plant.
- Water abstraction bore(s) for construction activities and associated infrastructure (dams/turkey's nests).
- Fire water tanks.
- Communication towers and monitoring masts (meteorological masts) up to 150 m tall.

Electricity from the Project is to be supplied to the South-West Interconnected System (SWIS), including the Mid West.

If approved, given the size and scale of the Proposal, including wind, solar and BESS, it is most likely that construction of the assets will be delivered over multiple stages. Each stage is expected to take around 18-24 months with a workforce peaking at up to 200 full-time equivalent (FTE) workers for each proposed construction period.



Scale: 1:100,000 at A4, GDA2020 MGA Zone 50

Legend

- Project Area
- Local Government Area Boundary
- National Park
- Nature Reserve
- Road
- Watercourse
- Proposed BESS Layout
- Supporting Infrastructure
- Proposed Solar Layout
- Existing Transmission Line
- Project Transmission Line
- Proposed WTG Location

0 2 4
Kilometres

FIGURE 1.1

Tathra Wind Farm Project Area

Image Source: ESRI Basemap (2023) | **Data Source:** Landgate (2024), DBCA (2024), Umwelt (2024), SynergyRED (2024)

1.2 Project Proponent

SynergyRED is a wholly owned subsidiary of Synergy, established to develop and manage renewable energy projects, such as wind farms and battery storage systems, in support of WA's decarbonisation strategy. Synergy is the largest electricity generator and retailer in Western Australia, serving over one million residential, business, and industrial customers. SynergyRED generates electricity from a range of both non-renewable and renewable sources and owns and operates power stations within the South-West Interconnected System (SWIS), one of Western Australia's two main electricity grids which spans from Kalbarri in the north, Kalgoorlie in the east, and Albany in the south.

SynergyRED is currently in the process of actively exploring and developing future energy solutions to potentially connect to the SWIS.

1.3 Report Structure and Objectives

This report is structured as follows:

- **Section 1.0** introduces the Project and provides a Project overview and objectives and structure of the report.
- **Section 2.0** outlines the assessment requirements, the SIA methodology, including stakeholder identification, engagement mechanisms and additional assessment methodologies utilised to inform the SIA. The section also outlines assessment limitations.
- **Section 3.0** provides an overview of the key characteristics of the social locality and a summary of the existing socio-economic baseline.
- **Section 4.0** provides further description of the potential social impacts and opportunities that may occur.
- **Section 5.0** provides an evaluation of the significance of each of the potential social impacts pre and post mitigation in line with criteria defined in the SIA Guideline (DPHI, 2023).
- **Section 6.0** further discusses proposed management and enhancement measures to address the identified social impacts.
- **Section 7.0** provides a summary and conclusion to the SIA.

2.0 Methodology

2.1 Introduction

Under the Western Australian *Planning and Development (Local Planning Schemes) Regulations 2015*, local governments must give due consideration to a range of matters, insofar as they are deemed relevant to the development application under assessment. Amongst these considerations is the social impacts of the development.

Pursuant to the *Environmental Protection Act 1986* (EP Act), Social Surroundings must be considered for projects which have the potential to significantly impact this Factor. It should be noted that this SIA is only one component of a Social Surroundings assessment as will be detailed in Synergy's referral under s38 of the EP Act.

In the absence of a prescribed approach to SIA within Western Australia (WA), in the preparation of this assessment, Umwelt has drawn on the NSW Department of Planning, Housing and Infrastructure's (DPHI) SIA Guideline (DPHI, 2023), which is in turn based on international best practice as documented by the IAIA (Vanclay, 2003).

The International Association for Impact Assessment (IAIA) defines SIA as:

> *the processes of analysing, monitoring, and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment (Vanclay, 2003).*

Commencement of SIA early in a project, and informed by community and stakeholder engagement, affords the opportunity to effectively address social impacts within the detailed project planning and assessment phase, resulting in improved project design and social/community outcomes. It also provides the opportunity to explore strategies that may be put in place to reduce negative impacts and enhance social benefits and outcomes throughout the life of a project.

It is important to recognise that in a project; not all social impacts will be equally distributed. Some individuals or groups within a community may benefit, while others may also experience negative impacts. If negative impacts are predicted, it is the role of the SIA to determine how such impacts may be effectively managed 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.

Monitoring and evaluation are also a key component of the SIA process and should outline how social impacts will be monitored and adaptive management applied to reduce impacts, should a project proceed. Such monitoring is also important to identify any unanticipated impacts that may arise as a result of the project.

According to the SIA Guideline, social impacts may be identified along a range of categories as outlined in **Figure 2.1**.

Figure 2.1 Social Impact Categories

Source: (Umwelt, 2023, adapted from NSW SIA Guidelines, 2023).

While some social impacts may directly occur because of the Project, others may be indirectly caused by changes in the biophysical environment and biophysical impacts, as described in **Figure 2.2**. Consequently, both direct and indirect social impacts should be considered.

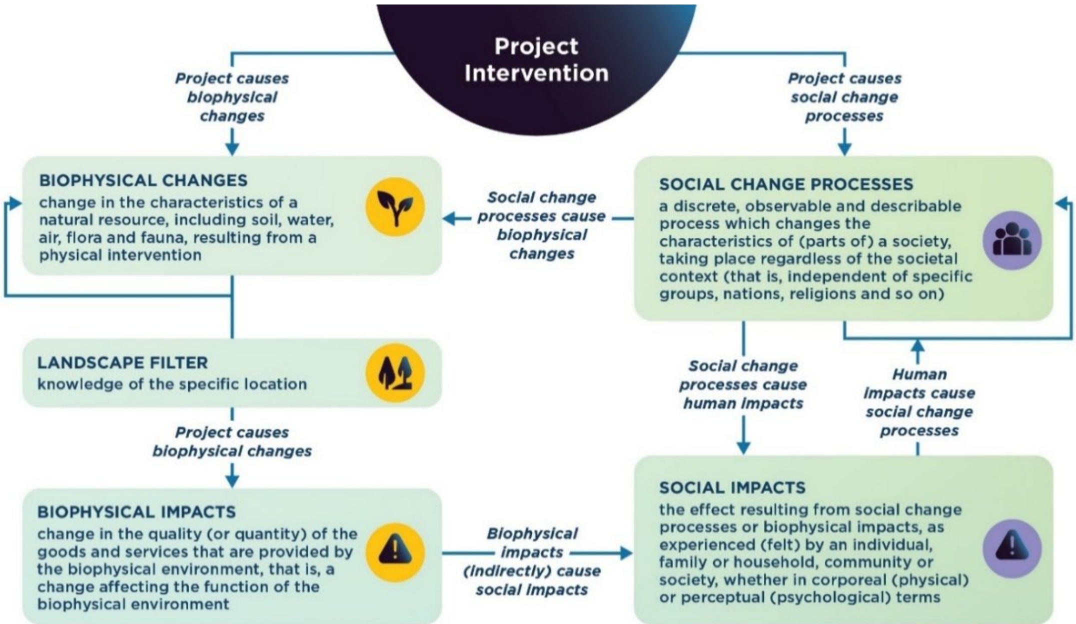


Figure 2.2 Direct and Indirect Social Impacts

Source: Umwelt 2023, Adapted from Slootweg et al 2013 (p.78).

Social impacts may also be tangible or more intangible in nature and may be experienced both physically and psychologically. They may also be experienced at even the rumour of a Project change, and may manifest in differing expectations, fears, or anxieties.

Given that social impacts are impacts on people, it is important that their significance is determined from the perspective of those experiencing the impact, informed by relevant social research and knowledge, and integrated with the social impact practitioner's experience.

2.2 Assessment Phases

Figure 2.3 provides an overview of the key phases that have been involved in the preparation of the SIA. This process is consistent with standard SIA approaches as described.

Figure 2.3 Assessment Phases

Source: Umwelt, 2025

2.3 Social Locality and Baseline Development

2.3.1 Defining the Social Locality

The term 'social locality' is commonly used in SIA practice to refer to the geographies included within the SIA. There is no fixed meaning or predefined geographic boundary to determining a social locality (e.g. the local suburb, or 'within 500 m'), instead, the scale of the social locality should be established on a case-by-case basis, having regard to the nature of the project, and its impacts (DPHI, 2023).

Determining the social locality should consider where people are located in relation to the Project and how groups of people interact with the Project Area and any associated features. For further direction, the SIA Guideline states that the social locality should be defined by:

- **The scale and nature of the Project**; its associated activities including ancillary works and infrastructure; potential direct and indirect impacts (positive and negative, e.g. for example, transport and logistics corridors, property acquisitions and sources of employment); and cumulative impacts.
- **Who may be affected by the Project and how they may be affected**; their social, cultural and demographic characteristics; their relevant interests and values; the things that differentiate groups (such as cultural diversity) as well as things that they have in common; and the broader community and public interest.
- **Whether any vulnerable or marginalised people may be affected by the Project;** including people on low incomes; people living with disabilities, chronic medical conditions or in poor health requiring access to services; culturally and linguistically diverse communities; people who are homeless or in insecure housing; people who are unable to represent themselves or other vulnerable people such as elderly people, children, or single-parent households.
- **Built or natural features on or near the Project that could be affected**, and the intangible values that people may associate with these features, such as a sense of place or belonging, rural character, community cohesion, connection to Country and value of stories within the cultural landscapes, and use of natural areas and resources.
- **Relevant social, cultural, demographic trends or social change processes** occurring now, or which have occurred in the past near the Project area and in the broader region, including how people have felt or experienced these changes; community resilience; different trends and patterns around issues relating to key social issues including rental affordability, employment, changing land uses, population and demographic change; or experiences of extreme weather and natural hazards.
- **The history** of the proposed project and the area, and any similar experiences people near the Project have had, including change prior to, or created by, the planning assessment process; how people have reacted to early discussions; and how these discussions and other experiences have affected the broader community; and the traditional Aboriginal use of the place, recent history of the place and people and any ongoing traumas (DPHI, 2023).

The social locality for the proposed Project is further defined in **Section 3.1.**

2.3.2 Developing a Social Baseline

The development of a social baseline profile gathers knowledge from both primary and secondary data sources to increase understanding of the existing social locality in which a project is proposed, and of potentially affected communities. Data collected is based on the social locality definition outlined in **Section 3.1**. The social baseline profile is a foundational component of SIA, as it provides the basis from which social impacts associated with the Project may be predicted.

To assist in structuring the social baseline for the Project, to better understand the communities of interest to the Project, and to evaluate their resilience and adaptive capacity to change, for the purposes of this SIA the Sustainable Livelihoods Approach or 'community capitals' approach has been adopted (DFID, 1999).

The DFID (1999) approach draws on broad categories of community capitals (human, social, natural, physical and economic/financial) as a fundamental basis to identifying and further enhancing community capacity and resilience. This methodology has been further developed by Coakes & Sadler (2011) and applied in SIA practice. The vulnerability of each capital area can be assessed through the selection of a suite of social and economic quantitative and qualitative indicators specific to each capital area to assess a community's vulnerability to change, or conversely adaptive capacity. Elements of each capital area are further outlined in **Figure 2.4,** with further discussion of these capitals provided in **Section 3.4**.

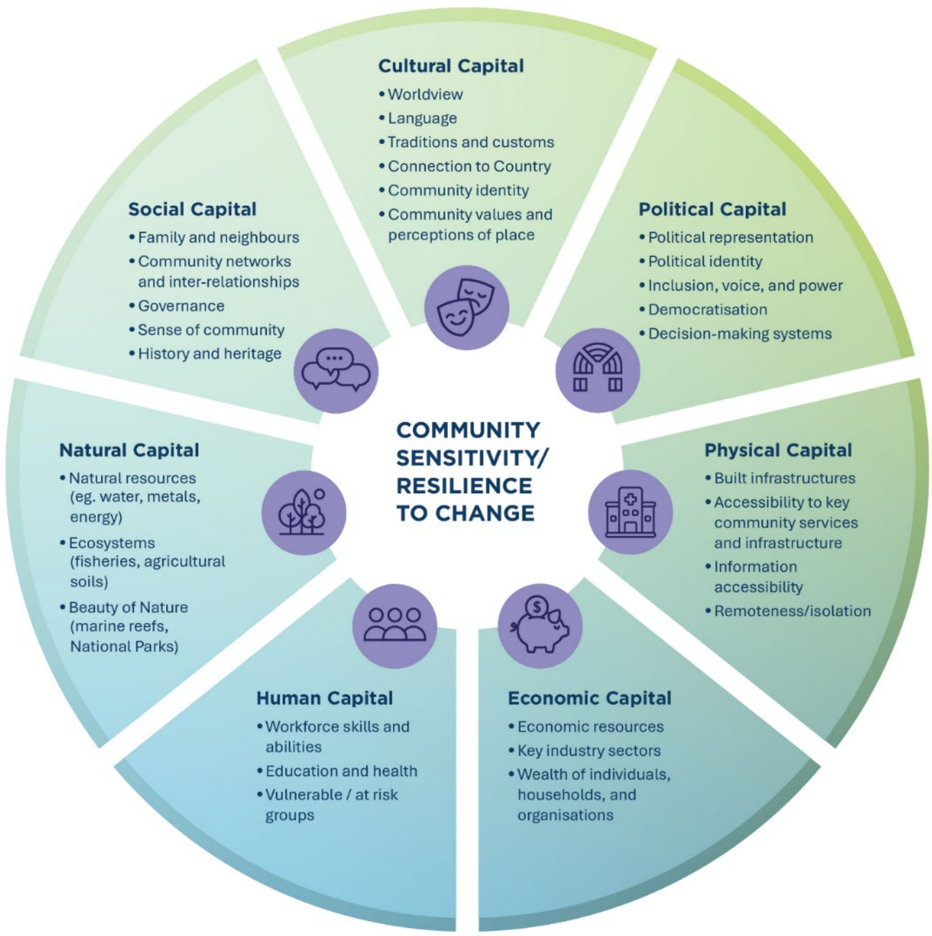


Figure 2.4 Community Capitals Framework

Source: Umwelt 2024 adapted from Coakes and Sadler, 2011

2.3.2.1 Data Sources

The social baseline has made use of a range of data sources to understand the socio-economic, cultural and demographic characteristics of the communities within the Project's social locality, as summarised in **Appendix A**. Data has been gathered and analysed from publicly available secondary datasets, including the most recent Australian Census (ABS, 2021) Social Health Atlas of Australia (PHIDU, 2021) as well as a thorough review of local media, government plans and strategies, and other literature and data sets relevant to the social locality.

This has been supported by a review of Synergy's sourced documentation including:

- Company policies and strategy documents.
- Stakeholder Registers.
- Community and stakeholder engagement documentation.

The key indicators of interest used to compile the social baseline profile are outlined in **Figure 2.5**.

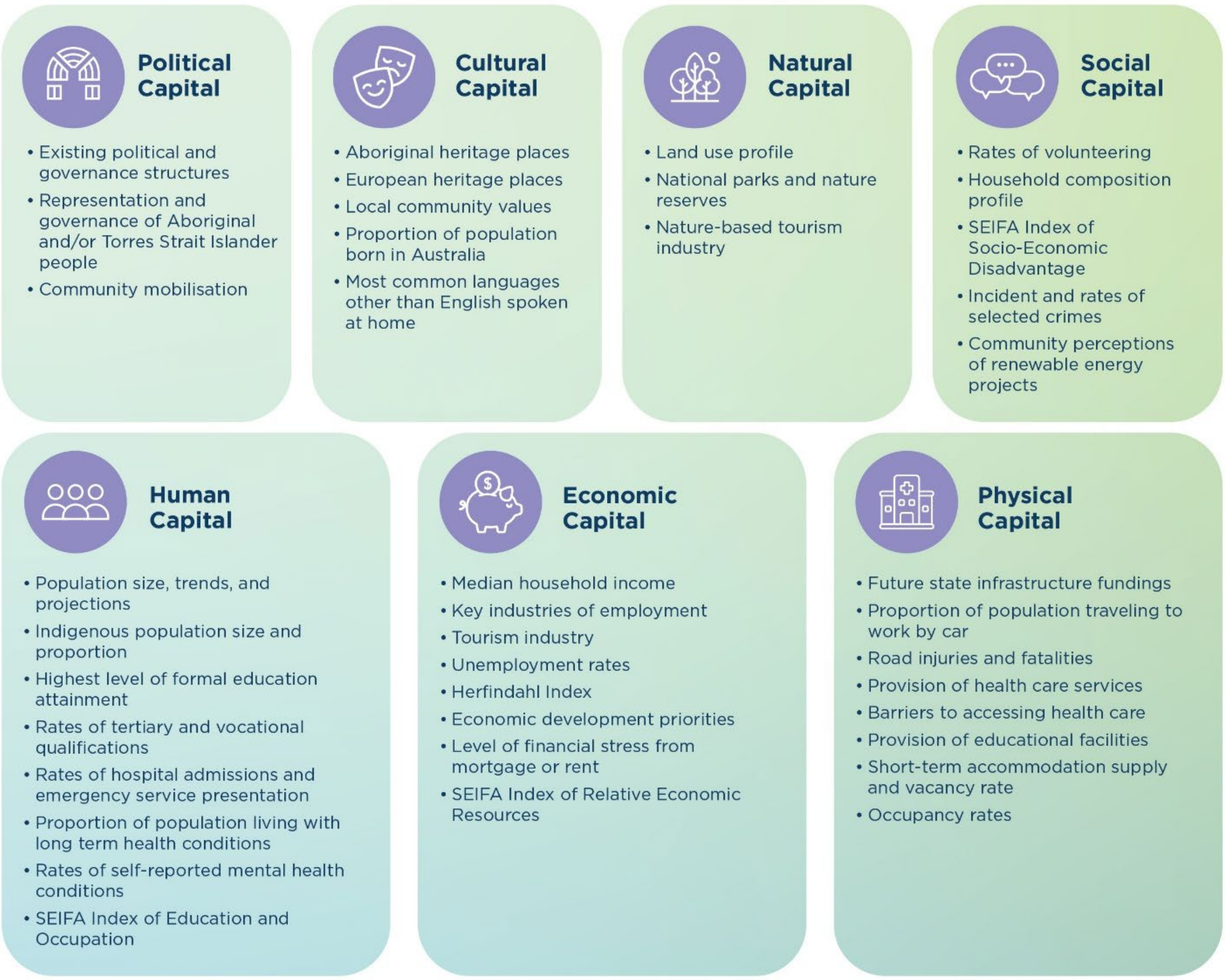


Figure 2.5 Social Baseline Profile Indicators

Source: Umwelt, 2025

2.4 Stakeholder Engagement

2.4.1 Stakeholder Identification

SIA involves the participation and collaboration of people who have an interest in, or those that may be 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 otherwise affected by the Project.

A stakeholder identification process has been completed to support the planning and delivery of community and stakeholder consultation activities to inform the preparation of this SIA. This process has involved identifying stakeholders with a likely interest in the Project, or those potentially directly and indirectly affected; including any groups that may be under-represented, or more vulnerable or marginalised.

The identification of these stakeholders and determining key mechanisms for engagement forms part of the Community Engagement Action Plan (CEAP). Key stakeholder groups identified during this phase are outlined in **Figure 2.6** which also identifies the specific stakeholders/organisations who were contacted or engaged during the SIA process. A total of 56 stakeholders participated in the SIA engagement process. Stakeholders in **bold** are those who chose to participate.

Figure 2.6 Key Stakeholder Groups

Source: Umwelt, 2025

2.4.2 Engagement Mechanisms

Consultation activities undertaken to inform the SIA focused on providing information on the Project and planning process, understanding the social impacts of the proposed Project and gathering community suggestions on potential management measures to address social impacts. Consultation was undertaken between April and July 2025.

A variety of mechanisms were used to obtain the input of various stakeholder groups to inform the preparation of this SIA. Information provision and consultation activities that have been undertaken are outlined in **Table 2.1.**

Table 2.1 Stakeholder Consultation and Engagement Undertaken

Mechanism	Details
Pop-up stalls	Pop-up stalls were used to provide an opportunity for informal engagement and information sharing to raise awareness of the Project, the planning and environmental approvals process and opportunities to participate. *A total of three stalls were held in Carnamah, Eneabba and Coorow between 9-11 April 2025. 17 people attended the Carnamah session, 3 people attended the Eneabba session and 3 people attended the Coorow session*.
Project meetings	Meetings were held with key stakeholders to address and seek input on specific matters from individuals, groups, and organisations with local or specialist knowledge, and to facilitate introduction and relationship building with key personnel. *37 Meetings were held in person and online between April and June 2025*.
Online survey	An online survey was distributed to gain feedback from key stakeholders and the broader community on the Project and community needs and values, which was advertised and distributed through various mechanisms including local media, Project information sheets and on Synergy's website. A paper version of the survey was also made available at the Shire office. *The survey was made available between mid-April to late May 2025, with six community members completing the survey.*
Information sheets	Digital and hard copy Project information sheets were developed to communicate key Project updates and opportunities to participate. Information sheets included maps and other visual aids and illustrations to show the Project location, components, appearance, and processes. *Information sheets were distributed via mail and email by SynergyRED to residents and business within the Carnamah LGA, Warradarge, Three Springs, Arrowsmith East and Kadathinni, local media and online*.

Source: Umwelt, 2025

Table 2.2 outlines the engagement mechanisms by consulted stakeholder group, as well as the total number of stakeholders consulted per group.

Table 2.2 Stakeholders Consulted

Stakeholder Group	Mechanism	Number Contacted	Number Consulted
Traditional Owner	Virtual meeting	2	1
Host Landholders/ Neighbouring Landholders	Phone interview/ face-to-face meeting	10	7
Local Government	Virtual meeting / face-to-face meeting	3	3
State Government	Virtual meeting	3	2
Community Members	Online survey Pop-up stall Phone interview	14	14
Community and Special Interest Groups	Face-to-face meeting	9	3

Stakeholder Group	Mechanism	Number Contacted	Number Consulted
Business and Industry	Virtual meeting / face-to-face meeting	2	2
Local Businesses	Face-to-face meeting	7	6
Health & Emergency	Virtual meeting / phone interview	9	4
Service Providers	Virtual meeting	3	1
Education Providers	Face-to-face meeting/ virtual meeting	4	2
Tourism and Accommodation	Phone interview Online survey/ phone interview/ face-to-face meeting	37	11
Local Media Providers	-	1	0
	Total	104	56

Quantitative and qualitative information collected through consultation activities has been analysed to inform the identification and evaluation of social impacts associated with the Project, as outlined in **Section 4.0**.

2.4.3 Social Impact Evaluation and Management

The SIA has used data from a range of sources to identify and develop a layered picture of the potential social impacts arising from the Project. These are based on consideration of the social baseline, community consultation, social research and technical knowledge relating to social impacts of development.

Each Project activity is assessed by its potential impacts on people, through consideration of whether previous investigation of the impact has been undertaken, the potential for cumulative impacts, and the consideration of possible mitigation or enhancement measures to reduce negative impacts and enhance positive impacts.

To prioritise the identified social impacts, a risk-based framework has been adopted. In this regard, stakeholder perception of impact is considered an independent and no less valid component of risk; with stakeholder perceptions often varying between individuals and groups. For assessment purposes, the most common, or what is judged to be the general perception/sentiment of a stakeholder group has been used as a measure of perceived stakeholder risk or impact, as determined through consultation.

The integration of the outcomes of technical ranking (severity/scale) with stakeholder perceived ranking of impacts (intensity or importance), thus affords a true integration of expert and local knowledge in SIA and enables both types of risk to be addressed in the development of impact mitigation, amelioration, and enhancement strategies.

Prioritising impacts in this integrated manner ensures that appropriate assessment and mitigation strategies can be developed that not only address impacts that may require more technical management, but also those impacts that are perceived by stakeholders as of high importance/concern. These perceived concerns are just as important to manage as they have the potential to result in elevated levels of community concerns, complaints and grievances if not addressed appropriately.

The social significance matrix used to evaluate social impacts (refer to **Figure 2.7**) considers both the magnitude of the potential social impact (Minimal, Minor, Moderate, Major and Transformational) and the likelihood of the impact occurring (Very unlikely, Unlikely, Possible, Likely and Almost certain) to determine an overall evaluation of impact as 'Low', 'Medium', 'High' or 'Very High'.

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

Figure 2.7 Social Significance Matrix

Source: (DPHI, 2023)

Table 2.3 and **Table 2.4** contain further details regarding how magnitude and likelihood are determined. Proposed mitigation and enhancement strategies are also considered in determining the residual social impact (i.e. the impact significance after any mitigation or enhancement measures have been implemented).

Table 2.3 Defining Magnitude Levels of Social Impact

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

Source: (DPHI, 2023)

Table 2.4 Defining Likelihood Levels for Social Impacts

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

Source: (DPHI, 2023)

In impact evaluation, both positive and negative impacts are considered, with slight adjustments made to the approach to reflect positive impacts e.g., level of concern becomes level of interest, severity becomes scale of improvement or benefit, sensitivity becomes importance of the improvement or benefit and the equity of its distribution, etc.

Section 4.0 describes the potential social impacts associated with the Project and provides an evaluation of the significance of each impact. The assessment is undertaken using the criteria noted above and through the application of the consequence and likelihood framework, as identified in the SIA Guideline, and summarised in **Figure 2.8.**

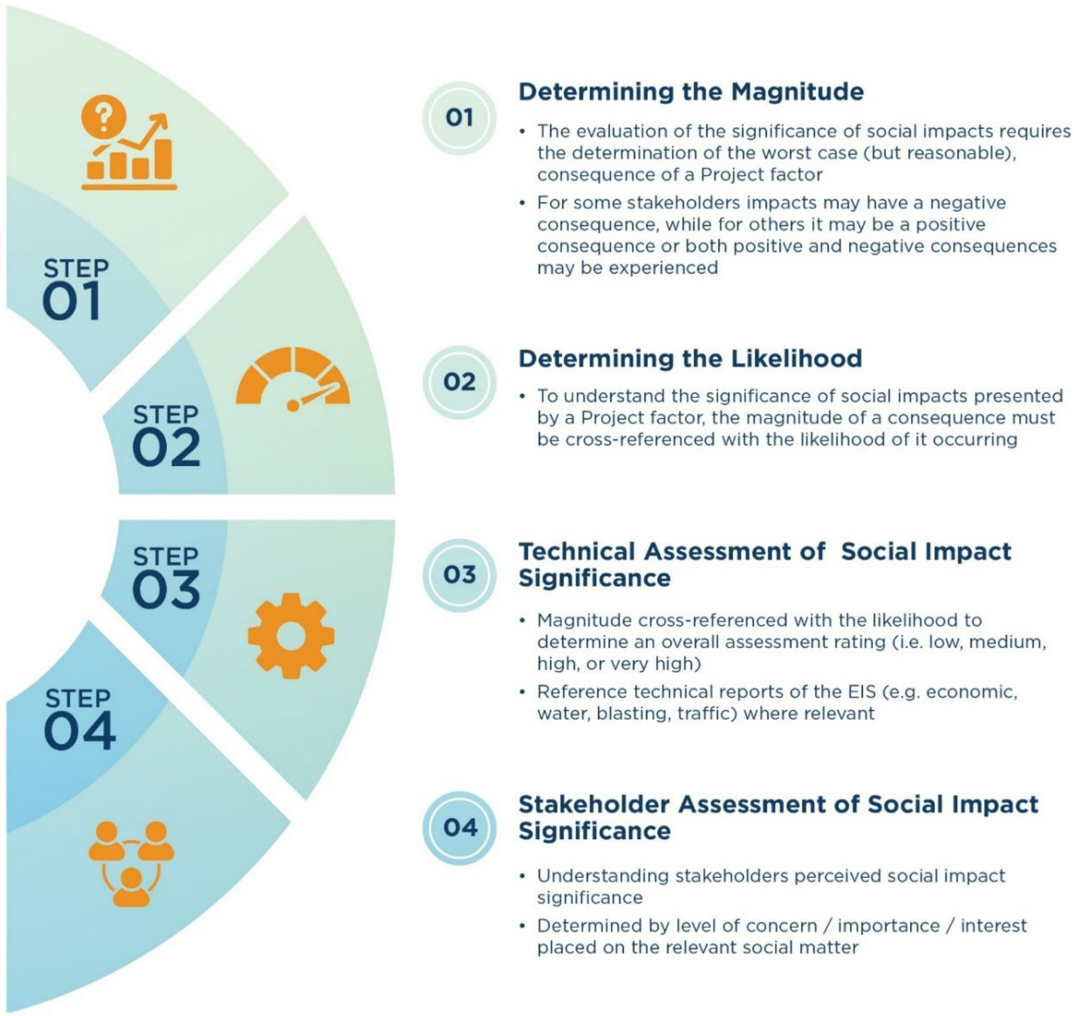


Figure 2.8 Social Impact Evaluation Process

Source: Umwelt, 2025

2.5 Study Assumptions and Limitations

The following points identify limitations of the SIA, that may affect assessment outcomes:

- Elements of the SIA have been developed based on knowledge and information collected from secondary data sources and community consultation. It is assumed that secondary data sources contain valid, representative data and have not misconstrued information.

- Umwelt has been involved in consultation activities specifically to inform the SIA since April 2025 with SynergyRED leading community consultation with host and neighbouring landholders and the broader community prior to this time. Feedback and outcomes from previous consultation completed by SynergyRED were provided to the SIA team for review and consideration in preparation of the SIA. It should be noted that Umwelt has not engaged with all proximal landholders for the purposes of the SIA.
- The views of the community stakeholders represented throughout the report are based on the sample of community members and stakeholders consulted as outlined in **Section 2.4** and do not represent the views of the entire community.
- Not all stakeholders contacted have been successfully consulted for the purposes of informing the assessment due to either a lack of stakeholder interest in participating, and/or an inability to contact certain stakeholders, e.g. no response to calls and emails.
- The solar and BESS components of the Project were not specifically included in the initial round of SIA focused stakeholder engagement. To address this, Umwelt conducted a second round of consultation with key stakeholders in July 2025, involving landholders, local government representatives and health and emergency service providers; however, broader stakeholder and community feedback on these elements remains limited. Umwelt has therefore also drawn on insights from previous projects and relevant research to identify potential concerns associated with solar and battery infrastructure.
- Publicly available sourced datasets contained within the SIA were current at the time of writing.

3.0 Social Locality and Baseline

This section defines the social locality and relevant social baseline context for the Project, including consideration of the social and economic and natural and physical attributes of the locality. As previously noted, the social baseline provides a foundation from which social impacts relating to a project can be predicted.

3.1 Defining the Project's Social Locality

The social baseline has been compiled based on the Project's social locality. As explained in **Section 2.3.1**, a social locality is defined as the area considered to be impacted by a Project, based on a range of tangible and intangible impacts (DPHI, 2023).

The social locality has been defined to reflect a variety of geographies and communities of interest where social impacts may be experienced because of the Project.

Statistical areas prescribed by the Australian Bureau of Statistics (ABS), land uses and transport routes, and the land tenure composition of properties in, or nearby the Project Area have also been used to determine the social locality.

The social locality is outlined in **Table 3.1** and is represented visually in **Figure 3.1.**

Table 3.1 Social Locality Justification

Aspect	ABS Data Boundary	Locations	Reason for Inclusion
Local impacted communities			
Host Landholders	NA	Nine (9) host landholders within the Project area	Host landholders – by virtue of having Project infrastructure directly located on their properties – are likely to experience both positive and negative impacts associated with the Project. These include impacts to their immediate surroundings as well as benefits from any host landholder agreements with the Project proponent.
Proximal neighbours	NA	Approximately 14 landholders adjacent to, but not within, the Project area within a 4 km radius	Neighbouring landholders are included due to sharing a property boundary with the Project area. As such, these neighbours are most likely to experience amenity changes associated with the Project due to changes in their surroundings. Landholders may experience both negative and positive impacts associated with the Project. These include increases in traffic and impacts to their surroundings, as well as benefits from any neighbour agreements with the Project proponent.
Closest locality	Suburb and Locality (SAL)	Eneabba (142[1])	Eneabba is the closest township to the Project area, being located 25 km west of the Project. Due to its proximity, it is likely to experience both positive and negative impacts associated with the Project. The town may also provide services to the Project.
Native Title Boundary			
Native Title Area	NA	Yamatji Native Title Boundary	The Yamatji Nation are the Traditional Owners of the region. The Yamatji native boundary traverses the Project area.
Transport Route			
Roads intersecting the Project area	NA	Carnamah-Eneabba Rd	Carnamah-Eneabba Rd is the main road bisecting the Project area, located in its northern half running east-west. The road also contains entrances to Tathra National Park. The Project may impact users of this road and visitors to Tathra

[1] The number following the locality indicates the population,

Aspect	ABS Data Boundary	Locations	Reason for Inclusion
			National Park in terms of increased traffic and/or road closures during construction.
Likely transport routes and landholders along these routes		Metropolitan roads, including Tonkin Hwy	
Broader community, labour pool, service centres and economy			
Locally adjacent communities (within approximately 30 minute drive from the Project area)	SAL	Carnamah SAL (407) ~45 km[2] Three Springs SAL (356) ~44 km Kadathinni SAL (36) ~25 km Arrowsmith East SAL (61) ~27 km Warradarge SAL (66) ~28 km Leeman SAL (351) ~47 km Coorow SAL (179) ~55 km	These localities are included due to their physical proximity to the Project and potential to provide services or accommodation to support the Project. Given their proximity, these localities may experience impacts associated with the Project. Given the small population sizes for these adjacent localities, data collected on these communities from datasets such as the ABS Census will likely be subject to data randomisation due to privacy reasons. Therefore, this should be taken into consideration for the social baseline in **Section 3.4.** Carnamah is the main townships within the host LGA, the Shire of Carnamah.
Host LGA	LGA	Carnamah LGA (552)	As the host LGA for the Project, residents in Carnamah LGA are likely to experience the most (positive and negative) social impacts due to the Project, including potential impacts on way of life, livelihoods, surroundings, etc.
Adjacent LGAs	LGA	Coorow LGA (1,055) Three Springs LGA (575)	As neighbouring LGAs for the Project, residents in Coorow and Three Springs LGAs are also likely to experience social impacts due to the Project, for example potential impacts on livelihoods (potential to provide employment opportunities).

