



# Socio-Economic Impact Analysis

Theodore Wind Farm

PREPARED FOR

**RWE**

Theodore Energy Development Pty  
Ltd

DATE

5 September 2024

REFERENCE

0661076



DOCUMENT DETAILS

DOCUMENT TITLE	Socio-Economic Impact Analysis
DOCUMENT SUBTITLE	Theodore Wind Farm
PROJECT NUMBER	0661076
Date	5 September 2024
Version	4.0
Author	Loucky Spit, Abbey Fitzroy, Ross Tunmer, Charlie Knaggs
Client name	Theodore Energy Development Pty Ltd

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
1.0	01	L. Spit	L. Penny	D. Dique	22.12.2023	Draft
2.0	01	L. Spit	L. Penny	D. Dique	30.07.2024	Final Draft
3.0	01	L. Penny	L. Penny	D. Dique	13.08.2024	Final Draft
4.0	01	L. Spit	M. Rookwood	D. Dique	04.09.2024	Final

# Socio-Economic Impact Analysis

Theodore Wind Farm

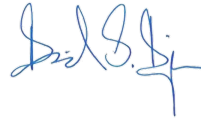
0661076



---

**Jessica Kwok**

Managing Consultant / Project Manager



---

**David Dique**

Partner-in-Charge



---

**Loucky Spit**

Managing Social Performance Consultant

Environmental Resources Management

Australia Pty Ltd

Level 14, 207 Kent Street

Sydney NSW 2000

T +61 2 8584 8888

© Copyright 2024 by The ERM International Group Limited and/or its affiliates ('ERM'). All Rights Reserved.

No part of this work may be reproduced or transmitted in any form or by any means, without prior written permission of ERM.

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	PURPOSE AND OBJECTIVE	1
1.2	PROJECT DESCRIPTION	1
1.3	DOCUMENT STRUCTURE	3
1.4	LIMITATIONS	4
1.5	AUTHORSHIP	4
<b>2.</b>	<b>METHODOLOGY</b>	<b>5</b>
2.1	SOCIAL IMPACT ANALYSIS METHODOLOGY	5
2.1.1	Task #1: Scoping	5
2.1.2	Task #2: High-Level Baseline Data Collection	5
2.1.3	Task #3: Early Stakeholder Engagement Outcomes Review	6
2.1.4	Task #4: Social Impact Analysis	6
2.1.5	Task #5: Monitoring and Reporting	7
2.2	ECONOMIC ANALYSIS METHODOLOGY	8
2.2.1	Task #1: Scoping and Economic Profiling	8
2.2.2	Task #2: Economic Analysis	8
<b>3.</b>	<b>SCOPING</b>	<b>9</b>
3.1	DESCRIPTION OF THE AREA OF INFLUENCE	10
3.1.1	ABS Datasets	12
<b>4.</b>	<b>SOCIO-ECONOMIC BASELINE</b>	<b>13</b>
4.1	LAND USE CONTEXT	13
4.2	COMMUNITY PROFILE	13
4.3	ECONOMIC PROFILE	16
4.3.1	Employment Rates	16
4.3.2	Employment Types	16
4.3.3	Household Income and Expenses	19
4.4	ACCOMMODATION CONSIDERATIONS	20
4.5	SOCIAL INFRASTRUCTURE	21
4.5.1	Recreation Facilities and Community Organisations	21
4.5.2	Health Services	22
4.5.3	Schools / Education Facilities	22
<b>5.</b>	<b>STAKEHOLDER ENGAGEMENT ACTIVITIES</b>	<b>24</b>
5.1	IDENTIFICATION OF KEY STAKEHOLDER GROUPS	24
5.2	CONSULTATION ACTIVITIES UNDERTAKEN	26
5.3	COUNCIL CONSULTATION	26
5.4	FUTURE ENGAGEMENT	27
5.5	SUMMARY OF KEY MATTERS RAISED DURING CONSULTATION	30
<b>6.</b>	<b>ECONOMIC ANALYSIS</b>	<b>32</b>

6.1	BASELINE ECONOMIC ACTIVITY AND “LOCAL” DEFINITION	33
6.1.1	Baseline Economic Activity	33
6.1.2	“Local” Definition	33
6.2	PROJECT ECONOMIC IMPACT	33
6.2.1	Construction Phase	33
6.2.2	Operational Phase	35
6.3	EMPLOYMENT IMPACTS	36
6.3.1	Direct Impact	36
6.3.2	Indirect Impact	37
6.4	OTHER IMPACTS	38
6.4.1	Positive impacts	38
6.4.2	Negative Impacts	39
7.	SOCIAL IMPACT ANALYSIS	41
8.	MONITORING FRAMEWORK AND REPORTING	50
8.1	REPORTING AND AUDITING	50
8.2	ROLES AND RESPONSIBILITIES	51
9.	REFERENCES	55

#### APPENDIX A RELEVANT INDIGENOUS LAND USE AGREEMENTS

#### APPENDIX B THEODORE WIND FARM ACCOMMODATION OPTIONS REPORT

## LIST OF TABLES

TABLE 2-1 SOCIAL IMPACT SIGNIFICANCE MATRIX	7
TABLE 3-1 APPROXIMATE DISTANCES TO THE PROJECT AREA	10
TABLE 3-2 SUMMARY OF RELEVANT ABS DATASETS	12
TABLE 4-1 KEY INDICATORS FOR ALL ABS DATASETS (2021) ACROSS THE PROJECT'S AOI	14
TABLE 4-2 EMPLOYMENT RATES	16
TABLE 4-3 PROJECT AOI OCCUPATION OF EMPLOYMENT SNAPSHOT	17
TABLE 4-4 EMPLOYMENT TYPES	18
TABLE 4-5 HOUSEHOLD INCOME AND EXPENSES	19
TABLE 4-6 PRIORITISATION OF ACCOMMODATION OPTIONS	20
TABLE 4-7 SCHOOL CATCHMENTS IN THE PROJECT AOI	23
TABLE 5-1 KEY STAKEHOLDER GROUPS	24
TABLE 5-2 ENGAGEMENT TOOLS	27
TABLE 5-3 KEY MATTERS RAISED BY STAKEHOLDERS	30
TABLE 6-1 IMPACT ON AUSTRALIAN ECONOMY	32
TABLE 6-2 IMPACT ON REGIONAL EMPLOYMENT	32
TABLE 6-3 CONSTRUCTION PHASE DIRECT EXPENDITURE	34
TABLE 6-4 ESTIMATE GRP DURING CONSTRUCTION PHASE	35
TABLE 6-5 OPERATIONAL PHASE DIRECT EXPENDITURE	35
TABLE 6-6 ESTIMATE GRP DURING OPERATIONAL PHASE	36
TABLE 6-7 SUMMARY OF THE DIRECT EMPLOYMENT OPPORTUNITIES ARISING FROM THE CONSTRUCTION PHASE OF THE PROJECT	36
TABLE 6-8 COMPARISON OF THE DIRECT EMPLOYMENT ESTIMATES WITH EMPLOYMENT FACTORS PROVIDED BY THE CLEAN ENERGY COUNCIL	37
TABLE 6-9 SUMMARY OF THE INDIRECT EMPLOYMENT OPPORTUNITIES ARISING FROM THE PROJECT IN OTHER COUNTRIES, INCLUDING CONSTRUCTION, MANUFACTURING AND OPERATION	38
TABLE 6-10 SUMMARY OF FUNDING PROGRAMS SPECIFICALLY ALLOCATED FOR THE LOCAL COMMUNITY	39
TABLE 7-1 SOCIAL IMPACT ANALYSIS	42
TABLE 8-1 PROPOSED MONITORING FRAMEWORK	52

## LIST OF FIGURES

FIGURE 1-1 THEODORE WIND FARM REGIONAL CONTEXT	3
FIGURE 1-2 THEODORE WIND FARM KEY PROJECT DETAILS	3
FIGURE 3-1 PRIMARY AND SECONDARY AREA OF INFLUENCE	11

## ACRONYMS AND ABBREVIATIONS

Acronyms	Description
ABS	Australian Bureau of Statistics
AoI	Area of Influence
AOR	Accommodation Options Report
CEC	Community Engagement Committee
CEMP	Construction Environment Management Plan
CQ	Central Queensland
CSEP	Community and Stakeholder Engagement Plan
DA	Development Approval
DCCEEW	Department of Climate Change, Energy, the Environment, and Water
DESI	Department of Environment, Science and Innovation
DOR	Department of Resources
DTMR	Department of Transport and Main Roads
EMS	Environmental Management System
EPBC Act	Environmental Protection and Biodiversity Conservation Act, 1999
ERM	Environmental Resources Management Australia Pty Ltd
FIFO	Fly-In Fly-Out
Ha	Hectares
ILUA	Indigenous Land Use Agreement
km	Kilometres
LGA	Local Government Area
LiDAR	Light Detection and Ranging
LNP	Liberal National Party
MCU	Material Change of Use
MP	Member of Parliament
MW	Megawatt
NSW	New South Wales
QFES	Queensland Fire and Emergency Services
QLD	Queensland
RWE	RWE Renewables Australia Pty Ltd
REZ	Renewable Energy Zone
SA1	ABS Statistical Area 1
SARA	State Assessment and Referral Agency
SIA	Social Impact Assessment
SEIA	Socio-Economic Impact Analysis

Acronyms	Description
SEIFA	ABS Socio-Economic Index for Areas
SET	Stakeholder Engagement Tools
TAFE	Technical and Further Education
TED	Theodore Energy Development Pty Ltd
the Project	Theodore Wind Farm
TMP	Traffic Management Plan
UCL	Urban Centres and Localities
WTG	Wind Turbine Generator
WWNAC	Wulli Wulli Nation Aboriginal Corporation



## 1. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) has been engaged by Theodore Energy Development Pty Ltd (TED) to undertake a Socio-Economic Impact Analysis (SEIA) for the proposed Theodore Wind Farm ('the Project').

The Project is located approximately 22 kilometres (km) east of the township of Theodore and approximately 50 km south-west of Biloela, over an area of 46,830 hectares (ha). The regional context of the Project Area is depicted in **Figure 1-1**, with key Project details outlined in **Figure 1-2**.

### 1.1 PURPOSE AND OBJECTIVE

The purpose of this SEIA is to provide a high-level understanding of the socio-economic context of the surrounding local communities of relevance to the Project, including the potential social and economic impacts that may be experienced by these communities.

A deeper understanding of both the socio-economic context and the potential impacts will help TED to secure its 'Social Licence to Operate' and meet future State and Commonwealth Government requirements (including the Development Application and *Environment Protection and Biodiversity Conservation Act 1999* (EBPC Act) Referral).

The SEIA refers to the Queensland Social Impact Assessment (SIA) Guideline (Department of State Development, Infrastructure, Local Government and Planning 2018), and requires the following:

- An understanding of the socio-economic environment within which the Project is situated;
- Identification of positive benefits and negative impacts to the community;
- Identification of management measures that seek to enhance benefits and mitigate negative impacts; and
- Recommendations to support community stakeholder engagement and benefit-sharing activities.

### 1.2 PROJECT DESCRIPTION

TED is developing the Project approximately 22 km east of the township of Theodore, 50 km south-west of Biloela and 150 km south-west of Gladstone in the Banana Shire Council Local Government Area (LGA), as shown in **Figure 1-1**.

The Project Area is comprised of nine lots on three properties, comprising approximately 46,830 ha. TED has signed agreements with all the Project landowners. Cattle grazing is the dominant land use in the Project Area, with largely cleared areas associated with lower slopes dominating the landscape.

The road network near the Project Area incorporates a range of local and state sealed and unsealed roads including Defence Road, Crowsdale-Camboon Road, and the Leichardt Highway. Access points will be created to facilitate entry into the site for construction and operation purposes and will stem from public roads.

The Project lies adjacent to and within the locality (10 km) of several state forests including Belmont State Forest to the east, Montour State Forest to the north and Trevethan State Forest to the south.

Key Project details include:

- **Wind Turbines** – up to 170 Wind Turbine Generators (WTGs) with a tip height of up to 270 m and a rotor diameter of up to 175 m.
- **Wind Monitoring** – temporary or permanent wind monitoring towers to be determined with Light Detection and Ranging (LiDARs) on site and met masts installed.
- **Ancillary Infrastructure** – including, but not limited to, access tracks, substations, overhead and underground electrical cabling, hardstands, and an operation and maintenance compound.
- **Operational Date** – target date of Quarter 4, 2027 for commercial operations to commence.
- **Battery Storage** – to co-locate with on-site substations.
- **Nearby dwellings** – No non-associated dwellings were identified 3.09 km of the nearest WTG associated with the Project. 11 non-associated dwellings have been identified within 3.09 km - 6.18 km of the proposed WTGs, and 6 non-associated dwellings have been identified within 6.18 km and the 10 km.
- **Homes Powered** – the Project proposes to power more than 500,000 homes.