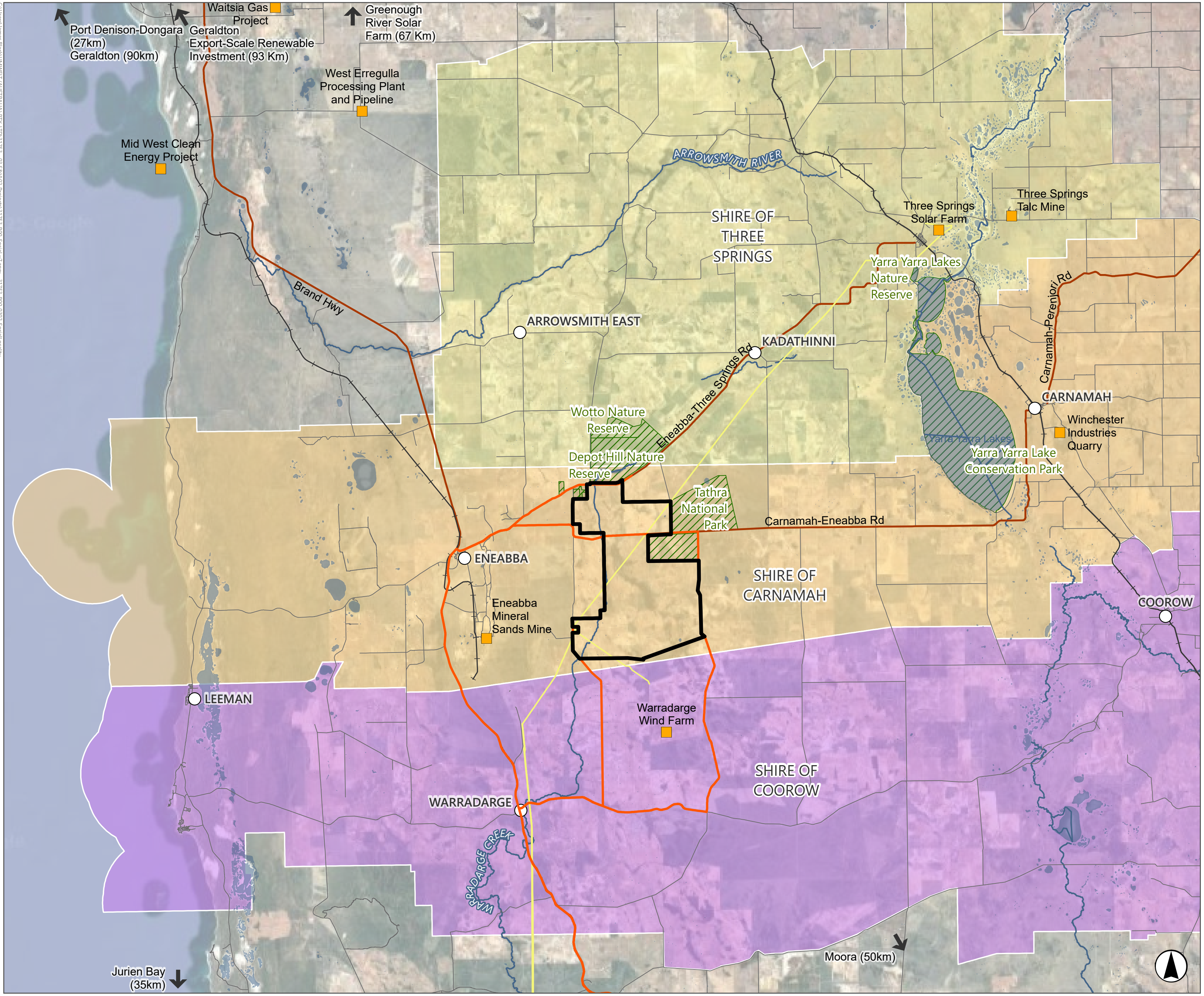
[2] Approximate straight-line distances between the Project and the localities

Aspect	ABS Data Boundary	Locations	Reason for Inclusion
			The host LGA of Carnamah has established partnerships with the Shires of Coorow and Three Springs to ensure medical services are available to the townships of Carnamah and Eneabba (Shire of Carnamah , 2023).
Regional LGAs	LGA	Irwin LGA (3,680) ~20 km Dandaragan LGA (3,355) ~45 km Moora LGA (2,292) ~50 km	Given their proximity, these LGAs may provide employment and accommodation for the Project and therefore have been considered in the social baseline where relevant.
		Greater Geraldton LGA (39,489) ~141 km	Given the remote location of the proposed Project, Geraldton is the closest primary order settlement and is approximately a 1.5 hour drive from the Shire of Carnamah (approximately 165 km via the Brand Hwy). It is the nearest regional city to the Project area and due to Greater Geraldton LGA's population size, this locality is likely to serve as a higher-order township with a greater density of businesses and employees the Project can draw upon, whilst also providing services for incoming Project workforce.
Proximal larger population centres (within 1.5 hour drive)	SAL / UCL	Jurien Bay SAL (1,985) ~67 km Moora SAL (1,755) ~106 km Port Denison – Dongara Urban Centre and Locality (UCL) (2,841) ~80 km	Jurien Bay SAL, Port Denison – Dongara UCL and Moora SAL are included due to their physical proximity to the Project and therefore have potential to provide services to the Project workforce, including accommodation services.
Mid West Region	SA3	Mid-West SA3 (54,981)	This boundary has been utilised to provide a broader understanding of the region and as a comparison point. In cases where SAL or LGA level is not available, this boundary has been used to provide data for the baseline.

Aspect	ABS Data Boundary	Locations	Reason for Inclusion
Natural Features		Tathra National Park Wotto Nature Reserve White Gums Nature Reserve Depot Hill Nature Reserve Yarra Yarra Lakes	Key natural features and areas within the social locality that are likely to be valued by both its residents and visitors to the area. Impacts to viewing points from Tathra National Park should be considered.
Proximal projects	NA	Refer to **Figure 3.1**	Several proximal projects have been identified including many large-scale projects, with these Projects having the potential to contribute to cumulative impact, either exacerbating or enhancing the impact of the Tathra Wind Farm. These projects may also affect perceptions of renewable energy projects in the locality.

Source: Umwelt, 2025

FIGURE 3.1
Social Locality



Legend

- Populated Place
- Proximal Projects
- Minor Road
- Major Road
- Railway
- Watercourse
- Existing Transmission Line
- Transport Route
- Project Area
- Waterbody
- National Parks / Nature Reserves

Local Government Area

- Shire of Carnamah
- Shire of Coorow
- Shire of Three Springs

0 10 20

Kilometres

Scale 1:550,000 at A4
GDA2020 MGA Zone 50

Image Source: ESRI Basemap (2021) | **Data Source:** Landgate (2023), Umwelt (2023), MRL (2023)

3.2 Local Project Setting

As noted in **Section 1.1**, the Project is located approximately 15 km east of Eneabba and 240 km north of Perth. The Project is situated within the Shire of Carnamah LGA. The Carnamah LGA covers an area of 2,000 km^2 and is located 300 km north of Perth and 180 km South of Geraldton

The LGA is predominantly occupied by agricultural land with mixed farming operations being a significant part of the local economy. The area is known for its grain production, particularly wheat, and also supports livestock farming. There are efforts to diversify land use, including promoting rural industries and sustainable practices (Shire of Carnamah, 2014). The natural beauty of the area, especially during the wildflower season, attracts visitors and boosts the local tourism industry.

The township of Eneabba within the Shire of Carnamah is also known for its rich natural landscapes, particularly its wildflower displays in the spring. The area is surrounded by national heritage reserves and is a popular destination for nature lovers, bird watchers, and wildflower enthusiasts (Tourism Western Australia, 2024). The economy of Eneabba is primarily driven by agriculture and mining.

Eneabba also has a rich cultural heritage, with historical ties to both Indigenous and European heritage. The area is part of the Yamatji Nation, and the Yamatji Nation Indigenous Land Use Agreement covers a significant portion of the Mid West region (Government of Western Australia , 2024). This agreement acknowledges the Traditional Owners and their connection to the land, promoting cultural preservation and economic opportunities for Indigenous communities. The Yamatji Marlpa Aboriginal Corporation (YMAC) is the Native Title Representative Body for the Yamatji and Pilbara regions of WA (YMAC, 2023).

3.3 Development Context

This section draws on several data sources to build an understanding of the relevant development context for the Project including at the State and Local Government policy level and also the social locality in which the Project is based. This includes an overview of the regional development drivers, existing conditions, trends, opportunities and challenges.

3.3.1 WA Energy Policy and Related Guidance

Western Australia is actively transitioning towards a more sustainable and low-carbon energy future, and has invested over $700 million to power the renewable energy boom (Government of Western Australia, 2023)

Key highlights of WA's energy policy and associated commitments, particularly with regards to renewable energy include:

- **Energy Transformation Strategy** launched by the WA Government in 2019 to ensure secure, reliable, sustainable, and affordable electricity and to make provision for significant investments in energy storage, wind generation, and transmission network upgrades with Stage 2 released in 2021 for the period 2021–2025.
- **Closure of Coal-Fired Power Stations**: In 2022, the WA State Government publicly made the commitment to retire all State-owned coal fired power stations by 2030 and replace them with renewable electricity generation and storage, committing to a $3.8 billion of new investment in renewable energy infrastructure, including new wind and energy storage projects.

- **The SWIS Demand Assessment** was announced on 24 August 2022 with the results publicly released on 9 May 2023. The Assessment was delivered by a Treasury-led Taskforce, comprised of membership from a number of State Government Departments and determined that the SWIS may need around an additional 4,000 km of new transmission lines and around 50 GW of new renewable electricity and storage infrastructure to support increased demand over the next 20 years (Government of Western Australia , 2025).
- **Renewable Energy Transformation Agreement**: In July 2024, the Western Australian Government formally set renewable energy targets as part of an Agreement with the Australian Commonwealth Government which included provision for the generation of an additional 6.5 Terrawatt-hours (TWh) of renewable energy by 2032 (Australian Government , 2024).
- **Infrastructure and Investment:** The Government has committed over $3.8 billion to support the energy transition. This includes upgrading the electricity network, attracting large-scale clean industries, and funding new energy industries (Commonwealth of Australia, 2024).
- **Draft Guideline on Community Benefits for Renewable Energy Projects**: In June 2025 the WA Government released the draft guideline which outlines a framework for ensuring community benefits from renewable energy projects in Western Australia (Government of Western Australia , 2025). The. According to the draft guideline community benefits should aim to create a lasting positive impact and legacy for the host area. These benefits should extend beyond landholders to the broader community, bringing economic and social advantages.
- **Renewable Energy Community Benefits and Engagement Guide**: In July 2025, the Western Australian Local Government Association (WALGA) released a framework to support Western Australian local governments in navigating the challenges and opportunities associated with large-scale renewable energy developments. Recognising the limited statutory powers of local councils, the guideline emphasises proactive engagement with developers and communities to secure lasting local benefits. It outlines best practices for community consultation, policy development, and negotiation of benefit-sharing arrangements. The guide also includes practical tools such as templates for project tracking, communications planning, and community benefit scheme design, aiming to foster transparent, inclusive, and locally responsive approaches to renewable energy transition (WALGA, 2025).

3.3.2 Regional and Local Policy

The *Mid West Regional Planning and Infrastructure Framework* notes that there is a substantial increase in energy demand across the Mid West, with the region having abundance energy resources such as solar, wind and geothermal (Western Australian Planning Commission, 2015). According to the *Mid West Regional Blueprint,* the Mid West Region currently produces 30% of WA's renewable energy. The blueprint identifies five key pillars to drive regional growth and development to 2050, of which 'Physical Infrastructure' is one. This pillar includes an 'Energy' element, with the aim of developing renewable energy as a key industry and to "become a national leader in renewable and remote energy solutions".

The Mid West region of WA is experiencing a surge in green hydrogen projects, driven by its abundant renewable energy resources. Carnamah is actively involved in this boom, with local governments, including the Shire of Carnamah, hoping these projects will help reverse population decline and boost the local economy. Additionally, the State Government has been reviewing numerous proposals for developing a renewable hydrogen production and export precinct at Oakajee. In October 2022, BP was allocated land at Oakajee by the WA Government to support its ambitions of developing a multiproduct renewable hydrogen industrial hub (BP, 2022). Such initiatives are expected to create jobs, support local businesses, and meet the growing international demand for green hydrogen, particularly from countries such as Japan and South Korea (ABC News, 2021).

The WA Government plans to enable significant energy generation projects in the Mid West region of WA (Western Power, 2023). Specifically, the WA Government has made a commitment to invest up to $117.5 million to attract federal funding for renewable energy hubs in the Mid-West and Pilbara regions. In the Mid West region, the State Government has proposed the development of the Mid West Hydrogen Hub (Government of Western Australia, 2021).

From a locally policy context, in April 2024 the Shire of Carnamah released the *Draft Local Planning Policy - Wind Farms/Turbines* for public comment. This was still draft in form as of the time of writing this SIA (July 2025). The purpose of the policy is to reduce negative impacts of wind farms on environmental, cultural and landscape values. It also encourages developers to engage with local community and stakeholders, as well as establishment of a Community Enhancement Fund to support local initiatives (Shire of Carnamah, 2024).

3.3.3 Project Development in the Region

A number of renewable energy and mining projects currently operate in the Mid West Region with several more in planning and development. Key developments within the region are summarised in **Appendix B.**

Cumulative social impacts may occur if construction periods of other and nearby major projects overlap with the construction period of the proposed development and consequently may present significant challenges in relation to access to housing, accommodation, and social infrastructure. In contrast, overlapping projects may create opportunities to build a pipeline of projects that encourage skilled workers (and their families) to move/relocate to the area, either permanently or in the medium-term, given project continuity. Other major projects which are already operational may impact the Project in terms of procuring local skills and workforce, or in the community's perception of the Project if, for example, the Project is seen to be contributing to increasing industrialisation of the landscape.

3.4 Community Capitals Analysis

As discussed in **Section 2.3.1**, to understand the communities of interest to the Project and to evaluate their resilience and adaptive capacity to change, a Sustainable Livelihoods or Community Capitals Approach (DFID, 1999) has been adopted. This includes an analysis of the seven community capitals. Each of these as relevant to the proposed Project have been discussed in the following sections.

3.4.1 Political Capital

Political capital refers to the individuals, institutions, and systems that contribute to a community's ability to maintain and uphold a governance structure. Political capital can determine the extent to which people are able to participate in decisions that affect their lives, the level of democratisation within a community, and the resources provided for this purpose. A summary of the political capital relating to the social locality is provided in **Table 3.2.**

Table 3.2 Political Capital Summary

Indicator	Description
Federal Government	The Project is located within the Australian electoral division of Durack, which is one of the largest political electorates in the world at 1.5 million hectares (Smith, 2019). The electorate is represented by the Liberal Party after Melissa Price was re-elected in 2025. Price has retained her seat since 2013, and her re-election in 2025 was secured by a 60.2% preference count, securing her fifth term (Green A. , 2025). Price has publicly spoken out about her reservations regarding Labour's renewable-only approach, advocating for zero-emissions nuclear energy in Australia, alongside renewable and gas to reduce energy prices and emissions (Price, 2024). It has also been noted that Price comes from a long history of employment in the mining sector, which aligns with the economic roots of the electorate (Smith, 2019). She has previously been involved in controversy, in her role as minister for the environment, regarding her approvals of projects such as the Adani groundwater plan and a uranium mine in WA, with members of the community expressing concerns that these decisions were rushed and not fully supported by technical assessments (Smith, 2019).
State Government	The Project is within the State electoral district of Moore, which is represented by the Leader of the Nationals WA party, MP Shane Love, who has held this seat since 2013. Love's re-election in 2021 was secured by a 58.5% preference count and was considered a very safe seat for the National Party, (Green A. , 2021). Prior to 2013, Love is also a Board member of the Wheatbelt Development Commission (NationalsWA, 2023). Love has previously shown support for other renewable energy developments within the district of Moore, including the APA Group's Badgingarra Wind Farm, one of the largest green energy initiatives in WA (Utility Magazine, 2019).
Local Government	The Carnamah LGA is governed by the Shire of Carnamah Council consisting of seven councillors, including its president, Merle Isbister, and deputy president Dwayne Wooltorton. President Isbister is a strong advocate for community consultation and believes in the values of interactive communication to facilitate decision making (Shire of Carnamah , 2023). The LGA of Three Springs is governed by the Shire Council consisting of seven councillors, including its President and Duty President. During engagement for the SIA, the Shire of Three Springs indicated a high level of support for renewable energy developments.
Aboriginal Governance	People of the Yamatji Nation are the Traditional Owners whose Country the Project is located within. The Yamatji Nation is represented by the Yamatji Southern Regional Corporation (YSRC). YSRC was established to provide governance and to implement Indigenous Land Use Agreement (ILUA) benefits package, that resulted from a negotiated settlement between the Western Australian Government and the Hutt River, Mullewa Wadjari, Southern Yamatji and Widi Mob claim groups. The YSRC Group is made up of YSRC and its 3 Entities (Yamatji Enterprises Limited (YEL); Yamatji Funds Management Limited (YFML); Bundi Yamatji Aboriginal Corporation (BYAC). The ILUA (Tribunal ID: WI2020/002) has been established encompassing 48,000 km^2 of the State's mid-west region (Government of Western Australia, 2021). This area extends to the North beyond Geraldton, intersecting with the Shire of Northampton and as far south as the Shire of Carnamah. The agreement was

Indicator	Description
	executed on the 9th of February 2020, when the Federal Court also determined that the Yamatji Nation holds non-exclusive native title rights and interests over a number of parcels of land (comprising 0.57% of the ILUA area) within the Agreement area, including some within the Shire of Carnamah. **Figure 3.2** shows the extent and details of the Yamatji ILUA area The ILUA is designed to support sustainable economic independence and self-determination for current and future generations of Yamatji People. The Yamatji Southern Regional Corporation (YSRC) sets the strategic direction of the Yamatji Nation, and the Bundi Yamatji Aboriginal Corporation is the Prescribed Body Corporate that will hold the native title rights and represent the interests for the Yamatji People. The agreement stipulates that consultation should be undertaken with Yamatji people regarding activities undertaken on their Country, particularly when there is a likelihood that Aboriginal heritage will be impacted.
Community mobilisation and public participation	The Shire of Carnamah councillors have their Council meetings every third Wednesday of each month, held at the Carnamah Council Chambers, located at 33-37 Macpherson Street, Carnamah. These meetings are open to the public for attendance, with a re-occurring public questions item in the meeting agenda. The public is encouraged to submit questions prior to meetings using the Public Question Time Form on the Council's website (Shire of Carnamah, n.d.). The meetings are typically held at 4pm. Given these meetings take place during standard working hours, public participation may be limited. However, there are various other methods for the community to contact council, including over the phone, online, by email and/or by post. Three Springs Shire Council has Council Chambers at 132 Railway Road, three Springs, and Council Meetings are held at this venue. Council meetings occur on the fourth Wednesday of each month from 5:30pm in which members of the public are welcome to both attend and participate (Three Springs Shire Council, n.d.). The Shire of Coorow hold Council Meetings on the third Wednesday of each month at 5pm in which members of the public are welcome to both attend and participate. The meeting venue rotates and can be available on the Council's website (Shire of Coorow, n.d.). A petition was created in 2018, which received over 5,661 signatures to 'make renewable energy generation a high priority for Australia government' calling out decision making such as Melissa Price (electorate for Durack, including Shires of Carnamah, Three Springs and Coorow) and the Prime Minister at the time (Scott Morrison) and the Australian Liberal Party. The petition sought to debunk myths associated with renewable energy around cost and reliability (Change.org, 2018).

Source: Umwelt, 2025

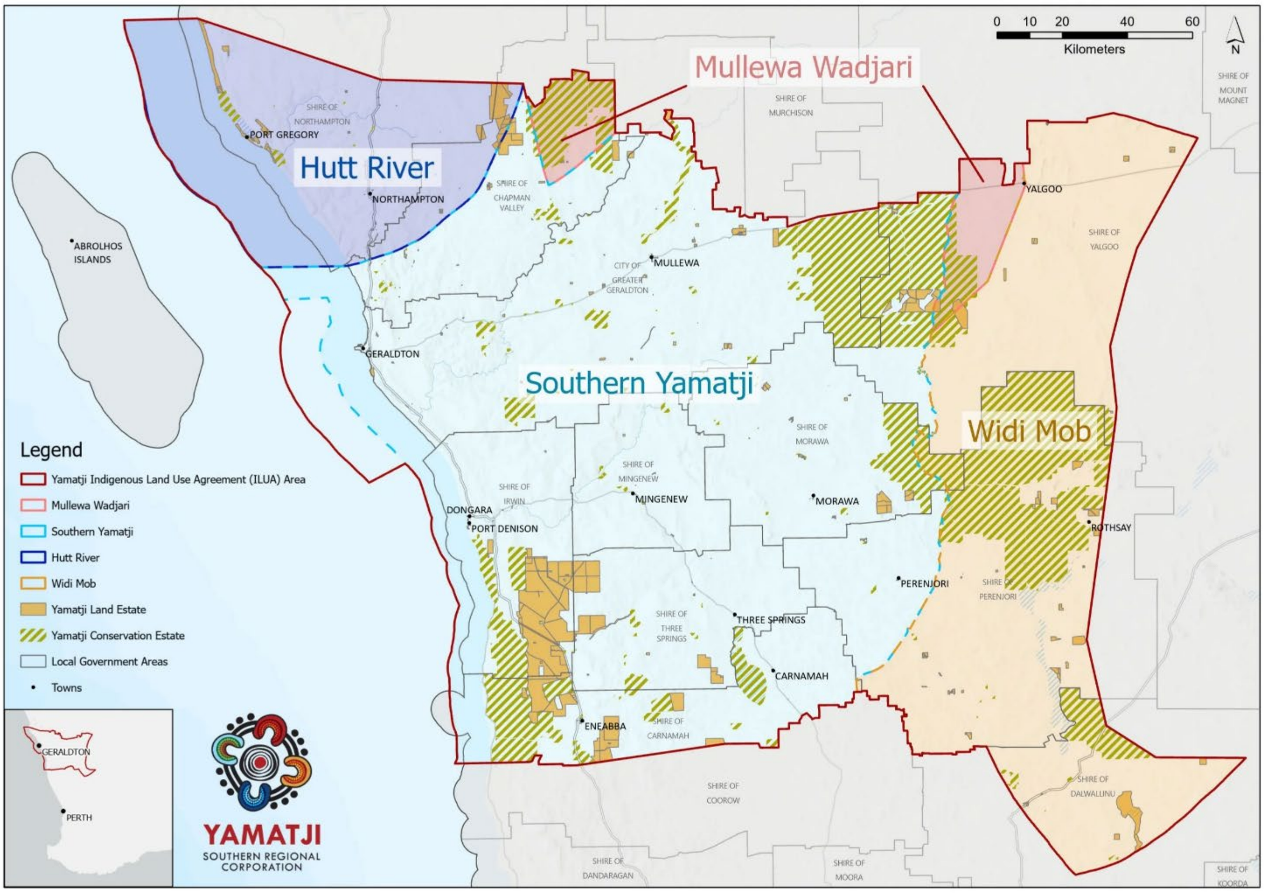


Figure 3.2 Yamatji ILUA Area

Source: (YSRC, 2025)

3.4.2 Cultural Capital

Cultural capital refers to underlying factors that provide human societies with the means and adaptions to maintain themselves in their environment (Cochrane, 2006). It includes the way people know and understand their place within the world. It may also refer to the extent to which the local culture, traditions, or language, may promote or hinder wellbeing, social inclusion, and development (IAIA, 2015). **Table 3.3** provides a summary of the key characteristics of the social locality from a cultural capital perspective.

Table 3.3 Cultural Capital Summary

Key Takeaways	Description
Rich Aboriginal Cultural Heritage and language groups	Yamatji people have lived in the area for over 30,000 years and continue to retain strong connections to country, sky and water. There are currently two registered and four lodged Aboriginal cultural heritage places within the Shire of Carnamah. Undoubtedly there exists further Aboriginal cultural heritage places within the area that are yet to be recorded and submitted to the Department of Planning, Lands and Heritage, as only a small portion of the Shire of Carnamah has been subject of Aboriginal cultural heritage investigations. The Aboriginal cultural heritage places that are shown on the Aboriginal Cultural Heritage Inquiry System represent places of ceremonial and sacred significance, as well as including places that are sites comprising cultural material.

Key Takeaways	Description
A long European history	Eneabba's European heritage dates back to early explorations and settlements in the region. The first European visit was in 1839 by George Grey's expedition, which named the Arrowsmith River. Subsequent explorers, including Augustus and Francis Gregory, camped in the area in 1846. The first European settler, William Horsley Rowland, arrived in 1870 and established a homestead at Eneabba Springs. The area was later developed for agriculture in the 1950s, leading to the establishment of the town in 1961 (Aussie Towns, 2024). The first European settlers of Carnamah were Duncan Macpherson and the Nairn family. Duncan Macpherson took up pastoral leases in 1861 and established Carnamah Station, which eventually grew to over 120,000 acres (Carnamah Historical Society and Musuem , 2022). The Nairn family established Noolooloo Station around the same time Carnamah rick European heritage is highlighted by numerous heritage-listed sites. An example is the Macpherson Homestead, established in 1870 and listed on the State Register of Heritage Places. Other significant heritage sites include St Andrew's Church, the Carnamah Post Office, and the Carnamah Shire Hall (Government of Western Australia, 2024). These landmarks illustrate the town's evolution from a rural settlement to a vibrant community, preserving its historical architecture and cultural significance.
A proud history of agriculture	The Shire of Carnamah takes great pride in its agricultural heritage and contributions. There is a tractor replica on Yarra Street in Carnamah to celebrate the first tractor manufactured in WA in 1949. The Chamberlain 40K tractor played a significant role in the development of Western Australia's agricultural industry and the momentum is a celebration of this heritage. The monument is 11.5 m high and was funded by private and corporate donations (Carnamah Visitor Information, 2017). The is also a tractor Museum in Carnamah, with over 60 vintage restored tractors. Additionally, there is a local museum which contains objects, photos and documents from the communities social, domestic, commercial and agricultural past and also features tractors.
Limited cultural diversity across the social locality	In Carnamah LGA, 69.9% of residents were born in Australia which is slightly higher than the state level at 62%. The most common birth places other than Australia were England at 5.1% followed by New Zealand at 2.5%. Additionally, a high proportion of the population speak only English at home in the LGA at 80.1%, compared to the state average at 75.3%. The most common languages spoken at home other than English in Carnamah LGA is Wangkatha (an Australian Aboriginal language at 0.9% of the population, represented by 5 people), and Spanish (at 0.5%, represented by 3 people, compared to the state average of 0.5%).

Source: Umwelt, 2024

3.4.3 Natural Capital

Natural capital refers to natural assets and resources that contribute to community strength and sustainability. Natural capital can include use of resources such as minerals, productive agricultural soil, presence of oil and gas and forests which provide commercial and practical benefit to the community. Natural capital can also include other environmental assets which generate tourism or provide other social, cultural, and recreational value, such as national parks or lakes. **Table 3.4** provides a summary of the key characteristics of the social locality from a natural capital perspective.

Table 3.4 Natural Capital Summary

Key Takeaways	Description
Diverse natural landscape with high conservation and cultural value	The Mid-West Region is one of the largest fishing, and agricultural and pastoral regions in WA, spanning across approximately 295,000 km^2. The region is also one of only five areas in the world with both marine and terrestrial biodiversity hotspots of national or international significance. National Parks and Nature reserves are listed in **Table 3.5**, for the Project's host LGA of Carnamah and adjacent Shires. The Wotto Nature Reserve and the White Gum Nature Reserve form part of the Yamatji Conservation Estate. The Conservation Estate is jointly managed by the Department of Biodiversity, Conservation and Attractions (DBCA) and the YSRC. Joint management allows for the merging of traditional knowledge and contemporary land management practices to improve reserve management and restoration (DBCA, n.d.).
Region known for nature-based tourism	Key tourism attractions in the region include an extensive parks system, the Houtman Abrolhos (Abrolhos Islands National Park), CSIRO's Murchison Radio-astronomy Observatory, and the Country and Coastal townships in the area. Wildflowers of the North Midlands and natural attractions of Kalbarri and Dongara-Port Denison are currently the region's major attractions with an average of 729,000 day-trip and overnight visitors annually to the Mid West, mostly during holiday periods and autumn to spring (Mid West Development Commission, 2014). Bird-watchers are also attracted to the Shire to spot over 100 species of birds at Beekeeper's Reserve and Lesueur National Park. There is potential for developments such as the Project to be met with opposition from local environmental and/or tourism groups due to their potential to detract from the natural landscape and surroundings.
Tathra National Park as a tourism hotspot in Eneabba	Tourism is an emerging industry in the Shire of Carnamah, with the Shire being one of the richest areas in WA for wildflowers (Shire of Carnamah, 2023). Eneabba is located in the heart of spring wildflower country, with Tathra National Park being a hotspot between August and December. Although there are no facilities within the Tathra National Park it is known for its diversity of flora and varying landscapes from sandplains to rocky breakaways. The Amangu people (one of the groups within the Yamatji Nation) are recognised as the Traditional Owners of Tathra National Park (Government of Western Australia, n.d.). Tourists can visit Tathra National Park in Eneabba from Perth either via the Indian Ocean Drive along the coast or further inland via the Brand Highway to enjoy the coast and wildflower landscapes of WA (Tourism Western Australia, n.d.).
Lakes as popular recreation and tourism locations	The Lakes within the Shire of Carnamah are key attractions, with Lake Indoon in Eneabba being a popular spot for recreational activities including water skiing, sailing and swimming. The Yarra Yarra Lakes (also known as Mulliah) covers an area of approximately 120 km^2 and changes colour from pink in summer to blue in the colder months (Tourism Western Australia, n.d.). The lakes' lookout point is noted as a key destination for astro-tourism due to the vivid display of stars seen at the location (Carnamah - Vistor Information, n.d.).

Source: Umwelt, 2024

Table 3.5 National Parks and Nature Reserves

Local Government Area	National Park(s)	Nature Reserve(s)
Shire of Carnamah (Project host LGA)	Tathra National Park*	Wotto Nature Reserve* White Gums Nature Reserve* Stockyard Gully Reserve Beekeepers Nature Reserve Yarra Yarra Lake Conservation Park Lake Logue Nature Reserve
Shire of Coorow	Alexander Morrison National Park Lesueur National Park Watheroo National Park	Beekeepers Nature Reserve South Eneabba Nature Reserve Stockyard Gulley Reserve
Shire of Irwin	-	Yardanogo Nature Reserve Beekeepers Nature Reserve
Shire of Three Springs	-	Wilson Nature Reserve

Source: Department of Biodiversity, Conservation and Attractions, 2023
* National Parks and Nature Reserves adjacent to the Project Area

3.4.4 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 vulnerable groups within the community. The social locality has the following key characteristics as outlined in **Table 3.6**.

Table 3.6 Human Capital Summary

Key Takeaways	Description
The social locality is largely characterised by an aging population	The median age in Carnamah LGA is 46, which is notably higher than the state average of 38 years old. Additionally, population projections suggest that the older age group cohorts of 65–74 years and 75–84 years will increase over time, from 90 people in 2016 to 135 people in 2031. An aging population indicates that there will likely be increasing pressure on aged care and medical services in the coming years. Other proximal suburbs to the Project have similar median ages, ranging from 43 years in Carnamah SAL to 57 in Warradarge SAL, with the exception of 37 years in Arrowsmith East SAL. Adjacent Shires of Coorow and Three Springs also consist of an aging populations as noted in their respective strategic plans (Shire of Coorow, 2023; Three Springs Shire Council, 2024) This may have implications on where the workforce is sourced from as well as what services are available for the incoming workforce.

Key Takeaways	Description
Population is projected to decrease	The total population of Carnamah is estimated to decrease from approximately 560 people in 2016 to 410 people in 2031 (Band C)[3], representing an annual average change of -1.76%, and a decrease in the working age population (aged 15–64 years) from 350 (2016) to 205 (2031). A declining and ageing population has been identified as an area of concern for the Shire of Carnamah and its community. During community consultation activities undertaken to support the preparation of the LGA's Strategic Community Plan, the community saw the main challenge for the coming decade as maintaining and growing the population, especially families. The LGA has also noted the need for having an established strategy in place to acknowledge the changing demographics and make provision for accommodation and facilities for an ageing population. Similarly, the populations in Coorow LGA and Three Springs are also anticipated to decline from 1050 people in 2016 to 690 in 2031 (Coorow LGA, Band C) and from 610 people in 2016 to 445 in 2031 (Three Springs LGA, Band C). Economic diversification has been identified as a strategy in both LGAs to reduce continued population decline, along with improving infrastructure, particularly housing and access to key services (Shire of Coorow, 2023; Three Springs Shire Council, 2024).
Slightly higher proportion of Aboriginal and/or Torres Strait Islander residents	The Aboriginal and/or Torres Strait Islander population in Carnamah LGA is 4%, slightly higher than the State average at 3.1%. The median age for this population group is 32, which is much lower than the 'all persons' median age for Carnamah LGA at 46 years. A lower median age amongst population groups is suggestive of lower life expectancy for the ATSI population. Within the social locality, there is a higher proportion of Aboriginal and/or Torres Strait Islander people within the suburbs of Eneabba SAL at 7.7% of the population (equivalent to 11 people) and in Three Springs SAL at 12.1% of the population (equivalent to 43 people).
High rates of vocational qualifications **Low rates of tertiary university qualifications**	Levels of education in the community can be a key determinant of the overall health and wellbeing as well as social cohesion. A well-educated population across all levels of an economy and society are indicators of a more sustainable and resilient community. Levels of education attained for those residing in the Carnamah LGA were at 33% of the population completing Year 12 or equivalent schooling which is much lower than the state average of 56%. Additionally, in the LGA of Carnamah, the proportion of the population that attained a bachelor level degree level or above is 9.5% which is significantly lower than the state average of 23.8%. Also, a bachelor level attainment has marginally declined between 2016 and 2021 (5.3% to 4%). The most common tertiary field of study in Carnamah, Three Spring and Coorow LGA was Engineering and related technologies at 21%, 16% and 24% respectively. This was followed by Agriculture, Environmental and Related Studies, and Management and Commerce (ABS, 2021). As per the Clean Energy Council (2024) relevant tertiary fields of study including engineering and related technologies, and architecture and building can be

[3] The WA Tomorrow Population Forecasts uses population bands labelled A to E to represent different growth scenarios, from bands A- E, with band C reflecting the median growth scenario.

Key Takeaways	Description
	relevant in gaining an understanding of the social locality's capability to provide a local workforce given these are the skillsets required throughout the construction phase. Attainment of Certificate level III qualifications is much higher in Carnamah at 17.5% compared to the state average of 13.9%. The proportion of the population with certificate level attainment is similarly higher in the adjacent LGA of Corrow at 21%, with 26% of the population in the suburb of Leeman SAL, compared to the state average of 17%. In Carnamah LGA, the most common field of study for Certificate level qualifications is in the Agriculture, Forestry and Fishing industry

Key Takeaways	Description
High prevalence of health conditions	The health and wellbeing of communities includes the physical, mental, and spiritual health of its members, and is not just associated with the absence of disease. The sustained health and wellbeing experienced within a population is essential for communities to flourish and achieve their potential. All health indicators are presented in Appendix A. Residents who live within the social locality have higher rates of hospital admissions and emergency department presentation when compared to the state (PHIDU, 2021). The highest rates of hospital admissions are from people living in Coorow LGA at a rate of 48,136 Average Standardised Rate (ASR) per 100,000, which is higher than the state level of 41,196.5 ASR per 100,000. The Shire of Carnamah is located within the Country Western Australia Public Health Network (PHN), one of 31 PHNs established by the Commonwealth Government. The Western Australian Primary Health Alliance manages all three PHNs in Western Australia. The Country Western Australia PHN area is the largest by area in Australia and has a population of about 529,933 people as of 2021. It covers all Western Australia excluding Perth. A 2022-2024 Needs Assessment prepared by the WA Primary Health Alliance (WA Primary Health Alliance, 2024) identifies the following key findings that are indicative of poorer health outcomes for the PHN: • High rates of avoidable deaths, increased lifestyle factors for chronic disease, and a higher prevalence of chronic disease. • High Aboriginal population who experience poor health outcomes. • Staff retention and the cost of travelling vast distances to provide clinical services seen as barriers to the provision of primary care. • Low supply of health workforce and service distribution. Across the three LGAs, there are higher rates of self-reported long-term health conditions compared to the state average. The highest rates are in Coorow LGA, with 30.6% of the population reporting they had one or more long-term health conditions, which is higher than the state average at 26.1% in 2021. Higher rates of long-term health conditions along with hospital admissions and emergency department presentations suggest that poorer health is experienced by residents living in Carnamah, Coorow and Three Springs LGAs, which could suggest that their health facilities are in higher demand and could therefore possibly be vulnerable to becoming strained if an influx of workers were requiring medical services. This could possibly result in longer wait times for visiting General Practitioners (GPs) or being sent to hospitals that are further away if beds aren't available, which could reduce the community's acceptance of the Project.
A higher vulnerability to mental health outcomes	Self-reported mental health conditions, such as depression and anxiety varied across the LGAs with the lowest rates reported in Coorow LGA at 6.2% of the population and the highest at 9.6% of the population in Carnamah LGA, above the State average of 8.3%.

Key Takeaways	Description
Varying SEIFA scores for Index of Education and Occupation (IEO) suggesting a heterogenous workforce	The Socio-Economic Indexes for Areas (SEIFA) Index of Education and Occupation (IEO), prepared by the ABS, reflects the general level of education and occupation-related skills of people within an area, with a value of one indicating low levels of skills, and a value of ten indicating a high level of skill. Scores for each social locality are presented in **Appendix A,** noting that scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs). Carnamah LGA has a score of 4, indicating a lower education and occupation status of people in the area in general. Interestingly there is a wide range of IEO scores for proximal suburbs to the project, with Eneabba SAL scoring 1 and Warradarge SAL scoring 10. The localities with high scores (Kadathinni, Arrowsmith and Warradarge SALs) are likely due to a high proportion of the population with a Bachelor's level qualifications at 11%, 11% and 12% respectively (compared to the state average of 10%), which is a much higher proportion than the other localities.

Source: Umwelt, 2024

3.4.5 Economic Capital

Examining a community's economic capital involves consideration of several indicators, including industry and employment distribution, workforce participation and unemployment, income levels and cost of living pressures, such as weekly rent or mortgage repayments. **Table 3.7** provides a summary of the key characteristics of the communities within the social locality from an economic capital perspective.

Table 3.7 Economic Capital Summary

Key takeaways	Description
Lower median household income	The median weekly total household income for most of the localities is below the state average of $1,815, with $1,234 as the median income across the LGA of Carnamah and $1,350 in Carnamah SAL and $762 in Eneabba SAL. The small community size in Eneabba may be impacting this figure or it could also be related to retirement, as this SAL has an older community. The suburbs of Kadathinni and Arrowsmith East within the Three Springs LGA are the exception at $2,250 and $2,249 respectively compared to the state average.
Main industry of employment is Agriculture, Forestry and Fishing	The Shire of Carnamah considers agriculture (grain and sheep farming) the principal industry of the Shire, acknowledging that Carnamah is one of the largest primary grain receival points[4] in the region (Shire of Carnamah, 2023). Unsurprisingly, as of 2021, most of the workforce across the social locality is employed within the Agriculture, Forestry and Fishing Industry. For some of these communities, employment in this industry was higher than 50% of the workforce, as seen in Warradarge SAL at 57.1%,

[4] A grain receival point is a facility where harvested grain is delivered, stored, and managed before being transported to its next destination, such as processing plants or export terminals.

Key takeaways	Description
	Arrowsmith East SAL at 94.4% and Kadathinni SAL at 100%, compared to the state average of 2.3% of the workforce population. Other Grain Growing and Grain-Sheep or Grain-Beef Cattle Farming were seen as the highest employment sub-categories across the three LGAs. These figures suggest a large farming community which should be taken into consideration when planning ongoing Project engagement to avoid peak seasons. Mining is another key employment industry for the locality, with a higher proportion of the workforce employed in Eneabba SAL at 12.5% and Leeman SAL at 11.2%, compared to the state average of 7.5%.
Economy vulnerable to a changing climate	Climate change has significantly impacted agricultural production in the Mid West region. The region has experienced shifts in temperature, altered rainfall patterns, and an increase in extreme weather events such as droughts and heatwaves. These climatic changes have led to reduced crop yields and increased variability in production (Australian Government, 2022).
Tourism as an emerging industry in the Mid West Region	The *Mid West Regional Tourism Development Strategy* has strong focuses on growing and diversifying the industry over the next 10 years, with a focus on growing capacity and infrastructure, as well as showcasing Aboriginal tourism (Mid West Regional Tourism, 2022). There is currently limited data on the economic impacts of tourism in the social locality, however Tourism Research Australia published a report in 2024, which provides the latest data on the economic contribution of tourism to the Western Australian economy. The report indicated that the Australia's Coral Coast' Region in which the Project is located, had a direct gross value add (GVA) of $409 million in 2022-2023, which was responsible for 4% of the total economy.
Relatively low unemployment rates	As per the 2021 ABS Census data, unemployment at the state level was at 5.1% as of 2021, with Carnamah LGA experiencing lower levels of unemployment at 2.96%. The LGAs of Three Springs and Coorow also had similar rates at 2.20% and 2.82% respectively. As of June 2024, the unemployment rate in Carnamah LGA is 3.2%, which has stayed relatively consistent over the past 2 years (June 2022- June 2024). Similarly, the rate in both Coorow and Three Springs LGA is 3.3% and has had minor fluctuations over the past 2 years (SALM, 2024). Despite previous unemployment rates in the social locality sitting at a similar rate to the state, labour shortages have been noted in the health services sector. The region faces significant challenges in attracting and retaining healthcare professionals, including doctors and nurses. This issue has been persistent and is exacerbated by the region's remote and rural nature (ABC News, 2021).
Lower market diversity, with potential for increased economic diversification	The Herfindahl Index score for Western Australia is 0.0106, suggesting a high degree of economic diversity and market competitiveness. The score of Carnamah and Coorow LGA are similar at 0.0519 and 0.0667 respectively, whereas the score is Three Springs LGA is much higher at 0.1109 suggesting more market concentration and less economic diversity.

Key takeaways	Description
	As previously discussed, a large portion of the workforce in the social locality in Three Springs LGA (Kadathinni and Arrowsmith East SAL) work in the agriculture, forestry and fishing industry, showing a reliance on this sector. Given there is a higher degree of market diversity in the host LGA of Carnamah this suggests that the local community will likely be more economically resilient to any disruptions to the agricultural industry due to the Project. Tathra wind farm also has the potential to increase economic diversity in the social locality.
Median house prices have increased, with stable house sales	The Mid West region of Western Australia is experiencing significant housing shortages, particularly in rental properties. This issue has been exacerbated by a combination of factors including increased demand, limited supply, and rising rents (ABC Midwest, 2020). Median house prices trends have increased steadily in the social locality since 2021 (REIWA, 2025). Jurien Bay continues to have the highest median house prices among all the locations, reflecting its desirability and possibly higher demand. Leeman shows significant sales increases, indicating strong growth in these areas. Although Eneabba and Coorow have the lowest median prices, they still exhibit a steady upward trend, suggesting gradual market improvement. Refer to **Appendix A** for further details on changes in median house prices over time. Despite rising median house prices, the number of annual house sales remain generally stable. Between 2021 and 2024 Coorow has exhibited stable sales, indicating consistent market activity. Conversely, Eneabba, Carnamah, Three Springs, and Port Denison-Dongara show a slight decline in sales, suggesting a decrease in market demand. Leeman demonstrates a slight increase in sales, reflecting growing interest in the area. Jurien Bay, while having the highest sales among all locations, experiences fluctuations, indicating variability in market conditions. Refer to **Appendix A** for further details on changes in housing sales over time. Engagement with local government and key stakeholders in the region revealed that housing affordability is a key issue for the community. The cost to benefit ratio of purchasing housing within the Shire of Three Springs is not seen as worthwhile, with housing prices currently exceeding the value of the land. One of the priorities outlined in the Shire of Carnamah's Strategic Community Plan and Corporate Business Plan 2021 – 2031 (2021) is to build unit style accommodation suitable for key workers and independent living units for aging members of the community. This may help to elevate the pressure on housing from the incoming construction workforce for this Project.
Moderate financial stress	Financial stress is determined based on rental and mortgage stress. Rental stress is defined as a rental household with rental repayments greater than 30% of the household income. Based on this definition, rental stress is experienced at below the state average rate across the three LGAs.

Key takeaways	Description
	Coorow LGA has the highest proportion of the 19.2% of rental households under rental stress compared to the state average of 28.3%. Mortgage stress is defined as homeowner households with mortgage repayments greater than 30% of the household income. Mortgage stress in Carnamah and Coorow LGAs are higher than the state average at 18.4% and 15.9% of households respectively, compared to the state average of 13%.
Lower SEIFA scores for Index of Economic Resources (IER) suggest higher levels of economic disadvantage	The SEIFA Index of Economic Resources summarises variables directly related to income and wealth, whereby a low score indicates a relative lack of access to economic resources in general, and vice versa for a high score. Scores for each social locality can be found in **Appendix A**, noting that scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs, but not between an LGA and an SAL). Carnamah and Three Springs LGAs have a score of 3 suggesting a disadvantage in terms of access to economic resources. Whereas Coorow LGA has a score of 6, suggesting greater access to economic resources. The suburb of Warradarge within the Shire of Coorow has the highest score among the other SALs at 9, which is likely related to their high rates of their homes owned outright at 72.7%, compared to that state average of 29.2%.

Source: Umwelt, 2024

3.4.6 Social Capital

Various indicators can be used to examine and assess social capital. Such indicators may 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. **Table 3.8** provides a summary of the key characteristics of the social locality from a social capital perspective.

Table 3.8 Social Capital Summary

Key takeaways	Description
High rates of volunteering	It was noted in the Shire of Carnamah's most recent annual report that both communities of Eneabba and Carnamah have a strong network of core volunteers Shire of Carnamah, 2023). Self-reported volunteer numbers are higher across the host LGA of Carnamah compared to the state average within the past 12 months from the 2021 census, reflecting the smaller size of these communities and stronger community associations. The proportion of the population participating in volunteering across Carnamah LGA was 24.5% compared to the state average at 12.9%. Participation in such activities is typically reflective of the degree of connection within a community. The Shire of Carnamah have several active community groups, including the Eneabba Progress Association, Friends of Heritage Park, Carnamah Community Activity Group, and Carnamah Historical Society & Museum as per the community directory (Shire of Carnamah, n.d.).

Key takeaways	Description
Population mobility on par with the state rate	Population mobility can often be reflective of a cohesive community with a stronger investment in sense of place. Within the social locality there are varying rates of population mobility. The proportion of the population living at a different address one year ago is similar to (and in most cases less) the state average of 13.9%. In Carnamah LGA, the proportion of the population living at a different address five years ago was 32.8%, which is similar to the state average of 36.6%.
Fewer households with children	There are fewer households with children than the state level. In Carnamah, Three Springs and Coorow LGA the proportion of households with children are 19%, 26% and 17% respectively, which is much lower than the state average of 32%.
Varying SEIFA scores for Index of Disadvantage (IRSD)	The Index of Relative Socio-Economic Disadvantage summarises a range of relative disadvantage indicators relating to economic and social conditions for individuals and households prepared by the ABS. A low score indicates a greater degree of disadvantage. Scores for all the social localities are displayed in **Appendix A,** noting that scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs). Carnamah and Three Springs LGA have a score of 4 and Coorow has a score of 5, indicating a moderate level of socio-economic disadvantage across these LGAs. It is worth noting that the suburbs of Eneabba, Three Springs and Leeman all have scores of 1, indicating high levels of disadvantage, which could be related to lower household incomes, “low skilled” occupations and many people without qualifications. Interestingly, proximal localities within the social locality such as Kadathinni, Arrowsmith East and Warradarge have score of 9, 9 and 10 respectively, indicating a lack of disadvantage. This suggests there is not a homogenous distribution of socio-economic factors.
Fluctuating crime rates	Levels of crime can be indicative of feelings of personal safety in an area. The Western Australia Police Force Crime Statistics contains quarterly updated, annual summary data on the number of offences and offence type by Suburbs and Police District. Crime rates are relatively low for the suburbs of Carnamah, Eneabba and Warradarge, which is likely due to their population sizes. Changes in offences over time for these localities are displayed in **Appendix A** with the primary offences being stealing, drug offences and assault (family) in 2024. The total number of offenses in the suburb Carnamah were 15 in 2024, which has already been exceeded by March 2025, with a total number of 17 offences (year to date). The most common offence type in 2025 is ‘selected offences against property’ (e.g. stealing, stealing of motor vehicle and property damage). The number of offences have fluctuated in Carnamah ranging between 12 and 31 between 2018–2025 year to date. However, an increase in reported offences is on the rise within the last 12 month, which could indicate a reduction in community cohesion, as research suggests that lower crime rates may indicate stronger community cohesion and community pride (Gulma, 2018). Nevertheless as of 2024, Carnamah was considered a safe area, which crimes existing, but not impacting most

Key takeaways	Description
	people, with a rate of 17.2 crimes per 1,000 people (compared to the state rate of 83 per 1,000) (Red Suburbs, 2024). Total offences in Eneabba have remined typically lower than in Carnamah, which is likely a reflection of the suburb's small population size. In 2024, there 12 offences in total, with stealing (selected offences against property) being the most common, accounting for 7 reported offences.
Heightened interest within rural communities regarding renewable energy project development and associated benefits	The scale and speed of the roll out of renewable energy projects across rural WA has resulted in a heightened level of concern for several Councils and communities (Bennett, 2025). Communities and local governments have been seeking further guidance from the government, with it perceived that the WA State Government has been slow to establish rules governing how renewable energy proponents interact with communities as seen in other states such as NSW and Queensland. A Draft Guideline on Community Benefits for Renewable Energy Projects is open for public consultation (as of July 2025), with PoweringWA intending to review submissions and publish a finalised guideline (Government of Western Australia , 2025). The WA Government is seeking to provide a more consistent approach for benefit sharing and to manage expectations across parties. Payment into a community benefits fund is presented as an option to assist in providing a standard baseline for approaching these negotiations. The guidelines also stipulate the extent of the impact of the project on the community should inform the final benefits offered. Key factors for consideration include impacts on community services, and amenities, cumulative impacts from other proximal developments as well as ability to access economic benefits from maintenance of renewable energy infrastructure. This is especially important for smaller communities, with community leaders wanting further clarity on long term economic benefits and legal protections for landholders impacted by towers, with farmers in Darkan expressing concerns regarding poor engagement and feeling left behind by the process (Bennett, 2025). Additionally, local governments across regional WA have expressed concerns regarding potential renewable energy developments on agricultural land, and what that will mean in terms of food security for the future. These concerns have prompted the Shire of Moora and four other local governments to work with the WALGA to develop a land use policy framework to balance the interests of the agricultural and energy sectors (Prendergast & Jose, 2024). In response to local government concerns with regards to the rapid energy shift and associated impacts on local communities, WALGA has released the *Renewable Energy Community Benefits and Engagement Guide* to assist Local Governments navigate large-scale renewable energy projects (WALGA, 2025).

Source: Umwelt, 2024

3.4.7 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. **Table 3.9** provides a summary of the physical capital available in the social locality.

Table 3.9 Physical Capital Summary

Key takeaways	Description
There is notable local government investment in community services and facilities	The Shire of Carnamah plans on investing approximately $2 million per year to 2031 in community assets and infrastructure such as parks, roads, and community building (Shire of Carnamah, 2023). By the end 2024, Carnamah Recreation Centre had undergone a refurbishment, the toilets at Carnamah Bowling Club were upgraded, a disabled toilet was installed at Carnamah Caravan Park and Carnamah Community Centre had undergone a renovation (Shire of Carnamah, 2024). Other key recreational facilities within the Shire of Carnamah include the Eneabba Recreation centre, the Carnamah swimming pool and the Carnamah Community Centre (the Exchange).
Well-connected road network, with some unsealed roads	Carnamah-Eneabba Rd intersects with the Project area. In 2022/2023 Carnamah-Eneabba Rd was undergoing major works to widen and reseal approximately 5 km of road, with further repairs proposed for 9 km of road in 2023/2024 (Shire of Carnamah , 2023). Additionally, the Brand Highway is proximal to the Project, which is the main transport route to Geraldton in the North and Perth in the South and intersects with both Eneabba and Warradarge townships. Therefore, this highway will likely be utilised by the Project for the transportation of materials from the major centres to the Project site. The use of heavy vehicles will likely have impacts on the local community due to potential road degradation and congestion. The Project area is bordered by Eneabba-Three Springs Rd in the north. Other minor roads proximal to the Project area are Rose Thomson Rd, Brimson Rd, First North Rd, Reserve Rd, and Caribaldi Willis Rd. Many private properties in the Shire of Carnamah are linked by unsealed roads, the use of these roads by the Project should be avoided where possible to minimise dust and road degradation. Within the Shire of Carnamah, 58% of the working population travel to work by car, which is similar to the state average of 62%. In 2023, eight people were killed and 49 were serious injured due to crashes on main roads in Mid-West Gascoyne. The number of both fatalities and injuries over the 5 years prior stow a 13.2% decrease in fatalities and a 15.2% decreased in serious injuries (Road Safety Commission, 2024).
Region susceptible to frequent power outages	Power reliability has been a significant issue in the Mid West region of WA, with frequent outages impacting local communities and businesses. It was reported in January 2025, that over 50 homes across the Mid West and Wheatbelt regions have remained without power for 5 days following an outage caused by weather conditions. At its peak, the outage left

Key takeaways	Description
	approximately 38,000 properties without power across both the metropolitan and regional areas (Lane, 2025).
Restricted access to Health Facilities	The closest hospital to the Project is North Midlands – Three Springs Public Hospital which is located in the adjacent Shire and is a multiple purpose service centre with eight beds. The services provided include a 24-hour accident and emergency service, general medical, paediatric services and aged care services (Shire of Carnamah, 2024). There is also a medical centre and dental clinic on the same street. The medical centre has two general practitioners. Three Springs health services, particularly the three Springs Hospital does not have the capacity to handle an additional population influx. With an aging population, Three Springs Hospital plays an important role in servicing the community. However, as is common across regional WA, staff shortages mean there is limited capacity. Within the Shire of Carnamah, the Eneabba Health Centre is a nurse led clinic open Mondays to Wednesdays which supports communicable disease prevention and management and non-emergency appointments for clinical services (Healthdirect Australia , 2024). The Carnamah Council contributes to the joint program with the Shire of Coorow and the Shire of Three Springs to ensure a medical service is available to Carnamah and Eneabba (Shire of Carnamah, 2023). Geraldton Health Campus, located approximately 1.5 hours away from the Project, offers a much wider variety of services and available hours and is the regional health campus for the Mid West and includes Geraldton Hospital. The services provided at the campus include a 24-hour emergency department (supported by Emergency Telehealth Services), aged and community care, community alcohol and drug services, comprehensive cancer care, high dependency and intensive care, maternity services, medical imaging, medical specialists, mental health services, paediatrics, and surgical services (Department of Health, Western Australia, 2023). Given the limited access to services proximal to the Project, a population influx associated with the construction of the Project may create a strain on existing health services.
Limited Educational Facilities	Small communities such as Carnamah are far more constrained in the availability and diversity of educational services offered, compared to LGA with large population numbers. In the Shire there is one primary school (Eneabba Primary School) and one High school (Carnamah District high school). Within the Shire of Three Springs schooling is offered from pre-school (ages 4 and 5) to primary school (years 1-7) at Three Springs Primary School. However high school is not offered in the Shire, and students are encouraged to attend Carnamah District High School from school years 8 - 12. A daily bus service is provided between Three Springs Primary School and Carnamah District High School (Shire of Three Springs, n.d.). Within the Shire of Corrow there are two primary schools – Coorow Primary School and Leeman Primary School, offering schooling up until school

Key takeaways	Description
	years 7 and 6 respectively. Leman Primary School services the coastal towns of Leeman and Greenhead (Department of Education, n.d.).
Short term accommodation is limited	There is limited short term accommodation available within the social locality. There is a limited number of rooms within a 30-minute drive of the Project, with availability increasing with distance to a total of 150 rooms available within an hour's drive. When considering Jurien Bay, which is slightly beyond 1hr drive from the Project, there are a total of 332 rooms. A higher number of rooms in both Jurien Bay and Port Denison- Dongara is likely due to the fact they are larger population centres and considered to be tourism hotspots, which will impact demand for short term accommodation. It is noted that there is a limited supply of branded accommodation facilities in the region, with demand largely being met by a very high number of holiday homes in the area, particularly in coastal holiday locations, such as Jurien Bay. This situation has developed from strong seasonal demand trends making it economically challenging to operate accommodation facilities during off peak periods. Therefore, there will be limited capacity to providing housing to the project workforce without causing strain on existing accommodation providers. Iluka Resources Limited has two existing accommodation facilities within 15 km of the Project site that can accommodate a total of 948 workers between them. At the time of the development of the latter facility, the Shire of Carnamah encouraged Iluka Resource Limited to house workers in Eneabba to stimulate the local economy (Shire of Carnamah, 2023). There is likely to be a similar expectation of Synergy's Project workforce.
Low availability of rental stock	As of January 2025, the rental population in Carnamah is 28.6%, with zero available rental stock (Real Esatate Investar, 2025). Whereas in the adjacent Shire of Coorow has a smaller rental population of 17.6%, also with a rental stock of 0 (Real estate Investar, 2025). Whereas the Shire of Three Springs has a larger rental population at 32.0%, with 0 available rental stock (Real Estate Investar, 2025). Refer to **Appendix A** for further details. Low rental stock suggests high demand, which has resulted in an increase in median rent prices across all localities between 2006 and 2021 as noted across the ABS Census. The rental shortage is not unique to the social locality, as across WA the worst rental shortage has been noted since 2007. As of 2020, the Mid-West Region had the second highest number of people on the waiting list for public housing, with the average wait time of 97 weeks (Meachim & Lynch, 2020).

Key takeaways	Description
Moderate to low rates of occupancy	The Shires of Carnamah and Three Springs recorded an occupancy rate of 75%, while Coorow had an occupancy rate of 49%, suggesting that a high proportion of the housing stock was vacant or unoccupied on the night of the Census, as the state average occupancy rate is 89%. Stakeholder engagement conducted for the SIA has indicated that a significant proportion of vacant housing in the area is owned by elderly individuals who have purchased properties to serve as a home base while travelling, particularly during extended caravanning periods.
Investment in transport infrastructure	Investment in transport infrastructure, and upgrades to road infrastructure is strong in the Shires of Carnamah. The town of Eneabba is also located on the East West Corridor freight rail network, which is part of the Wheatbelt railway lines of Western Australia. The system connects Geraldton and Perth to the wider southeast wheatbelt growing region.

Source: Umwelt, 2024

3.5 Local Challenges and Opportunities

The community profile has highlighted key strengths and vulnerabilities arising from the capitals assessment that will be important to consider in the assessment of social impacts. **Table 3.10** identifies key challenges and strengths/opportunities experienced across the social locality, as gathered in the development of the social baseline profile and through community consultation.

Table 3.10 Community Challenges and Opportunities

Challenges	Capital Area	Strengths/ Opportunities
Unknown perspectives on renewables by all local councils in the locality.	**Political**	Strong representation of Aboriginal peoples through the Yamatji Southern Regional Corporation.
Limited cultural diversity with a high proportion of the population born in Australia and speaking only English at home.	**Cultural**	Strong European and community pride surrounding the region's agricultural history. Rich intangible and tangible Aboriginal cultural heritage suggesting a strong connection to Country.
Social locality may be more vulnerable to natural disasters due to heavily modified landscape.	**Natural**	The Mid-West Region is one of the largest fishing, and agricultural and pastoral regions in WA The region is one of only five areas in the world with both marine and terrestrial biodiversity hotspots of national or international significance. Tourism is an emerging industry in the Shire of Carnamah.
The population in the social locality is declining and aging, which is likely to have implications on procuring a local workforce. The locality experiences poorer health outcomes, with residents living in Coorow LGA and Three Springs LGA experiencing shorter lifespans than the state average. Varying SEIFA scores for education and occupation across the social locality with Carnamah LGA, and suburbs within the LGA (Eneabba SAL) having a low scores, indicating lower education and occupation status of people in the area in general. Whereas residents in Warradarge SAL (within Coorow LGA) having very high scores suggesting that there could be quite different workforces between these two communities (in terms of skilled occupations and educational qualifications).	**Human**	Higher proportion of population with certificate level attainment in engineering and related technologies, offering opportunities for local workforce procurement. Higher than average proportion of Aboriginal and / or Torres Strait Islander population, enhancing opportunities for local Indigenous participation in the Project.

Challenges	Capital Area	Strengths/ Opportunities
Increasing housing costs affecting affordability. Climate change is impacting farmers livelihoods due to increasing heat and rain. Lower median household income in most localities compared to the state as well as higher rates of mortgage stress. Lower market diversity in the social locality, especially within the Shire of Three Springs, suggesting a strong economic reliance on the agricultural industry. Carnamah and Three Springs LGAs have low SEIFA scores suggesting a disadvantage in terms of access to economic resources.	**Economic**	Agriculture, forestry and fishing is the biggest industries of employment for the social locality. High rates of home ownership within the social locality. There are low rates of rental stress compared to the state average, but it is unclear whether this may be due to low rental stock. Coorow LGA and suburbs within Coorow such as Warradarge SAL having higher SEIFA scores, suggesting There is a heterogenous distribution of economic resources across the social locality.
Fewer households with children compared to the state average, which is likely related to population decline. Nearby rural communities have expressed concern regarding renewable energy projects in Mid West Region.	**Social**	High rates of volunteering suggesting high community connectedness and cohesion, and low population mobility suggested a more established community. Low crimes rates across the social locality.
Aging population may place strain on health care and aged care services. Moderate to low rates of occupancy across the social locality. Social locality has limited access to education facilities, with one high school servicing the entire social locality. Minimal data available on rental stock and short term accommodation options.	**Physical**	Due to limited access to health care facilities, partnerships have been formed between councils to provide additional support. Iluka Resources have developed two accommodation villages in Eneabba for mining operations – the Banksia Village within Eneabba itself which accommodates up to 197 people, and Ngulya Village just east of Eneabba which accommodates up top 360 people.

Source: Umwelt, 2024

4.0 Social Impact Evaluation

This section identifies and evaluates the social impacts associated with the Project. Social impacts have been categorised according to the social impact categories provided in the NSW SIA Guideline (refer to **Section 2.4.3**). Social impacts have also been assessed and evaluated in relation to the likelihood and magnitude of the social impact occurring, considering outcomes of engagement with key stakeholders, social research relating to the specific social impacts identified, social science expert assessment, and a review of outcomes of relevant technical studies.

Potential impacts identified relate to all aspects of the Project, except where specifically noted it is in relation to a particular component (i.e. solar panels or wind turbines).