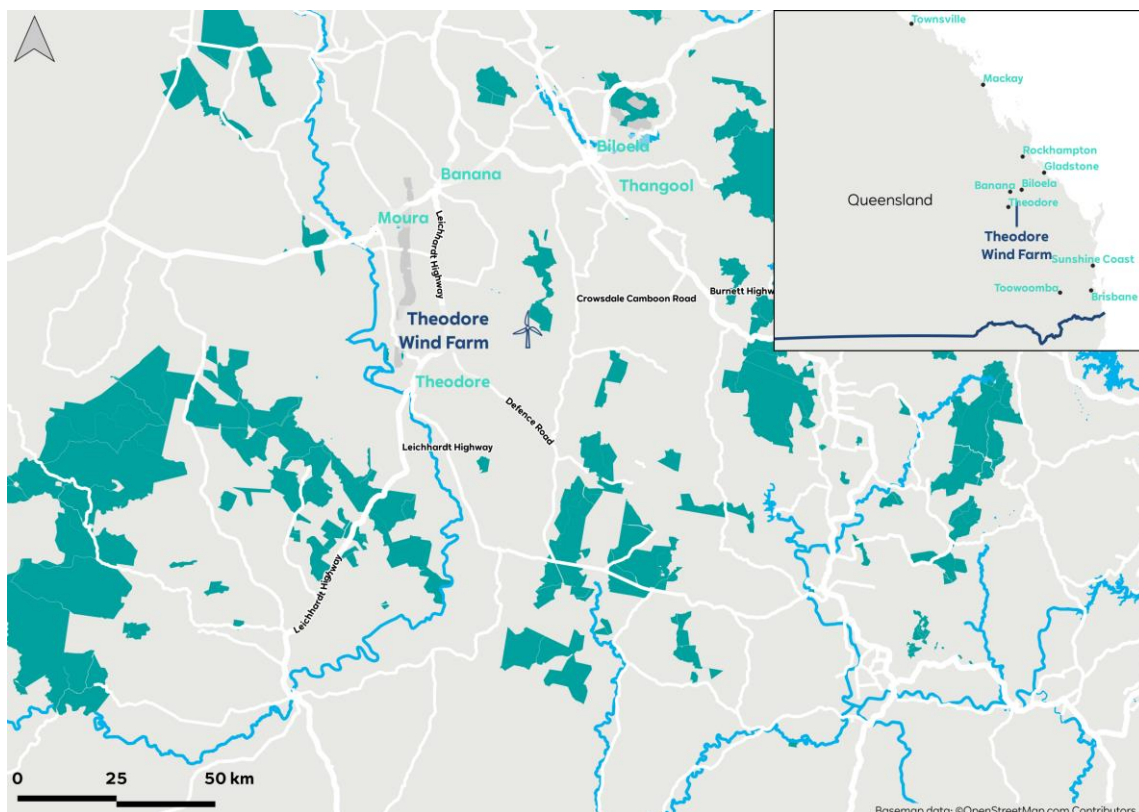


FIGURE 1-1 THEODORE WIND FARM REGIONAL CONTEXT

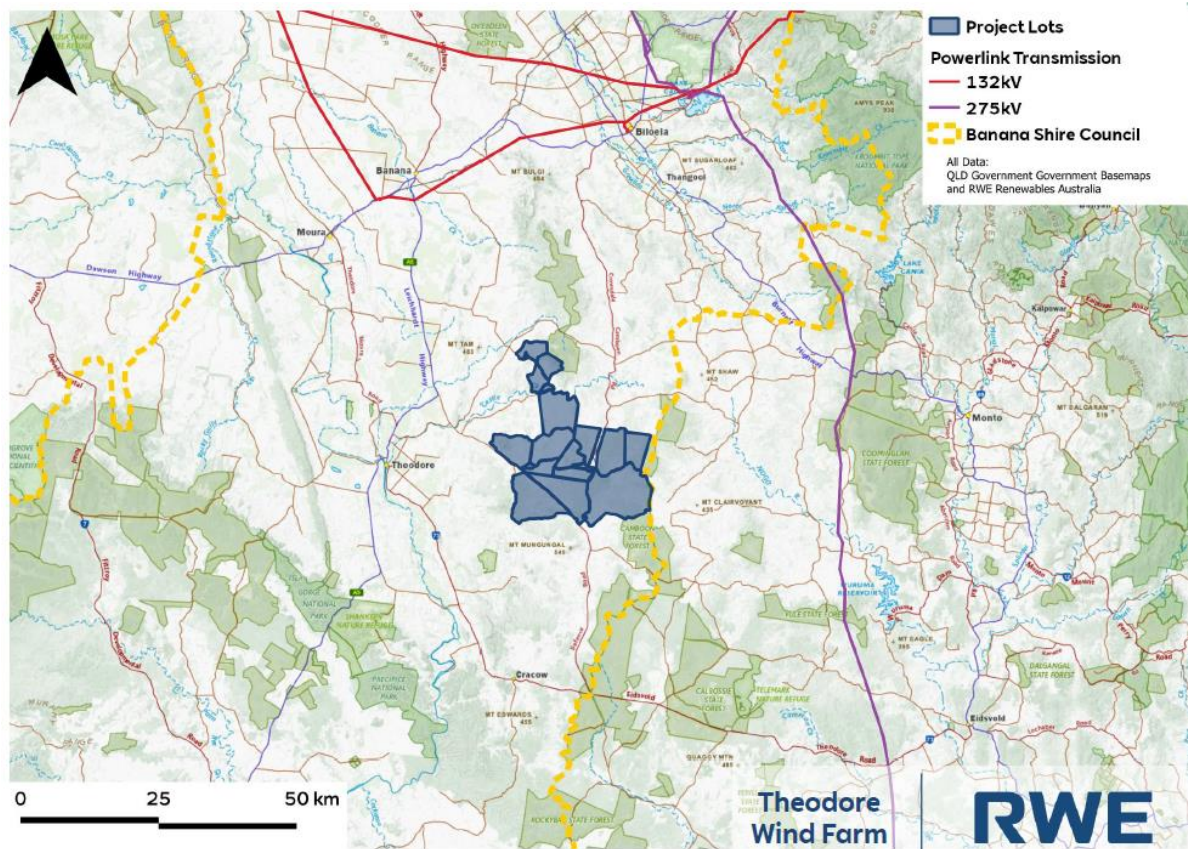


FIGURE 1-2 THEODORE WIND FARM KEY PROJECT DETAILS

### 1.3 DOCUMENT STRUCTURE

This SEIA is structured as follows:

- **Section 2** provides an overview of the methodology used for the social and economic impact analysis;
- **Section 3** describes the scoping for the Project's Area of Influence (AoI);
- **Section 4** describes the existing baseline conditions in the Project's AoI;
- **Section 5** provides an overview of stakeholder engagement undertaken for the Project to-date, and the outcomes of the engagement;
- **Section 6** provides a quantitative cost-benefit analysis of the Project, and employment opportunities generated by the Project;
- **Section 7** analyses the social impacts that may result from the Project, and provides an overview of social impact enhancement and mitigation measures; and
- **Section 8** outlines the approach that will be followed in monitoring and managing impacts into the Construction and Operation phases of the Project.

## 1.4 LIMITATIONS

This SEIA has been prepared based on publicly available desktop data and information provided by TED as part of document request responses.

The SEIA seeks to identify and consider the socio-economic impacts within the Project's AoI only. It is also noted that ERM's findings are accurate and complete only to the extent that information provided to ERM was itself accurate and complete.

Finally, ERM's findings reflect the current Project status. It is noted that a number of key decisions have not yet been made, such as the selection of contractors or suppliers. Once such decisions have been made the predicted impacts should be reviewed and updated accordingly.

## 1.5 AUTHORSHIP

The SEIA was drafted by Loucky Spit, Abbey Fitzroy, Ross Tunmer, and Charlie Knaggs, who hold relevant degrees in social and economic sciences. The SEIA was reviewed from a technical perspective by Louis Penny, who has over 14 years' experience in the field of social performance (including SIA) and holds a Bachelor of Regional and Town Planning from the University of Queensland, and is a member of the Planning Institute of Australia (PIA).



## 2. METHODOLOGY

This section describes the methodology utilised to conduct the socio-economic analysis for the Project. **Section 2.1** provides an overview of the social impact analysis methodology, with **Section 2.2** providing an overview of the economic analysis. It should be noted that the outcomes of the economic analysis have been incorporated into the final analysis.

### 2.1 SOCIAL IMPACT ANALYSIS METHODOLOGY

The methodology used for this SEIA has been guided by the requirements of the Queensland SIA Guideline (Department of State Development, Infrastructure, Local Government and Planning 2018) and the New South Wales (NSW) SIA Guideline (NSW Department of Planning and Environment 2023).

To this end, the SEIA involved five key tasks (Scoping, Baseline Data Collection, Stakeholder Engagement Outcomes Review, Social Impact Analysis, and Monitoring and Reporting), which are outlined in the following sub-sections.

#### 2.1.1 TASK #1: SCOPING

The first task undertaken was a scoping exercise, which sought to:

- Determine the Project's AoI, which is the area within which potential social impacts will likely be experienced;
- Develop an initial understanding of the location and characteristics of the communities within the AoI; and
- Undertake an initial review of the likely social and community health impacts that may impact social receptors throughout the Project's lifecycle.

#### 2.1.2 TASK #2: HIGH-LEVEL BASELINE DATA COLLECTION

The social baseline describes the social context within the Project's AoI. The aim of data collection is to identify the social environment, conditions, and trends which will be impacted by the proposed development. The social baseline is the benchmark against which direct, indirect, and cumulative impacts are predicted and analysed.

The scope and content of the social baseline has been tailored to the Project context and the level of analysis of social impacts. Primary data obtained through the engagement activities carried out to-date has also been included where relevant.

The data collected and presented in the social impact analysis is based on a review of available data from a range of primary and secondary sources, including but not limited to:

- The Australian Bureau of Statistics (ABS) Census (Community Profile) and Socio-Economic Index for Areas (SEIFA);
- Queensland Government information;

- Early stakeholder engagement outcomes, including community insights, issues and concerns, which were gathered through the stakeholder consultation process (refer to **Section 2.1.3**);
- Local and State government planning, policy, and strategy documentation (such as the Queensland SIA Guideline); and
- Plans, policies, and other documents provided by TED.

### 2.1.3 TASK #3: EARLY STAKEHOLDER ENGAGEMENT OUTCOMES REVIEW

Stakeholder engagement has already been undertaken by TED in order to inform Project refinement, and preparation of the Development Application. The extent of this previous engagement, as well the associated outcomes, was reviewed.

The stakeholder engagement outcomes have been used to inform the analysis of potential impacts. In addition to actualised impacts, outcomes relevant to concerns or perceptions held by the community that may not eventuate have also been considered.

### 2.1.4 TASK #4: SOCIAL IMPACT ANALYSIS

After the completion of the baseline data collection and with input from the community engagement activities, a high-level analysis of the potential social impacts for the Project on the communities and stakeholders located within the AoI was undertaken.

The social impacts were analysed to determine their level of significance, based on the likelihood of an impact occurring, the magnitude of impact, both positive and negative, and prior to the application of any mitigation or management measures.

The likelihood level refers to the probability of a social impact occurring as a result of the Project, while the magnitude is considered as a combination of the following characteristics:

- **Extent:** Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any potential vulnerable people<sup>1</sup>? Which location(s) are affected (e.g. local, regional)?
- **Duration:** When is the social impact expected to occur? Will it be time-limited (e.g. over particular Project phases) or permanent?
- **Severity:** What is the likely scale or degree of change (e.g. mild, moderate, severe)?
- **Intensity:** How sensitive or vulnerable (or how adaptable or resilient) are affected people to the impact? How important are positive impacts to them? This might depend on the value they attach to the matter, whether it is rare or unique or replaceable, the extent to which it is tied to their identity, and their capacity to cope with or adapt to change.

---

<sup>1</sup> This may include 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 (NSW Department of Planning, Housing and Infrastructure 2023)

- **Level of Concern or Interest:** How concerned or interested are people? Any perceived impacts are considered as impacts for this assessment, even when concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or severity.

Baseline indicators were then used to inform an understanding of the social impacts across five magnitude characteristics:

- **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 or improvement to something that people value highly (e.g. amenity, health, etc.), either lasting for an indefinite time, or affecting many people in a widespread area.
- **Moderate:** Noticeable deterioration or improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people.
- **Minor:** Mild deterioration or 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 AoI.

The likelihood of an impact occurring along with its magnitude of impact combine to provide a rating of social impact significance, as described in **Table 2-1**.

Where a positive social impact is identified, it is designated as 'positive', despite the varying likelihood levels.

**TABLE 2-1 SOCIAL IMPACT SIGNIFICANCE MATRIX**

		Magnitude Level					
		1 Minimal	2 Minor	3 Moderate	4 Major	5 Transformational	6 Positive
Likelihood Level	A Almost Certain	Medium	Medium	High	Very High	Very High	Positive
	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	

### 2.1.5 TASK #5: MONITORING AND REPORTING

Following analysis of the social impacts, measures to manage and/or mitigate predicted negative impacts were considered. Where an impact is predicted to be positive, measures to enhance positive impacts were identified to ensure the maximum benefit to the community. In addition, an outline for the ongoing monitoring, evaluation and reporting of the predicted social impacts has been identified.

## 2.2 ECONOMIC ANALYSIS METHODOLOGY

The economic analysis was developed across two key tasks (Scoping and Economic Profiling, and Economic Analysis), which are outlined in the following sub-sections.

### 2.2.1 TASK #1: SCOPING AND ECONOMIC PROFILING

The first task focused on scoping the requirements of the economic analysis, and gathering the information required in order to complete the analysis.

The technical parameters of the economic analysis were established, and Project-specific economic data was obtained. An initial review of key documentation available for the Project and as received from TED was undertaken in order to formulate an understanding of the breadth of economic data available for analysis.

In addition, an economic profile of the AoI was determined. The economic profile sought to appropriately contextualise the local community as relevant to the AoI established for the Project (refer to **Section 3.1**).

### 2.2.2 TASK #2: ECONOMIC ANALYSIS

Once the economic parameters were determined, and the economic profile developed, the economic analysis could be undertaken. The economic analysis for the Project comprised two main elements:

1. A high level, largely quantitative cost-benefit analysis for the proposed development, focusing on the economic impacts (both positive and negative) for the local economy and community within the AoI; and
2. A more specific, quantitative analysis of the employment outcomes generated by the Project, focusing on the local community.



### 3. SCOPING

The first step in a SEIA is the scoping process, which helps to define the AoI, as well as the potential interactions between the Project and those communities and stakeholders who be impacted.

For the purposes of this SEIA, 'people' includes individuals, households, groups, communities, businesses, and other types of organisations. Collectively these are often referred to as 'receptors'. Based on our delineation of the Project AoI, there are a number of potential interactions that may occur between the Project and people surrounding the Project.

In determining the Project's AoI, the following Project aspects were taken into consideration:

- The regulatory context;
- The Project Description (refer to **Section 1.2**), with particular focus on the number of WTGs and their locations across the Project Area, the layout of the access tracks, the substation, and transmission line;
- Construction and Operation phase activities, such as:
  - Land clearing and ongoing access for maintenance;
  - Workforce requirements, including skills required and the proposed on-site workforce accommodation facility;
  - Goods and services required by the Project; and
  - Haulage routes to and from the Project Area;
- The location of WTGs and associated infrastructure within the Project Area relative to sensitive land users or receptors (nearby residents, communities, potential vulnerable groups and nearby businesses). This also included consideration of the proximity to environmental values and topographical features;
- The level and/or extent of impact based on technical studies carried out to-date (e.g. landscape and visual impact assessment, noise assessment, etc.); and
- The community and stakeholder engagement undertaken to-date, including the outcomes of the engagements carried out.