4.1 Stakeholder Perceived Impacts and Opportunities

As highlighted in **Section 2.0**, a key component of the SIA process is the process of understanding the perceived impacts and opportunities associated with the Project from a range of stakeholder perspectives. Consultation activities to inform this SIA have included engagement with a range of stakeholder groups and via a number of mechanisms (refer to **Section 2.4**). Through the engagement process, a range of perceived social impacts, both positive and negative, have been identified for the Project. **Figure 4.1** provides a summary of the frequency of social impacts (both negative and positive) associated with the Project through engagement mechanisms outlined in **Section 2.4.2** . Impacts that were only raised once are not presented visually in **Figure 4.1,** but rather are discussed throughout the sections below.

Social impacts often relate to more than one social impact category. **Figure 4.2** lists the social impacts identified for the Project and outlines each social impact category they relate to. Social impacts have also been assessed and evaluated in relation to the likelihood and magnitude of the social impact occurring, considering outcomes of engagement with key stakeholders, social research relating to the specific social impacts identified, social science expert assessment, and a review of outcomes of relevant technical studies.

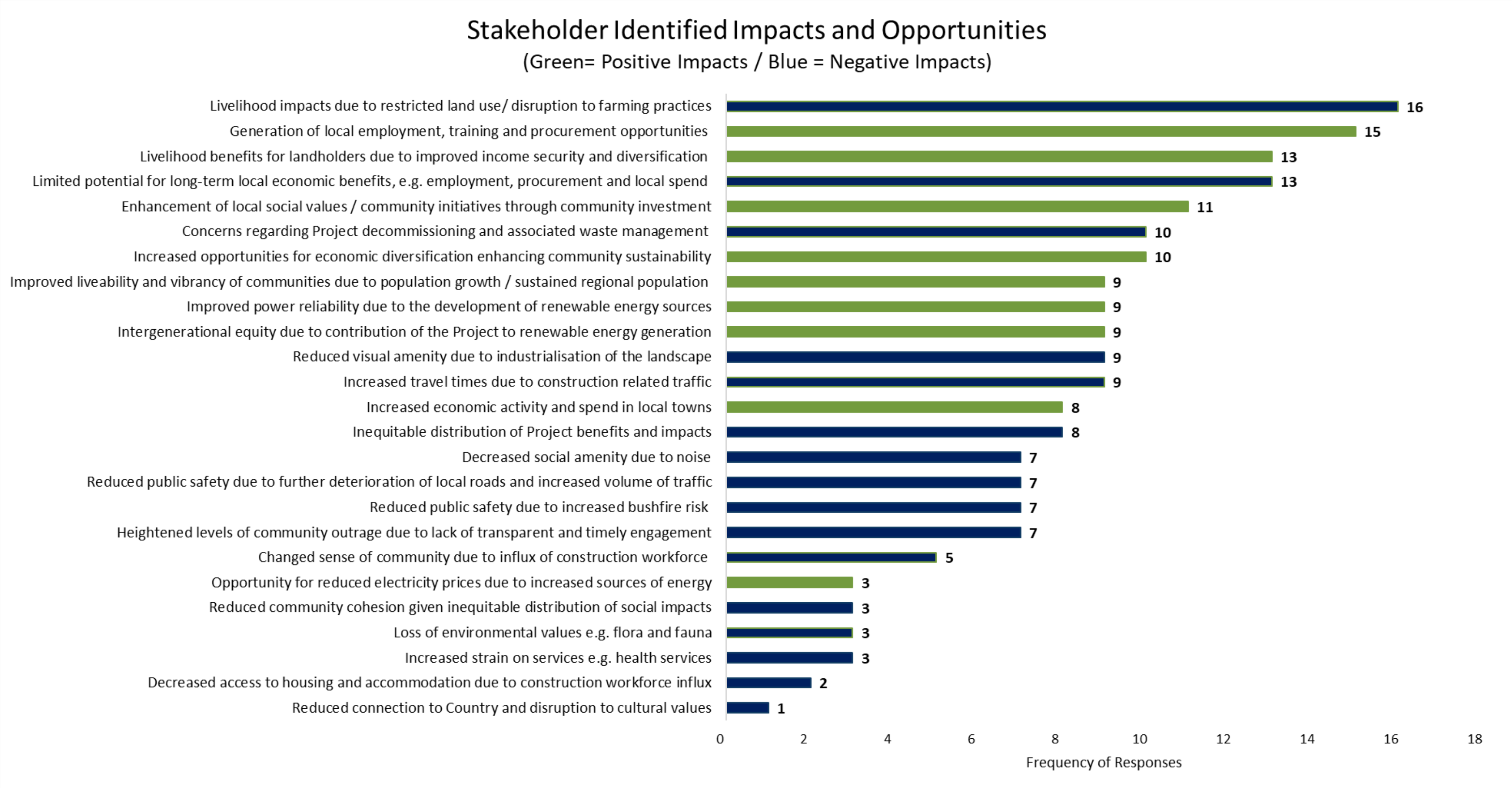


Figure 4.1 Stakeholder Identified Impacts and Opportunities

Source: Umwelt community engagement, 2025 (n=42)

Figure 4.2 Social Impact by Impact Category

Source: Umwelt, 2025

4.2 Livelihoods

Livelihood impacts refer to the Project's effect on people's capacity to sustain themselves through employment or business activities, and the economic contribution that a project may make to local communities and the broader region.

4.2.1 The Local Employment, Training and Procurement Opportunities

As the Project is anticipated to create approximately 200 FTE jobs during construction and 30 during its operational phase, engaged stakeholders identified potential **local employment and procurement opportunities** associated with these roles as a key benefit of the Project (n=15).

> *"There is the potential for local employment and procurement opportunities if done right. There is also the potential for upskilling of the workforce." (Education Provider)*

> *"It is going to increase employment in the area. If they do it from entry level job to skilled jobs it will target all areas." (Service Provider)*

> *"Employ locally, within a 100–200 km radius. Make sure contractors are required to employ people locally." (Community Member)*

> *"Potential employment opportunities for locals. Most of the unemployed here are unskilled, so maybe labouring type jobs. But there are also many people who are overqualified for the jobs they're in." (Local Business)*

Stakeholders also identified **procurement of local suppliers and contractors** as a key opportunity but noted that local procurement must be done in a considered way, in partnership with the community to ensure that opportunities are maximised. Consultation with key stakeholders highlighted that forward planning and early engagement would be crucial to enable local businesses and contractors to adequately prepare to meet Project related demand.

> *"Minimum entry requirements knock local business out of being considered for the jobs. The requirements need to be stated and be stated in advance. The sooner the better, and it will inform local businesses to understand the certifications and qualifications required to be able to access those opportunities. Employees need to have some level of oversight over the projects, so they know when to ramp up. They need to understand what kind of work will be available. Right now, local businesses employ the number of workers required to meet current demand. Without any oversight on what will be coming into the region, they won't be able to prepare for those opportunities and thereby will miss out." (Education Provider)*

> *"Businesses don't know what to prepare for because they are not engaged early enough. We would like to see more engagement… We would like to think we have the capabilities to handle the manufacturing locally, but we need to be engaged so that we can prepare" (State Government)*

Beyond direct employment and procurement, increased economic production or new investment can directly add to the strength of the economy and create indirect jobs, in turn generating additional economic activity. The initial increase in activity generates other business opportunities as the new activity purchases the materials and services it needs to operate. In addition, extra jobs provide income to households, creating a second source of growth in demand for goods and services. The successive waves of increased economic activity work their way through the economy. As a result, the Project is likely to generate positive flow-on impacts to local businesses such as accommodation providers, catering services, entertainment, landscaping, biodiversity management, transport services and road maintenance and management businesses (Terril, Emslie, & Moran, 2020).

As of 2021, there were 119 businesses operating within the Carnamah LGA, with 46 identified as potentially benefiting from flow-on effects of the Project. Similarly, the Three Springs LGA had 91 businesses, of which 31 may experience positive impacts, while the Coorow LGA had 158 businesses, with 65 expected to benefit from associated opportunities.

To ensure benefits are maximised, SynergyRED will encourage the implementation of a social procurement strategy that details procurement considerations to increase opportunities for local and regional businesses (refer to **Section 6.3**).

Despite the potential local employment and procurement, some stakeholders raised concerns for **the potential of unmet expectations around local employment and procurement** associated with the Project (n=7). This concern was largely raised as a result of past project experiences where stakeholders noted limited opportunities for local employment and procurement.

The potential for SynergyRED to **contribute to training and skills development** was one of the most raised topics by stakeholders consulted, with interest expressed in potential Project workforce opportunities and the pathways available for local jobseekers to access training and develop skills for these future opportunities.

Local education and training providers expressed concerns that the region is 40% below the electrical apprenticeship rate that they need to meet the demands of regional renewable energy projects by 2030. They noted a desire to upskill the local workforce to support these projects, creating long term job opportunities for a workforce in transition as agriculture moves to automation. Education and training providers also identified a lack of wind farm apprenticeship opportunities as a barrier to entering the workforce and urged SynergyRED to utilise the opportunity of Tathra Wind Farm to assist with providing long term job opportunities to the local community.

It was noted that SynergyRED should strive to ensure that appropriate programs are in place to upskill and train local residents and through transparent and accessible procurement processes to ensure local employment, training and procurement where possible. It was also suggested that renewable energy proponents in the broader region should seek to work together, with local employment, training and education providers to support skills and capacity development across the social locality.

> *"The massive uptick to move to net zero in 2050 means that renewable energy developers need to get on board and start preparing the workforce to meet the demand that is coming... Synergy is big enough and across the whole of WA to be able to do something. We want to see early engagement with local businesses to be able to realise employment opportunities... They need to put the work upfront and actually work with the schools and TAFE to enable and facilitate the local community to access employment and procurement opportunities in the region." (Education Provider)*

> *"Forward planning is so essential here. We are setting ourselves up to fail in some regard because we don't know what we don't know. We have all these different silos happening at different times and there is no real collaboration between proponents." (Business and Industry Group)*

Around 75% of jobs in renewable energy over the next 15 years are likely to be available for labourers, trades and technicians and professionals, with electricians, electrical trade assistants, mechanical trades and technicians, finance, business, legal and planning professions and administrative staff generating the largest number of jobs (Briggs, Rutovitiz, Nagrath & Dominish, 2020).

For the purposes of the SIA, Umwelt has assumed that the Project's construction workforce is likely to be derived from two key sources:

1. Suitably skilled people who are currently unemployed and / or those that may require training.
2. Suitably skilled people who are currently employed but may transition to work on this Project in response to the new job opportunities.

The SIA has considered possible employment and procurement targets at the local scale (within a one-hour drive from the Project[5]) to determine the feasibility of local employment in the Project's construction and operational phase.

Based on the December 2024 unemployment rates there are potentially 265 unemployed people in the LGA's of Carnamah, Coorow, Dandaragan, Greater Geraldton, Irwin, Moora and Three Springs with relevant occupations (labourers, technicians and trade workers, and machinery operators and drivers), 11 unemployed electricians, and 174 unemployed people with relevant skills (qualifications in the engineering and related technologies, and architecture and building fields of study) that could be available for the Project workforce (450 total). Given the existing labour force context, it appears as there are opportunities for the Project to draw on the local labour force for construction, whilst also ensuring there is minimal impacts on skills drains from other key industries. To increase the opportunity for local employment, SynergyRED intends to implement a number of measures (as identified in **Table 5.1**) including relevant conditions in EPC contracts to encourage the sourcing of local employment and procurement from local suppliers, collaboration with local education and training providers to better understand how SynergyRED could contribute to education opportunities that facilitate increased local employment in the renewable energy sector in the region and early communication with regards to possible employment and procurement opportunities.

For the operational period, a local employment target of 100% has been proposed (30 FTE roles).

Considering the low number of Aboriginal people and females employed in the construction industry across the Study Area, operational local employment should have a focus on employing and upskilling these two under-represented groups within the industry. Within the 100% local employment target, it is recommended that 50% of employees be females (5 FTEs) and 2% First Nations residents (1 FTE).

There are significant opportunities relating to the upskilling and training of local workers to maximise benefits for the Project, especially for women and Aboriginal workers who are currently underrepresented. In summary, the Project has the potential to positively contribute to local employment, procurement and training opportunities and is likely to have a high positive social impact, with a likely possibility and a moderate magnitude.

[5] Some additional localities outside a one hour drive have been considered due to their population size and therefore potential ability to support the Project.

4.2.2 Enhancement of the Local Economy and Local Livelihoods

Aside from direct spend associated with Project related procurement activities outlined above, the potential for **increased local economic activity and spend in local towns**, such as Eneabba, Coorow and Carnamah was noted by eight stakeholders as a key positive impact that could arise from the Project. During the construction period, the Project's incoming workforce will likely provide a significant injection into the local economy as workers are housed and spend wages in local townships in the areas of retail, recreation, personal medical and other services. Such an effect is further enhanced given the cumulative economic inflows associated with multiple project development across the region.

This is consistent with outcomes of a recent survey of 48 local government representatives across WA (75% of which were regional LGAs). When asked *What are the biggest opportunities for your Local Government when it comes to the energy transition?,* 60% of respondents referred to local economy diversification and 51% referred to local business opportunities (refer to **Figure 4.3**).

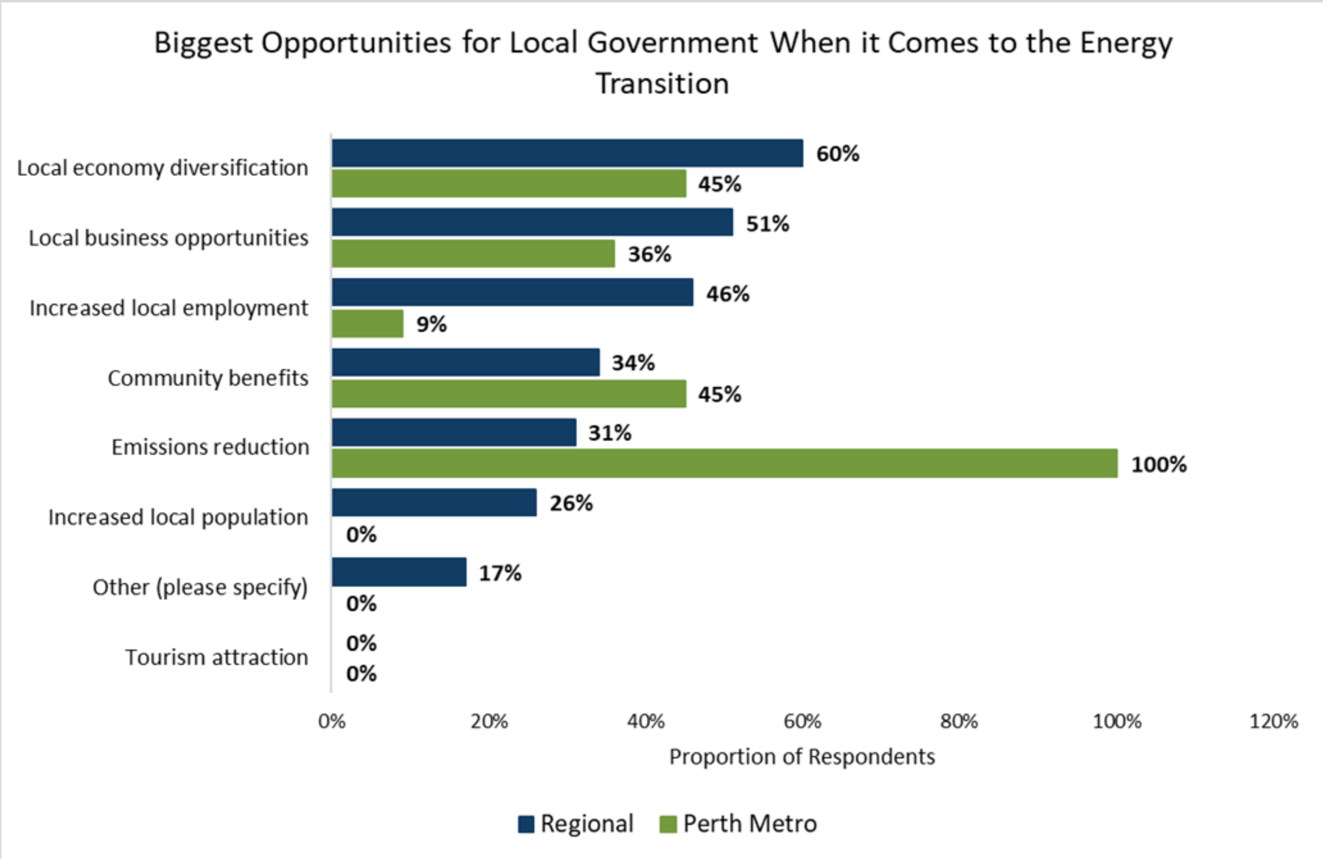


Figure 4.3 Biggest Opportunities for Your Local Government When It Comes to The Energy Transition?

Source: (WALGA, 2024)

However, the **limited potential for long-term local economic benefits, e.g. employment, procurement and local spend** was also noted as a concern by thirteen stakeholders. Concerns were primarily linked to perceptions that the workforce would not be housed locally or would reside in camps located outside of main townships and therefore would not be encouraged to spend locally.

> *"I am concerned that they will have their own camp onsite and that won't be near the town, so the town will not get any income. I would love to see them in Eneabba.*

There is a mining camp already there. They could use that to house the workforce. It will be big bonus for the town. If they use those towns and live in them that will be awesome, but I concerned that will not happen" (Host Landholder)

"If the accommodation camp is in Jurien Bay there would be no benefits here." (Community Member)

Recent research on renewable energy projects in Australia indicates that renewable energy projects have the potential to deliver substantial flow-on economic benefits, particularly in regional communities. Beyond the direct creation of construction and operational jobs, these projects stimulate local supply chains—such as transport, engineering services, and equipment hire—and boost demand for local businesses including accommodation, hospitality, and retail. Studies by the Clean Energy Council (CEC) and the University of Technology Sydney (UTS) have found that lease payments to landholders and community benefits funds contribute to rural resilience and the diversification of the local economy (Clean Energy Council , 2020; UTS, 2025). Economic modelling by Deloitte further indicates that the total economic effect can multiply the original investment, supporting sustained regional growth (Deloitte, 2022). While these benefits are most pronounced during construction phases, there is the also the potential for longer-term impacts, including increased regional income stability and employment. To ensure continued economic enhancement for small towns surrounding the Project, stakeholders suggested several measures that could be implemented by Synergy. Suggestions included the encouragement of employees and contractors to spend and be housed locally, targeted procurement of local businesses and services, establishing a permanent workforce within the locality, funding for local infrastructure and programs and sponsorship of community events and for SynergyRED to encourage the workforce to buy locally e.g., at cafes, roadhouses, and grocery stores in Eneabba.

"We would love the see money going towards purchasing food locally" (Health and Emergency)

"You need to house the workforce locally to see any real benefit. If we could get some permanent workers here, we would be a lot better off." (Host Landholder)

4.2.2.1 Diversification of Economy and industry

Historically, Carnamah LGA has been heavily reliant on the agricultural sector (refer to **Section 3.4.4**), however the diversification of the economy has been noted as a key strategic area for the Shire of Carnamah (Shire of Carnamah, 2023). The potential for renewable energy to contribute to this diversification was noted by a local government representative, who noted that given advances in agricultural technology, there is now less demand for employment in the sector. Consequently, it was also acknowledged that the Project could contribute to increased opportunities for economic diversification enhancing community sustainability (n=10)

"I think the community is quite open to new developments and see the need for diversity. There is a need to consider diversification to stop that population decline, and renewables can be a part of that. Agriculture is experiencing improvements in technology which is reducing the need for people." (Local Government)

"Agricultural is the key driver. It has been agriculture for 100 plus years. With energy type projects, no one would have thought 50 years ago that it would happen... In the long run, the diversification of the landscape will have positive economic impacts.

As temperatures increase it will be more difficult to grow, which will put a strain on agriculture. Using the landscape for other purposes will benefit the region in the long run." (Local Government)

This diversification was considered increasingly important when considering broader climatic conditions. Climate change has significantly impacted agricultural production in the Mid West region. The region has experienced shifts in temperature, altered rainfall patterns, and an increase in extreme weather events such as droughts and heatwaves (refer to **Section 3.4.3**). These climatic changes have led to reduced crop yields and increased variability in production (Australian Government, 2022). The effects of climate change on agricultural production have been noted by landholders as a key challenge:

"Our broad acre cropping is being affected by climate change. We are having higher temperatures and lower rainfall." (Host Landholder)

Studies have shown that renewable energy projects can be significant contributors to the local economy. Developers are forecast to contribute $213 million to regional councils by 2030, growing to $1.9 billion by 2050. Modelling by the Regional Australia Institute suggests that renewables could generate $68 billion in economic activity over the next four years

4.2.3 Income Stability and Diversification for Landholders

Throughout engagement, stakeholders highlighted that renewable energy developments can significantly **improve income stability and diversify income for landholders** by providing alternative revenue streams (n=13). As outlined in **Section 3.4.3**, climate change has impacted agricultural production in the social locality. In addition to this, stakeholders noted that the seasonality of agriculture can cause financial instability, recognising the Project will deliver economic benefits to the host landholder of the Project Area through commercial arrangements.

"It will enable us to continue farming ... It is very tough for us to survive and get a decent income... [there is] not that much profit in agriculture. Any other source of income is good...It gives us security for the future." (Host Landholder)

"Payments to host farmers provides them financial security during droughts." (Local Business)

"People who previously did not support wind farms on their properties are now seeing that it is an economically viable option of income. It provides a constant source of income that things like agriculture cannot." (State Government)

Large-scale renewable energy projects across Australia are expected to deliver substantial financial benefits to host landholders with landholder payments for hosting solar and wind farms projected to exceed $1 billion by 2030, potentially reaching close to $10 billion by 2050 across the country. These payments include annual fees for land use, with solar farms typically paying $1,500–$2,500 per MW and wind farms $5,500–$6,500 per MW (CEC, 2024). Further, research indicates that farmers hosting projects will benefit from dual income streams, such as grazing livestock under solar panels (Farmers for Climate Action & CEC, 2024). While host landholders stand to gain significant economic benefits from renewable energy projects, research also highlights potential disruptions to community cohesion due to perceived inequitable distribution of impacts (see **Section 4.5.1** and **Section 4.5.3**).

To ensure these projects contribute positively in the long term, it is essential to implement strategies that deliver sustained economic and social benefits to the broader community (refer to **Section 4.5.1** and **Section 6.5**).

SynergyRED has entered into agreements with host landholders and is also liaising with neighbouring landowners to consider opportunities for neighbour agreements.

4.2.4 Changes in Land Use and Disruption to Farming Practices

Despite the positive contribution to income diversification, the potential for **land use restrictions and disruptions to farming practices** was raised in relation to the Project (n=16). Primary concerns included reduced property access, disruptions to autonomous farming machinery and the management of construction workforce. Two consulted stakeholders also expressed concerns that the presence of wind turbines might make it more challenging to attract farm workers. This was also raised as a potential cumulative impact due to the increase of proposed renewable energy projects in the region and other non-renewable projects.

> *"It is hard to attract workers to live on farms with wind turbines. It could impact their choice to live on that farm." (Host Landholder)*

> *"Farmers use GPS, and they won't be happy. There may be livelihood impacts because it would disrupt the farming systems...They will need to add additional poles in the system, they are already pulling out fences to make it easier." (Tourism Provider)*

The area of land required for the construction of the Project is currently estimated to be approximately 1,595 ha which equates to approximately 10% of the Project area. The majority of the properties surrounding, and within the Project area are rural farming properties, with primary land use including cropping and grazing.

> *"Prime concern is the impact on agricultural land." (Local Business)*

> *"[There will be a] loss of valuable farming land." (Community Group)*

Research indicates that wind farms can coexist effectively with agricultural practices, offering a sustainable dual use of land (Sampson, Perry, & Taylor, 2020). Furthermore, the agrivoltaics whereby solar panels are collocated to allow for solar power generation and ongoing agricultural activities including cropping, grazing and horticulture are becoming increasing popular for solar projects within Australia.

The development of renewable energy projects can also impact the rights of host landholders, particularly in terms of land use. The rights of host landholders regarding land access can be significantly affected by renewable energy developments. Developers often seek access through various types of agreements, granting developers broad rights to enter and use the land, sometimes with minimal notice, which may disrupt farming activities or personal use of the property (Renew Economy , 2025).

In other project experiences, concerns have been raised about agreements being biased toward developers, with unclear terms about when and how access is granted, and inadequate compensation for the inconvenience or loss of land utility (Renew Economy , 2025). This concern was echoed by one stakeholder who noted past experiences where host landholders land rights were eroded as a result of a project:

> *"There are lease holder rights erosions and not enough whole system negotiations from the government. We have had some past experiences where landholders have lost some rights to their lands, the proponent would come and go on their land as they pleased." (Business and Industry)*

SynergyRED is committed to working with host landholders to reduce any potential impacts on access to their property throughout both the construction and operational periods of the Project. It has therefore been assessed that this would have a potential low negative impact. Furthermore, the siting of infrastructure has considered the utilisation of existing farm tracks and creek crossings, alignment of tracks to minimise farming practices e.g. avoiding creating cut-off pockets of cropping farm area or inefficient crop layouts and placement of buildings and assets in lower value farming areas wherever possible. Throughout the detailed design phase, SynergyRED will also continue to explore the incorporation of agrivoltaics for the solar component of the Project in consultation with landholders.

4.3 Surroundings

4.3.1 Decreased Visual Amenity

The development of the Project has the potential to change the visual landscape and as such has the potential to impact host landholders, neighbouring landholders' and the broader community's visual amenity. Concerns associated with a **decrease in visual amenity** from those consulted for the SIA were focused on the perceived industrialisation of the landscape, particularly as result of the cumulative impacts associated with other developments (n=9). Concerns were associated with both the wind and solar components of the Project, with one stakeholder also raising concerns in relation to lighting from the turbines.

> *"They are quite ugly. They are confronting. Why do they have to be white? Make them less of blot on the landscape." (Community Member)*

> *"Wind is ugly, but solar is uglier. The aesthetics of the landscape will be ruined and that is something we will have to get used to. I have seen solar farms in Europe. They were ugly, and those are nowhere near as big as the ones Synergy are proposing." (Host Landholder)*

> *"I am concerned about the cumulative impacts to visual amenity. We are known as being a dark sky area and I do worry that it will brings lights and it will affect the night sky." (Host Landholder)*

Concerns may be heightened given the existing value places on the landscape in the locality. When stakeholders were asked to state what they value about their community, stakeholders placed a high value on the existing landscape and attributed this to a strong sense of place (refer to **Section 4.5.2**), potentially increasing the level of impact experienced within the locality as a result of visual amenity changes.

> *"Our landscape is our biggest virtue. Our skies, open areas, wildflowers." (Host Landholder)*

> *"The openness, the vast horizons, the rolling paddocks. Before harvest, that's the landscape. The crops in the paddocks that you see for miles and miles. When crops are getting close to harvest, you can see it at is best. It shows that productivity." (Local Government)*

> *"Bushland, white gum bush and some of the best wildflowers in the state." (Host Landholder)*

The Landscape and Visual Impact Assessment (LVIA) undertaken from the Project has determined that the Project will have low to moderate visual impacts from local road networks. The LVIA did not consider impacts on any residential dwellings. Where the project has the potential to create a moderate visual impact or greater, mitigation measures should be explored on a case by case basis in consultation with the effected stakeholder, and a qualified landscape architect, and may include vegetation screening and turbine placement.

4.3.2 Reduced Social Amenity

The construction and operation of a wind farm and associated infrastructure may result in increased noise, dust and vibration and consequently has the potential to impact host landholders, neighbouring landholders' and the broader community's amenity and way of life. Throughout engagement seven (7) stakeholders raised concerns associated with the potential for an increase in noise, with concerns relating to turbine operation, as well as construction related traffic and potential noise aminating from workers accommodation facilities. Concerns may have been heightened given the value placed on the peace and quiet of the locality by consulted stakeholders (refer **Section 4.5.2**)

> *"Potential noise impacts from reverse beepers of worker vehicles, depending on where the camp is" (Local Government)*

> *"It is hard to attract workers to live on farms with wind turbines. It could impact their choice to live on that farm. I hope it doesn't affect us in terms of attracting staff due to noise." (Host Landholder)*

> *"Your peace and quiet would be out the door a little." (Host Landholder)*

The Noise and Vibration Impact Assessment (NVIA) confirms compliance with relevant noise regulations. For non-involved receptors, predicted noise levels remain below the night-time limit of 35 dB (LA10), with mitigation measures applied to turbines in the south-western section of the site to ensure this outcome. For Project-involved receptors, noise emissions are also compliant, remaining below the accepted 40 dB (LA10) threshold. Although some areas beyond the Project boundary may experience noise levels exceeding 35 dB, these areas currently contain no residential dwellings. The Project commits to meeting the Environmental Protection (Noise) Regulations 1997. Additionally, where construction activities are predicted to exceed 35 dB (LAeq) at night or 40 dB (LAeq) on Sundays or public holidays, a Construction Noise Management Plan will be required to manage potential impacts on sensitive receptors. Vibration impacts from key construction activities have also been assessed and the 'worst case' scenarios modelled were identified to be acceptable.

4.3.3 Intergenerational Equity

Intergenerational equity is the idea of applying fairness or facilitating distribution of well-being between/across generations, preserving natural resources and/or caring for the environment for the benefit of future generations. 'A sustainable world is one in which human needs are met equitably without sacrificing the ability of future generations to meet their needs' (Summers and Smith, 2014: 718).

4.3.3.1 Projects Contribution to Renewable Energy Generation

Respondents frequently noted the potential Project benefits to the broader environmental values arising from the generation of low emission energy and the role of the Project in this regard (n=9). It was emphasised that this shift not only contributes to the sustainability and wellbeing of future generations but also positions the Project as a key player in this transformative journey.

During engagement, stakeholders noted the positive impact that the Project would have on climate change, affording provision of renewable energy and reducing reliance on other energy generation sources such as coal mining:

> *"It's the environmental impact, not digging up coal anymore and are using a natural product. I think they are great." (Community Group)*

> *"No emissions and no issues of contamination. Other forms of energy are coal and gas, which is not good. There are no emissions with renewables." (Host Landholder)*

4.3.3.2 Project Decommissioning and Waste Management

Ten stakeholders raised concerns in relation to waste management and decommissioning during SIA engagement activities. Concerns included:

- Waste generated at the end of the Project life,
- Decommissioning and removal of Project infrastructure,
- Rehabilitation of the Project area; and
- Decommissioning plans and retention of sufficient funds for decommissioning.

Key stakeholders particularly expressed concerns regarding the seemingly short life cycle of the Project, indicating that they were concerned about proponent commitment to decommissioning and removal of infrastructure from the site when the Project is complete.

> *"What happens to the concreate pads in the ground after you have finished with them?" (Community Member)*

> *"What happens to the turbines after they're done, [are they] going to landfill?" (Community Member)*

While stakeholders were concerned about waste generation from wind turbines, specific concerns were raised in relation to solar panels and their shorter life span[6].

[6] It is anticipated that the solar component of the Project will operate for up to 30 years, and BESS up to 15 years.

“With wind turbines we are speaking about 35 years, but solar panels won’t last as long. How will solar panels be recycled and how renewable are the materials themselves?” (Host Landholder)

Concerns relating to decommissioning and disposal of renewable energy project infrastructure has been documented in broader national surveys and other solar farm developments across Australia. For instance, a study completed by CSIRO on Australian attitudes towards renewable energy transition noted that panel disposal was frequently raised as a concern, and the second largest concern associated with onshore windfarms. The study noted the need to address end of life solutions to prevent materials ending up in land fill, in turn increasing social acceptance of renewable energy technology (Poruschi, Scovell, McCrea, Walton, & Gardner, 2024).

In 2022, approximately 80 million solar PV panels were installed in Australia, 90% of which were silicon solar panels. By 2030, these panels are projected to generate a cumulative waste volume exceeding 500,000 tonnes, which will increase to over 1.1 million tonnes by 2040 due to growing adoption of solar power in homes and solar farms (Energy Magazine, 2022).

To address this challenge, various mitigation measures have been implemented across different Australian states, including landfill bans for solar panels in Victoria, panel recycling, and serial number tracking to monitor panel life cycle (Energy Magazine, 2022). Experts have emphasised the need for sophisticated technologies to extract valuable metals, the establishment of recycling centres, and the development of a product stewardship scheme for photovoltaics (UNSW, 2023). The Australian Centre of Advanced Photovoltaics recommends creating large waste facilities in major cities to manage the anticipated 100,000 tonnes of photovoltaic waste annually by 2030, emphasising the importance of innovative solutions for sustainable management of decommissioned solar panels (UNSW, 2024).

The decommissioning process would be guided by the initial Project conditions of approval and would be the responsibility of the wind farm operator to decommission and rehabilitate at the end of the Project life. Project decommissioning would be as prescribed in Development and Environmental approvals. Continued implementation of the Project’s stakeholder engagement strategy for the Project during the construction, operation, and decommissioning phases will allow for the sharing of information with regards to decommissioning phase activities.

4.3.4 Loss of Environmental Values

Through the engagement program, the importance and value of the environment in and surrounding the Project Area was highlighted by stakeholders consulted. A total of three stakeholders raised concerns regarding impacts to the **loss of natural environmental values**, including local flora and fauna as a result of construction and operation of the Project. Some stakeholders raised specific concerns relating to wedge tailed eagles and black cockatoos, with nature reserves acting as a migratory stop over point for 100 species of birds (refer to **Section 3.4.3**).

“Tathra and Wotto are very unique in terms of biodiversity. They are home to bees, cockatoos, and endangered flora and fauna.” (Traditional Owner Representative Group)

A Flora and Vegetation Assessment undertaken for the Project recorded 50 significant flora species, comprising of four threatened species and 43 priority species. The survey area includes two Threatened Ecological Communities and several vegetation types of local and regional significance.

While most of the targeted area is highly degraded or cleared, small patches of remnant native vegetation and groundwater-dependent ecosystems were identified (Umwelt, 2025).

A Basic and Targeted Fauna Assessment was undertaken for the Project. The survey recorded 56 vertebrate fauna species, comprising 38 birds, 13 mammals and five reptile of this, one species is listed as conservation significant (Carnaby's Black Cockatoo) and four are exotic species. The Short-range Endemic (SRE) desktop assessment identified 158 likely or confirmed species, within the 100 km x 100 km square SRE desktop study area. Habitat mapping revealed a landscape dominated by cleared agricultural land, with key natural habitats including Eucalypt and Banksia woodlands (Umwelt, 2025). Impacts to the key environmental features across the site can be avoided including native vegetation, water courses, wetlands and fauna habitat.

The Bird and Bat Utilisation Surveys (BBUS) identified 98 bird species and multiple microbat species within the proposed Project area. Notably, conservation-significant species such as Carnaby's Black-Cockatoo (Endangered), Peregrine Falcon, and Pacific Swift were observed, with confirmed flight activity within the potential rotor swept area (RSA), indicating potential collision risk. Raptor activity was observed, with 10 species recorded, including sightings of Wedge-tailed Eagles and Nankeen Kestrels. Preliminary bat data suggest at least seven species (non conservation-significant) are present, with two to four species likely to interact with the RSA.

Additionally, whilst not specifically raised by stakeholders engaged for the Project, a common concern associated with solar and BESS projects is the potential for soil and ground/ surface water contamination associated with potential leeching of chemicals from Project infrastructure into ground and surface water, reducing water quality and contaminating the soil.

This is notable in the context of the proposed Project given the value attached to water – both ground and surface– in the social locality and region more broadly. Soil quality is also highly valued in the social locality due to the link to agricultural productivity. As identified at **Section 3.4.3**, water the Lakes within the Shire of Carnamah are key attractions. Further, the entire Mid-West region is dependent on groundwater for drinking water, agriculture, and industry (Water Corporation , 2025).

Eco Logical Australia (2025) conducted a hydrogeological and hydrological (surface water) desktop assessment for the Project. The assessment has documented that the site comprises of three aquifers—Surficial (unconfined), Leederville-Parmelia, and Yarragadee—divided by the Eneabba fault. Groundwater quality ranges from fresh to brackish and is likely influenced by past agricultural use. The desktop assessment identified the presence of potential terrestrial and aquatic groundwater-dependent ecosystems (GDEs), including a geomorphic wetland along Warradarge Creek, as well as third-party bore users as potential receptors of impact.

Based on the desktop hydrogeological assessment, key mitigation measures will include the establishment of buffer zones, particularly along Warradarge Creek, micrositing of turbines, appropriate groundwater licensing, utilisation of low impact constriction techniques, contamination and spill prevention control and development of a fit for purpose groundwater and surface water monitoring program.

4.4 Accessibility

Impacts on accessibility related to how the Project may affect how people access and use infrastructure, services and facilities, and any changes to lifestyle, including how people live, get around, work, recreate and interact.

4.4.1 Improved Power Reliability and Reduced Electricity Costs

Stakeholder engagement participants also reflected on the possibility of the proposed Project to improve **power reliability** for local townships (n=9) with references made to high instances of blackouts in the locality.

> *"I think we need to help the power situation... We have quite a few blackouts around the area." (Tourism Provider)*

> *"The benefit that it brings to the community in terms of... reassurance around more reliable electricity, sometimes we get blackouts." (Local Government)*

> *"Every summer, storms, moisture and dust cause issues with power." (Local business)*

> *"Hopefully a better power supply." (Tourism Provider)*

Power reliability has been a significant issue in the Mid West region of WA, with frequent outages impacting local communities and businesses (refer to **Section 3.4.7**). For instance, in 2022, several towns experienced up to 60 hours of power outages, largely due to aging infrastructure and extreme weather events. Through the integration of renewable energy sources, it is possible that the SWIS may become more reliable and hence the region could possibly benefit from a more reliable supply, enhancing the overall quality of life and economic stability for residents; however the realisation of this benefit is not currently certain

Furthermore, stakeholders suggested that the Project could provide the **opportunity for reduced electricity prices** in local townships such as Eneabba, Coorow and Carnamah (n=3).

> *"Cheaper power for the community potentially. Would be a great benefit for the community." (Health and Emergency)*

> *"We're powering the state, we should benefit. If there's a drop in energy prices, nearby towns should benefit first." (Local Business)*

4.4.2 Increased Travel Time

Impacts to accessibility due to **increased travel times** associated with construction related traffic activities was raised as a concern by a number of those consulted (n=9). Concerns related to the delivery of Project components along local and major transportation routes, and how this may lead to delays. Concerns were exacerbated by some given their lived experience associated with other developments in the locality, including the Eneabba Rare Earth Refinery Project. Additionally, some stakeholders further noted the implications this may have during harvest season and school peak hours given the higher volume of traffic. Consequently, there may be secondary impacts to livelihoods as the Project may affect the timely transportation of farming good.

> *"Traffic impacts, congestion...Impacts around harvest time, and cumulative impacts of vehicle movements between farmers and construction." (Local Government)*

"There are also traffic concerns with it being an agricultural area and there being a lot of school busses. It is important to not do it over high production time. That would be a nightmare." (Business and Industry)

As outlined in **Section 3.4.7**, there is a higher percentage of people who travel to work by car in the social locality, indicating a greater dependence on road use. The TIA has identified that whilst there will be an increase in traffic volume, the existing road network has sufficient capacity to accommodate the increase.

4.4.3 Increased Demand for Housing and Accommodation

The increase in pressure on housing and accommodation associated with an incoming construction workforce was raised as a concern by two stakeholders given the presence of other key industry sectors e.g. agriculture and mining. Concerns were exacerbated for some when considering the current limited capacity within the locality, noting that there has been an increase in retirees migrating to the region from Perth.

"There may be a few more people coming into town. We have issues with accommodation." (Host Landholder)

"Accommodation is limited or non-existent, and housing projects take years, not months." (Community Member)

The limited stock of housing and accommodation has been an ongoing issue for the communities of Eneabba, Carnamah and Coorow. While there are high rates of unoccupied dwellings in the social locality (refer to **Section 3.4.7**), stakeholders have observed that many properties have been acquired by elderly couples who use them as intermittent home bases, thereby limiting their availability for use by other such as potential Project developments. Stakeholders noted that the lack of housing has flow on effects for healthcare workers and education providers.

"Because it is cheaper here, older people come up and buy out the houses... Retirees move here because it's cheaper... They use the house as a base and go caravanning." (Host Landholder)

"A lot of the people who move here are older couples, and they have a caravan. People use it as base for travelling around." (Tourism Provider)

"Housing availability... As soon as a house comes on it is sold. It goes off the market so quick" (Health and Emergency)

Stakeholders suggested that the Project could have additional long-term community benefits through providing affordable housing which could be used by the community once the Project's construction is complete. It was also noted by stakeholders that this may improve rates of community acceptance of the Project. Stakeholders also suggested housing the Project's workforce in the Eneabba Banksia Village but expressed concerns that this arrangement might result in limited benefits for the local community.

There is currently limited short-term accommodation (i.e. hotels, motels and Airbnb's), and rental accommodation within the social locality (also refer to **Section 3.4.7**). Importantly, SynergyRED will continue to investigate accommodation options, including the use of existing workers accommodation to reduce the negative impact on the availability of housing and accommodation. It will be important that in further developing these options, the social impacts and opportunities within the social locality are considered.

4.4.4 Increased Demand on Local Services

There is the potential that an incoming Project construction workforce may increase demand and reduce access to key local services within the social locality, including health services, particularly GP and emergency health services (hospital, ambulance), other emergency services (police, SES, RFS). This was a concern raised by three stakeholders. As noted in **Section 3.4.7,** access to healthcare services is a significant concern in the region, with per capita access to GPs and specialists being among the lowest in the state. The area also faces challenges in attracting and retaining healthcare professionals and emergency service volunteers, a common issue in rural Australia.

> *"The ambulance is run by 3 members in a community of 300. You can't use it; the volunteers are exhausted." (Proximal landholder)*

Approximately 5.5% of labourers and technicians experience a workplace related injury each year in Australia (Safe Work Australia , 2023). In applying this statistic to the Project, in a worst-case scenario (where all of the reported injuries required medical attention), approximately 11 people per annum (based on an average workforce of 200) for each phase of the construction period may need to access a local GP service and/or attend a hospital Emergency Department. Research has shown that non-resident workforces are likely to use GP and Emergency Health services and Hospital Emergency Departments at a level higher than the resident population (Erny-Albrecht, 2014). Further, non-resident workforces are likely to present at health services with more complex or challenging cases due to workplace accidents and fatigue-related road incidents. Treating these patients is challenged by a lack of existing relationship with the medical staff, which can result in low cooperation, the danger of drug interaction and/or unidentified allergy risks; and dissatisfaction with perceived 'small town' medical services (Erny-Albrecht, 2014).

While a small proportion of this workforce may be local and thus already have an established GP relationship in place, it does not consider the potential cumulative effects to allied health services that may be required to provide rehabilitation support post injury.

Constraints on health services are more likely to be experienced at the GP level with an n average 79.2% of Australian adults between the ages of 25 to 54 years attended a GP in 2022–2023 (ABS, 2023).

As the locality currently has limited capacity in health service provision (as outlined in **Section 3.4.4**) particularly in relation to GP access, it will be necessary to ensure that appropriate strategies are in place to address the potential impact resulting from the proposed Project and that regular engagement with health service providers in the locality is undertaken (via pulse surveys for example) to monitor impacts on service delivery. Possible strategies include for example workforce access to telehealth or medic services at the Project site. Contributions to existing health services and / or provision of First Aid qualified staff on site during construction and operation are also strategies to be further investigated and a potential area of focus for the Project's Community Benefit Fund arrangements.

4.5 Community and Way of Life

Potential impacts to way of life and community may include changes to how people live, work, and play within their communities and any changes in community composition, cohesion, character, function, resilience, and sense of place because of a project.

4.5.1 Inequitable Distribution of Benefits and Impacts

The impacts of a Project are rarely evenly distributed, with some stakeholders gaining benefits from a Project's development and others experiencing the negative impacts.

The **inequitable distribution of Project benefits and impacts** were raised by eight (8) stakeholders who suggested that rural communities were paying the price for the provision of clean energy to cities and urban areas, without fairly receiving the benefits of such development.

"It will create a bit of angst among a few people, people that are anti-wind farms, but don't think it'd be a huge issue in Carnamah. But depends on where the turbines go in relations to neighbours' farms etc. The ones that are getting paid a lot of money might be close to someone who's not getting benefits." (Health and Emergency)

"There are no real positive benefits to the town." (Traditional Owner Group)

"Why do we need to have it if there is not benefit for the Mid west community?" (Community Member)

"Is it purely to put power in the grid for city people? Probably." (Local Business)

"What does the community get back from the state from this massive investment? What does the local community get?" (Local Government)

Furthermore, stakeholders highlighted a disparity between neighbouring and host landholders, commenting on the payments received when hosting infrastructure, whilst neighbours and the broader community experience the greatest impacts.

"It is very disappointing as there is no community benefit from these wind farms. Only benefits the proponents and landholder. Community is left in the cold and so is the council." (Host Landholder)

"The landowners benefit, the neighbours don't. People who are benefitting are happy, but neighbours aren't." (Local Business)

"The only people it benefits right now is Synergy and the farmers who will have it on their land." (Health and Emergency)

While concerns were held for the inequitable distribution of Project benefits and impacts, eleven stakeholders acknowledged the potential **enhancement of local values through community investments** initiatives supported by Synergy.

The Project is committed to developing a Renewables Community Benefit Fund in line with the WA Draft Guideline on Community Benefits for Renewable Energy Projects, which is in development (Government of Western Australia , 2025) with SynergyRED to work with community to further understand their key needs, values and aspirations with regards to these funds. With regards to this future Fund, consulted stakeholders expressed the view that the monies provided under this should be substantive enough to enable significant legacy projects to be undertaken that address existing community needs.

> *"Community investment. With the amount of money investing in the development, provide funds to community groups, run grant programs and fund community chests. Mining companies do that, but there is a hope that Renewable Energy proponents will do that as well." (Local Government)*

> *"If they got the money, they might build a couple houses if we're lucky." (Community Member)*

> *"Funding into Blue Bush, local clubs, events. The benefit that it brings to the community in terms of mental health...Funding emergency services." (Local Government)*

The Community Benefit Fund, and key considerations for funding are further considered in **Section 6.5**.

4.5.2 Change in Sense of Place

Large-scale projects have the potential to change a community's place identity or place attachment. Place-identity relates to the dimensions of self that develop through interaction with the environment via beliefs, preferences, feelings and values. When change is proposed to a place, it can be perceived as a 'disruption' or 'threat' and can be met with opposition or anxiety in some instances. Where change is perceived as being in keeping with place values, it may be met with support (Carlisle et al., 2014).

When community members were asked to describe what they value about the area, community members often focused on feelings of belonging, lifestyle, amenity, history and characteristics of the landscape. These descriptions denote that for some, the area evokes a sense of place identity and attachment, that is part of how community members define who and what they are, in relation to the 'memories, ideas, feelings, attitudes, values, meanings and experience' that are attached to the physical settings around them (Proshansky, Fabian, & Kaminoff, 1983). This incorporates both past and current ways in which a place or space contributes to fulfilling biological, psychological, social and/ or cultural needs (Proshansky, Fabian, & Kaminoff, 1983; Devine-Wright, 2009; Hernández,, Hidalgo, Salazar-Laplace, & Hess, 2007). These feelings, values and experiences are highlighted in the quotes below.

“Home is where the heart is. A lot of blood, sweat and tears gave gone into farming and what I have built over time.” (Host Landholder)

“Our landscape is our biggest virtue. Our skies, open areas, and wildflowers.” (Host Landholder)

As place attachment is correlated with length of residence, a less transient population, higher levels of volunteering and home ownership, and the working relationship with the natural world, it is likely that sense of place may be impacted for community members residing in proximity of the Project (Devine-Wright, 2009; Giuliani, 2003).

As identified in **Section 3.4.6**, the social locality has a high volunteering rates and rates of home ownership when compared to the state, both indicators of a less transient population. The social locality has also historically had low levels of mobility, however this has increased in recent years, with stakeholder indicating this correlates with a lack of employment opportunities within the locality. This suggests that there is a strong sense of place in the locality that may be impacted by the Project.

As outlined in **Section 3.4.5**, agriculture is a key industry in the region and contributes significantly to the community’s sense of place within the social locality. Some stakeholders expressed concern that the introduction of the Project may alter land use patterns, potentially leading to a shift in community identity. These concerns are further reflected in feedback indicating that changes to the landscape could affect their sense of place, particularly in relation to visual and social amenity (see **Section 4.3.1**).

4.5.3 Loss of Sense of Community and Cohesion

Large-scale transitions, the introduction of new projects in a social locality, changes to the built and natural environment, and the subsequent influx of new residents, can influence levels of social cohesion within a community as well as alter a community’s composition and stability.

Sense of community focuses on the notion that individuals exist within a larger interdependent network or system that is greater than personal relationships between individuals. It includes a sense of communal efficacy and mutual responsibility to do ‘right’ by the community as a whole, where community members believe that they can do together what they can’t achieve on their own (Pretty, Bishop, Fisher, & Sonn, 2007; Jason, Stevens, & Ram, 2015). It is not an outcome nor an end state in itself but can be perceived as a process in which members of a community interact with each other, express who they are in an individual and collective sense, seek and provide social support, and create experiences that facilitate a shared history (Pretty, Bishop, Fisher, & Sonn, 2007).

Community members residing in proximity to the Project highlighted the value of the community as evidenced in the following quotes:

“We have a very healthy and happy community and reasonably safe. We have very little crime; we play a lot of sport and all help each other. It is a great place to grow up your kids.” (Community Group)

“You have whole community night outs where everyone comes. Everyone knows anyone.” (Host Landholder)

"Close knit, when the kids are running around, everyone is uncle or auntie." (Community Member)

"The sense of community and we have each other's backs. When you talk about children, we say it takes a village raise a child, and that is exactly it. We all support each other and are all in the same business. We all back each other." (Host Landholder)

"The community is quick to band together if there's something wrong." (Health and Emergency)

Research undertaken and international experience has found that the renewable energy developments in rural communities has been a source of significant social conflict, often leading to the division of communities along lines of support and opposition (Danielle, de Blasio, & Pasquini, 2024; PBS, 2023; Baxter, Morzaria, & Hirsch, 2013). Research indicates that the introduction of renewable energy projects can create a clear dichotomy between those who view them as an opportunity for economic development—offering job creation, increased revenue, and environmental benefits—and those who perceive them as disruptive to the local landscape, way of life, and cultural identity. This division can strain existing social networks, as community members who were once united by shared values and goals find themselves at odds (Baxter, Morzaria, & Hirsch, 2013). The phenomenon known as "Not in My Backyard" (NIMBY) further exacerbates these tensions, with those opposing the wind farms often framing their resistance as a desire to protect their environment, health, or community character (Danielle, de Blasio, & Pasquini, 2024). As a result, interpersonal relationships can become increasingly polarized, leading to rifts within families, neighbourhoods, and social groups that were previously cohesive. The breakdown of these social bonds may not only diminish social cohesion but also hinder collective action and collaboration, undermining the potential for local communities to manage or benefit from the renewable energy projects introduced in their area.

During engagement activities only one (1) community member expressed concerns that the Project's development may impact **community cohesion due to differing attitudes toward renewable energy developments;** however three stakeholders also raised concerned that the Project could lead to **increased conflict and reduced cohesion between neighbouring landholders given inequitable distribution of social impacts**.

> *"It's going to have huge repercussions, neighbours can't talk to each other and look each other in the eye, it is not transparent. [It] will be a generational issue." (Neighbouring Landholder)*

> *"People who are benefitting are happy, but [the] neighbours aren't." (Local Business)*

In addition to a potential decline in community cohesion, engagement efforts have revealed that community members are experiencing a diminished sense of community due to broader population decline within the locality. While some of this decline can be attributed to natural circumstances, it has also been noted by stakeholders that in recent years, the social locality has experienced population loss due to the acquisition of land for renewable energy developments, tree farms, and large-scale agricultural production. As such, one stakeholder held concerns that the Project could lead to further population decline. Importantly, SynergyRED is not proposing to acquire any properties.

> *"No one is there anymore; they bought up all the land and everyone left. You don't notice when people leave in cities, you notice it here in the rural towns. As a small rural town, we struggle to survive… I noticed there was no other activity on the place besides wind farms. [Developers] just buy the farmers out and use it only for the turbines." (Community Group)*

4.5.4 Improved Liveability and Vibrancy due to Population Influx

Population loss due to a lack of opportunity and services available has been raised as the greatest issue facing rural communities within the social locality. Eight stakeholders noted as a potential positive impact of the Project the fact that a population influx associated with the Project could potentially result in **improved community liveability and vibrancy**. This was further emphasised for some stakeholders when considering diversification of industry and economy (refer to **Section 4.2.2.1**) and how this may attract and retain workforces.

Stakeholders expressed a desire to see an increase in population to ensure services within townships are maintained and improved. It was acknowledged that a permanent workforce in town could realise this.

> *"If they did hire locally or have people come and live in the area it would mean that obviously there will be money going into small local businesses, new people in town, more people into the school, more volunteers, more people to play sport. If one person comes to town and brings their partner into town it could bring other opportunities. Even one family makes a difference." (Host Landholder)*

> *"In all these Wheatbelt and agricultural towns, population decline is a massive issue and retaining services. Perhaps there might be some permanent employees living in the town. Even having one family is significant. One family can make a difference in a small community like Eneabba, who only has 140. There would be a hope that there would be a small population gain." (Local Government)*

Moreover, stakeholders acknowledged that permanently locating a portion of the Project's workforce within these townships could help expand the pool of local volunteers as due to ongoing population decline, the number of available volunteers is limited, and those who do volunteer are often overstretched.

> *"Volunteer shortages* are a recurring theme." (Community member)

> "Ambulances in every town *are crying out for volunteers." (Host Landholder)*

It was recommended that SynergyRED encourage the workforce to volunteer to address the community's volunteer shortage, particularly in terms of health and emergency (refer to **Section 4.4.4**).

It was also acknowledged that the Project could contribute to improved population sustainability due to diversified employment opportunities, with a large proportion of the community out-migrating due to a lack of opportunities. Employment opportunities are further considered in **Section 4.2.1**.

"Our...sons have left the farm because there is not enough money for them and their families... They will keep us and our families in the area. Our children's children will have an opportunity to do something with the farm. Long-term it will help our farming families." (Host Landholder)

4.5.5 Social Acceptance of Renewable Energy Projects

As outlined in **Section 3.4.7**, there are an increasing number of developments within the region, including renewable energy projects. The cumulative impact of multiple projects can exacerbate concerns about health, safety, amenity, and environmental sustainability. This can lead to increased opposition, even if individual projects might have been acceptable on their own. While this concern was echoed by only one stakeholder, case studies in renewable energy zones within NSW have shown increasing opposition to renewable energy developments given cumulative impacts (Armidale Regional Council, 2025).

During the engagement process, stakeholders were asked to consider their level of acceptance towards renewable energy projects, and the Project more specifically. Stakeholders provided an average acceptance rating of 7.7 out of 10, where 1 is not at all accepting, and 10 is very accepting for renewable energy developments generally; and an average rating of 8.0 for renewable energy developments specifically within their Shire indicating a relatively high level of acceptance despite the increasing number of renewable energy projects in the region.

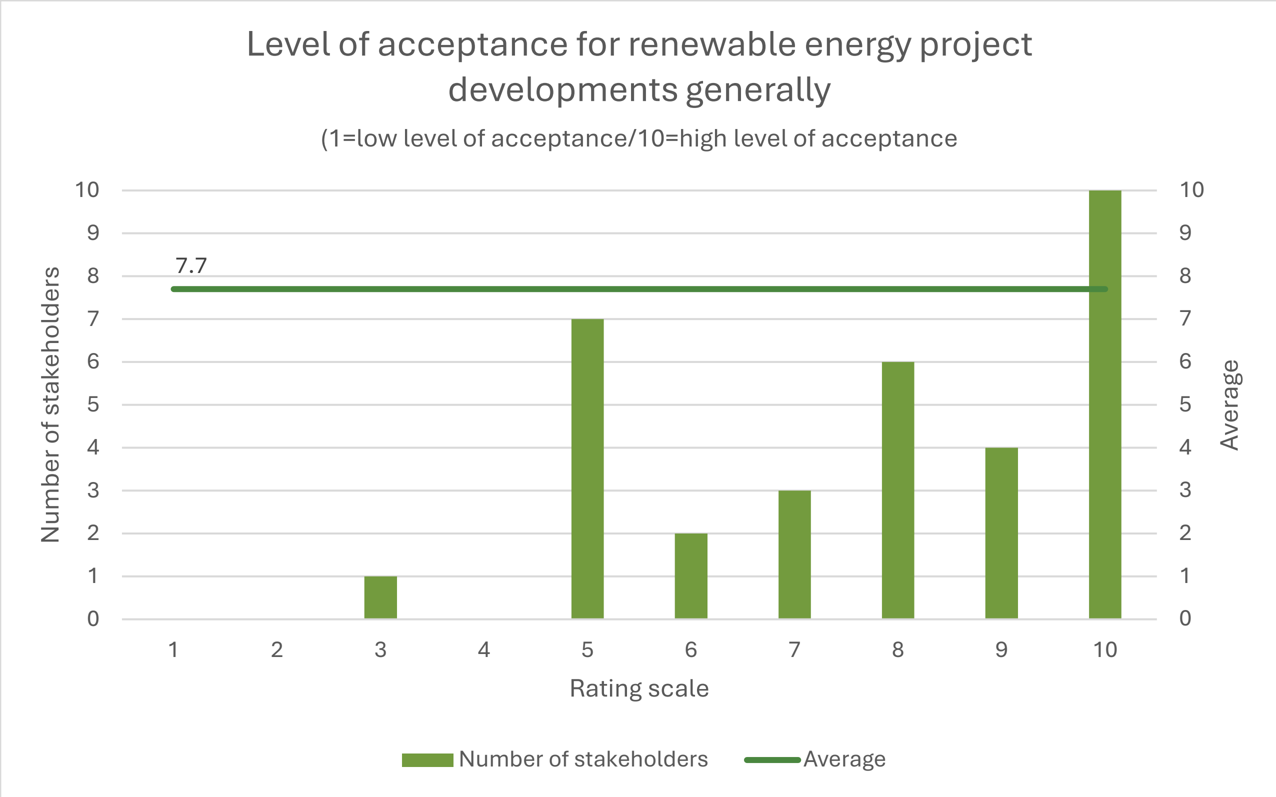


Figure 4.4 Level of Acceptance for Renewable Energy Project Developments Generally

*Source: Umwelt, 2025 (n=*33)

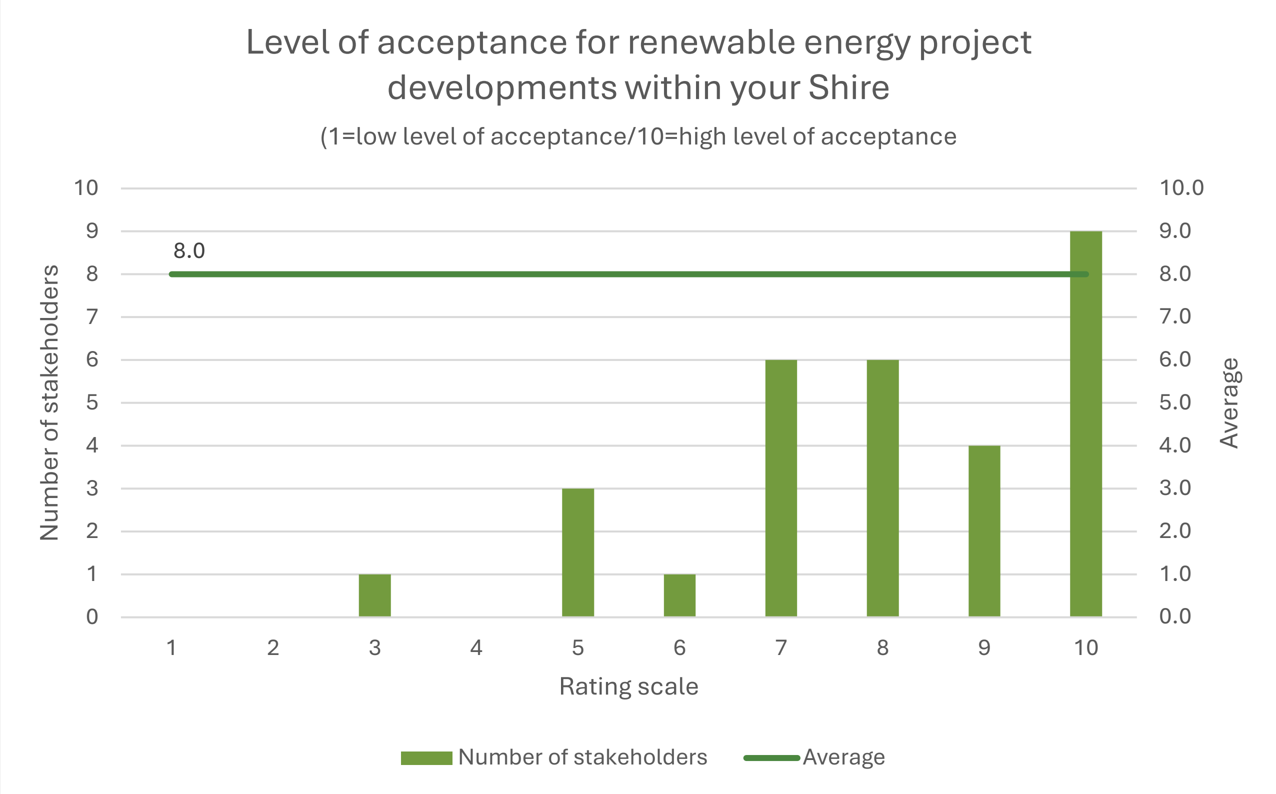


Figure 4.5 Level of Acceptance for Renewable Energy Project Developments Within Your Shire

Source: Umwelt, 2025 (n=30)

Stakeholders were also asked to rate their level of acceptance of the Project more specifically. Stakeholders provided an average acceptance rating of 7.5, which is slightly lower than the level of acceptance towards renewable energy projects generally and within the Shire (refer to **Figure 4.6**). When asked to provide a reason for their rating, reasons provided by stakeholders were largely associated with the limited existing awareness and knowledge of Project details, suggesting an opportunity for SynergyRED to increase information provision and engagement related to the Project.

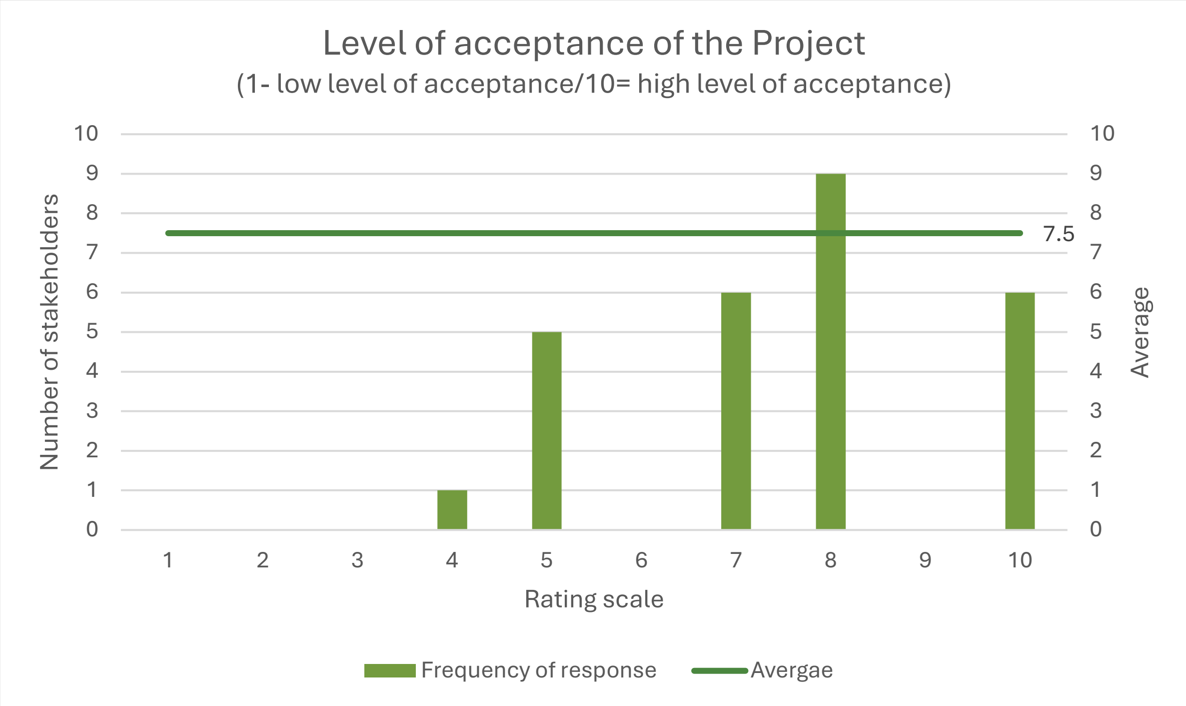


Figure 4.6 Level of Acceptance of the Project

Source: Umwelt, 2025 (n=28)

4.6 Health and Wellbeing

Health and wellbeing impacts include impacts to both physical and mental health and may include psychological stress resulting from uncertainty, financial and/or other pressures, as well as anticipated changes to individual and public health.