When considering these aspects, it was determined that the Project's AoI should include the Project Area, the area surrounding the Project Area wherein noise, visual and other amenity impacts may occur, the haulage routes where amenity impacts may be experienced, and the communities in larger nearby centres from which skills, goods, or services may be procured.

### 3.1 DESCRIPTION OF THE AREA OF INFLUENCE

Given the prior considerations, the Project AoI is considered to comprise a Primary AoI and Secondary AoI, defined for the purposes of this SEIA as comprising of the following two components:

- **Primary AoI:**
  - The **Project Area and immediate surrounding areas** comprising an area 5 km from the site boundary, including ABS SA1 No. 30804152801, ABS SA1 No. 31902150815 and the Urban Centres and Localities (UCL) of Theodore, Banana, Moura, and Biloela. ABS data has been used to identify key baseline indicators for this Primary AoI. The UCLs are included in the Primary AoI as these surrounding towns and regional centres may provide goods and services, as well as accommodation options, to support the Construction and/or Operation Phases of the Project.
- **Secondary AoI:**
  - The **Local Government Areas** of the Banana Shire LGA and Gladstone Region LGA are included as the Secondary AoI. Further, State level data for Queensland, and national data for Australia, has been used so as to provide an understanding of the broader and comparative socio-economic context within which the Project is located.
  - There are several possible **transportation and haulage routes** to the Project Area. Project equipment is to be shipped into the Port of Gladstone (located approximately 150 km north-east of the Project Area) and transported overland from the Port of Gladstone to the Project Area. It is noted that final route determination will be predicated upon potential road upgrades requirements, given the dimensions of Project components.

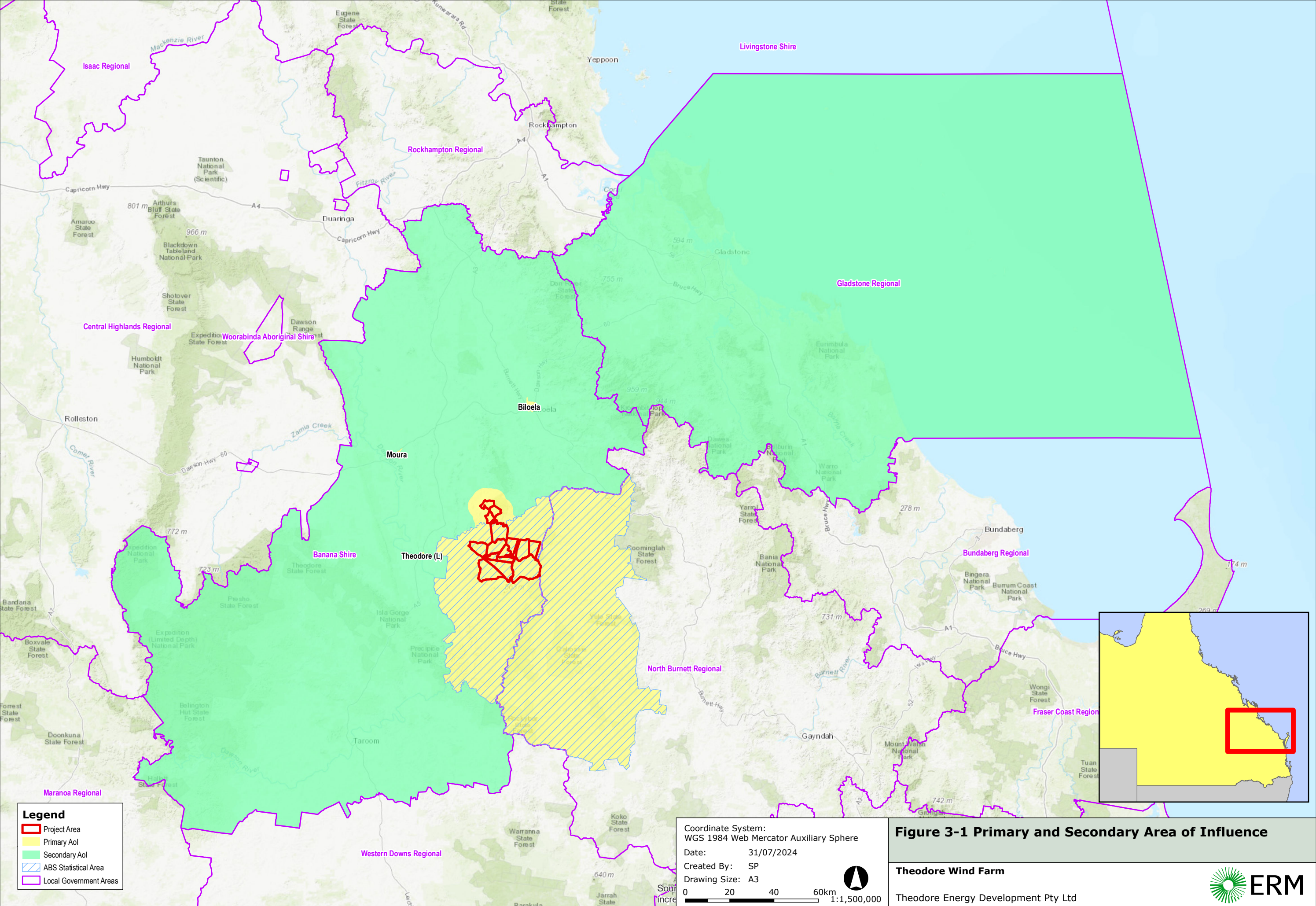
Indicative travel distances from the Project Area site access to the various town and regional centres is provided in **Table 3-1**.

**TABLE 3-1 APPROXIMATE DISTANCES TO THE PROJECT AREA**

Town/Regional Centre	Travel Distance by Road	Approximate Travel Time
Theodore	25 km west	18 minutes
Banana	49 km north	32 minutes
Moura	58 km north-west	42 minutes
Biloela	94 km north-east	1 hour
Gladstone	216 km north-east	2 hours 25 minutes

The Primary and Secondary AoIs are depicted in **Figure 3-1**.







### 3.1.1 ABS DATASETS

**Table 3-2** outlines the primary ABS datasets used to provide key demographic information across the Project's Primary and Secondary AoIs. For the purposes of this SEIA, a combination of 2021 (i.e. latest available) and 2016 ABS datasets were considered, based on the release timeframes of data.

**TABLE 3-2 SUMMARY OF RELEVANT ABS DATASETS**

Location	2016 ABS Data Reference	2021 ABS Data Reference
SA1	SA13152801	SA130804152801
SA1	SA13150815	SA131902150815
Theodore (UCL)	UCL322123	UCL322120
Moura (UCL)	UCL315068	UCL315070
Biloela (UCL)	UCL314006	UCL314005
Banana Shire (LGA)	LGA30370	LGA30370
Gladstone Region (LGA)	LGA33360	LGA33360
QLD (State)	Area code 3 (State)	Area code 3 (State)

## 4. SOCIO-ECONOMIC BASELINE

The high-level socio-economic baseline presented in this section provides the means to contextualise the Project within the AoI. It documents the existing social and economic environments and conditions relevant for the economic and social impact analyses, provided in **Section 6** and **Section 7**, respectively.

### 4.1 LAND USE CONTEXT

The Project Area is within a landscape dominated by agriculture, with a history of pastoral use and associated industries such as logging for the creation of agricultural related infrastructure and amenities (e.g. fences, gates, cattle yards and firewood), vegetation clearing for grazing lands and access tracks. The current land use remains predominantly for cattle grazing purposes.

The Project Area lies adjacent to and within 10 km of several state forests including Belmont State Forest to the east, Montour State Forest to the north and Trevethan State Forest to the south.

### 4.2 COMMUNITY PROFILE

The community profile presented in this section is based on ABS 2021 Census data, with ABS 2016 Census data used as a means of providing comparison. The specific ABS datasets used those identified in **Table 3-2**, within **Section 3.1.1**.

**Table 4-1** draws on these ABS datasets in order to provide a high-level demographic overview of the Project's AoI.

**Table 4-1** also includes the SEIFA to provide an indication of comparative socio-economic advantage and disadvantage, alongside details of unoccupied dwellings, dwelling tenure, and household composition.

TABLE 4-1 KEY INDICATORS FOR ALL ABS DATASETS (2021)<sup>2</sup> ACROSS THE PROJECT'S AOI

Population	Median Age	Indigenous Pop. (%)	Gender (M/F) <sup>3</sup>	SEIFA (percentile in Qld)	Dwelling count (occupied/unoccupied)	Dwelling tenure (owned outright/ mortgaged/ rented, %)	Household composition (families/ singles/ group, %)
<b>Banana Shire LGA30370 (LGA)</b>							
14,514	38	4.6%	51.4% / 48.6%	79	81.6% / 18.4%	33.1% / 27.6% / 30.0%	70.5% / 26.8% / 2.7%
<b>Gladstone Region LGA33360 (LGA)</b>							
63,515	38	6.2%	50.7% / 49.3%	69	85.0% / 15.0%	27.3% / 36.5% / 33.4%	71.3% / 25.6% / 3.1%
<b>Theodore UCL322120 (UCL)</b>							
451	38	15.1%	46.6% / 53.4%	-	80.8% / 15.8%	28.9% / 23.7% / 41.2%	59.6% / 38.8% / 1.6%
<b>Moura UCL315070 (UCL)</b>							
1,843	33	8.0%	53.7% / 46.3%	-	78.6% / 21.9%	25.1% / 25.1% / 45%	65.8% / 31.3% / 2.9%
<b>Biloela UCL314005 (UCL)</b>							
5,667	36	4.8%	50.1% / 49.9%	-	85.2% / 14.8%	25.0% / 32.5% / 38.5%	69.0% / 27.0% / 4.1%
<b>SA130804152801 (SA1)</b>							
192	48	2.6%	57.0% / 43.0%	44	73.6% / 25.0%	52.8% / 11.3% / 24.5%	59.2% / 40.8% / 0%
<b>SA131902150815 (SA1)</b>							
183	39	2.2%	53.4% / 46.6%	77	64.4% / 27.8%	44.8% / 27.6% / 10.3%	87.7% / 12.3% / 0.0%

<sup>2</sup> Refer to **Section 3.1.1** for an explanation of the ABS datasets<sup>3</sup> Percentages do not necessarily equal 100% as lower population datasets are purposely distorted to preserve anonymity.

Population	Median Age	Indigenous Pop. (%)	Gender (M/F) <sup>3</sup>	SEIFA (percentile in Qld)	Dwelling count (occupied/ unoccupied)	Dwelling tenure (owned outright/ mortgaged/ rented, %)	Household composition (families/ singles/ group, %)
QLD Code 3 (STE)							
5,156,138	38	4.6%	49.3% / 50.7%	-	90.7% / 9.3%	29.1% / 34.4% / 33.1%	71.0% / 24.7% / 4.3%
Australia (AUS)							
25,422,788	38	3.2%	49.3% / 50.7%	-	89.9% / 10.1%	31.0% / 35.0% / 30.6%	70.5% / 25.6% / 3.9%

Source: (ABS 2024a, ABS 2024b, ABS 2024c, ABS 2024d, ABS 2024e, ABS 2024f, ABS 2024g)



## 4.3 ECONOMIC PROFILE

The economic profile presented in this section provides a quantitative and qualitative description of the economic activities and impacts within the Project's AoI in the absence of the Project.

Statistical data in this section has been derived from both the 2016 and 2021 Census, as relevant to the LGAs of Banana Shire and Gladstone Region.

### 4.3.1 EMPLOYMENT RATES

**Table 4-2** summarises the employment rates across the Banana Shire and Gladstone Region LGAs and compares these to the Queensland and Australian employment rates.

The 2021 Census data shows 61.6% of Queensland's population is engaged in the labour force, with 55.9% working full-time. In the Banana Shire and Gladstone Region LGAs, this rate was higher at 65.4% and 58.1% of people working full-time, respectively. The highest percentage of unemployed persons was in the Gladstone Region LGA which recorded 7.4% of people unemployed, and the lowest being in the Banana Shire LGA which recorded 4.0% of people unemployed. The percentage of people 'away from work' has increased across the board between 2016 and 2021 (ABS 2024a, ABS 2024b).

**TABLE 4-2 EMPLOYMENT RATES**

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
Full time work	<b>2021</b>	65.4%	58.1%	55.8%	55.9%
	<b>2016</b>	66.0%	58.3%	57.7%	57.7%
Part time work	<b>2021</b>	24.2%	28.0%	30.5%	31.2%
	<b>2016</b>	23.8%	25.5%	29.9%	30.4%
Away from work	<b>2021</b>	7.7%	6.5%	8.3%	7.8%
	<b>2016</b>	6.2%	5.1%	4.8%	5.0%
Unemployed	<b>2021</b>	2.8%	7.4%	5.4%	5.1%
	<b>2016</b>	4.0%	11.1%	7.6%	6.9%

Source: ABS 2024a, ABS 2024b

### 4.3.2 EMPLOYMENT TYPES

Employment within the Project AoI has been considered across occupation of employment (refer to **Section 4.3.2.1**) and industry of employment (refer to **Section 4.3.2.2**).



#### 4.3.2.1 OCCUPATION OF EMPLOYMENT

**Table 4-2** summarises the most common employment types in Banana Shire and Gladstone Region LGAs. There is a higher percentage of technicians and trades workers, labourers and machinery operators/drivers in the Banana Shire and Gladstone Region LGAs comparative to Queensland. This data shows that the population around the Project Area has a range of necessary skills that can be drawn upon for the workforce and construction of the Project (ABS 2024a, ABS 2024b).

**TABLE 4-3 PROJECT AOI OCCUPATION OF EMPLOYMENT SNAPSHOT**

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
<b>Technicians and trades workers</b>	<b>2021</b>	15.5%	20.6%	13.7%	12.9%
	<b>2016</b>	16.0%	21.4%	13.5%	13.5%
<b>Labourers</b>	<b>2021</b>	14.3%	12.4%	10.1%	9.0%
	<b>2016</b>	15.4%	12.9%	9.5%	9.5%
<b>Professionals</b>	<b>2021</b>	10.6%	14.4%	21.4%	24.0%
	<b>2016</b>	9.9%	13.6%	22.2%	22.2%
<b>Machinery operator or driver</b>	<b>2021</b>	14.6%	12.2%	6.8%	6.3%
	<b>2016</b>	14.1%	12.4%	6.3%	6.3%
<b>Clerical and administrative worker</b>	<b>2021</b>	9.3%	10.2%	12.7%	12.7%
	<b>2016</b>	9.6%	10.8%	13.6%	13.6%
<b>Sales worker</b>	<b>2021</b>	6.2%	8.0%	8.7%	8.2%
	<b>2016</b>	6.6%	8.5%	9.4%	9.4%
<b>Managers</b>	<b>2021</b>	19.5%	9.3%	12.5%	13.7%
	<b>2016</b>	20.3%	9.5%	13.0%	13.0%
<b>Community and Personal Service Workers</b>	<b>2021</b>	7.6%	10.8%	12.3%	11.5%
	<b>2016</b>	6.8%	9.2%	10.8%	10.8%

Source: ABS 2024a, ABS 2024b

#### 4.3.2.2 INDUSTRY OF EMPLOYMENT

**Table 4-4** identifies the top industries of employment within the Project AoI. The top industry in the Banana Shire LGA is Beef Cattle Farming (Specialised) (12.7%) and Aluminum Smelting (5.7%) in Gladstone Region LGA. This contrasts with the top industry of employment in Queensland more broadly, being Primary Education (2.5%) (ABS 2024a, ABS 2024b).

The type of industries prevalent in both the Banana Shire and Gladstone Region LGAs appear to be beneficial to TED given the range of skills available within a relatively short geographic distance that could be of use in the construction of the Project. For instance, 2.9% of those employed in the Banana Shire LGA are already involved in Fossil Fuel Electricity Generation, and therefore may have potentially transferrable skillsets. Further upskilling of the local workforce may be required however, if the Project is to engage a local workforce, which may deliver skills-based benefits to the local area (ABS 2024a, ABS 2024b).

**TABLE 4-4 EMPLOYMENT TYPES**

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
<b>Beef Cattle Farming (Specialised)</b>	<b>2021</b>	12.7%	-	0.7%	0.4%
	<b>2016</b>	13.6%	-	0.8%	0.4%
<b>Coal Mining</b>	<b>2021</b>	12.2%	-	1.1%	0.4%
	<b>2016</b>	13.7%	-	1.2%	0.4%
<b>Meat Processing</b>	<b>2021</b>	3.6%	-	0.5%	0.3%
	<b>2016</b>	4.0%	-	0.5%	0.3%
<b>Local Government Administration</b>	<b>2021</b>	3.5%	-	1.4%	1.3%
	<b>2016</b>	3.3%	-	1.4%	1.3%
<b>Fossil Fuel Electricity Generation</b>	<b>2021</b>	2.9%	-	0.1%	0.1%
	<b>2016</b>	3.3%	-	0.1%	0.1%
<b>Aluminium Smelting</b>	<b>2021</b>	-	5.7%	0.1%	0.0%
	<b>2016</b>	-	3.6%	0.1%	0.0%
<b>Alumina Production</b>	<b>2021</b>	-	3.6%	0.0%	0.0%
	<b>2016</b>	-	5.4%	0.1%	0.0%

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
<b>Other Heavy and Civil Engineering Construction</b>	<b>2021</b>	-	3.2%	0.6%	0.6%
	<b>2016</b>	-	3.2%	0.9%	0.7%
<b>Primary Education</b>	<b>2021</b>	-	3.1%	2.5%	2.2%
	<b>2016</b>	-	3.0%	2.5%	2.2%
<b>Supermarket and Grocery Stores</b>	<b>2021</b>	-	2.8%	2.5%	2.5%
	<b>2016</b>	-	3.0%	2.4%	2.4%

Source: ABS 2024a, ABS 2024b

### 4.3.3 HOUSEHOLD INCOME AND EXPENSES

**Table 4-5** summarises household income and expense across the Banana Shire and Gladstone Region LGAs and compares this to household expenses across Queensland and Australia.

Personal, family and household income have all increased between 2016 and 2021 within the Banana Shire and Gladstone Region LGAs. Notably, households in Banana Shire LGA, experienced higher personal, family and household incomes compared to the State and nationally. Gladstone Region LGA households, however, experience lower personal incomes and lower household incomes when compared to state-wide and national data.

The median mortgage repayments and rent within the Project Area are also displayed in **Table 4-5**. It is noted that the median weekly rent has increased between 2016 and 2021 across the Banana Shire and Gladstone region LGAs, as well as in Queensland as a whole (ABS 2024a, ABS 2024b).

TABLE 4-5 HOUSEHOLD INCOME AND EXPENSES

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
<b>Median weekly income (personal)</b>	<b>2021</b>	\$856	\$758	\$787	\$805
	<b>2016</b>	\$714	\$678	\$662	\$662
<b>Median weekly income (family)</b>	<b>2021</b>	\$2,138	\$2,048	\$2,024	\$2,120
	<b>2016</b>	\$1,895	\$1,918	\$1,734	\$1,734
	<b>2021</b>	\$1,766	\$1,639	\$1,675	\$1,746

	Census Year	Banana Shire LGA	Gladstone Region LGA	Queensland	Australia
Median weekly income (household)	2016	\$1,575	\$1,586	\$1,438	\$1,438
Median monthly mortgage repayments	2021	\$1,300	\$1,625	\$1,670	\$1,721
	2016	\$1,600	\$2,000	\$1,660	\$1,660
Median weekly rent	2021	\$220	\$270	\$305	\$300
	2016	\$198	\$240	\$250	\$255

Source: ABS 2024a, ABS 2024b

## 4.4 ACCOMMODATION CONSIDERATIONS

Aspects associated with worker accommodation during the construction phase, including the nature and availability of existing short-term and long-term accommodation within the Project AoI, have been addressed in **Section 5** of the Construction Workers Accommodation Options Report (AOR) for the Project, provided in [Appendix B](#) of this SEIA.

The AOR assesses the Project's accommodation options, and how those may potentially have an impact on its surrounding communities, in accordance with the draft updates to State Code 23 and associated Planning Guidance, dated 07 August 2023.

Based on the assessment conducted in the AOR, the following was recommended in relation to the construction phase workforce accommodation for the Project:

- TED is to consider and consult on the accommodation priority hierarchy as denoted in **Table 4-6**; and
- TED is to encourage local employment as part of construction phase hiring practices, particularly for those located in the Primary AoI.

**TABLE 4-6 PRIORITISATION OF ACCOMMODATION OPTIONS**

Priority	Accommodation Option
1	<b>On-site workforce accommodation</b> – construction and operation of an on-site workforce accommodation facility within the Project Area to cater for the majority of workers anticipated to be employed during the construction phase.
2	<b>Short-term accommodation</b> – use of e.g. motels, hotels, cabins, caravan parks, and existing workforce accommodation facilities, within the Primary AoI and wider Banana Shire LGA. The intent will be to use the short-term accommodation either for contractors not associated with the main construction workforce, visiting TED employees, or for workforce overflow during peak construction periods.

Priority	Accommodation Option
3	<b>Long-term accommodation</b> – rental and/or purchase of existing housing stock within Theodore, Banana, Moura or Biloela is to be limited, and should only be considered where short-term accommodation options cannot be procured.

The recommendation provided in the AOR is not an 'all-in-one' solution, but rather a prioritisation. Whilst the main recommendation is for TED to construct and operate an on-site accommodation facility that will house most of the Project's construction phase workforce, the utilisation of short-term accommodation options will allow for economic benefits to be experienced by local communities, provide flexibility for TED at times of peak construction, and reduce the exposure of local community stakeholders within the Primary AoI to the full extent of the negative social impacts identified in the key matters assessment in the AOR (refer to [Appendix B](#)).

The outcomes of the key matters assessment included the AOR, have been incorporated into the social impact analysis in **Section 7** of this SEIA.

## 4.5 SOCIAL INFRASTRUCTURE

Social infrastructure comprises schools and other education institutions, medical services, emergency services, recreational facilities and community organisations. Some commercial services are also listed under social infrastructure, such as childcare facilities.

### 4.5.1 RECREATION FACILITIES AND COMMUNITY ORGANISATIONS

As a rural community, the town of Theodore hosts recreation and attractions including Rose's Garden, Dawson Fold Museum, Isla Gorge National Park, historical bridges, Flagstaff Hill and Old Flagged Road, Cracow Beach. Events in and around Theodore include Bull's N' Barrels Bonanza, Theodore Trail Ride, 'Hooked on Theodore' Fishing Competition, Spindles and Spurs Campdraft and Dawson River Festival. Theodore's Hotel pub is the only pub in Queensland that was owned by an entire community. The local community took the pub over in the 1940s, issuing each resident the equivalent of a 25-cent stake (Banana Shire Council 2023).

In terms of social infrastructure, Theodore hosts a selection of retail shops including IGA Theodore, Holmes Enterprises., Theodore Home & Garden Café, Vinnies, Theodore Pharmacy and Theodore Medical Centre. Further, emergency services for the town include Theodore Fire Brigade and Theodore Ambulance Station. In terms of recreational facilities, the Theodore Sport & Recreation Association Inc. includes eight local interest groups, Junior Rugby League Club, Pony Club, Show Society, Touch Football Association, Campdraft & Rodeo Association, Junior Cricket Club & Netball. Additionally, the Theodore Community Link serves the community with public swimming sessions, a community gym, and a Centrelink access point.

Similar to Theodore, Moura hosts a variety of retail shops including Moura IGA, Moura butcher shop (Moura Meat Centre), Mitre 10, Vinnies, Moura Bakery, Country

Atmosphere Cafe, Moura Pharmacy and Moura Tavern. In terms of recreational and community organisations, the town of Moura hosts sports including bowls, tennis and golf clubs, Moura RSL and Memorial Swimming Pool (Banana Shire Council 2023). The town of Moura has both an ambulance and a police station.

Community members in Theodore, Moura and surrounding areas may need to travel to larger centres for access to larger grocery stores, higher-order medical services, larger airports, alternative recreational activities, speciality goods stores, other educational facilities (i.e. childcare, and secondary schooling), and other community organisations.

Compared to Theodore and Moura, Biloela hosts a more highly populated area, therefore encompassing a greater amount of recreation and community organisations. Located at the intersection of the Dawson and Burnett Highways, Biloela is a commercial and tourist centre. Social activities in the region encompasses camping, fishing, and boating adventures along the Callide Dam's banks, as well as the Kroombit Tops National Park which offers a plethora of outdoor adventures. A range of exhibitions can regularly be seen at the Banana Shire Regional Art Gallery.

The closest airport to the Project Area is Theodore Airport, located 7.6 km south of Theodore along Eidsvold-Theodore Road. The next closest airport is located in Biloela (Thangool) which is located 11 km south from Biloela town centre on the A1 highway. Gladstone Airport (located approximately 211 km from the Project Area) also services the region with the most services non-stop to or from Brisbane Airport.

#### 4.5.2 HEALTH SERVICES

The Banana Shire LGA is serviced by six hospitals including Biloela Hospital, Moura Multipurpose Health Service, Theodore Multipurpose Health Service (including the University of Queensland Medical School), Taroom Hospital, Baralaba Multipurpose Health Service, and Wowan/Dululu Multi-Purpose Centre. Private practices exist throughout the district along with Medical Centres. Both Theodore and Moura Multipurpose Health Services are open 24/7 including emergency, general medical and surgical facilities.

The township of Biloela has the options of Biloela Hospital, Biloela Medical Centre, Gladstone Hospital and Calliope Medical Centre as the closest health services.

The Nhulundu Health Service is located in Gladstone and is an Aboriginal Community Controlled Health Service delivering primary care health services to Gladstone and surrounding communities.

#### 4.5.3 SCHOOLS / EDUCATION FACILITIES

Several schools are located in the Banana Shire LGA and Gladstone Region LGA. The schools located within, and/or closest to, the Project AoI are identified in **Table 4-7**. In terms of tertiary education, a technical and further education institution (TAFE) campus is located in Biloela and Gladstone. Central Queensland (CQ) University is also located in Gladstone.

TABLE 4-7 SCHOOL CATCHMENTS IN THE PROJECT AOI

School Name	School Type
Biloela State School	State
Redeemer Lutheran College, Biloela	Lutheran
St Joseph's Catholic Primary School Biloela	Catholic
Calliope State School	State
Baralaba State School	State
Mount Murchison State School	State
Theodore State School	State
Moura State High School	State
Banana State School	State

## 5. STAKEHOLDER ENGAGEMENT ACTIVITIES

TED commenced stakeholder engagement for the Project in August 2023. This section summarises the engagement activities relevant to the SEIA, and their associated engagement outcomes.

### 5.1 IDENTIFICATION OF KEY STAKEHOLDER GROUPS

A Community and Stakeholder Engagement Plan (CSEP) has been prepared to guide stakeholder engagement for the Project, and establishes the overarching guidelines, principles, objectives, and approach to delivering stakeholder engagement during the Development (planning and approval) Phase of the Project.

The CSEP (2024) is underpinned by a clear and considered stakeholder and material risk identification and mitigation methodology. TED recognises that engagement in regional areas needs to be different to metropolitan engagement as regional communities tend to rely less on mass communication methods and respond more favourably to an individualised direct engagement (i.e. face-to-face) approach.

To this end, TED undertook a mapping exercise to identify stakeholders located near the Project Area who were most likely to directly benefit or be impacted by the Project. The purpose of this mapping exercise was to understand the community context in which the Project sits, and to ensure that appropriate attention and communication was made to address concerns and/or queries.

The stakeholder groups identified via the mapping as potentially impacted by the Project, are outlined in **Table 5-1**.