4.6.1 Reduced Public Safety

4.6.1.1 Road Deterioration and Increased Traffic

In addition to the potential for an increase in travel time (refer to **Section 4.4.2**), key stakeholders also raised concerns regarding **reduced public safety due to further deterioration of local roads** and **increased traffic volumes**, particularly heavy vehicle movements during the construction period (n=6). Stakeholders expressed that this concern was exacerbated due to the existing poor condition of local gravel roads. Some stakeholders also reflected on past experiences with major project developments in the area and recent traffic incidents, including a fatal accident that occurred in 2020 in Warradarge (The West Australian , 2020).

> *"Make every attempt to make people slowdown on the roads, that did not happen for Warradarge. They are not used to driving in the gravel and it became unsafe." (Host Landholder)*

A number of concerns were also raised in relation to the proposed access routes to the Project Area, with participants frequently noting that local roads were currently unsuitable for heavy vehicle traffic and would not be able to cope with additional traffic volumes, particularly during harvest season. As such, stakeholders raised the possibility for the further deterioration of the road network.

"[The] condition of the road after the traffic movement. Trucks are getting bigger and bigger. Roads were built in the 60s and trucks were 8 tonne now they are 78 tonnes." (Host Landholder)

"The roads are not designed to accommodate extra traffic" (Local Government)

"We have roads that are not equipped to handle the existing traffic... There are also traffic concerns with it being an agricultural area... It is important to not do it over high production time... I am concerned about [the] safety and deterioration of the road. The weight over the gravel roads will have an impact on the road quality. After harvest season the gravel roads crack and degrade significantly." (Business and Industry)

The Traffic Impact Assessment (TIS) has determined that during peak construction periods, the Project will result in 133 light vehicle, and 205 heavy vehicle movements per day, with 120 of these movements occurring during peak hour traffic. The TIS has considered the local capacity of the existing road network, and has determined that vehicle movements will remain well within the capacity of the roads.

While some stakeholders raised concerns for the deterioration of the road network, one stakeholder highlighted that the Project could contribute to **improved road infrastructure due to possible upgrades of the road network**.

As noted above, it has been determined that the existing road network can absorb and increase in traffic, and therefore no upgrades are required. The TIS has also determined that key intersections along the transport route (i.e. Jurien Road / Brand Highway, Jurien Road / Indian Ocean Drive, Brand Highway / Coorow-Green Head Road and Brand Highway / Three Springs – Eneabba Road) do not require upgrades given their existing high turn treatments. Furthermore, the TIS has determined that given the Project will generate a low to moderate volume of traffic, it is unlikely to increase the risk of crashes to an unacceptable amount.

4.6.1.2 Glare and Shadow Flicker

One stakeholder also raised concerns that shadow flicker from turbine components, and glare from solar panels may be a potential risk to road users.

"If they are located close to one of our roads, people might complain that there may be a shadow which could cause issues on the roads. You can sometimes get a bit of a glare. That is mainly an issue with solar farms, but it can also occur with wind farms." (State Government)

"When you get close to the solar panels it has a massive sun reflection. It is like a massive glass mirror." (Host Landholder)

A Shadow Flicker and Blade Glint Assessment has determined that one dwelling is predicted to experience some shadow flicker above a moderate level of intensity. Mitigation options, including the turbine blades being coated with a non-reflective paint to avoid blade glint, and ongoing detailed designs and final siting of the turbines will be implemented to further reduce impacts. Furthermore, whilst a glare assessment of the solar panels has not been undertaken, it is recommended that during the detailed design phase, potential glare on local roads be considered, with mitigation measures implemented should they be required, including the use of visual screens.

One stakeholder also raised concerns that the Project could disrupt recreational aircraft flight paths. The Project Area is currently utilised for recreational flying. The Aviation Impact Statement has determined that the Project would not impact aviation navigations, communication facilities and surveillance radar installations. The turbines would however impact one air route, with the flight path needing to be modified slightly. SynergyRED continues to consult with local and regional aircraft operators to clarify the potential impact of the wind farm to their operations and possible management measures to address.

4.6.2 Bushfire Risk

Public safety concerns due to bushfire risk was a key concern for stakeholders (n=7). Concerns related to personal safety, as well as risks to property given the potential for flammability of Project components, particularly BESS and solar, and a history of fires in the area.

> *"Fire risk for batteries and risk to our land if the battery would go up in flames, particularly if it is a lithium battery. There is a fire risk to Yamatji parcels of land and therefore a risk from a cultural and environmental perspective. Fire at the wrong time of the year could be a major risk to Yamatji land." (Traditional Owner Representative Group)*

In addition, residents and landholders were concerned that the Project could impact on the ability of landholders and emergency services to effectively respond to and attend a bushfire in the Project Area, or the locality. There was also a perception that the Project workforce's lack of adequate training to address bushfires, coupled with farmers leaving due to the increase in renewable energy projects in the area could increase the risk of bushfires spreading.

> *"Increased possibility of fire. You have technicians on the ground that are not trained. The average farmer is t rained to deal with fire. It is in the background and people can't ignore it. The more of you have (wind farms), the greater possibility of it happening down the line." (Host Landholder)*

A Bushfire Assessment has determined that bushfire-prone assets within the project area are expected to achieve a Bushfire Attack Level (BAL) rating of BAL-12.5 or lower, indicating minimal bushfire risk. This outcome is based on assumptions that the site will be cleared and hardscaped or contain only low-threat vegetation, with adjacent vegetation largely retained except for necessary infrastructure. An Asset Protection Zone (APZ) has been designated within Site 21 to ensure future infrastructure is located outside bushfire-prone areas, thereby exempting it from further bushfire mitigation requirements. Should the development design or vegetation classification change, a reassessment of BAL ratings will be conducted via a Bushfire Management Plan (BMP) addendum or revision (Western Environmental , 2025).

Management measures in this regard will include the development and implementation of Bushfire Management Plan that includes provision for the installations of firefighting water tanks and construction of internal access tracks. SynergyRED will also liaise with relevant fire and land management agencies to ensure ongoing management is effective, and access to the Project is maintained for all emergency and on ground firefighting operations.

Stakeholders have also suggested during engagement that the provision of funding for fire emergency services and provision of volunteers would assist in the management of potential bushfire related impacts.

Additionally, while not specifically raised as a concern during the engagement activities undertaken to date for the proposed Project, concerns about **public liability insurance and associated costs of insurance premiums** have been raised during engagement activities associated with renewable energy development across the country. These concerns typically stem from the potential financial risks associated with fire incidents from renewable energy infrastructure and the impact on premiums.

In NSW and Victoria, landholders proximal to the development of solar farms have raised concerns regarding increasing insurance premiums. For example, media coverage of the Culcairn Solar Farm in NSW and the proposed Meadow Creek Solar Farm in Victoria highlights growing anxiety among neighbouring farmers about rising insurance premiums with armers fearing that if a fire originating on their property damages nearby solar infrastructure, they could face liabilities far exceeding their coverage limits The Farmer, 2024).

Analysis undertaken by BMS Group and GCube Underwriting in 2021 identified a notable increase in insurance claims associated with solar energy projects, particularly in Australia. The study conducted by the BMS Group in Australia found that the top insurance claims made by solar farms were linked to mechanical breakdown, fire, and flood, however it was reportedly unclear if these risks increased the insurance premiums of surrounding properties (BMS, 2021).

Conversely, it has more recently been reported by the Insurance Council of Australia (ICA) and the Clean Energy Council that the ICA is not aware of any instances where its members have been unable to provide insurance, or have increased premiums as a result of a farm (or a neighbouring property) hosting energy infrastructure. The rising costs in public liability insurance is not due to renewable development, but rather are in relation to escalating costs of natural disasters, increasing values of homes, and vehicles and inflation (ABC Rural, 2024) (Clean Energy Council, n.d) (Insurance Council of Australia, 2024).

Based on current available research, the level of impact of increased insurance premiums due to proximity to solar farm projects is difficult to ascertain and therefore conclusively assess. While there are no Project specific mitigation measures proposed to address potential increase in insurance, SynergyRED will manage associated risks associated solar technology through the development of a Bushfire Management Plan and communicate the plan's details to emergency service providers and the community.

4.6.3 Increased Stress and Anxiety

In relation to the Project, concerns raised included the uncertainty associated with the assessment process, construction, operation and decommissioning of the Project, with one landholder outlining that their life had been put on hold as a result of the Project. Other factors that were seen to contribute to greater levels of stress and anxiety, included a lack of readily available Project information and updates on the Project website.

A recent engagement review undertaken by Andrew Dyer, the Commonwealth Energy Infrastructure Commissioner, has identified landholders' frustration with the time taken for renewable energy projects to progress through their respective planning processes. Dyer explains that through his research, it is the uncertainty about whether a project would proceed (and if so, when), that has a negative impact on landholders, and project opponents' mental health (Dyer, 2023).

Stress and uncertainty can affect quality of life, and for individuals with an existing vulnerability to mental health issues, are added stressors. Regular sleep disturbance is also known to affect health outcomes. Research confirms that the impacts of major projects on those that oppose development can result in increased stress levels, a sense or feeling of things being out of one's control and distress induced by change (Albrecht, 2007).

Psychosocial disruption may have a wide array of impacts that can affect individual wellbeing (e.g., psychological distress, fear, grief, and mental and physical health), project acceptance (e.g., attitudes, potential for division, trust), capacity to adapt to change (e.g., coping mechanisms) and community wellbeing (e.g., family relations and community support networks) (Grupe, 2013).

Psycho-social impacts, as noted, can have real and negative consequences for individuals and local populations, as has been frequently noted in media articles associated with the renewable energy transition more broadly across the country.

The Project will continue to engage with local landowners and community residents regarding Project implementation and related information provision to reduce levels of stress and anxiety in relation to the Project where possible.

4.7 Culture

Impacts or changes to culture include effects on people's shared beliefs, customs, values, language, and dialect, as well as their local culture, heritage, and ability to access cultural resources.

In relation to Aboriginal cultural values and sites of importance, Yamatji noted concerns that the Project Area may contain specific values and artefacts of importance to the community. There were also concerns that the BESS could pose a fire risk from both a cultural and environmental perspective.

> *"There is a fire risk to Yamatji parcels of land and therefore a risk from a cultural and environmental perspective. Fire at the wrong time of the year could be a major risk to Yamatji land." (Traditional Owner Representative Group)*

A Cultural Heritage Assessment is currently being undertaken for the Project. The preliminary Heritage Due Diligence Analysis has identified that as the proposed Project works are concentrated within cleared agricultural land and utilise and an existing watercourse crossing, there is a low to medium likelihood of Aboriginal Cultural Heritage existing within this area and being subject to disturbance. Proposed management measures will be further defined in collaboration with YMAC upon the completion of the study.

4.8 Decision Making Systems

Impacts on decision-making systems includes the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms (IAIA, 2015). It also refers to the degree to which people feel they have sufficient information and opportunity to provide meaningful input to decisions that affect them, their families, households and communities.

4.8.1 Information Provision, Engagement and Community Agency

Impacts on decision-making systems include the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy, and grievance mechanisms (IAIA, 2015). It also refers to the degree to which people feel they have access to sufficient information and the opportunity to make informed decisions about changes to their homes and communities.

During the engagement process, stakeholders expressed **heightened levels of community outrage due to a perceived lack of transparent and timely engagement** (n=8). Numerous stakeholders commented that they felt engagement had been inadequate, emphasising the importance of SynergyRED offering frequent and structured opportunities for dialogue. As such, they stressed the need for community access to project information and transparent and timely information.

> *"My concerns lay on that fact that proponents, like Synergy, engage once they already developed the project design, that is already too late for us." (Traditional Owner Representative Group)*
>
> *"There has not been enough engagement. They need to have people from the companies on the ground, engaging and connecting with the community." (Business and Industry)*

Similarly, the need for timely and transparent information with regards to renewable energy projects has been identified as a significant challenge by Western Australian local governments, with 46% of regional and 30% of Perth metropolitan council participants in a WALGA survey highlighting a lack of information as being a key challenge in informing decision making (WALGA, 2024). During the engagement process, stakeholders were asked to rate their level of knowledge regarding the Project. On average, stakeholders rated their level of knowledge a 4.7 out of 10 (refer to **Figure 4.7**). This suggests that, on average, stakeholders feel they have a relatively low to moderate understanding of the Project. A rating of 4.7 out of 10 indicates that there is opportunity for enhanced information provision from SynergyRED to ensure stakeholders are well-informed.

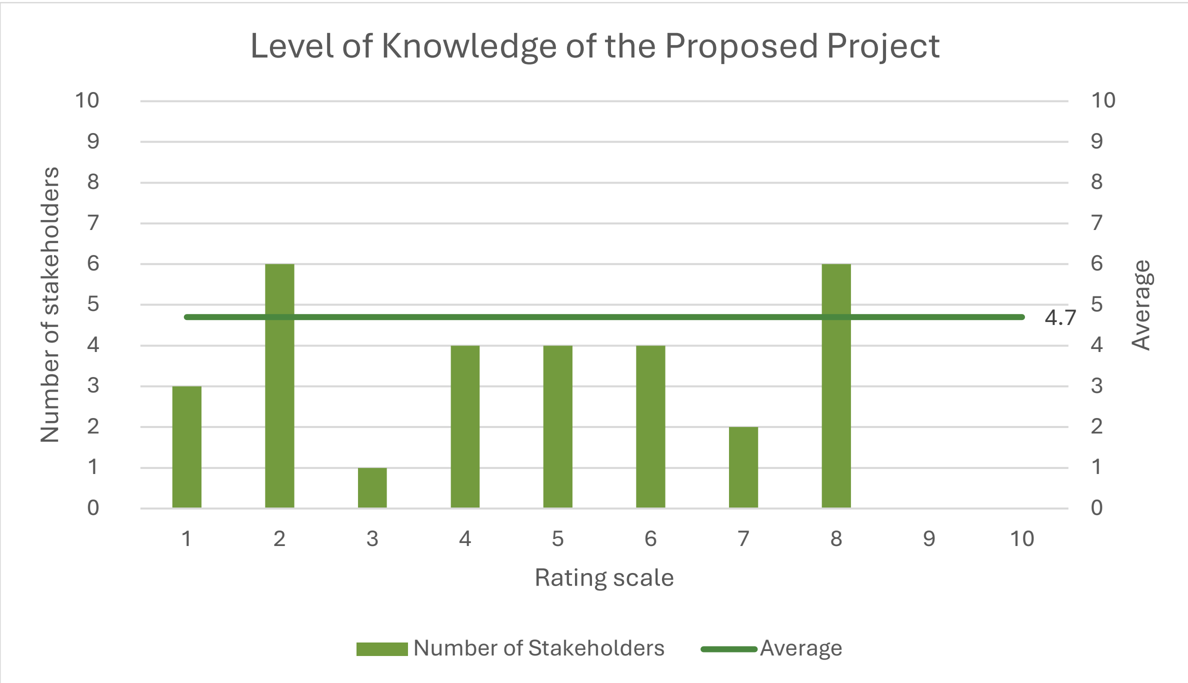


Figure 4.7 Level of Knowledge of the Proposed Tathra Wind Farm

Source: Umwelt, 2025 (n=30)

Additionally, stakeholders expressed significant concerns about the **uncertainty surrounding the future management of the Project** should it be approved. A number of those consulted, felt uneasy, fearing that the promises and commitments which will be made during the initial phases might not be upheld throughout the construction, operation, and eventual decommissioning stages. This concern stemmed from past experiences with the mining industry, and has led to a lack of trust and confidence in the Project's long-term execution and adherence to promised standards.

> *"If promises are not held, they will feel disfranchised. They already have those experiences form mining companies... You can make promises, but often we have seen time and time again we have seen empty promises, and it has not been sustained." (Health and Emergency)*

As noted in **Section 2.4**, Project engagement has been involved consultation with a number of stakeholders via a number of mechanisms. SynergyRED will continue to engage with community and key stakeholders throughout the planning, construction and operational phases of the Project. The existing CEAP will be updated to reflect the Project's lifecycle, with consideration given to preferred engagement mechanisms (refer to **Section 6.4**).

5.0 Social Impact Evaluation Summary

This section summarises the technical and perceived social impacts (positive and negative) that may be experienced by different stakeholders due to anticipated changes associated with the Project.

Social impact evaluation has been informed by a consideration of the social baseline conditions in which the Project is located, engagement with key stakeholders, relevant social research and other social assessment studies, outcomes of the relevant draft technical assessments and expert assessment. Impact evaluations have been based on draft technical assessments that were available at the time of writing. These have been indicated with a footnote as relevant in **Table 5.1**. As a result, there may be some overstating of impact rankings as a worst case scenario provided for these particular impacts.

Social impacts have been categorised in line with the relevant social impact categories outlined in the assessment methodology and have applied likelihood and magnitude dimensions relevant to social impact practice. A suite of mitigation and enhancement measures have been identified to avoid or reduce negative impacts or to enhance the benefits of the Project at the local and regional community level.

SynergyRED has also made changes to the project design to reduce impacts where possible (refer to **Section 6.1** for further details). Key mitigation and enhancement measures also incorporate environmental management initiatives and plans. Measures identified/suggested by stakeholders throughout consultation are italicised.

Table 5.1 presents a summary of the social impact evaluation with proposed management and enhancement strategies and a residual risk ranking noting also noted. Shading has been used to represent the Significance Rating of impacts, with shades of blue and green used to indicate if an impact is negative or positive, respectively.

Abbreviations and definitions used in the table include:

- **Duration:** P = Planning phase, C = Construction phase, O = Operational Phase and D = Decommissioning Phase
- **SIA Rating: '**-'= Negative impacts, '+' = Positive impacts. These have been highlighted to quickly show the differences, with negatives highlighted in a light red colour, and positives highlighted in a light green colour.
- **Perceived stakeholder significance:** Perceived stakeholder significance reflects level of stakeholder concern gathered via engagement.
- **Significance Rating** (Pre-Mitigation and residual): L = Likelihood, M = Magnitude and S = Significance. These ratings are defined in the Social Impact Assessment Guideline, Technical Supplement (DPE, 2023). The social significance matrix used to evaluate social impacts (refer **Section 2.4.3**), considers both the magnitude of the potential social impact (minimal, minor, moderate, major and transformational) and the likelihood of the impact occurring (very unlikely, unlikely, possible, likely and almost certain) to determine an overall evaluation of impact as 'low', 'medium', 'high' or 'very high'.

Table 5.1 Potential Social Impacts

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
Livelihoods	Workforce associated with construction and operation	Generation of local employment, training and procurement opportunities	Broader community and local job seekers	C	Very High	C	3	Medium (+)	• Establish and operate an EOI register for local suppliers • Continued engagement with Aboriginal organisations (including YSRC) to identify employment and training opportunities to maximise local benefit • Deliver an Aboriginal Procurement Policy (APP) that demonstrates commitments towards achieving baseline requirements and stretch goals for Aboriginal people • Communicate and promote opportunities for local employment and procurement • Build local familiarity and connections with SynergyRED and the Project requirements • Facilitate the participation of underrepresented groups in the labour force • *Collaborate with local education and training providers to understand how SynergyRED could contribute to education opportunities* • Encourage EPC Contractor employs locally to meet targets	B	3	High (+)
			Local businesses	C	Very High	C	2	Medium (+)		B	2	Medium (+)
Livelihoods	Leasing agreements	Livelihood benefits for landholders due to improved income security and diversification	9 Host landholders	O	Very High	B	2	Medium (+)	• Deliver transparently applied Host Landholder Agreements	A	2	Medium (+)
Livelihoods	Project workforce	Increased opportunities for economic diversification enhancing community sustainability	Broader community	C,O & D	High	B	2	Medium	• Development of a procurement strategy / framework • Establish and operate an Expression of interest (EOI) register for local suppliers • *Continued engagement with Aboriginal organisations (including YSRC) to identify employment and training opportunities to maximise local benefit*	B	3	High (+)

[7] Community identified strategies are displayed in italics.

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
									• Deliver an APP that demonstrates commitments towards achieving baseline requirements and stretch goals for Aboriginal people • Communicate and promote opportunities for local employment and procurement • Build local familiarity and connections with SynergyRED and the Project requirements • Seek to facilitate participation of underrepresented groups in the labour force • Collaborate with local education and training providers to understand how SynergyRED could contribute to education opportunities. • Encourage EPC Contractor employs locally to meet targets • *Encourage skilled workers to move to the region long-term through mechanisms developed in partnerships with the Shire of Carnamah.*			
Livelihoods	Construction workforce	Increased economic activity and spend in local towns	Local businesses and service providers	C	Very High	C	3	Medium (+)	• Consideration of a local spend strategy, where local workforces are encouraged to access services such as food and recreational activities within the vicinity of the Project.	B	3	High (+)
Livelihoods	Presence of Project infrastructure	Livelihood impacts associated with potential contamination of land due to potential damage to infrastructure	Proximal landholders	C, O & D	-	C	3	Medium (-)[8]	• Develop a Construction Environmental Management Plan (CEMP) that outlines measures to manage impacts on soil and water.	D	2	Low (-)
Livelihoods	Presence and flammability of Project infrastructure	Livelihood impacts due to increased insurance premiums for neighbouring agricultural properties	Adjacent landowners / residents	C & O	-	C	3	Medium (-)	• Implementation of the Bushfire Management Plan, and communicate the plan's details to emergency service providers and the community. • Implementation of Neighbour Agreements	D	3	Medium (-)

[8] Based on Draft EIS

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
Livelihoods	Construction workforce	Limited potential for long-term economic benefits, e.g. employment, training, procurement and local spend	Broader community	C, O & D	Very High	B	3	High (-)	• Development of a procurement strategy / framework • Establish and operate an EOI register for local suppliers • *Continued engagement with Aboriginal organisations (including YSRC) to identify employment and training opportunities to maximise local benefit* • Deliver an APP that demonstrates commitments towards achieving baseline requirements and stretch goals for Aboriginal people • Communicate and promote opportunities for local employment and procurement • Build local familiarity and connections with SynergyRED and the Project requirements • Facilitate the participation of underrepresented groups in the labour force • Collaborate with local education and training providers to understand how SynergyRED could contribute to education opportunities • Encourage EPC Contractor to employ locally • *Encourage skilled workers to move to the region long-term through mechanisms developed in partnerships with the Shire of Carnamah* • Consideration of a local spend strategy, where local workforces are encouraged to access services such as food and recreational activities within the vicinity of the Project	C	3	Medium (-)
Livelihoods Surroundings Accessibility	Establishment and operation of Project infrastructure including ancillary infrastructure	Livelihood impacts associated with property damage due to heightened bushfire risk	Host and proximal landholders, including for ancillary infrastructure	C & O	Low	C	4	Medium (-)	• Implementation of a Bushfire Management Plan, and communicate the plan's details to emergency service providers and the community.	D	4	Medium (-)
Livelihoods, Surroundings Accessibility	Project planning and constructions	Livelihood impacts due to restricted land use/ disruption to farming practices	Host landholders and proximal neighbours	P,C, O	Very High	C	3	Medium (-)	• Implement Host Landholder Agreements and Neighbour Agreements • Continued consultation with landholders throughout the construction and operational phases of the Project.	C	2	Medium (-)

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
Livelihoods, Community	Payments to landholders Neighbour Agreements	Inequitable distribution of project benefits and impacts	Proximal Landholders Broader community	P, C, O	High	B	3	High (-)	• Implementation of Neighbour Agreements • *Transparently applied RCBF prepared in consultation with community members and key stakeholders, including Council.*	C	2	Medium (-)
Surroundings	Project operation	Intergenerational equity and improved liveability due to contribution of the Project to renewable energy generation	All stakeholders	O	Medium	B	3	High (+)		B	3	High (+)
Surroundings	Construction of Project infrastructure and Project operation	Loss of environmental values, such as flora and fauna	Broader community Environmental groups		Low	C	3	Medium (-)	• Placement of turbines, solar and BESS within existing cleared farmland and related infrastructure away from remnant native vegetation • Detailed designs and final siting infrastructure to further reduce impact on environmental values	C	2	Medium (-)
Surroundings	Infrastructure transportation	Improved road infrastructure due to upgrades of the road network, improving road safety	Broader community, road users	C	Low	D	2	Medium (+)	• *Continued coordination and engagement with the Shire to understand construction impacts and requirements for existing roads*	D	2	Medium (+)
Surroundings Way of Life	Installation and operation of Project Infrastructure	Change in the rural landscape resulting in impacts on visual amenity	Proximal landholders	C & O	Very High	A	3	High (-)	• Implement Host Landholder Agreements and Neighbour Agreements • Implement measures identified in the LVIA, including vegetation screening	B	2	Medium (-)
Surroundings	Construction of Project infrastructure	Social amenity impacts due to noise and vibration associated with construction activities	Proximal landholders	C	High	C	3	Medium (-)[9]	• Implement measures identified in the NIA, including: • Development of a Construction Noise Management Plan • Use of noise mitigation modes • Consider relocation of turbines during the detailed design phase and final selection of turbines • Consider post construction noise monitoring	C	2	Medium (-)

[9] Based on draft NVIA

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
									• Implement the CEAP with consideration into keeping community informed of working hours and any potential change, temporarily or permanent, relating to the construction schedule			
Surroundings	Construction of Project infrastructure	Social amenity impacts due to dust associated with construction activities	Proximal landholders	C	Low	B	2	Medium (-)[10]	• Keep community informed of working hours and any potential change, temporarily or permanent, relating to the construction schedule • Implement the CEAP • Ensure an appropriate grievance and complaints mechanism is available for stakeholders throughout the construction period	B	2	Medium (-)
Surroundings	Operations of Project infrastructure	Social amenity impacts due to noise associated with turbine operation	Proximal landholders	O	Medium	C	3	Medium (-)[11]	• Implement measures identified in the NIA, including: • Development of a Construction Noise Management Plan • Use of noise mitigation modes • Consider relocation of turbines during the detailed design phase and final selection of turbines • Consider post construction noise monitoring • Implement the CEAP. • Ensure an appropriate grievance and complaints mechanism is available for stakeholders	C	2	Medium (-)
Surroundings Health and Wellbeing	Operations	Reduced public safety due to increased bushfire risk	Proximal landholders	O	Low	B	3	High (-)[12]	• Implementation of the Bushfire Management Plan • *Deliver fire safety training to the Project's workforce to support in first responding to potential fire occurrences.* • Implement the CEAP	C	3	Medium (-)
Surroundings	Operations	Safety concerns due to potential glint/glare and shadow flicker on roads	Proximal landholders	O	Low	B	3	High (-)[13]	• Detailed designs and final siting infrastructure to reduce impact on affected dwelling • Coating of turbine blades with non-reflective paint • Implement Host Landholder Agreements and Neighbour Agreements	C	2	Medium (-)

[10] Based on draft EIS
[11] Based on draft NVIA
[12] Based on draft EIS
[13] Based on draft Shadow Flicker Assessment

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
Surroundings	Decommissioning	Concerns regarding Project decommissioning and associated waste management	Proximal landholders	D	High	B	3	High (-)	• Prepare a Decommissioning and Rehabilitation Management Plan (DRMP)	C	3	Medium (-)
			Environmental groups		-							
Accessibility, Surroundings	Establishment and construction of Project Infrastructure	Reduced public safety due to further deterioration of local roads and increased volume of traffic	Proximal Landholders	C	Medium	C	2	Medium (-)	• Preparation and implementation of a detailed construction Traffic Management Plan (TMP) detailing how works to the site access and ongoing construction works will be undertaken. The TMP shall be prepared by the proponent with the works contractor in consultation with Council. It is recommended the TMP incorporate: ○ Notification to residents along the transport route during peak construction period and implementation of a Drivers Code of Conduct			Low (-)
			Road users		Medium							
Accessibility Livelihoods Way of Life Community	Establishment and Construction of Project Infrastructure	Decreased access to affordable housing and accommodation due to construction workforce influx	Broader Community, Service Providers,	C		A	3	High (-)	• Continued investigation into housing and accommodation options • When sourcing accommodation for workers, if it is a traditional provider, ensure there is capacity for tourists through only using 30% of vacant rooms • Continued engagement with key stakeholders to further understand potential accommodation options, including the facilitate the use pre-existing workers accommodation • Undertake a targeted, fit for purpose assessment for each accommodation option that considers social impacts associated with each option	C	2	Medium (-)
Accessibility	Establishment and Construction of Project Infrastructure	Reduced access to health and emergency services due to cumulative workforce project influx	Broader community, Health service providers	C, D		C	3	Medium (-)	• *Implementation of contributions to local health and emergency services and initiatives through the RCBF (i.e. St John Ambulance)* • *Ongoing engagement and collaboration with existing health providers to understand capacity and demand* • Consideration into the incorporation of medical facilities (i.e. telehealth facilities, provision of an onsite nurse/ medic and ambulance services) in workers accommodation	D	3	Medium

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
									• Consideration into rotation schedules that enable workers to access health services at home			
Decision-Making Systems	Community engagement	Heightened levels of community outrage due to perceived lack of transparent and timely engagement	Broader community	P,C,O & D	High	B	3	Medium (-)	• The Project will require the development of a community engagement and communication strategy that addresses both construction and operational phases of Project, which should include information relating to the construction period, operational phase, the company, and decommissioning phase • *Transparent, timely and accessible information provision from Synergy* • *Utilise local facilities for engagement activities* • Establishment of a complaints and feedback register	C	2	Medium (-)
Health and Wellbeing	Operations of Project infrastructure	Increased stress or annoyance due to shadow flicker from turbine blades	Proximal landholders	O	Low	B	2	Medium (-)[14]	• Detailed designs and final siting of the turbines to reduce impact on affected dwelling • Coating of turbine blades with non-reflective paint • Implement Host Landholder Agreements and Neighbour Agreements	C	2	Medium (-)
Health and Wellbeing	Public release of Project plans and documentation	Increased stress and anxiety due to uncertainty associated with project development and changes to way of life	Proximal Landholders	P & C	Low	B	3	High (-)	• Transparent, timely and accessible information provision from SynergyRED in line with the CEAP • Ensure an appropriate grievance and complaints mechanism is available for stakeholders and establish a complaints and feedback register	C	2	Medium (-)
Health and wellbeing Livelihoods	Damaged solar panel and battery infrastructure	Health and wellbeing impacts associated with potential water contamination of neighbouring water sources, e.g. dams and bores.	Proximal landholders	O	-	C	3	Medium (-)[15]	• Establishment of buffer zones, particularly along Warradarge Creek • Micrositing of proposed WTG crane pads • Provision of appropriate groundwater licensing • Implementation of low impact construction techniques, including stormwater, sediment and erosion controls • Implementation of contamination and spill prevention controls	D	3	Medium (-)

[14] Based on draft Shadow Flicker Assessment.