**TABLE 5-1 KEY STAKEHOLDER GROUPS**

Stakeholder	Specific Parties
Landowners	Landowners hosting Project infrastructure for the proposed Theodore Wind Farm.
Fenceline Neighbours	Fenceline neighbours are identified as neighbours share a fence line or property boundary with the host landowner(s)/Project Area.
Near Neighbours	Neighbours with properties touching the site boundary, and/or any community members with a dwelling within 10 km of the proposed Theodore Wind Farm site boundary.
Traditional Owners	Local Aboriginal elders, representatives, and organisations, specifically the Wulli Wulli people and the Wulli Wulli Nation Aboriginal Corporation (WWNAC).
Wider Community	Residents of the AoI hosting the proposed project, as well as local interest groups not defined in any previous categories, including: <ul style="list-style-type: none"> <li>Residents outside of the boundary determined for neighbours;</li> <li>Aged care and healthcare organisations;</li> </ul>



Stakeholder	Specific Parties
	<ul style="list-style-type: none"> <li>• Business organisations, including but not limited to farmer associations, local progress associations, chambers of commerce or local business structures;</li> <li>• Churches and faith-based organisations;</li> <li>• Conservation and environmental organisations;</li> <li>• Local climate action and sustainability groups;</li> <li>• Not-for-profit organisations;</li> <li>• Primary, secondary, or tertiary educational institutions; and</li> <li>• Recreational groups and clubs.</li> </ul>
Local Government	Councillors and staff employed by: <ul style="list-style-type: none"> <li>• Banana Shire Council</li> <li>• Gladstone Regional Council</li> </ul>
Industry Bodies	<ul style="list-style-type: none"> <li>• Clean Energy Council (CEC)</li> <li>• Queensland Renewable Energy Council</li> <li>• Queensland Fire and Emergency Services (QFES)</li> <li>• Gladstone Ports Corporation</li> <li>• Camboon Rural Fire Brigade</li> <li>• Moura Rural Fire Brigade</li> <li>• Rural Fire Service Gladstone</li> </ul>
Government and Associated Agencies	<ul style="list-style-type: none"> <li>• Federal Department of Climate Change, Energy, the Environment, and Water (DCCEEW)</li> <li>• State Assessment and Referral Agency (SARA)</li> <li>• Queensland Department of Environment, Science and Innovation (DESI)</li> <li>• Queensland Department of Resources (DOR)</li> <li>• Queensland Department of Transport and Main Roads (DTMR)</li> <li>• Australian Energy Infrastructure Commissioner</li> </ul>
State and Federal Members of Parliament (MPs)	<ul style="list-style-type: none"> <li>• Federal Member for Flynn Colin Boyce MP (Liberal National Party (LNP))</li> <li>• State Member for Callide Bryson Head MP (LNP)</li> </ul>
Media	Print and online media: <ul style="list-style-type: none"> <li>• The Focus Magazine</li> <li>• The Gladstone Observer</li> <li>• The Courier Mail</li> <li>• CQ Today</li> <li>• Biloela Beacon</li> <li>• Theodore Community Link Newsletter</li> </ul> Broadcast media (radio and TV): <ul style="list-style-type: none"> <li>• ABC</li> <li>• 4CC</li> <li>• Hot FM</li> <li>• Triple M Central Queensland</li> <li>• Fresh FM</li> <li>• Win News</li> <li>• Channel 7</li> <li>• Nine News</li> </ul>

Source: CSEP 2024

A summary of the outcomes of engagement undertaken with these groups to date is described in **Table 5-3**.

## 5.2 CONSULTATION ACTIVITIES UNDERTAKEN

A variety of consultation activities have been carried out for the Project to-date. Stakeholder engagement undertaken by TED has provided Project feedback from local residents, local Councils, and the wider community, helping to determine the sentiment of those likely to be impacted by the Project.

Stakeholder engagement undertaken by TED to-date, has included:

- Meetings with landowners, near neighbours, the community and other interested parties;
- Meetings with and site visits by Traditional Owners;
- Letterbox drops to all homes within 10 kilometres (km) of the project;
- A newsletter to introduce the project and TED to the community;
- Two two-day community drop-in sessions attended by about 90 community and other key stakeholders;
- Formal presentations to Banana Shire Council;
- Regular 'shopfronts' at the Theodore Community Hall for two consecutive days; and
- A dedicated website that includes project information, news, updates and engagement opportunities.

The Community Engagement Drop-In Sessions were conducted in the towns of Theodore and Banana, with a turnout of approximately 90 attendees. The key takeaways and feedback from the sessions included the following:

- TED is to remain as the primary point of contact for stakeholders;
- One-on-one meetings to determine the most appropriate grid route connection will be essential.

Actions arising from the Community Engagement Drop-In Sessions included the following:

- TED to investigate a 'shopfront' to foster local relationships;
- The potential for TED to sponsor local events was highly desired by the community (refer to **Section 5.3**); and
- Future Community Engagement Sessions are to be conducted to foster community feedback.

## 5.3 COUNCIL CONSULTATION

TED have been undertaking regular briefing sessions for the Project with the Banana Shire Council since 2023. The Briefing Sessions centred on the Project location and outlined consultation undertaken to-date, and generally considered the following:

- Community input/benefit will be discussed with the local community in order to understand how a Community Benefit Fund would be most useful;
- TED is committed to seeking employment within the region where possible;
- Potential jobs generated during construction; and
- Potential jobs generated during operation.

## 5.4 FUTURE ENGAGEMENT

The Stakeholder Engagement Tools (SET) set out in **Table 5-2** have been developed as part of TED's commitment to genuine dialogue with stakeholders and will be employed as part of ongoing engagement with the community for the Project, including when engaging with the local community in relation to workforce accommodation opportunities and/or impacts.

**TABLE 5-2 ENGAGEMENT TOOLS**

Engagement Tool	Objective
Personal phone calls	<ul style="list-style-type: none"> <li>• Personal phone calls will be a significant aspect of stakeholder engagement, particularly with those stakeholder groups most interested in a project. Direct phone calls are a deliberative engagement tool to facilitate immediate and direct conversations.</li> </ul>
Meetings	<ul style="list-style-type: none"> <li>• Personal meetings with individuals and sometimes groups will be a key avenue of personalised engagement. These may be one-on-one meetings with landowners or near neighbours, or meetings with a local community groups. Meetings provide an opportunity to educate, inform, and listen to issues and concerns.</li> </ul>
Emails/letters	<ul style="list-style-type: none"> <li>• Emails and letters will be used to provide notification of important information, such as works, surveys or other activities, or provide stakeholder-specific information and engagement.</li> </ul>
Briefings	<ul style="list-style-type: none"> <li>• Briefings will take place as and when required with representatives of stakeholder groups including local Councillors and Council executives, Members of Parliament and government departments. Briefings allow stakeholders to stay informed about a project's progress.</li> </ul>
Door knocks	<ul style="list-style-type: none"> <li>• Door knocks can be used to speak personally with neighbours within a pre-determined distance band of the Project. Direct outreach allows community members to engage and interact in their own environment.</li> </ul>
Letterbox drops	<ul style="list-style-type: none"> <li>• Letterbox drops provide the opportunity to directly contact residents and/or ratepayers within a certain geographical boundary depending on the delivery method employed. Letterbox drops can be used to distribute newsletters, flyers, FAQs, and other project information.</li> </ul>
Shopfront (permanent or 'pop up')	<ul style="list-style-type: none"> <li>• A shopfront in a project area can take on a variety of forms. It can be a fixed space that is open one or multiple days per fortnight. Another option is a temporary 'pop up' venue which could include a stall in a public space such as a Council office, shopping centre or public library. This option is usually more informal and may occur as a one-off or for shorter periods.</li> </ul>

Engagement Tool	Objective
Drop-in sessions/ pop-ups	<ul style="list-style-type: none"> <li>Drop-in sessions provide an opportunity for stakeholders to meet with members of the Project team and Subject Matter Experts (SMEs) about the Project. Drop-in sessions are advertised in the local community and generally held over multiple days (often two consecutive days) in a local hall or halls. These drop-in sessions do not have a formal structure, but usually incorporate project poster and fact sheets, industry materials, and catering. Subject materials should be selected in response to the community's interests.</li> </ul>
Attendance at community events	<ul style="list-style-type: none"> <li>This may include information stands at agricultural shows, sporting, and other events, providing a platform for community members to ask questions and provide feedback.</li> </ul>
Workshops	<ul style="list-style-type: none"> <li>Workshops can create a space for stakeholders to discuss any questions or concerns with the Project team and/or SMEs, as well as positively contribute to the development of the Project by brainstorming ideas and community-led problem solving.</li> </ul>
Focus groups	<ul style="list-style-type: none"> <li>Create an opportunity for key stakeholders, selected by the Project team, the project team, to provide detailed community feedback in a group setting, as well as raise project-related concerns, considerations, or issues with the TED team and/or SMEs.</li> </ul>
Free call 1800 number	<ul style="list-style-type: none"> <li>A free call 1800 number, 1800 879 435, has been established for the Project.</li> </ul>
Electronic direct mail (EDMs)	<ul style="list-style-type: none"> <li>EDMs will be an important part of communications and could be used to share information such as newsletters, flyers, invitations to upcoming events, fact sheets and more. A sign-up list will be made available on the Project website and at community events.</li> </ul>
SMS notifications	<ul style="list-style-type: none"> <li>SMS notifications can be used for time critical notifications, such as works and deadlines for public submissions.</li> </ul>
RWE website	<ul style="list-style-type: none"> <li>The RWE Renewables Australia Pty Ltd (RWE) website is live and can be found at <a href="http://www.au.rwe.com">www.au.rwe.com</a>. This site contains information about RWE globally, RWE Renewables Australia and Australian projects, as well as links to Project-specific sites.</li> </ul>
Project website	<ul style="list-style-type: none"> <li>A Project website has been established at <a href="http://theodorewindfarm.com.au">theodorewindfarm.com.au</a> and will be regularly updated to provide more information, as well as digital versions of Project collateral. The website URL is included on printed and digital collateral.</li> </ul>
Media releases and advertisements	<ul style="list-style-type: none"> <li>Media releases will be prepared and shared with media outlets based on communications objectives throughout the Project timeline. Advertisements will be booked when required.</li> </ul>
Project email address	<ul style="list-style-type: none"> <li>A Project-specific email address, <a href="mailto:theodorewindfarm@rwe.com">theodorewindfarm@rwe.com</a> has been created and will be used as a central point of obtaining community feedback.</li> </ul>
Newsletters	<ul style="list-style-type: none"> <li>Project newsletters should be developed and distributed regularly. These should provide Project updates and be posted to all landowners within a pre-determined Project radius (suggested to be 10 kilometres from the Project boundary). They can also be delivered electronically.</li> </ul>

Engagement Tool	Objective
Flyers	<ul style="list-style-type: none"> <li>Flyers can be used to promote information sessions or events. Flyers can reach community members who may not have access to digital communications or online platforms.</li> </ul>
Information packs	<ul style="list-style-type: none"> <li>Information packs can include a combination of Project collateral, such as newsletters, fact sheets, maps, information on upcoming events, photo montages, independent third-party studies and more. These can be tailored to the specific needs of the community or individual stakeholders and can include information on topics of particular focus for the Project community. These could be posted to individuals as required or left at key locations, such as Council offices.</li> </ul>
Surveys	<ul style="list-style-type: none"> <li>Surveys are a useful data collection tool to understand community issues, needs and preferences. Surveys can help gauge public opinion on a variety of topics, including framing of benefit sharing initiatives, the Project, and renewable energy in general.</li> </ul>

Source: CSEP 2024

In addition, TED has committed to the following stakeholder engagement initiatives:

- **Community Engagement Committee (CEC):** It is TED's intention to establish a CEC, assuming there is interest from Theodore and surrounding communities to do so. The CEC's purpose would be to capture the voice and sentiments of the community, to help to inform the Project, and direct how TED engages with the community as well as the content of such engagement. The CEC will provide a tool to share information with the community and to build a sense of trust. It is anticipated the CEC would be established in 2025 and run beyond the Planning Phase, into construction, operations and potentially decommissioning.
- **Community Benefit Fund:** Development of a Community Benefit Fund of at least \$500,000 per year (\$17.5 million over the operation life of the Project).
- **Complaints Management:** Development and implementation of a Theodore Wind Farm Complaints and Grievance Management System (in accordance with the Australian Standard AS/NZS 10002:2014 – Guidelines for Complaint Management in Organisations). The TED Complaints Handling Procedure will ensure that complaints are dealt with in a timely and effective manner, and includes the below:
  - Stage One: Receiving
  - Stage Two: Responding
  - Stage Three: Managing
  - Stage Four: Closing, and
  - Stage Five: Continuous Improvement

All instances are recorded within TED's internal SET, with the intent to archive, allocate, monitor, action, resolve, close and analyse all relevant enquiries. TED aims to resolve complaints within 10 working days. If this is not possible TED commits to continued engagement with the stakeholder.

## 5.5 SUMMARY OF KEY MATTERS RAISED DURING CONSULTATION

Throughout the stakeholder engagement activities carried out by TED, stakeholders identified a range of matters of importance to them and/or the local community or groups. These matters are identified in **Table 5-3**.

These key matters have helped to inform the scoping of the potential impacts and are captured in the socio-economic analysis contained in **Table 7-1**.

**TABLE 5-3 KEY MATTERS RAISED BY STAKEHOLDERS**

Key Matters Raised	Detail
Workforce Accommodation	Workforce accommodation during construction, and the impact on the local housing market, has been identified as a key concern. This is a particular topic of interest for the Theodore district community due to the significant number of mining camps and fly-in fly-out (FIFO) workers in the area around Moura. TED will work with Council and seek feedback from community on the potential ways to accommodate a workforce of up to 500 people at peak construction periods.
Grid Connection	Engagement on the potential grid connection is currently underway and will incorporate personal meetings with landowners that will potentially host infrastructure, as well as community information sessions. TED and Powerlink are working together to progress the grid connection community engagement.
Road Network	Oversize vehicles will be required for blades, towers and transformers. Additionally, local traffic flows may be disrupted during the construction phase. TED will work with the community to manage traffic impacts and gain local knowledge on existing road usage, including – for example – school bus routes, if the project proceeds to construction. A Preliminary Traffic Impact Assessment is included with the Development Application for the Project.
Aerial Operations	TED is aware of the existing aviation in the Theodore area, including aerial mustering. Initial studies have shown the proposed wind farm will have minimal impact on aviation in the area. The current indicative WTG layout also satisfies the aviation planning provisions of Banana Shire Council. This information will be shared in newsletters and fact sheets, at community drop-in sessions and other briefings/meetings as required. TED will share met mast locations with local pilots and aviation businesses on request, as well as WTG locations as the project progresses.
Noise	TED, as part of best practice, has completed background noise monitoring in the Project Area. The Project must have a 1.5 km buffer to dwellings, and all neighbouring dwellings are currently well in excess of this.
Biodiversity	TED will provide the community and stakeholders with information on biodiversity studies and findings, as well as committing to: <ul style="list-style-type: none"> <li>Avoiding areas of environmental significance wherever possible. (WTGs have been sited to avoid Queensland</li> </ul>

Key Matters Raised	Detail
	<p>Government identified matters of state environmental significance);</p> <ul style="list-style-type: none"> <li>• Pre-clearance surveys and micro-siting of infrastructure;</li> <li>• Post-construction rehabilitation of disturbed areas not required for ongoing project operation; and</li> <li>• Ongoing monitoring and management of bird and bat impacts, including management resources that are able to adapt as required.</li> </ul>
Fire Risk and Mitigation	<p>TED has commenced liaison with fire services in the proposed Project Area and other emergency services stakeholders as part of the development process for the Project.</p> <p>Wind farm developments incorporate many fire mitigation measures, and these will be communicated with the community, as well as the benefits of access tracks as fire breaks in the event of a fire.</p>
Visual Amenity	<p>Photomontages undertaken from key points in and around the Project Area have shown minimal visual impact from most locations that will be seen by external stakeholders. These will be shared with the community.</p>

Source: CSEP 2024

## 6. ECONOMIC ANALYSIS

The high-level potential economic impact of the Project on the Australian economy and regional employment can be summarised as outlined in **Table 6-1** and **Table 6-2**, respectively.