[15] Based on draft Hydrogeological and Surface Water Desktop Assessment

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
									• Ongoing groundwater monitoring			
Health and Wellbeing Livelihoods	Project Construction and Operation	Increased risks to aviation activities due to the presence of turbines	Host and neighbouring landholders, Broader Community.	C, O	Low	B	2	Medium (-)	• Provision of details to local and regional aircraft operations prior to construction of Project • Ongoing consultation with local and regional aircraft operators through the detailed design and construction period • Implement measures identified in the Aviation Impact Assessment	B	1	Low (-)
Community	Project workforce	Improved liveability and vibrancy of communities due to population growth / sustained regional population	Broader community	C & O	Medium	C	3	Medium (-)	• *Encourage Project workforce to volunteer and participate in community events* • Continued engagement with the Council to consider strategies to encourage skilled workers to relocate to the region, especially during the operation phase	C	3	Medium (-)
Community	Project planning and implementation	Reduced community cohesion due to differing attitudes towards renewable energy developments	Proximal landholders Broader community	P	High	B	3	Medium (-)	• The Project will require the development of a community engagement and communication strategy that addresses both construction and operational phases of Project, which should include information relating to the construction period, operational phase, the company, and decommissioning phase.	C	2	Medium (-)
Community	Construction workforce	Reduced community cohesion due to incoming workforce resulting in changed community characteristics and composition	Proximal landholders, Broader community	C	Medium	B	3	Medium (-)	• *Provision of accessible opportunities and working with relevant Aboriginal training and employment groups* • *Targeted training opportunities for reskilling or upskilling local workforces* • *Work with local service providers, education providers and procurement stakeholders* • Work with local emergency service providers, such as the police, during the construction period and as needed • *Implement a standardised workforce code of conduct, including all contractors. This includes expectations of workforce behaviour outside of work hours*	C	3	Medium (-)
Community	Construction workforce	Changed sense of community due to influx of	Proximal landholders,	C	Medium	B	3	Medium (-)	• Targeted training opportunities for reskilling or upskilling local workforces	C	3	Medium (-)

SIA Impact Category	Project Aspect	Social Impact	Affected Parties	Duration	Perceived Significance	Significance Rating Pre-Mitigation			Refinements, Mitigation or Enhancement Measures[7]	Residual Significance Rating		
						Likelihood	Magnitude	Significance		Likelihood	Magnitude	Significance
		construction workforce	Broader community						• Work with local service providers, education providers and procurement stakeholders • Implement a standardised workforce code of conduct, including all contractors. This includes expectations of workforce behaviour outside of work hours • Encourage Project workforce to volunteer and participate in community events			
Culture	Project establishment, construction, operation, and decommissioning	Reduced connection to Country and disruption to cultural values	Traditional Owners and Aboriginal community	P, C, O & D	High	C	2	Medium (-)[16]	• Continued engagement with Aboriginal organisations (including YSRC) through the life of the project to avoid or minimise heritage impacts • Implement measures identified in the Aboriginal heritage survey once finalised	C	2	Medium (-)
Cumulative	Project planning	Declining rates of social acceptance of wind farms due to saturation of projects in the region	Broader community	P, C, O & D	Low	C	3	Medium (-)	• Coordinate with other developers to minimise where possible cumulative social impacts associated with renewable energy development in the area	C	2	Medium (-)

[16] Based on draft Heritage Due Diligence Analysis

6.0 Social Impact Management

This section elaborates on the proposed strategies to address the anticipated social impacts associated with the Project, focusing on those evaluated as having moderate to high significance. Social impact management planning is a crucial element of SIA, ensuring that impacts identified through the SIA process and community consultation are managed effectively throughout the development lifecycle (Franks & Vanclay, 2013). The selection of strategies incorporates proposals from the community, insights gained through consultation, industry benchmarking, recommendations from environmental technical studies, and the social team's expertise in conducting SIAs for similar projects throughout Australia.

Mitigation measures to respond to project impacts may be:

- **Performance-based** – identify performance criteria that must be complied with to achieve an appropriate outcome, but do not specify how the outcome is to be achieved, demonstrating why the performance criteria are appropriate.
- **Prescriptive** – outlining actions that need to be taken or things that must be done, with justification as to why this approach is appropriate by providing scientific evidence or referencing relevant guidelines or case studies.
- **Management-based** – where potential impacts can be satisfactorily avoided or mitigated by implementing known management approaches.

6.1 Project Design Refinements

The Project design has been developed and refined through an iterative process, in response to investigations into key site constraints, feedback from key stakeholders and as a result of the outcomes of technical assessment studies.

SynergyRED undertook an initial constraints mapping exercise to understand key constraints associated with vegetation, heritage, flooding and to minimise and potential noise impacts on neighbouring residences. Further to more detailed flora, vegetation and fauna mapping, the Project has also been refined to further avoid potential impacts on remnant vegetation and potential black cockatoo foraging and habitat areas. As identified in **Section 4.2.4**, SynergyRED have also worked with landholders to ensure Project infrastructure to ensure impacts on farming operations are minimised.

Furthermore, through the subsequent detailed design and renewable infrastructure selection process, Synergy will continue to explore opportunities to ensure that key environmental and heritage values, and impacts to farming operations, traffic, electromagnetic induction, shadow flicker and noise are minimised. As noted in **Section 4.2.4**, SynergyRED will also continue to explore agrivoltaics for the solar component of the Project during the detailed design and selection of a solar technology.

6.2 Community Identified Enhancement Measures

Throughout the stakeholder engagement process, a number of potential mitigation and enhancement measures were identified by the community. While specifics are not fully detailed in the provided excerpt, it is noted that these measures have been discussed, where relevant, throughout

Section 4.0, and included where relevant in to address social impacts in **Table 5.1**. Key measures identified include:

- Implement meaningful community legacy benefits.
- Maximise local employment and procurement.
- Ensure timely and transparent engagement.
- Encourage the workforce to spend locally.
- Attract workers to reside permanently in town.

6.3 Accommodation and Employment

To support preparation of the SIA, detailed analysis has been undertaken of the available local accommodation and employment capacity in the broader social locality that may be available for the proposed Project in the future for consideration by SynergyRED and the ultimate project developer. Engagement has also been undertaken with a range of local and regional accommodation providers and business representative groups to further understand capacity.

This analysis has identified that there the broader Study Area has a relatively large labour force, with 200 unemployed residents that hold the necessary skill set to support the Project. However, the available labour force is largely concentrated in Greater Geraldton, suggesting accommodation will also likely be needed to be provided to support employment of this labour. Accommodation options for the project are also being further explored and assessed for the Project.

SynergyRED will work in collaboration with the nominated Project contractors and other relevant key stakeholders where possible to implement strategies prior to construction that increase opportunities for local employment and minimise impacts on the availability and affordability of local accommodation. Examples of such activities include:

- Develop and maintain strong relationships with interested contractors and service providers by to maximise local participation and ensures early communication about upcoming opportunities, e.g. creating an Expression of Interest (EOI) register and engaging regularly with local businesses and representative groups.
- Work collaboratively with key stakeholders and service providers to enhance opportunities for skills development, employment, and local procurement.
- Facilitate the participation of underrepresented groups in the labour force, including Aboriginal people and females, for example via continued engagement with Aboriginal organisations (including YSRC) to identify employment and training opportunities to maximise local benefit.
- Continued engagement with key stakeholders to further understand potential accommodation options, including the establishment of a temporary workforce accommodations, or use of pre-existing workers accommodation options.

Furthermore, SynergyRED has a social procurement strategy (SynergyRED, 2023) that aligns with the Western Australia's Social Procurement Framework. SynergyRED's key considerations for social procurement are summarised in **Figure 6.1**. As SynergyRED is a government trading enterprise (GTE), the company applies the Western Australian Government's Aboriginal Procurement Policy (APP). Under the APP, SynergyRED is committed to providing employment pathways and opportunities, including a 2% Aboriginal employment target and a 4% Aboriginal business subcontracting target.

These targets aim to contribute to Aboriginal economic development by influencing the broader supply chain.

It is recommended that where it is possible to influence, that SynergyRED encourage the development of a targeted social procurement strategy to be attached to the Project that aligns with the intent of SynergyRED's existing strategy and the outcomes of this assessment.

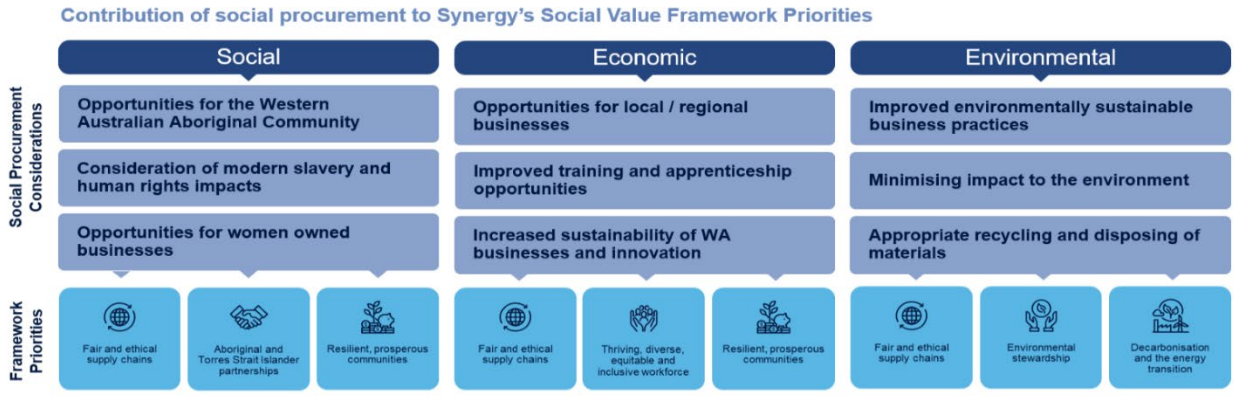


Figure 6.1 Contribution of Social Procurement to SynergyRED's Social Value Framework Priorities

Source: SynergyRED, 2023

The AES also identifies that workers accommodation will be required for the Project workforce, outlining potential options for further consideration. SynergyRED will continue to investigate these potential options, including the establishment of a temporary workers facility, or the use of existing accommodation camps in collaboration with key stakeholders. Further analysis of each option should seek to consider potential social impacts and benefits.

6.4 Community Engagement Action Plan

Should the Project be approved, consistent and consultative engagement with communities throughout the Project's planning, pre-construction, construction, and operations is critical in increasing social acceptance, developing strong local partnerships and achieving successful, and sustainable Project outcomes. Fairness in the Project's development process requires the establishment and management of processes to ensure that people have meaningful opportunities to influence the design, plans, and outcomes of a development as well as in realising the positive impacts of the Project.

It is recommended that the Proponent update the existing CEAP for the Project to incorporate the construction, operations and decommissioning phases of the Project, continuing to prioritise transparent and timely communication with stakeholders that is focused on key issues of concern and information needs.

The CEAP is to be developed in line with relevant guidelines, including:

- Clean Energy Council's Community Engagement Guidelines for the Australian Wind Industry (Clean Energy Council, 2018)
- Renewable Energy Community Benefits and Engagement Guide (WALGA, 2025)
- IAP2 Standards of engagement for best practice.

6.5 Community Benefit Fund

Community benefit sharing in the context of the renewable energy sector in Australia relates to the establishment of an integrated model within projects to share the rewards of the development proactively and purposefully with local communities and aims to improve positive project impacts by ensuring financial and social gains are distributed locally and regionally with a longer-term view (Clean Energy Council, 2019). Outcomes of such a model are seen to contribute positively to the development and sustainability of a region.

As noted in **Section 4.5**, Synergyare committed to developing a RCBF in line with WA's final guideline, once released. Synergy will consider the specific needs and desires of the community to develop a targeted and tailored program.

Synergy will develop the RCBF with consideration into the principles outlined in the draft guidelines, specifically it will be:

- **Appropriate:** the arrangements should consider the project size and its impact on the host community, with the contribution being commensurate to the scale of the project.
- **Provide Opportunity:** the arrangements should support the community to benefit from hosting a project and reap lasting economic benefits
- **Equitable and Inclusive:** the arrangements should aim to include affected community as much as practicable and distribute benefits equitably.
- **Legacy Building:** the arrangements should leave a lasting positive impact on the community.
- **Bespoke:** the arrangements should be created with local input to address specific needs and concerns in the area.
- **Transparent:** the arrangements should be clearly communicated, with local involvement and collaboration whenever possible (Government of Western Australia , 2025).

The fund will have a fixed annual budget (CPI indexed in future years) proportional to the Project size and based on industry best practice. SynergyRED will continue to collaborate with the Shire and community to further identify priority area and projects for investment and will continue to work with key stakeholders to inform the development of the RCBF.

This is key given that there is an intrinsic relationship between community engagement and the development of community benefit sharing programs or similar funding arrangements with the need to understand and tailor funding to the local context and local needs. The best way to understand this context is by engaging a wide range of communities and stakeholders relevant to the project/operation to understand:

- Local community needs or challenges.
- Current organisations, programs, initiatives in the local area.
- Community expectations and aspirations in relation to benefit sharing.

Effective engagement with relevant stakeholders increases procedural fairness and ensures that programs developed are meeting community needs and aspirations and delivering value at the local and regional community level.

In 2021, the Shire of Carnamah developed the Eneabba Economic Revival Strategy (2021). The preparation of this strategy was informed by community engagement activities that sought to, among other things, identify community aspirations and needs. Aspirations and needs identified at the time of this engagement, included:

- Enhancing tourism and local business through improved caravan park amenities, signage, and the promotion of wildflower and bushland trails.
- Attracting visitors by developing events and experiences such as progressive golf tournaments and pony trails.
- Improving local services like cafés, general stores, and eating/washing facilities to encourage longer visitor stays.
- Leveraging location advantages such as proximity to the Brand Highway for increased exposure.
- Driving economic diversification by attracting investment and introducing new industries (e.g., fabrication, mining supplies, horticulture).
- Improving infrastructure, particularly roads and communication networks.
- Strengthening regional collaboration with neighbouring Shires to support shared development goals.

Furthermore, engagement activities to support the preparation of the SIA also gathered some preliminary insights into needs, challenges and opportunities in the locality with stakeholders asked to consider the top issues in the community, and ways in which SynergyRED could work with the community to address local needs or create community value (refer to **Figure 6.2** and **Figure 6.3**).

This is to be further explored in future more targeted engagements activities to be undertaken by SynergyRED to support the development of its funding agreement with the Shire.

Figure 6.2 Key Community Issues[17]

Source: Umwelt, 2025 (n=32)

Figure 6.3 Strategies to Address Local Needs[18]

Source: Umwelt, 2025 (n=26)

[17] Size of text reflects the number of times raised

[18] Ibid

7.0 Conclusion

This Social Impact Assessment has documented the social baseline, social impacts and social impact management and enhancement measures associated with the Project. This SIA has included consolidation of community consultation outcomes to inform the assessment of, and evaluation of Project related social impacts and opportunities, and preliminary social impact management planning. The 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 and social outcomes.

The positive social impacts ranked with a residual significance ranking of high or medium include:

- Generation of local employment, training and procurement opportunities.
- Livelihood benefits for landholders due to improved income security and diversification.
- Increased opportunities for economic diversification enhancing community sustainability.
- Increased economic activity and spend in local towns.
- Intergenerational equity and improved liveability due to contribution of the Project to renewable energy generation.

The SIA has also identified and assessed potential negative social impacts of the Project. Impacts that are likely to be of high significance include:

- Limited potential for long-term economic benefits, e.g. employment, training, procurement and local spend.
- Inequitable distribution of project benefits and impacts.
- Change in the rural landscape resulting in impacts on visual amenity.
- Reduced public safety due to increased bushfire risk.
- Safety concerns due to potential glint/glare.
- Concerns regarding Project decommissioning and associated waste management.
- Reduced public safety due to further deterioration of local roads and increased volume of traffic.
- Decreased access to affordable housing and accommodation due to construction workforce influx.
- Increased stress and anxiety due to uncertainty associated with project development and changes to way of life.

Community identified strategies to mitigate or respond to these potential negative impacts, as well as opportunities to enhance the positive impacts of the Project and contribute to the local and regional community, have been identified, with these strategies considered by SynergyRED in the development of the social impact management framework.

8.0 References

ABC Midwest. (2020, November 15). *WA is experiencing its worst rental shortage since 2007 with many facing homelessness*. Retrieved from ABC MIdwest: https://www.abc.net.au/news/2020-11-15/wa-rental-crisis-covid-19-people-at-breaking-point/12868428

ABC News. (2021, May 25). *Regional WA towns hope 'global export race' for green hydrogen will fuel revival*. Retrieved from ABC News: https://www.abc.net.au/news/2021-05-25/mid-west-green-hydrogen-interest-boom/100161000

ABC Rural. (2024, June 12). *Farmer fears potential public liability insurance risks living next door to Neoen's Culcairn solar farm*. Retrieved from https://www.abc.net.au/news/2024-06-12/farmer-stephen-pumpa-insurance-concerns-neoen-solar-farm/103855680

ABS. (2021). *ABS Census Data*. Retrieved from Australian Bureau of Statistics: https://www.abs.gov.au/census/find-census-data/search-by-area

ABS. (2023). *Patient experiences* . ABS.

Albrecht, G. (2007). *Solastalgia: The Distress Caused by Environmental Change*.

Ares. (2024). *Tathra Wind Farm OSOM Route Study*. Ares.

Armidale Regional Council. (2025). *Impact of Renewable Energy Zones on Rural and Regional Communities and Industries in NSW*. Armidale Regional Council.

Aussie Towns. (2024). *Eneabba, WA*. Retrieved from Aussie Towns: https://www.aussietowns.com.au/town/eneabba-wa

Australian Government . (2024). *Boosting renewables in Western Australia and South Australia*. Retrieved from DCCEEW: https://www.dcceew.gov.au/about/news/boosting-renewables-western-australia-south-australia

Australian Government. (2022). *Climate change impacts and adaptation on Australian farms*. Retrieved from Australian Government: https://www.agriculture.gov.au/abares/products/insights/climate-change-impacts-and-adaptation

Australian Healthcare and Hospitals Association. (2019). *General Practice in Western New South Wales*. Retrieved from https://www.wnswphn.org.au/uploads/documents/GENERAL%20PRACTICE%20IN%20WESTERN%20NEW%20SOUTH%20WALES%20FINAL.pdf

Baxter, J., Morzaria, R., & Hirsch, R. (2013). A case-control study of support/opposition to wind turbines: Perceptions of health risk, economic benefits, and community conflict. *Energy Policy*, 931-943.

Bennett, M. (2025, Jan 5). *Country towns feeling steamrolled by rapid growth of wind energy in regional WA*. Retrieved from ABC News: https://www.abc.net.au/news/2025-01-05/regional-western-australia-wind-farm-growth-concerns/104781748

BMS. (2021). *Renewable Energy: The Impact of Claims Activity on Insurance Market Dynamics*. BMS.

BP. (2022). *bp welcomes Oakajee land allocation*. Retrieved from BP: https://www.bp.com/en_au/australia/home/media/press-releases/bp-welcomes-oakajee-land-allocation.html

Bright Energy Investments. (2021). *Warradarge Wind Farm*. Retrieved from Bright Energy Investments: https://www.brightenergyinvestments.com.au/warradarge-wind-farm-1

Bright Energy Investments. (2021). *Warradarge Wind Farm* . Retrieved from Bright Energy Investments: https://www.brightenergyinvestments.com.au/warradarge-wind-farm-1

Bright Energy Investments. (n.d.). *Greenough River Solar Farm*. Retrieved from Bright Energy Investments: https://www.brightenergyinvestments.com.au/greenough-river-solar-farm

Burdge, R. J. (2004). The concepts, process and methods of SIA. *The Social Ecology press*.

Burt, M. (2024, February 19). *The Farmer*. Retrieved from Public liability insurance backs farmers into a corner: https://thefarmermagazine.com.au/public-liability-insurance/

Carnamah - Vistor Information. (n.d.). *Explore Carnamah's natural, heritage and cultural attractions*. Retrieved from Carnamah - Vistor Information: https://www.carnamah.town/attractions

Carnamah Historical Society & Museum. (n.d.). *Carnamah Historical Society & Museum*. Retrieved from Carnamah Historical Society & Museum: https://www.carnamah.com.au/

Carnamah Historical Society and Musuem . (2022). *Early History of Carnamah*. Retrieved from Carnamah Historical Society and Musuem : https://www.carnamah.com.au/history

Carnamah Visitor Information. (2017). *Explore Carnamah's natural, heritage and cultural attractions*. Retrieved from Carnamah Visitor Information: https://www.carnamah.town/attractions

Change.org. (2018, October 15). *Make Renewable energy generation a high priority for the Australian government*. Retrieved from Change.org: https://www.change.org/p/scott-morrison-make-renewable-energy-generation-a-high-priority-for-the-australian-government?source_location=decision_maker_profile

City of Greater Geraldton. (n.d.). *Aboriginal Culture*. Retrieved from City of Greater Geraldton: https://www.cgg.wa.gov.au/community/our-community/aboriginal.aspx

Clean Energy Council . (2020). *Clean Energy at Work.* Clean Energy Council .

Clean Energy Council. (2018). *Community Engagement Guidelines for the Australian Wind Industry* . Clean Energy Council.

Clean Energy Council. (2024). *Wind Careers*. Retrieved from Clean Energy Council: https://www.cleanenergycouncil.org.au/advocacy-initiatives/workforce-development/careers-guide/wind

Clough. (2024, Oct 29). *Soaring Progress at the Waitsia Gas Project Stage 2*. Retrieved from Clough: https://www.cloughgroup.com/en-us/news/soaring-progress-at-the-waitsia-gas-project-stage-2

Coakes, S., & Sadler, A. (2011). Utilizing a sustainable livelihoods approach to inform a social impact assessment practice. In F. Vanclay, & A. M. Esteves, *New Directions in Social Impact Assessment.* Edward Elgar.

Cochrane, P. (2006). Exploring cultural capital and its importance in sustainable development. *Elsevier*, 318-330.

Commonwealth of Australia. (2024). *Joint media release: Delivering reliable renewables for Western Australia*. Retrieved from Commonwealth of Australia: https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-delivering-reliable-renewables-western-australia

CSIRO. (2025, April 1). *Mid West Clean Energy Project*. Retrieved from CSIRO Hy Resource: https://research.csiro.au/hyresource/mid-west-clean-energy-project/

Danielle, F., de Blasio, G., & Pasquini, A. (2024). Is local opposition taking the wind out of the energy transition? *Cornell University*.

DBCA. (n.d.). *Joint management*. Retrieved from Government of Western Australia: https://www.dbca.wa.gov.au/management/aboriginal-engagement/joint-management

Deloitte. (2022). *Climate action, renewable energy zones, and getting the ecosystem right*. Retrieved from Deloitte: https://www.deloitte.com/au/en/Industries/energy/blogs/climate-action-renewable-energy-zones.html?utm_source=chatgpt.com

Department of Education. (n.d.). *Leeman Primary School (5539)*. Retrieved from Department of Education: https://www.det.wa.edu.au/schoolsonline/overview.do?schoolID=5539

Department of Health, Western Australia. (2023, August 07). *Geraldton Health Campus*. Retrieved from Government of Western Australia: https://wacountry.health.wa.gov.au/Our-services/Midwest/Midwest-health-services/Geraldton-Health-Campus

Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. *Journal of Community & Applied Social Psychology*, 426-441.

DFID. (1999). *Sustainable Livelihoods Guidance Sheets.* Department of International Development.

DPE. (2023). *Technical Supplement. Social Impact Assessment Guideline for State Significant Projects.*

DPHI. (2023). *Social Impact Assessment Guideline*. Retrieved from NSW Department of Planning, Housing and Infrastructure : https://www.planningportal.nsw.gov.au/sites/default/files/documents/2023/GD1944%20SIA%20Guideline_NEW%20VI_14_02_23.pdf

Dyer, A. (2023). *Community Engagement Review Report.* Department of Climate Change, Energy, the Environment and Water.

Eco Logical Australia. (2025). *Tathra Wind Farm Hydrogeological Desktop Assessment.*

Energy Magazine. (2022, Novemeber 29). *Managing solar waste: getting ahead of the challenge*. Retrieved from Energy Magazine: https://www.energymagazine.com.au/managing-solar-waste-getting-ahead-of-the-challenge/

Energy Magazine. (2022). *To address this challenge, various mitigation measures have been implemented across different Australian states, including landfill bans for solar panels in Victoria, panel recycling, and serial number tracking to monitor panel life cycle (Energy Magazine*. Retrieved from Energy Magazine: https://www.energymagazine.com.au/managing-solar-waste-getting-ahead-of-the-challenge/

Energy Source & Distribution. (2021, October 20). *WA councils partner for renewable energy PPA*. Retrieved from Energy Source & Distribution: https://esdnews.com.au/wa-councils-partner-for-renewable-energy-ppa/#:~:text=In%20a%20giant%20step%20towards%20zero%20emissions%2C%2051,100%20per%20cent%20renewable%20power%20to%2051%20councils.

EPA. (2024, July 8). *West Erregulla Processing Plant and Pipeline*. Retrieved from Government of Western Australia: https://www.epa.wa.gov.au/proposals/west-erregulla-processing-plant-and-pipeline

Erny-Albrecht. (2014). *Health impacts of non-resident workforces in rural and remote Australia*.

Farmers for Climate Action & CEC. (2024). *Billions in the Bush: Renewable Energy for Regional Prosperity.* Clean Energy Council.

Giuliani, M. V. (2003). Theory of Attachment and Place Attachment. In M. Bones, T. Lee, & M. Bonaiuto, *Psychological Theories for Environmental Issues* (pp. 137-170). Ashgate.

Government of Western Australia . (2024). *Yamatji Nation Indigenous Land Use Agreement*. Retrieved from Department of Energy, Mines, Industry Regulation and Safety : https://www.dmp.wa.gov.au/Minerals/Yamatji-Nation-Indigenous-Land-28481.aspx

Government of Western Australia . (2025). *SWIS Demand Assessment.* June.

Government of Western Australia . (2025). *the Draft Guideline on Community Benefits for Renewable Energy Projects* . Powering WA.

Government of Western Australia. (2021, November). *Renewable Hydrogen Hubs*. Retrieved from Government of Western Australia: https://www.wa.gov.au/government/announcements/renewable-hydrogen-hubs

Government of Western Australia. (2021, November 26). *Yamatji Nation Indigenous Land Use Agreement*. Retrieved from Government of Western Australia: https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/yamatji-nation-indigenous-land-use-agreement

Government of Western Australia. (2023). *$708 million to power WA's renewable energy boom*. Retrieved from https://www.wa.gov.au/government/media-statements/Cook-Labor-Government/%24708-million-to-power-WA%27s-renewable-energy-boom-20231117

Government of Western Australia. (2024). *Heritage Places*. Retrieved from Government of Western Australia: https://inherit.dplh.wa.gov.au/public/search/results?newsearch=true&placenamecontains=&streetnamecontains=&suburbortowncontains=&lgacontains=carnamah&iscurrentlystateregistered=false

Government of Western Australia. (n.d.). *Tathra National Park*. Retrieved from Government of Western Australia: https://exploreparks.dbca.wa.gov.au/park/tathra-national-park

Green, A. (2021). *Moore - WA Election 2021*. Retrieved from ABC News: https://www.abc.net.au/news/elections/wa/2021/guide/moor

Green, A. (2022). *Durack - Federal Election 2022*. Retrieved from ABC News: https://www.abc.net.au/news/elections/federal/2022/guide/dura

Green, A. (2025, June 8). *Durack Federal Election 2025 Results*. Retrieved from ABC News: https://www.abc.net.au/news/elections/federal/2025/guide/dura

Grupe, D. W. (2013). Uncertainty and anticipation in anxiety: an integrated neurobiological and psychological perspective. *Nature Reviews Neuroscience*.

Gulma, U. L. (2018). The Impact of Community Cohesion on Crime. *PhD Thesis, University of Leeds*.

Healthdirect Australia . (2024). *Eneabba Health Centre*. Retrieved from Health Direct: https://www.healthdirect.gov.au/australian-health-services/healthcare-service/eneabba-6518-wa/eneabba-silver-chain-health-centre-nursing-post/nurse-led-clinic/c12cf7af-9fcc-c0b4-d2ce-92a899d52a93

Hernández,, B., Hidalgo, C. M., Salazar-Laplace, E. M., & Hess, S. (2007). Place attachment and place identity in natives and non-natives. *urnal of Environmental Psychology*, 310-319.

IAIA. (2015). Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects. *International Association for Impact Assessment*.

Jason, L. A., Stevens, E., & Ram, D. (2015). Development of a three-factor psychological Sense of Community Scale. *Journal of Community Psychology*, 973-985.

Lane, O. (2025, January 30). *Weekend outages continue to plague regional homes with tens still waiting for electricity to return*. Retrieved from The West Australia: https://thewest.com.au/news/wa/weekend-outages-continue-to-plague-regional-homes-with-tens-still-waiting-for-electricity-to-return-c-17556438

MCWA. (n.d.). *Generating Clean Energy to WA*. Retrieved from Main Camp WA Pty Ltd: https://www.maincampwa.com.au/news-from-the-farm/generating-clean-energy-to-wa

Meachim , L., & Lynch, J. (2020, Nov 15). *WA is experiencing its worst rental shortage since 2007 with many facing homelessness*. Retrieved from ABC News: https://www.abc.net.au/news/2020-11-15/wa-rental-crisis-covid-19-people-at-breaking-point/12868428

Mid West Regional Tourism. (2022). *Mid West Regional Tourism Development Strategy 2023-2033.* Mid West Regional Tourism.

Midwest Offshore Wind Farm. (n.d.). *Midwest Offshore Wind*. Retrieved from Midwest Offshore Wind Farm: https://midwestoffshorewind.com.au/

Mindat.org. (n.d.). *Three Springs Talc Mine, Three Springs, Three Springs Shire, Western Australia, Australia*. Retrieved from Mindat.org: https://www.mindat.org/loc-123068.html

National Native Title Tribunal. (2020). *WCD2020/001 - Yamatji Nation*. Retrieved from National Native Title Tribunal: https://www.nntt.gov.au/searchRegApps/NativeTitleRegisters/Pages/NNTR_details.aspx?NNTT_Fileno=WCD2020/001

NationalsWA. (2023). *Shane Love*. Retrieved from NationalsWA: https://www.nationalswa.com/our-team/shane-love/

NPS Medicine Wise. (2022). *General Practice Insights Report.* https://www.safetyandquality.gov.au/sites/default/files/2024-01/mi_general_practice_insights_report_2020-21.pdf.

NSW Government . (2025). *Understanding the land acquisition process*. Retrieved from Energy Co: https://www.energyco.nsw.gov.au/living-in-a-renewable-energy-zone/information-for-landowners/acquisition-process-explained

OTOC Australia. (n.d.). *Iluka resources Design and Construction of 360 person Permanent Accommodation Village*. Retrieved from OTOC Australia: http://otocaustralia.com.au/projects/mining-resources/eneabba-accommodation-village/

Parliament of Australia. (2021). *Offshore Electricity Infrastructure Bill 2021*. Retrieved from Parliament of Australia: https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bId=r6774

PBS. (2023, July 14). *Battles over wind farms divide rural communities*. Retrieved from PBS News: https://www.pbs.org/newshour/show/battles-over-wind-farms-divide-rural-communities

PHIDU. (2021). *Data workbooks* . Retrieved from PHIDU: https://phidu.torrens.edu.au/social-health-atlases/data

Prendergast, J., & Jose, L. (2024, June 20). *Renewable projects 'coming in large and fast' but local governments worry about legacy, food security*. Retrieved from ABC News: https://www.abc.net.au/news/rural/2024-06-20/can-renewable-projects-live-with-agriculture/103969582

Pretty, G., Bishop, B., Fisher, A., & Sonn, C. (2007). Psychological sense of community and its relevance to well-being and everyday life in Australia. . *The Australian Community Psychologist*, 6-25.

Price, M. (2024, June 21). *Australia's Energy Future*. Retrieved from Melissa Price MP Federal Member for Durack: https://www.melissapricemp.com.au/latest-news-2/australias-energy-future

Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology*, 57-83.

Real Esatate Investar. (2025). *Investment Property Carnamah, WA, 6517*. Retrieved from Real Esatate Investar: https://www.realestateinvestar.com.au/property/carnamah

Real estate Investar. (2025). *Investment Property Coorow, WA*. Retrieved from Real estate Investar: https://www.realestateinvestar.com.au/property/western+australia/coorow

Real Estate Investar. (2025). *Investment Property Three Springs, WA, 6519*. Retrieved from Real Estate Investar: https://www.realestateinvestar.com.au/property/three+springs

realestate.com. (2025). *Eneabba*. Retrieved from realestate.com: https://www.realestate.com.au/wa/eneabba-6518/?sourcePage=rea:buy:srp&sourceElement=suburb-profile

Red Suburbs. (2024). *Crime rate in Carnamah, WA, Australia, 6517*. Retrieved from Red Suburbs: Crime Map of Australia: https://redsuburbs.com.au/suburbs/carnamah/

Renew Economy . (2025, July 1). *Landholders get new guidelines on how to host wind and solar farms, and big batteries*. Retrieved from Renew Economy : https://reneweconomy.com.au/landholders-get-new-guidelines-on-how-to-host-wind-and-solar-farms-and-big-batteries/

Road Safety Commission. (2024). *Western Australia Road Fatalities and Serious Injuries 2023*. Government of Western Australia.

Safe Work Australia . (2023). *Key work health and saefty statistics Australia*. https://data.safeworkaustralia.gov.au/insights/key-whs-stats-2023.

SALM. (2024). *Small Area Labour Markets*. Retrieved from Jobs and Skills Australia: https://www.jobsandskills.gov.au/data/small-area-labour-markets

Sampson, G. S., Perry, D. E., & Taylor, M. R. (2020). The On-Farm and Near-Farm Effects of Wind Turbines on Agricultural Land Values. *Journal of Agricultural and Resource Economics*, 410-427.

Shire of Carnamah . (2021). *Eneabba Economic Revival Strategy* . Shire of Carnamah .

Shire of Carnamah . (2021). *Strategic Community Plan and Corporate Business Plan 2021 – 2031*. Shire of Carnamah .