**TABLE 6-1 IMPACT ON AUSTRALIAN ECONOMY**

	Direct Economic Impact	Indirect Economic Impact <sup>4</sup>
<b>Construction Phase</b>		
Local	\$0.5 billion	\$0.835 billion
State	\$0.425 billion	\$0.710 billion
National	\$0.290 billion	\$0.485 billion
<b>Operation Phase (nominal total over 30 years)<sup>5</sup></b>		
Local	\$0.780 billion	\$1.300 billion
State	\$0.400 billion	\$0.660 billion
National	\$0.100 billion	\$0.167 billion

**TABLE 6-2 IMPACT ON REGIONAL EMPLOYMENT**

	Number of Jobs
<b>Construction Phase</b>	
Local	100 FTEs
State	325 FTEs
National	75 FTEs
<b>Operation Phase</b>	
Local/State	25 FTEs
<b>Additional Indirect Employment</b>	
Unspecified	329 FTEs

<sup>4</sup> Gross Regional Product values assume an economic output multiplier of 1.67 can be applied to direct spend values to estimate the indirect and induced economic impacts of the renewable energy project ("NSW Renewable Energy Zone: Economic Impact Assessment," – ARENA). The economic output multiplier of 1.67 means that for every \$1 million invested in the project, the total economic output in the region is expected to increase by \$1.67 million.

<sup>5</sup> Interest adjustments related to discounts have not been applied, i.e., these are nominal figures. It is assumed that all operational costs are indexed to inflation (CPI).



The following sections describe the analysis undertaken to reach these values, along with underlying assumptions.

## 6.1 BASELINE ECONOMIC ACTIVITY AND “LOCAL” DEFINITION

### 6.1.1 BASELINE ECONOMIC ACTIVITY

To determine the potential economic impact of the Project, the counterfactual baseline case must be determined (i.e. what would the economic activity look like if the Project were not to proceed, and relatedly, is there any **opportunity cost** associated with the Project?).

The **baseline economic case** can be thought of as **business-as-usual economic activity**, where the land is used for low intensity cattle grazing, as it is today (refer to **Section 1.2**).

No alternative project in the local area has been identified as potentially contributing to an opportunity cost. Accordingly, it can be concluded that there is no significant opportunity cost related to the development of the Project.

The baseline economic activity can be compared to the proposed economic activity (the Project), which is the development of a 1.152 GW wind farm which will be in operation for 30 years. Baseline employment figures are discussed in the AOR, provided in Appendix B.

### 6.1.2 “LOCAL” DEFINITION

For the purposes of the economic analysis, the term “Local” aligns with the defined Primary and Secondary AoIs described in **Section 3.1**. This includes the adjacent towns of Theodore, Banana, Moura, and Biloela, as well as the Banana Shire and Gladstone Region LGAs. Whilst Bundaberg and Rockhampton are port cities that may be relevant to the Project, they have been categorised as “State” and not “Local”, for the purposes of estimating direct and indirect economic and employment impacts.

## 6.2 PROJECT ECONOMIC IMPACT

The potential economic impact of the Project is estimated using comparable wind farm projects in Queensland, with assumptions based on relevant renewable energy projects in the region, or information developed by organisations such as the Institute for Sustainable Futures for the Clean Energy Council. In several instances, where estimated values could not be extrapolated from RWE projects, assumptions have been made based on other relevant renewable energy projects in the region, or information developed by organisations such as the Institute for Sustainable Futures for the Clean Energy Council.

### 6.2.1 CONSTRUCTION PHASE

#### 6.2.1.1 DIRECT IMPACT

**Table 6-3** the initial estimates of the direct economic activity during the construction phase across the defined economic AoI.

TABLE 6-3 CONSTRUCTION PHASE DIRECT EXPENDITURE

Activity	Total Project Spend (AUD)	Local <sup>6</sup> Spend (AUD)	State Spend (AUD)	National Spend (AUD)
Project Management, landowner and other <sup>7</sup>	\$39,040,000	\$35,345,000	\$3,325,500	\$369,500
Qld State levy	\$26,920,000	\$0	\$26,920,000	\$0
CapEx - WTG supply and install <sup>8</sup>	\$1,983,790,000	\$0	\$99,189,500	\$99,189,500
CapEx – Balance of Plant <sup>9</sup>	\$900,000,000	\$450,000,000	\$270,000,000	\$180,000,000
Offsets <sup>10</sup>	\$5,910,000	\$2,955,000	\$2,955,000	\$0
Grid Connection CapEx <sup>11</sup>	\$44,340,000	\$11,085,000	\$22,170,000	\$11,085,000
<b>Total (\$ spend)</b>	<b>\$3,000,000,000</b>	<b>\$499,385,000</b>	<b>\$424,560,000</b>	<b>\$290,644,000</b>
<b>Total (% total spend)<sup>12</sup></b>		<b>16.6%</b>	<b>14.2%</b>	<b>9.7%</b>

It is important to note that worker accommodation costs have not been estimated. The procurement and/or construction of this accommodation, plus associated living expenses, will drive further downstream economic activity (in retail, health, hospitality and other industries), which is not captured in the above. Refer to the AOR, provided in Appendix B of this SEIA, for further information on accommodation options considered.

#### 6.2.1.2 INDIRECT IMPACT

Gross Regional Product (GRP) values can be estimated at a high level using an economic output multiplier of 1.67, which can be applied to direct spend values to estimate the indirect and induced economic impacts of the renewable energy project ("NSW Renewable Energy Zone: Economic Impact Assessment," – ARENA). The economic output multiplier of 1.67 means that for every \$1 million invested in the Project, the total economic output in the region is expected to increase by \$1.67 million.

We have applied this multiplier for this preliminary analysis (refer to **Table 6-4**), however it is important to note that the use of such multipliers can be controversial, considering their intended use and the preliminary nature of all direct spend figures. An alternative source (IMF, 2021) provides a more conservative multiplier range of 1.1 – 1.5 for

<sup>6</sup> "Local" aligns with the defined Primary and Secondary AoIs defined in this SEIA.

<sup>7</sup> Inclusive of landowner payments and \$500,000 p.a. Community Benefit Fund. It is likely that project management activities will be roughly evenly spread between the Primary and Secondary AoIs and other LGAs.

<sup>8</sup> It is estimated that 10% of the turbine supply and install expenditure will be made to Australian businesses (for road transport, some tower sections, crane and installation costs, and foundations reinforcement). A co-located Battery Energy Storage System (BESS) is also included in these costs.

<sup>9</sup> A large portion of the civil and electrical costs will be local in relation to plant and machinery hire, road construction, gravel and other materials. Assumed to be 30% of overall project costs.

<sup>10</sup> Assumed to be split evenly across local and state

<sup>11</sup> This also includes transmission line construction, which includes mainly state-based specialised skills, but also some local skills.

<sup>12</sup> Percentages do not add up to 100% - any unaccounted for expenditure in this table is allocated to overseas.

renewable projects. The most conservative approach would of course be to only consider direct-spends and not apply multipliers.

**TABLE 6-4 ESTIMATE GRP DURING CONSTRUCTION PHASE**

	<b>Local (AUD)</b>	<b>State (AUD)</b>	<b>National (AUD)</b>
GRP (\$)	\$835,000,000	\$710,000,000	\$485,000,000

Given the small population of nearby towns, it is expected that the workers who relocate to the area during the Construction and Operation Phases would provide a comparatively large boost the local economy through expenditure on local goods and services such as food, drinks, petrol, accommodation and medical care.

## 6.2.2 OPERATIONAL PHASE

### 6.2.2.1 DIRECT IMPACT

**Table 6-5** shows the initial estimates of the direct economic activity during the Operational Phase across the defined economic AoI.

**TABLE 6-5 OPERATIONAL PHASE DIRECT EXPENDITURE**

<b>Activity</b>	<b>Annual Project Spend (AUD)</b>	<b>Local Spend (AUD)</b>	<b>State Spend (AUD)</b>	<b>National Spend (AUD)</b>
Council Rates <sup>13</sup>	\$600,000	\$600,000	\$0	\$0
OpEx <sup>14</sup>	\$32,800,000	\$20,050,000	\$5,100,000	\$2,550,000
Asset Management <sup>15</sup>	\$4,000,000	\$3,200,000	\$0	\$800,000
Offsets <sup>16</sup>	\$230,000	\$115,000	\$115,000	\$0
Grid Connection OpEx <sup>17</sup>	\$10,000,000	\$2,000,000	\$8,000,000	\$0
<b>Total (\$ spend)</b>	<b>\$47,630,000</b>	<b>\$25,965,000</b>	<b>\$13,215,000</b>	<b>\$3,350,000</b>
<b>Total (% total spend)</b>		<b>54.5%</b>	<b>27.7%</b>	<b>7.0%</b>

<sup>13</sup> Please note this is an estimate.

<sup>14</sup> Mainly local costs for staff and maintenance requirements, but some cost attributable to Australian 'systems support' rather than just local personnel, and parts and material from overseas. Inclusive of landowner payments and \$100,000 p.a. Community Benefit Fund.

<sup>15</sup> Mainly local costs, e.g., local contractors used for maintenance, but some cost attributable to non-local Australian-based systems support personnel.

<sup>16</sup> Assumed to be split evenly across local and state

<sup>17</sup> State spend is payable to the electricity operator covering the construction costs for the substation.

### 6.2.2.2 INDIRECT IMPACT

The economic output multiplier of 1.67 has been applied to the preliminary Operational Phase figures (refer to **Table 6-6**), however it is important to note that use of such multipliers can be controversial, considering their intended use and the preliminary nature of all direct spend figures. A more conservative multiplier range of 1.1 – 1.5 (IMF, 2021) could be used.

**TABLE 6-6 ESTIMATE GRP DURING OPERATIONAL PHASE**

	Local (AUD)	State (AUD)	National (AUD)
GRP (\$)	\$1,300,000,000	\$660,000,000	\$167,500,000

Similar to the construction phase, up to 50 workers will be employed during the Operational Phase, many of whom are likely to live in the local community and to spend some of their income with local businesses.

## 6.3 EMPLOYMENT IMPACTS

Alongside the economic benefits discussed in the previous Section, the Project is expected to directly generate up to 500 jobs during the peak of the Project's construction phase across local, state and federal levels.

### 6.3.1 DIRECT IMPACT

It is expected that up to 500 jobs will be created during the peak of the Project's construction phase. **Table 6-7** shows a breakdown summary of the estimated number of direct employment opportunities arising from this Project across Local, State, and wider Australian jurisdictions.

**TABLE 6-7 SUMMARY OF THE DIRECT EMPLOYMENT OPPORTUNITIES ARISING FROM THE CONSTRUCTION PHASE OF THE PROJECT**

Area	Number of Jobs	Employment Type	Description
Local <sup>18</sup>	100	Direct	Skilled labour (e.g. electricians), plant/machinery drivers, civil workers, metal workers, site maintenance and cleaning workers, and truck drivers.
State	325	Direct	Specialised workers such as transmission line construction, crane operators, over-dimensional truck drivers, project management, concrete batch plant operators, and IT and communication specialists.

<sup>18</sup> "Local" aligns with the defined Primary and Secondary AoIs defined in this SEIA.

Area	Number of Jobs	Employment Type	Description
Australia	75	Direct	Senior management, specialised workers, wind turbine specialists and other technical engineering specialists.

It is also anticipated that there will be around 25<sup>19</sup> ongoing full-time local (or possibly state-based) jobs associated with the Project's Operation over its 30-year life.

The direct employment estimates above can be compared to the employment factors developed by the UTS Institute for Sustainable Futures for the Clean Energy Council (UTS Institute for Sustainable Futures, 2020) outlined in **Table 6-8**. These employment factors estimate the number of Australian jobs created per MW based on a construction timeframe of three years. In total, the Clean Energy Council guidance suggests that 1,321 jobs will be created over the construction, development, manufacturing, operation and maintenance of the Project. This is more than the number of jobs estimated above, indicating that these initial estimates are sufficiently conservative.

**TABLE 6-8 COMPARISON OF THE DIRECT EMPLOYMENT ESTIMATES WITH EMPLOYMENT FACTORS PROVIDED BY THE CLEAN ENERGY COUNCIL**

Phase	Multiplier	Unit	Number of jobs
<b>Construction and Development</b>	2.84	Job-Years / MW	1,091
<b>Manufacturing</b>	0.38	Job-Years / MW	146
<b>Operations and Maintenance</b>	0.22	Jobs / MW	84
<b>Total</b>			<b>1,321</b>

### 6.3.2 INDIRECT IMPACT

The indirect employment resulting from the construction, manufacturing and operation of this Project can be estimated using ratios derived from Nathani *et al.* (Breitschopf, B., C. Nathani and G. Resch, 2012). These ratios link the total direct employment opportunities identified in **Table 6-7** to indirect employment opportunities, based on the development of renewable energy technologies in selected countries. Each ratio produces a different number of employment opportunities. To estimate the total number of indirect jobs that could be created through the Project, we have identified the minimum, average and maximum number of indirect employment opportunities estimated using ratios applying to different countries, as shown in **Table 6-9**. These employment opportunities comprise all jobs created at the local, state and Australia-wide scale.

<sup>19</sup> Current estimates are for 15 to 50 ongoing FTEs associated with the project

**TABLE 6-9 SUMMARY OF THE INDIRECT EMPLOYMENT OPPORTUNITIES ARISING FROM THE PROJECT IN OTHER COUNTRIES, INCLUDING CONSTRUCTION, MANUFACTURING AND OPERATION**

<b>Country</b>	<b>Ratio indirect over direct employment</b>	<b>Calculated indirect employment for Theodore Wind Farm</b>
Canada	68%	340
Denmark	80%	400
France	64%	320
Germany	80%	400
Ireland	29%	145
Japan	116%	580
Netherlands	17%	85
Norway	70%	350
United Kingdom	68%	340
<b>Minimum</b>		<b>85</b>
<b>Average</b>		<b>329</b>
<b>Maximum</b>		<b>580</b>

Using these ratios, it is estimated that the Project will indirectly produce around 329 jobs during the manufacturing, construction, and operation of the Project, lasting 30 years.