Shire of Carnamah . (2023). *Annual Report*. Shire of Carnamah .

Shire of Carnamah. (2014). *Local Planning Strategy* . Shire of Carnamah.

Shire of Carnamah. (2023). *Annual Report*. Shire of Carnamah.

Shire of Carnamah. (2023). *Creating Our Future*. Shire of Carnamah.

Shire of Carnamah. (2024). *Annual Report 2023/2024*. Shire of Carnamah.

Shire of Carnamah. (2024). *Health and support services*. Retrieved from Shire of Carnamah: https://www.carnamah.wa.gov.au/community/health-and-support-services/

Shire of Carnamah. (2024). *Policy No.7.13 – Wind Farms (draft)*.

Shire of Carnamah. (n.d.). *Community groups*. Retrieved from Shire of Carnamah: https://www.carnamah.wa.gov.au/business-directory/category/community-groups/

Shire of Carnamah. (n.d.). *Council Meetings*. Retrieved from Shire of Carnamah: https://www.carnamah.wa.gov.au/your-shire/agendas-and-minutes/

Shire of Coorow. (2023). *Integrated Strategic Plan 2022- 2032*. Shire of Coorow.

Shire of Coorow. (n.d.). *Meetings*. Retrieved from Shire of Coorow: https://coorow.wa.gov.au/council-and-staff/meetings/

Shire of Three Springs. (n.d.). *Education*. Retrieved from Shire of Three Springs: https://www.threesprings.wa.gov.au/index.php/community/education

Smith, E. J. (2019, May 17). *Our current environment minister is a former mining lawyer. But what are Labor's credentials?* Retrieved from SBS News: https://www.sbs.com.au/news/the-feed/article/our-current-environment-minister-is-a-former-mining-lawyer-but-what-are-labors-credentials/y6c2ovm6s

SynergyRED. (2023). *Social Procurement*. Synergy.

Terril, M., Emslie, O., & Moran, G. (2020). *The rise of megaprojects: Counting the costs*. Grattan institute .

The Farmer. (2024). *Public liability insurance backs farmers into a corner*. Retrieved from The Farmer: https://thefarmermagazine.com.au/public-liability-insurance/

The West Australian . (2020). *Warradarge: Male driver dead, teen injured after car and truck collide in WA's Mid West*. Retrieved from The West Australian : https://thewest.com.au/news/disaster-and-emergency/warradarge-rac-rescue-helicopter-sent-to-serious-crash-between-car-and-truck-in-mid-west-c-16142428

Three Springs Shire Council. (2024). *Strategic Community Plan 2024- 2034*. Three Springs Shire Council.

Three Springs Shire Council. (n.d.). *Council & Committee Meetings*. Retrieved from Three Springs Shire Council: https://www.threesprings.wa.gov.au/index.php/our-council/council-meetings

Tourism WA Insights and Planning. (2024). *Regional Tourism Satellite Account 2022-23*. Tourism Research Australia .

Tourism Western Australia. (2024). *Eneabba* . Retrieved from Tourism Western Australia: https://www.westernaustralia.com/en/places/Eneabba/56b267afaeeeaaf773cfa766

Tourism Western Australia. (n.d.). *Carnamah*. Retrieved from Tourism Western Australia: https://www.westernaustralia.com/en/places/carnamah/56b267afd5f1565045daae09

Tourism Western Australia. (n.d.). *Eneabba*. Retrieved from Tourism Western Australia: https://www.westernaustralia.com/en/places/Eneabba/56b267afaeeeaaf773cfa766

Umwelt . (2025). *Bird and Bat Utilisation Surveys Year 1 Summary Report.*

Umwelt. (2025). *Basic and Targeted Fauna Assessment.*

Umwelt. (2025). *Reconnaissance and Targeted Flora and Vegetation Survey Report.* Synergy .

Umwelt. (2025). *Tathra Wind Farm - Accommodation and Employment Strategy.* Umwelt (Australia) Pty Ltd.

Umwelt. (2025). *Tathra Wind Farm Accommodation and Employment Strategy.*

UNSW. (2023). *Repair, reuse and recycle: dealing with solar panels at the end of their useful life*. Retrieved from UNSW: https://www.unsw.edu.au/newsroom/news/2023/06/Repair-reuse-and-recycle-dealing-solar-panels-end-their-useful-life

UNSW. (2024). *Bigger and better solar panel recycling centres needed to deal with PV waste, says report*. Retrieved from UNSW: https://www.unsw.edu.au/newsroom/news/2024/03/Bigger-better-solar-panel-recycling-centres-needed-deal-PV-waste-report

Utility Magazine. (2019, July 10). *$315 million Badgingarra Wind Farm officially opens*. Retrieved from Utility: https://utilitymagazine.com.au/315-million-badgingarra-wind-farm-officially-opens/

UTS. (2025). *Making a Clean and Equitable Energy Future a Reality*. Retrieved from UTS: https://www.uts.edu.au/case-studies/making-clean-and-equitable-energy-future-reality?utm_source=chatgpt.com

Vanclay, F. (2003). International Principles for Social Impact Assessment . *Imoact Assessment and Project Appraisal* , 5-12.

WA Primary Health Alliance. (2024). *Needs Assessment*. Retrieved from WA Primary Health Alliance: https://www.wapha.org.au/service-providers/health-planning/needs-assessment/

WALGA. (2024). *Renewable Energy in Western Australia* . WALGA.

WALGA. (2025). *Renewable Energy Community Benefits and Engagement GuidE*. WALGA.

Water Corporation . (2025). *Climate & the Mid West*. Retrieved from Water Corporation : https://www.watercorporation.com.au/Our-water/Climate-change-and-WA/Climate-and-the-Mid-West

Western Australia Police Force. (2025). *Crime statistics*. Retrieved from Government of Western Australia: https://www.wa.gov.au/organisation/western-australia-police-force/crime-statistics#/

Western Australian Planning Commission. (2015). *Mid West: Regional Planning and Infrastructure Framework.* Perth : Western Australian Planning Commission.

Western Environmental . (2025). *Bushfire Management Plan.*

Western Power. (2023, November). *$708 million to power WA's renewable energy boom*. Retrieved from Western Power: https://www.westernpower.com.au/news/$708-million-to-power-was-renewable-energy-boom/

Western Power. (n.d.). *Clean Energy Link* . Retrieved from Western Power: https://www.westernpower.com.au/resources-education/our-network-the-grid/future-of-the-grid/clean-energy-link-program/clean-energy-link-north/

YMAC. (2023). Retrieved from Yamatji Marlpa Aboriginal Coporation: https://www.ymac.org.au/

Appendix A

Baseline data sources

A.1 Data Sources

Table A.1 Summary of Indicators and Data Sources used for the Social Baseline

Capital	Relevant Indicator	Data Sources
Political Capital	• Existing political and governance structures • Representation and governance of Aboriginal and/or Torres Strait Islander people • Community mobilisation	• Australian Electoral Commission (AEC) • ABC and SBS News • WA Electoral Commission • Local Council websites • National Native Title Tribunal • Media review • Online petitions
Cultural	• Aboriginal heritage places • European heritage places • Local community values • Proportion of population born in Australia • Most common languages other than English spoken at home	• Local Council reports/ documents • WA Heritage Council • ABS Census (2021) - Community Profiles • Local Media
Natural	• Land use profile • National parks and nature reserves • Nature-based tourism industry	• Mid West Development Commission • Tourism Western Australia • Local Council websites • Department of Biodiversity, Conservation and Attractions

Capital	Relevant Indicator	Data Sources
Human	• Population size, trends, and projections • Indigenous population size and proportion • Highest level of formal education attainment • Rates of tertiary and vocational qualifications • Rates of hospital admissions and emergency service presentation • Proportion of population living with long term health conditions • Rates of self-reported mental health conditions • SEIFA Index of Education and Occupation	• ABS Census (2021) - Community Profiles • Socio-Economic Indexes for Areas (SEIFA) • Social Health Atlas of Australia (PHIDU) • Local Council reports/ documents • WA Tomorrow Population Reports
Economic	• Median household income • Key industries of employment • Tourism industry • Unemployment rates • Herfindahl Index • Economic development priorities • Level of financial stress from mortgage or rent • SEIFA Index of Relative Economic Resources	• ABS Census (2021) - Community Profiles • Tourism Western Australia • ABC News • Small Area Labour Market (SALM) • Herfindahl Index • REIWA • REA Group • Local Government documents & strategic plans • Socio-Economic Indexes for Areas (SEIFA)

Capital	Relevant Indicator	Data Sources
Social	• Rates of volunteering • Household composition profile • SEIFA Index of Socio-Economic Disadvantage • Incident and rates of selected crimes • Community perceptions of renewable energy projects	• ABS Census (2021) - Community Profiles • Local Council reports/ documents • Local Council websites • Socio-Economic Indexes for Areas (SEIFA) • Western Australia Police Force • Red Suburbs: Crime Map of Australia • Media review
Physical	• Future state infrastructure fundings • Proportion of population traveling to work by car • Road injuries and fatalities • Provision of health care services • Barriers to accessing health care • Provision of educational facilities • Short-term accommodation supply and vacancy rate • Occupancy rates	• Local Government strategic planning documents • ABS Census (2021) - Community Profiles • Local Council websites • Healthdirect Australia • Department of Health Western Australia • Department of Education Western Australia • Real Estate Investar • Australian Tourism Data Warehouse • AirDNA

A.2 Data Analysis

The following figure and table provide additional information for some of the indicators explored for **Section 3.4.4** Human Capital. For **Figure A.1** scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs, but not between an LGA and an SAL).

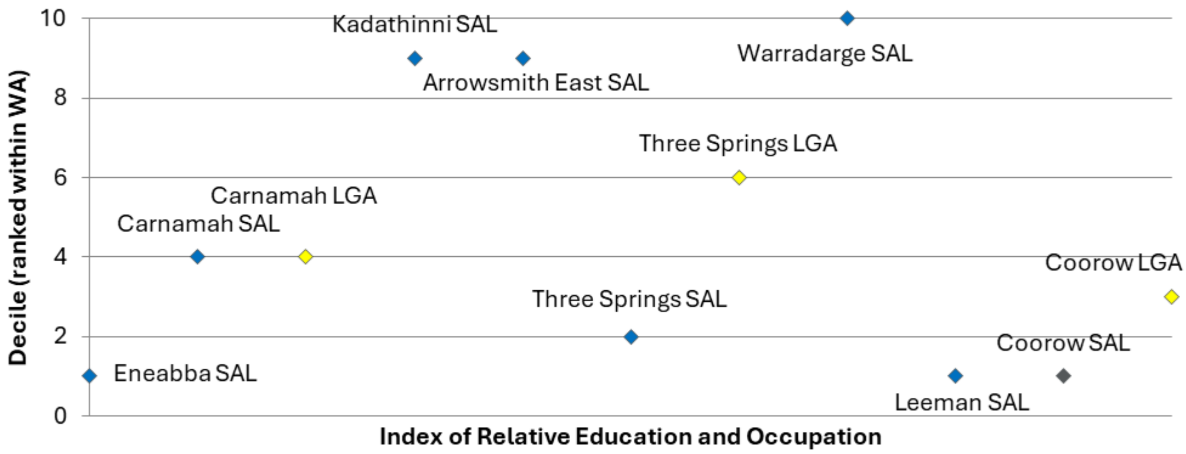


Figure A.1 SEIFA Scores for Index of Relative Education and Occupation (IEO) across the Social Locality

Table A.2 Summary of Health Indicators

Indicator	Carnamah LGA	Coorow LGA	Three Springs LGA	WA (state)
Hospital admissions (area of residence) 2020/2021	46,622.5 ASR per 100,000	48,136.0 ASR per 100,000	47,404.3 ASR per 100,000	41,196.5 ASR per 100,000
Emergency department presentations (area of residence) 2020/2021	40,126.4 SR per 100,000	47,037 ASR per 100,000	39,674.9 ASR per 100,000	37, 025.7 ASR per 100,000
Potential years of life lost (deaths before 75 years of age) 2018–2022	16.7 ASR per 1,000	65.7 ASR per 1,000	57.1 ASR per 1,000	37.9 ASR per 1,000
Self-reported (one or more) long-term health conditions[19] 2021	30.2%	30.6%	27%	26.1%
Self-reported mental health condition (including depression or anxiety) 2021	9.6%	6.2%	7%	8.3%

Source: PHIDU, 2022; ABS, 2021

*Red indicates above the state average, and green is below.

[19] long-term health conditions include arthritis, asthma, cancer (including remission), dementia (including Alzheimer's), diabetes (excluding gestational diabetes), heart disease (including heart attack or angina), kidney disease, lung condition (including COPD or emphysema), mental health condition (including depression or anxiety) and stroke (ABS, 2021).

The following figures provide additional information for **Section 3.4.5** Economic Capital. Noting that for **Figure A.2**, scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs, but not between an LGA and an SAL).

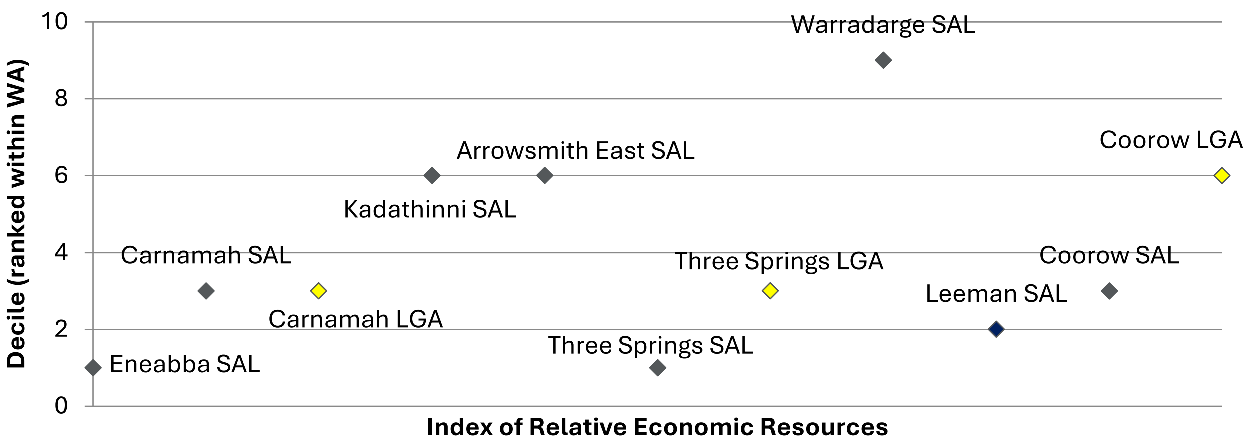


Figure A.2 SEIFA Scores for Relative Economic Resources across the Social Locality

Source: ABS, 2021

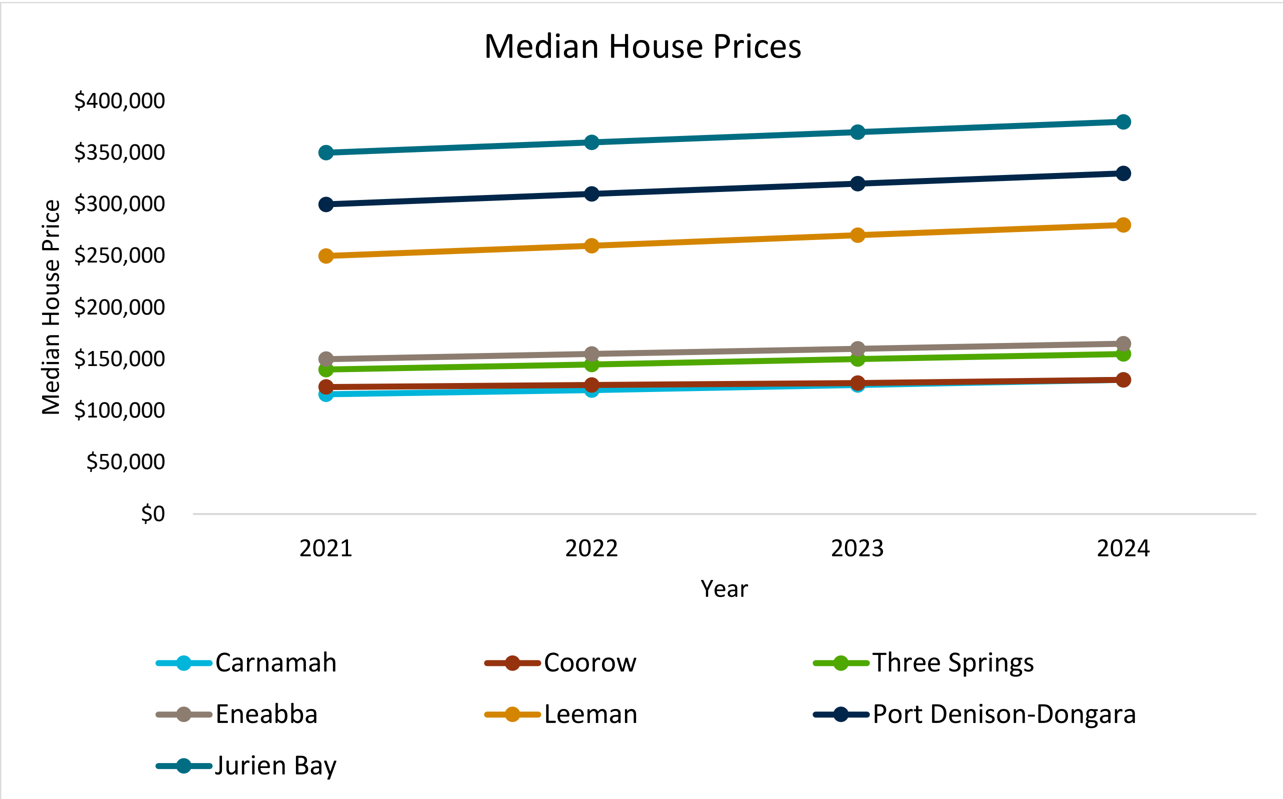


Figure A.3 Median House Prices

Source: Reiwa, 2025

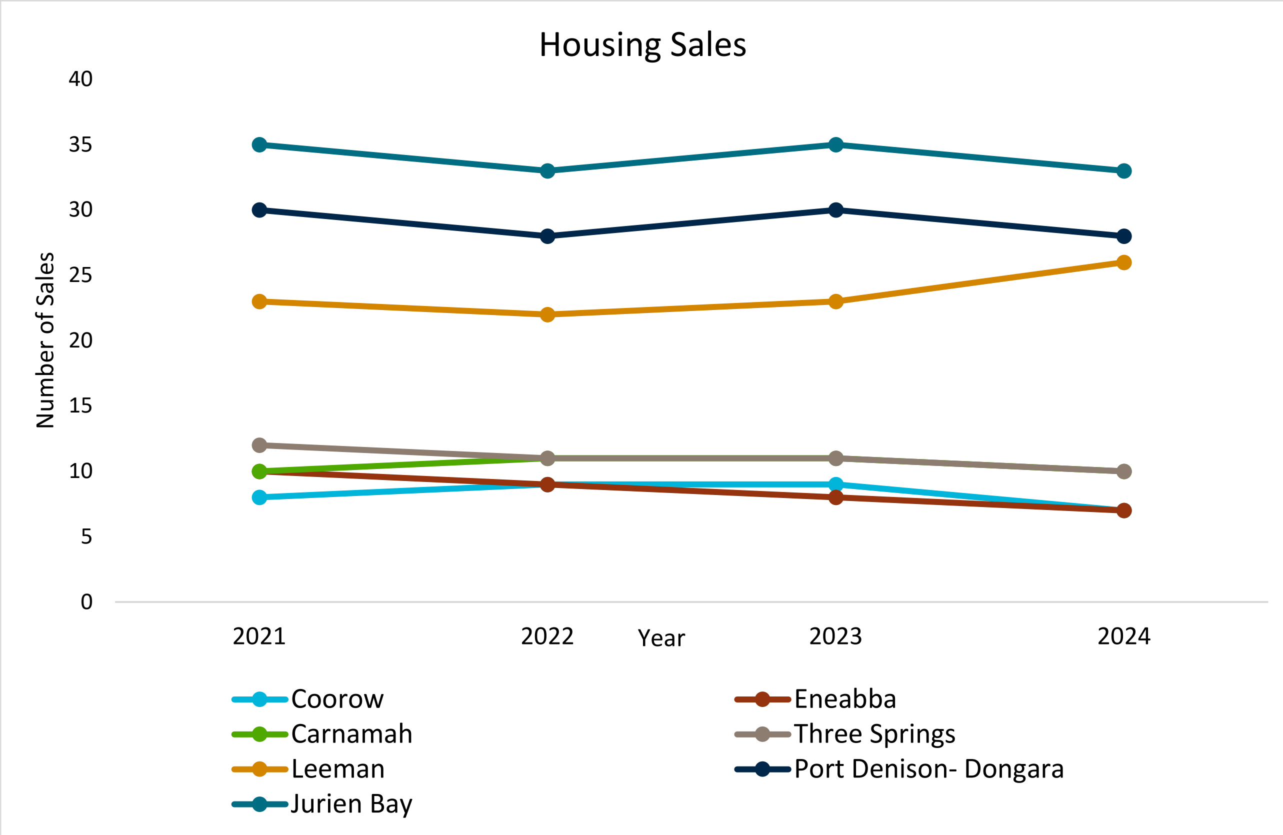


Figure A.4 Housing Sales

Source: REA Group, 2025

The following figure and table provide additional information for some of the indicators explored for **Section 3.4.6** Social Capital. For **Figure A.5**, scores can only be compared between localities with the same ABS boundaries (e.g. you could compare scores between two different LGAs, but not between an LGA and an SAL).

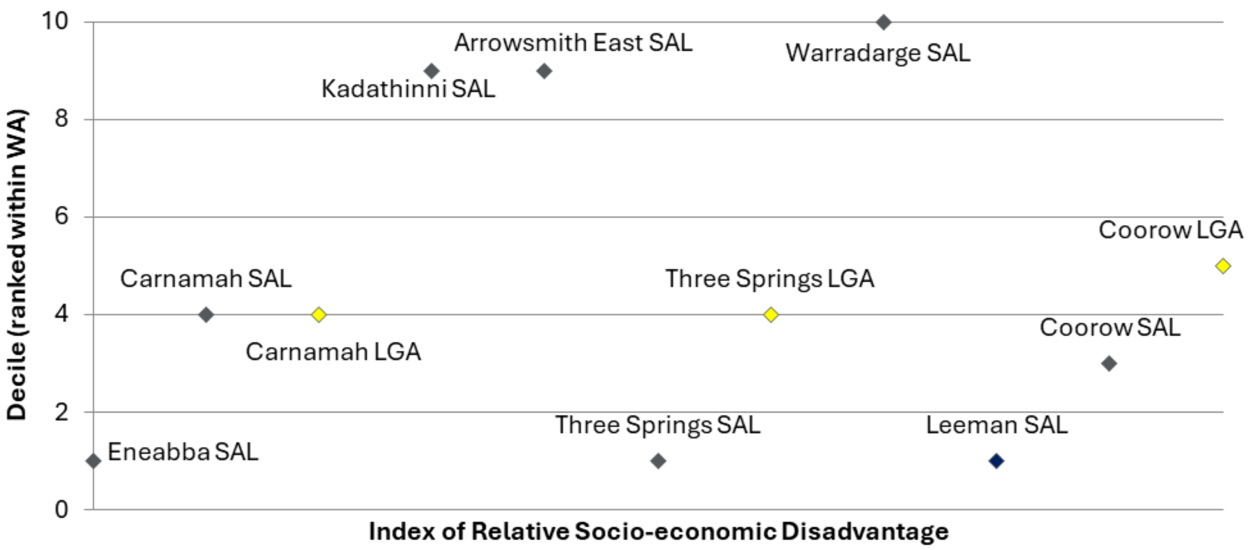


Figure A.5 SEIFA Scores for Relative Disadvantage across the Social Locality

Source: ABS, 2021

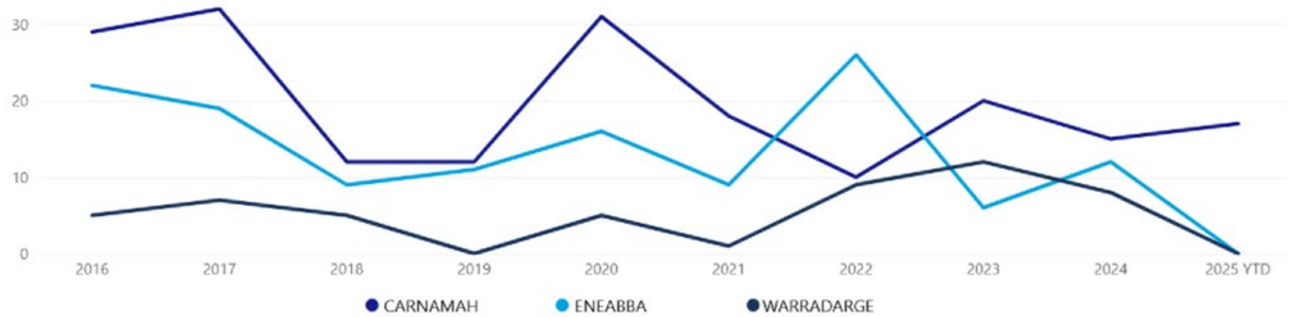


Figure A.6 Number of Offences over the Past 10 Years for the Suburbs of Carnamah, Eneabba and Warradarge

Source: (Western Australia Police Force, 2025)

The following figure provides additional information for some of the indicators explored for **Section 3.4.7** Physical Capital.

Table A.3 Rental Availability as of January 2025

Township	Rental Population	Vacancy Rate	Rental Stock
Eneabba	23.2%	NA	0
Carnamah	28.6%	NA	0
Coorow	17.6%	NA	0
Leeman	25.2%	0.97%	3
Three Springs	32.0%	NA	0
Jurien Bay	24.8%	0.12%	2
Port Denison-Dongara	28.9%	0.12%	2
	Total		**7**

Appendix B

Major Project Developments

Table B.1 Major Projects Developments

Project	Distance from Project	Description	Timing/Stage	Workforce (FTE)	Key considerations for the SIA
Warradarge Wind Farm Bright Energy Investments	15 km SE	Existing wind farm consisting of 51 turbines with a 180 MW turbine capacity. A 10 km transmission line from the wind farm sub-station to the existing 330 kV transmission line near Eneabba was constructed by Western Power and includes a new terminal station at Eneabba (Bright Energy Investments, 2021). Vestas has been appointed as Operations and Maintenance contractor for plant operations. In December 2024, an expansion was announced to install an additional 30 turbines to the existing 51, increasing total capacity to 283 MW (Government of Western Australia, 2024).	Operational, with expansion commencing in Q2 2025 Stage 2 to be operational by late 2026	10 operational staff	Cumulative impacts are likely due to the proximity to Tathra Wind Farm. They include visual amenity, sense of place, sense of community, noise, and health and wellbeing (perceived and/or real).
Eneabba Mineral Sands Mine Iluka Resources Limited	15 km W	The Eneabba Mineral Sands Mine is a significant global producer of zircon and high-grade titanium oxide products. Mining occurs to a depth of 30 meters over a large area, with operations managed by Iluka Resources.	Operational	30 operational staff Iluka Resources Limited has two existing accommodation facilities within 15 km of the Project site that can accommodate a total of 948 workers between them.	Potential for minor cumulative impacts due to construction workers located onsite which may impact social cohesion and add pressure to local social infrastructure.

Project	Distance from Project	Description	Timing/Stage	Workforce (FTE)	Key considerations for the SIA
		A 360-person accommodation village was constructed in Eneabba to support the operations (OTOC Australia, n.d.).			
South West Interconnected System (SWIS) transmission networks, Western Power	15 km W	The North Region (Northern Metropolitan to Geraldton) Clean Energy Link transmission upgrades will involve upgrading the current 132 kV to 300 kV lines to support additional transmission capacity in the Wheatbelt and Mid West (Western Power, n.d.). PoweringWA, Western Power and other State Government agencies are working in partnership to progress the developments across the SWIS.	Early planning and scoping, and feasibility studies Anticipated construction timeframe is early 2026- 2028	Construction of the SWIS and the North West Interconnected System (NWIS) is expected to create approximately 1,800 construction jobs. It is unclear at this stage how many workers will be required for the north region of the SWIS.	Cumulative changes to social amenity in the locality due to visual, noise and dust. Traffic volume increases, especially along the Brand Highway.
Wheatbelt Solar Farm Pilot Energy Limited	30 km N	Project is proposed to comprise of 626,000 solar panels across a 530 ha site. Electricity generated from this solar fam would be transported to the Mid West Clean Energy Project (MWCEP) ammonia production facility, 100 km west via a private transmission network.	Proposed Construction predicted to commence in 2026 to be operational by 2028.	60 construction jobs 6 operational staff	Cumulative impacts are possible due to proximity to Tathra Wind Farm. Impacts may include visual and rural amenity, sense of place, and sense of community due to a feeling of 'encroachment' from multiple wind farms in the region.

Project	Distance from Project	Description	Timing/Stage	Workforce (FTE)	Key considerations for the SIA
Winchester Industries Quarry Winchester Industries	45 km NE	Winchester Quarries offers an extensive range of products, including crushed stone, gravel, sand, and aggregate. The company is a reliable provider of high-quality quarry materials to cater to the growing demand for raw materials essential for building infrastructure, such as concrete production, road base, drainage, and more.	Operational	20 operational staff	Minor cumulative impacts due to distance from the project and project already in operational stage. May be a potential source of quarrying materials for the Project.
Three Springs Talc Mine Imerys group	52 km NE	The Three Springs Open Cut talc mine is the second largest talc mine in the world with annual production exceeds 240,000 tonnes (Mindat.org, n.d.).	Operational	50 operational staff	Unlikely to have cumulative impacts due to distance from the project and project already in operational stage.
West Erregulla Processing Plant and Pipeline, AGI Operations Pty Limited	54 km NW	Proposed to construct a gas processing plant and pipeline associated with the development of the West Erregulla gas field (EPA, 2024). Strike Energy is the operator of the EP469 Joint Venture, for both upstream and midstream infrastructure (including the West Erregulla Processing Plant and Pipeline). Upstream infrastructure related to the West Erregulla gas field has also obtained approval.	Approved Anticipated construction phase is late 2025 – late 2026	Anticipated workforce of 200 workers.	Unlikely to have cumulative impacts as construction is likely to be completed prior to construction commencing.

Project	Distance from Project	Description	Timing/Stage	Workforce (FTE)	Key considerations for the SIA
Waslee Downs Wind Farm, Main Camp WA Pty Ltd	55 km S	The Waslee Downs Wind Farm features five wind turbines and is located at Main Camp WA's (MCWA) Eucalyptus Farm in Waslee Downs (MCWA, n.d.).	Operational	16 operational staff	Unlikely to have cumulative impacts due to distance from the project and project already in operational stage.
Waitsia Gas Project MITSUI E&P	67 km NW	The Waitsia Gas Project Stage 2 seeks to expand current conventional gas extraction operations approximately 16 km East-South-East of the Dongara-Port Denison town sites. Waitsia Gas Project Stage 2B proposes to drill a further five to eight wells.	Construction started 2016, with Stage 1 fully operational. The Waitsia gas plant is now in full commissioning control, which means they are running final tests before the project becomes operational (Clough, 2024).	400 peak construction workforce in 2023 25 operational staff	Unlikely to have cumulative impacts as construction is likely to be completed prior to construction commencing.
Greenough River Solar Farm, Bright Energy Investments	110 km N	450,000 solar panels (stages 1 and 2) Estimated generating capacity of 98GWhr/Year The solar farm recently underwent a 30 MW expansion (stage 2) with an additional 300,000 panels (Bright Energy Investments, n.d.).	Operational	Operational staff number unknown	Unlikely to have cumulative impacts due to distance from the project and project already in operational stage.

Project	Distance from Project	Description	Timing/Stage	Workforce (FTE)	Key considerations for the SIA
Geraldton Export-Scale Renewable Investment (GERI), BP	160 km NW	GERI is large-scale integrated renewables and green hydrogen project. The plan is for phased development involving 14 GW+ of wind and solar generation to produce power and green hydrogen.	Proposed Aspirations to be operational by 2030.	1,000 construction jobs	Unlikely to have cumulative impacts due to distance from the project.
Mid West Clean Energy Project (MWCEP) Pilot Energy	TBC	The Project consists of two major developments – the Cliff Head Carbon Storage Facility and the Mid West Clean Ammonia Export Plant (CSIRO, 2025).	Proposed	Workforce numbers unknown	Unlikely to have cumulative impacts due to distance from the project.

Source: Umwelt, 2025

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