It is important to note that these ratios do not allow us to estimate how these jobs will be spread across the local, state, or Australian economy, or which will occur in the manufacturing, Construction and Operation Phases. However, assuming these indirect employment opportunities are spread in a similar way to the direct employment opportunities, we can expect that the majority of these jobs will be created during the construction phase, and predominantly within the state/local economy.

## 6.4 OTHER IMPACTS

### 6.4.1 POSITIVE IMPACTS

#### 6.4.1.1 COMMUNITY IMPACTS

As discussed in **Section 4**, the Project aims to have specific positive economic outcomes for the local community. **Table 6-10** shows a summary of the type of funding allocated by TED directly for local purposes (and already announced).

TABLE 6-10 SUMMARY OF FUNDING PROGRAMS SPECIFICALLY ALLOCATED FOR THE LOCAL COMMUNITY

Type of Fund	Spend (AUD)	Project Phase	Description
<b>Community Benefit Fund</b>	\$500,000 per year	Construction and operation - annually for 30 years	The proposed CEC (refer to <b>Section 5.4</b> ) may in future oversee this fund.
<b>Sponsorship Fund</b>	\$100,000 per year	Design – annually until construction	Provided in accordance with RWE guidelines and targeting direct local benefits.

#### 6.4.1.2 REDUCED ELECTRICITY COSTS AND GRID DECARBONISATION

Wind power, and renewable energy more broadly, is one of the cheapest forms of electricity to produce. The Project can be expected to put downward pressure on electricity prices, making electricity more affordable for the Queensland community and businesses.

The Project has the potential to annually generate enough renewable electricity to supply 500,000 households per year and reduce scope 2 greenhouse gas emissions by close to 2 million tonnes.

#### 6.4.1.3 UPSKILLING OF THE LOCAL WORKFORCE

It is intended that TED will develop and implement Local Business and Industry Procurement Plan in order to seek local industry involvement in the Project (refer to **Section 7**), and will provide training and upskilling in accordance with the plan. If labour is sourced locally, then the development could contribute to skill building in the local workforce. Given the nature of the Project, local procurement could build skills in areas including earthworks; lift and shift; formwork; concreting; civil, mechanical engineering; electrical engineering; medium voltage and high voltage electricians; linesmen; site supervision; construction management; craneage; security and safety; and administration.

### 6.4.2 NEGATIVE IMPACTS

#### 6.4.2.1 CHANGING TOURISM ACTIVITY

The Project is located near Isla Gorge National Park. This area is a tourist attraction, with several walking trails and campsites. There is some potential for the proposed development to affect the natural and cultural value of these National and State Parks and reduce tourism activity, however, as discussed in **Section 7**, this impact is likely low, and any impact would be mitigated and tracked. In some instances, wind farms have also been known to increase tourism, as an attraction in themselves (New Hampshire Site Evaluation Committee, 2013). However, this effect varies widely by jurisdiction and opinions specific to the region (Shannon, 2021) and (Lothian, 2020).

#### 6.4.2.2 LAND USE CHANGE IMPACT

The Project Area<sup>20</sup> can currently sustain approximately 16,000 (Queensland Government Long Paddock Program, 2024) head of cattle, with an estimated sales value of around \$20 million (Meat and Livestock Australia, 2024)<sup>21</sup>, in August 2024. The typical slaughter age of beef cattle is around 18 months (Farm Transparency Project, 2024); therefore, the annual value of cattle grazing in the Project Area is estimated to be approximately \$13 million.

It is anticipated that, while there may be some disruption to cattle grazing capacity during the Project's construction phase, the overall impact during its Operational Phase should be negligible, with livestock often grazing right up to the base of WTGs. If the ongoing impact is in the order of 1% (Australian National University, 2024), this would only disrupt maximum potential revenues from the land by around \$100,000 - \$200,000 per annum.

---

<sup>20</sup> Refer to the wind farm footprint comprised of nine lots on three properties, comprising approximately 46,830 ha, as described in **Section 1.2**.

<sup>21</sup> Emerald is the closest saleyard.



## 7. SOCIAL IMPACT ANALYSIS

As outlined in **Section 2.1**, the social impact analysis methodology has been based on the impact assessment methodologies included in the Queensland SIA Guideline (State Development, Manufacturing, Infrastructure and Planning 2018) and NSW SIA Guideline (NSW Department of Planning and Environment 2023).

Overall, the key drivers of social change that may affect communities in the Project AoI resulting from the Project relate to:

- procurement opportunities for local businesses and employment opportunities for the local workforce (including Theodore, Banana, Moura, Biloela and Gladstone);
- opportunities for diversification of income streams for the host landowners;
- financial benefits for local community economies, and the potential for indirect benefits such as workforce upskilling and increased localised spend;
- disruptions due to construction related activities (noise, dust, transportation of materials and workers, etc);
- amenity (e.g. visual) and other land use and landscape changes due to altered landscapes; and
- accommodation arrangements for construction workforce.

Technology to support renewable energy projects is continuously evolving and improving. Accordingly, following the 30-year operating life, components of the wind farm may be upgraded to prolong the life of operation, or the Project as a whole will be decommissioned and the land returned to the original land use. For the purposes of this social impact analysis, therefore, decommissioning has not been assessed. The potential social impacts associated with the decommissioning of the Project will be considered as part of a future Decommissioning Plan (or similar).

In analysing the potential impacts taken along in this assessment, ERM has considered the:

- Project Description, including the timing, duration and intensity of activities, where known (refer to **Section 1.2**);
- Key matters raised by stakeholders during the engagement process (refer to **Section 5.5**); and
- Outcomes from prior technical studies undertaken by TED.

The potential impacts have been analysed based on the likelihood of the impact occurring, the magnitude of the impact (degree of change caused by the impact) if it occurs, and the vulnerability of the impacted receptors (refer to **Section 2**).

**Table 7-1** provides an overview of predicted impacts likely to be experienced by different stakeholder groups and outlines the pre-mitigation impact, mitigation measures/enhancement opportunities, and post-mitigation impact significance.

TABLE 7-1 SOCIAL IMPACT ANALYSIS

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
Employment and Procurement	The increased demand for labour creates direct and indirect employment opportunities for the local community.  Early stakeholder engagement has not identified that employment has been raised by stakeholders, however, employment opportunities associated with the Project, especially identifying local job creation, will be a key Project benefit.	C, O	Landowners, Neighbours, Traditional Owners, Wider Community	Almost Certain	Positive	Positive	<ul style="list-style-type: none"> <li>Develop and implement a Workforce Management Plan to maximise local employment opportunities.</li> <li>Develop and implement a Local Business and Industry Procurement Plan to maximise local and regional business (procurement) opportunities.</li> <li>Develop hiring preferences with priority given to applicants from within the Project AoI, who have suitable skills to undertake the jobs required for the Project.</li> </ul>	Almost Certain	Positive	Positive
	Increased demand for labour for the Project creates skills shortages.  Other businesses in the Project AoI cannot find the relevant skilled and unskilled employees they need to operate their businesses due to the presence of the Project.  Additionally, there is the potential that skilled employees leave the Project AoI subsequent to the Construction of the Project to work on other projects.	C, O	Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Host information sessions to engage with the community and local businesses who can provide inputs or services and other prospective contractors/subcontractors, regarding construction timing, workforce estimates and accommodation requirements.</li> </ul>	Possible	Moderate	Medium
	Increased demand for goods and services helps to stimulate the local economies through greater indirect spend.  Businesses within the Project AoI benefit from increased economic activity associated with the construction and operation phase workforces, and the spend on materials and equipment for the Project.	C, O	Wider Community	Almost Certain	Positive	Positive	<ul style="list-style-type: none"> <li>Engage local media including radio, newspaper, and social media to advertise expressions of interest for employment or provision of services or materials.</li> <li>Engage with the local employment agencies to identify access pathways for local workers. Assess the candidate pool to determine suitable labour, trade, or other employment for the Project.</li> </ul>	Almost Certain	Positive	Positive
	Increased demand for goods and services creates shortages within local communities.  The increased demand for goods and services due to the Project leads to local supply shortages and price increases which may affect the ability for the wider community within the Project AoI to access and/or procure necessary goods and/or services.	C	Landowners, Neighbours, Traditional Owners, Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Set up a dedicated employment opportunity platform on the Project's website in consultation and coordination with the EPC contractor.</li> <li>Consult with the Banana Shire Council and Gladstone</li> </ul>	Possible	Moderate	Medium

<sup>22</sup> Construction phase (C), operation phase (O)

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
	Opportunities to enhance the capacity of local businesses and supply chain through supply and/or service contracts.	C, O	Wider Community	Possible	Positive	Positive	<div>Regional Council, as well as any Business Chambers to provide their members with relevant details such as Project construction timing, workforce estimates and accommodation requirements.</div> <ul style="list-style-type: none"><li>Development of Social Procurement Policy and platform which addresses the following:<ul style="list-style-type: none"><li>Provision of opportunities for local businesses to submit proposals and tenders and prioritise the use of goods and services that can be sourced locally and are competitive for price and quality.</li><li>Encouraging subcontractors to employ local workers wherever possible and reasonable.</li><li>Identification of positions where training would allow additional local workers and encourage local workers and businesses to undertake training to provide for specialist works.</li><li>Collaboration with local trade/training organisations (such as TAFE) to promote job opportunities with the Project, in enough time to give local people enough notice to receive training in Project related skill sets, if desired.</li><li>Informing non-local workers about local services, as well as shops, cafes, recreational facilities, etc. and make access easy.</li></ul></li></ul>	Likely	Positive	Positive

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
Diversified Income Streams	Diversification of income streams for local host landowners.  The host landowner will receive payments for hosting WTG infrastructure, diversifying the income streams that are available to them.	C, O	Host Landowner	Almost Certain	Positive	Positive	<ul style="list-style-type: none"> <li>Provide payments to host landowner as planned and explore opportunities to provide additional income streams (e.g. carrying out low risk maintenance activities).</li> </ul>	Almost Certain	Positive	Positive
Benefits for Indigenous Economies	Financial benefits for local Aboriginal economies, and the potential for indirect benefits such as workforce upskilling and increased localised spend.	C, O	Traditional Owners	Possible	Positive	Positive	<ul style="list-style-type: none"> <li>Ensure the benefits generated from the development are spread fairly within the community, by identifying the needs of the community and addressing these through a range of targeted actions throughout the project's lifecycle, and by continuously engaging with the WWNAC.</li> <li>Communicating job and business opportunities and skills training in a culturally appropriate manner</li> </ul>	Almost Certain	Positive	Positive
Disruptions and Amenity	Disruptions to pastoral practices because of Project construction.  Construction activities may limit access and cause temporary inconveniences for the operation of rural properties, such as stock movements, paddock access, etc.	C	Host Landowner	Likely	Minor	Medium	<ul style="list-style-type: none"> <li>Develop and implement a Construction Environment Management Plan (CEMP) informed by Project approval requirements to manage construction environmental impacts.</li> </ul>	Possible	Minimal	Low
	Perceived impacts on livestock as a result of WTG operation. In particular, the potential impact on cattle due to noise, vibration, and/or blade throw.	O	Host Landowner, Nearby Neighbours	Likely	Minor	Medium	<ul style="list-style-type: none"> <li>Develop and implement a Traffic Management Plan (TMP) informed by the Project approval requirements, and with input from the Local Councils (i.e. Banana Shire and Gladstone Regional Council). For example, this could include seeking to minimise light traffic as much as practicable for reasons of safety and minimising community impact, segregating traffic for light vehicles, heavy vehicles, and over-dimensional vehicles and road trains, and avoiding particular routes dependent upon school bus timetables.</li> </ul>	Unlikely	Minimal	Low
	Transportation of materials and equipment to the Project Area has the potential to cause road safety impacts for road users along the haulage routes from the Port of Gladstone.  Oversize vehicles will be required for blades, towers and transformers. In addition, local traffic flow may be impacted during construction.  Risk of traffic injury or in the worst case a fatality, resulting from increased vehicle movements during the transportation of goods and workers to and from the Project Area.	C	Landowners, Neighbours, Wider Community	Likely	Major	High	<ul style="list-style-type: none"> <li>Repair damage to Council roads and/or upgrade roads in</li> </ul>	Possible	Major	High

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
	Daily life impacts, such as disruptions to school buses, mail deliveries, utilities, etc. arising from increased construction traffic and local road upgrades.  Increased congestion (particularly if work occurs during peak hour times) may lead to frustration by road users and requirement for more frequent repairs.	C	Landowners, Neighbours, Wider Community	Likely	Moderate	High	line with good industry practice. These commitments will be outlined in the TMP.  <ul style="list-style-type: none"> <li>Establish and implement an Environmental Management System (EMS) to manage operational environmental impacts, consistent with Project approval requirements.</li> <li>Continue to proactively implement the CSEP (2024) and a complaint management and recording procedure.</li> </ul>	Possible	Minor	Medium
	Construction environmental impacts, including noise, vibration, dust, visual amenity.  Various impacts resulting from construction activities, generally felt by people living in proximity to construction activities, such as degradation of air quality and health impacts as a result of increased generation of dust and particles from land clearing, and the use of heavy vehicles and equipment.	C	Landowners, Neighbours	Likely	Major	High	<ul style="list-style-type: none"> <li>Embed Project and specific key stakeholder updates within the CSEP (2024) and complaint management and recording procedure through the stakeholder management database, and ensure execution occurs in a timely fashion when impacts from construction activities are likely.</li> </ul>	Possible	Moderate	Medium
	Perceived impacts on land values. Perceived potential impacts to neighbouring land values is common with opposition to wind farms but has not been raised by stakeholders to-date.	O	Neighbours, Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Include factual, scientific and publicly accessible information on sensitive topics such as the impact of wind farms on land values and health impacts on humans and animals from wind farm infrastructure in ongoing Project updates.</li> </ul>	Unlikely	Minimal	Low
	Altered landscape character, including visual amenity impacts.  Changes to the character of the landscape will occur through the installation of Project infrastructure. Photomontages undertaken from key points in and around the Project Area have shown minimal visual impact from most locations viewed by external stakeholders.	O	Neighbours, Wider Community	Likely	Minimal	Low	<ul style="list-style-type: none"> <li>Implement all relevant management requirements from technical assessments, as required by Project Approvals, including mitigations relating to the Landscape and Visual Impact Assessment and Noise Impact Assessment, with particular emphasis on WTG operation, ancillary infrastructure, construction, and traffic.</li> </ul>	Possible	Minimal	Low
	Perceived impacts on local tourism as a result of the Project proceeding.	O	Wider Community	Possible	Minimal	Low	<ul style="list-style-type: none"> <li>Record tourism data associated with local tourism enterprises and tourism feedback via online platforms.</li> </ul>	Unlikely	Minimal	Low
	Perceived health impacts associated with operational noise.	O	Neighbours, Wider Community	Possible	Moderate	Medium		Unlikely	Minor	Low

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
	Altered landscapes have the potential to impact tangible and intangible Aboriginal heritage.	C, O	Traditional Owners	Possible	Major	High	<ul style="list-style-type: none"> <li>Implement cultural heritage management procedures, as relevant.</li> </ul>	Unlikely	Major	Medium
Accommodation and Worker Influx <sup>23</sup>	<p>Increased demand for short-term accommodation within the Primary AoI, which may reduce the accessibility for community members/tourists to purchase or rent accommodation options</p> <p>The Project has the potential to create shortages and increase cost of living pressures through increased rents of local accommodation.</p> <p>The CSEP (2024) has identified that the workforce accommodation during construction, and the impact on the local housing market, has been identified as a key concern.</p>	C, O	Wider Community	Likely	Major	High	<ul style="list-style-type: none"> <li>Continue to proactively implement the CSEP (2024) and a complaint management and recording procedure.</li> <li>Implement the AOR recommendations, including the associated management measures for accommodation: <ul style="list-style-type: none"> <li>Explore available accommodation options around the Theodore, Moura, Banana and Biloela (i.e. Primary AoI).</li> <li>Host information sessions to engage with the community and local businesses who can provide inputs or services and other prospective contractors/subcontractors, regarding construction timing, workforce estimates and accommodation requirements.</li> </ul> </li> </ul>	Possible	Moderate	Medium
	Increased demand for services and recreational facilities within the various townships of the Primary AoI, which may place a strain on these services/facilities, and in doing so, reduce accessibility for community members.	C	Wider Community	Likely	Moderate	High	<ul style="list-style-type: none"> <li>Investigate local and regional options to disseminate information to local accommodation operators and rental property owners, such as construction timing, workforce estimates and accommodation requirements.</li> </ul>	Possible	Moderate	Medium
	Generate potential opportunities for local accommodation providers to capitalise on the demand for short and long-term accommodation/housing stock.	C	Wider Community	Possible	Positive	Positive	<ul style="list-style-type: none"> <li>Investigate local and regional options to disseminate information to local accommodation operators and rental property owners, such as construction timing, workforce estimates and accommodation requirements.</li> </ul>	Possible	Positive	Positive
	Increase in the demand for long-term housing stock which may contribute to housing market changes for local communities within the Project AoI and reduce housing affordability – in the event that long-term accommodation is to be used by the construction workforce.	C	Wider Community	Likely	Major	High	<ul style="list-style-type: none"> <li>Preparation and implementation of a Workforce Management Plan.</li> <li>Preparation and implementation of a Code of Conduct applicable to all Project workers during the construction phase</li> </ul>	Unlikely	Minor	Low
	Reduced community cohesion as a result of potential ill-discipline of the construction workforce.	C	Landowners, Neighbours, Wider Community	Possible	Moderate	Medium		Possible	Minor	Medium

<sup>23</sup> Refer to TED AOR for further details



Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
	This includes safety concerns and community friction due to the influx of temporary out of town workers.						<ul style="list-style-type: none"> <li>Preparation and implementation of a Workforce Housing and Accommodation Plan</li> </ul>			
	Potential to cause congestion along the roads used by the community resulting from increased vehicle movements associated with the transportation of workers to and from the Project Area.	C	Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Preparation and implementation of a Local Business and Industry Procurement Plan</li> <li>Preparation and implementation of a Health and Community Well-Being Plan</li> </ul>	Possible	Minor	Medium
	Risk of traffic-related injury, or in the worst case a fatality, resulting from increased vehicle movements during the transportation of workers to and from the Project Area	C	Wider Community	Possible	Major	High	<ul style="list-style-type: none"> <li>The on-site workforce accommodation facility should be designed in accordance with the Banana Shire Council Planning Scheme 2021 Development Design Code and have a Waste Management Plan in place.</li> </ul>	Possible	Major	High
	Amenity impacts arising from the use of the accommodation (e.g. noise, visual, dust, etc.), which may potentially cause an impact on community health and wellbeing.	C	Landowners, Neighbours, Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"> <li>Host information sessions to engage with Banana Shire Council, the community and local businesses regarding construction timing, workforce estimates and accommodation requirements.</li> </ul>	Possible	Minor	Medium
	Increased demand for goods and services has the potential to negatively impact the local community through creation of supply shortages.	C	Wider Community	Possible	Moderate		<ul style="list-style-type: none"> <li>Consult with the Banana Shire Council and Gladstone Regional Council to minimise pressure on local resources, and to address worker influx concerns during the construction phase.</li> <li>Contact the local accommodation operators to provide Project information such as construction timing, workforce estimates and accommodation requirements.</li> <li>Provide a register of local accommodation options and contact details to contractors and subcontractors.</li> <li>Maintain a register of local property owners who have expressed interest in offering dwellings for rent (if</li> </ul>	Possible	Minor	Medium

Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
							<p>this occurs in the future). Provide this register to contractors and subcontractors.</p> <ul style="list-style-type: none"><li>◦ Review workforce predictions every six months during construction to ensure that accommodation requirements are met in accordance with the objectives of this AOR.</li><li>◦ Identify any overlaps with peak demand periods for accommodation during the following six months and engage with key stakeholders.</li><li>◦ Maintain a register of local, regional and national workforce breakdown by company on site.</li><li>◦ Regularly consult with local property owners and accommodation providers to manage occupancy to maximise use of local accommodation, without preventing its use for major event and holiday purposes.</li><li>◦ Engage with other project developers to mitigate potential cumulative impacts which may put additional pressure on the area.</li><li>◦ Engage with local health care, social and emergency service providers to monitor the Project's use (if any) of these facilities.</li></ul>			
Stakeholder and Community	<p>Impacts to community cohesion through divided opinions about the desirability of the Project in the community.</p> <p>Community cohesion is likely to be impacted at the level of relationships between individuals who support the Project and those who do not support the Project.</p>	C, O	Landowners, Neighbours, Wider Community	Possible	Moderate	Medium	<ul style="list-style-type: none"><li>• Continue to proactively implement the CSEP (2024) and a complaint management and recording procedure (refer to <b>Section 5</b>).</li><li>• Embed Project and specific key stakeholder updates within the CESP (2024) and complaint management and recording</li></ul>	Unlikely	Minor	Low



Impact Activity	Description of Impact	Project Phase <sup>22</sup>	Impacted Stakeholder/s	Pre-Mitigation Rating			Mitigation Measures / Enhancement Opportunities	Post-Mitigation Rating		
				Likelihood	Magnitude	Impact Significance		Residual Likelihood	Residual Magnitude	Residual Impact Significance
	Community engagement for the Project can be or become ineffective with stakeholders feeling as though they have not been heard or are unable to influence Project decisions and management outcomes.	C,O	Landowners, Neighbours, Wider Community	Possible	Moderate	Medium	<div>procedure through the stakeholder management database, and ensure execution occurs in a timely fashion.</div> <div><div>• Establish a CEC, as intended by TED, assuming there is interest from Theodore and surrounding communities to do so (refer to <b>Section 5</b>).</div></div>	Unlikely	Minor	Low

## 8. MONITORING FRAMEWORK AND REPORTING

This section provides an overview of the recommended monitoring framework for the social impact management measures to be put in place during the Construction and Operation Phases of the Project.

To achieve the post-mitigation impact significant ratings as outlined in **Table 7-1**, all social impact mitigations will need to be monitored in accordance with the framework outlined in **Table 8-1**.

The objectives of the social impact monitoring are to:

- Verify the predicted impacts and identify any other impacts that may arise;
- Verify that management measures are being implemented as planned;
- Assess the effectiveness of the management measures; and
- Provide data for any necessary regulatory reporting to the State Government or other internal compliance reporting.

Accordingly, **Table 8-1** identifies the following:

- **Impact Activity:** The relevant impact activity area identified in the social impact analysis (refer to **Section 7**).
- **Management Goals:** The overarching objective is to minimise the negative social impacts associated with the Project and enhance the positive impacts. As such, specific goals corresponding to the impacts identified have been provided. These can be used to determine whether the management measures have been effectively implemented.
- **Proposed Monitoring Activities:** The monitoring activities proposed will ensure that relevant data is collected (e.g. the performance indicators) during the various phases of the Project to ensure the effectiveness of the management measures.
- **Performance Indicators:** The indicators provide a mechanism to determine whether the goals have been met.
- **Monitoring Frequency:** Outlines the period for data collection.

### 8.1 REPORTING AND AUDITING

In addition to ongoing monitoring, regular audits should be undertaken by TED. These audits are to be conducted throughout the Construction and Operation Phases of the Project and will likely be informed by the outcomes of Project approvals.

Audit findings will be reviewed by TED, and where corrective actions are deemed necessary, specific actions (with designated responsibility and timing) will be developed by TED. The focus will be on achieving the objectives set out in **Table 8-1**, as well as continuous improvement in performance.

A summary of the audit findings is to be reported by TED on an annual basis. This will include an evaluation of the objectives set out in **Table 8-1** and any corrective actions that have been developed because of the audit process.

It is recommended that the predicted impacts and corresponding management measures (i.e. Project performance) be internally audited annually and externally audited once every three years. This timeframe may be extended or reduced based on the findings of ongoing audits.

## 8.2 ROLES AND RESPONSIBILITIES

TED will be principally responsible for implementation of the management measures and the monitoring activities carried out for the Project. However, there will be instances where data will need to be obtained from a third party, or implementation will require cooperation and involvement of others (e.g. contractors and relevant local stakeholders).

TABLE 8-1 PROPOSED MONITORING FRAMEWORK

Impact Activity	Management Goal	Proposed Monitoring Activity	Performance Indicator/s	Monitoring Frequency
Employment and Procurement	Maximise local employment during the construction phase	<ul style="list-style-type: none"> <li>Record local employment</li> <li>Record employee retention rate</li> <li>Record number of apprenticeships</li> <li>Ensure major contractors report on local employment</li> <li>Record the number of training programs undertaken</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of people from the Region employed by the Project (by TED and its contractors)</li> <li>Number of training programs delivered</li> <li>Number of apprenticeships provided</li> </ul>	Quarterly
	Maximise local employment during the Operation Phase	<ul style="list-style-type: none"> <li>Record local employment</li> <li>Record employee retention rate</li> <li>Report on number of, and value of contracts with local and regional businesses</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of people from the Region employed by the Project</li> <li>Percentage of local and regional businesses involved in the Project</li> <li>Percentage of total value of relevant Project expenditure awarded to local and regional businesses</li> </ul>	Annually
	Maximise local procurement	<ul style="list-style-type: none"> <li>Report on number of, and value of contracts with local and regional businesses</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of local and regional businesses involved in the Project</li> <li>Percentage of total value of relevant Project expenditure awarded to local and regional businesses</li> </ul>	Quarterly
Benefits for Indigenous Economies	Maximise financial benefits and job and business opportunities for local First Nations people	<ul style="list-style-type: none"> <li>Report on benefits provided</li> <li>Record local Aboriginal people included in jobs and training programs</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of payments linked to local Aboriginal businesses</li> <li>Percentage local Aboriginal persons included in jobs and training programs</li> </ul>	Quarterly
Local Disruptions and Amenity	Minimise potential environmental and amenity impacts (i.e.	<ul style="list-style-type: none"> <li>Record queries and complaints received from stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Number of complaints</li> <li>Percentage of complaints satisfactorily addressed/resolved</li> </ul>	Quarterly

Impact Activity	Management Goal	Proposed Monitoring Activity	Performance Indicator/s	Monitoring Frequency
	noise, vibration, dust) on community members			
	Minimise the impact on local tourism operations	<ul style="list-style-type: none"> <li>Record tourism data associated with local tourism enterprises (e.g. number of visitors/customers)</li> </ul>	<ul style="list-style-type: none"> <li>Number of tourists to region</li> <li>Tourist feedback received via online platforms (e.g. Trip Advisor)</li> </ul>	Five yearly
	Avoid or minimise potential impacts on tangible and intangible Aboriginal cultural heritage.	<ul style="list-style-type: none"> <li>Record queries and complaints received from Aboriginal Communities and Traditional Owners</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder feedback (qualitative) access to sufficient information on activities, impacts, and mitigation and management measures.</li> <li>Number of complaints</li> <li>Percentage of complaints satisfactorily addressed/resolved</li> </ul>	Quarterly
Accommodation and Worker Influx	Minimise potential impacts on accommodation availability, community and emergency services, and community wellbeing.	<ul style="list-style-type: none"> <li>Record local employment</li> <li>Record employee retention rate</li> <li>Record changes to local residential vacancy rates and rent increases as a potential result from the project</li> <li>Record number of admissions to regional health facilities resulting from project construction</li> <li>Record medical treatment provided on-site, including number of visits and treatment provided related to Project construction</li> <li>Record all Project interactions with local emergency services</li> <li>Survey and record Project-induced interactions with local social services</li> <li>Record random alcohol and drug testing results</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of people from the region employed by the Project</li> <li>Residential vacancy rate</li> <li>Number of admissions to regional health facilities related to project construction activities</li> <li>Callouts to the Project Area or as a result of a Project-induced injury</li> <li>Number of on-site medical visits caused by the Project</li> <li>Type of medical treatment provided</li> <li>Increased demand as a percentage for local social services</li> <li>Percentage of positive alcohol and drug test results</li> <li>Number of breaches of Code of Conduct</li> <li>Percentage of complaints satisfactorily addressed/resolved</li> </ul>	Quarterly

Impact Activity	Management Goal	Proposed Monitoring Activity	Performance Indicator/s	Monitoring Frequency
		<ul style="list-style-type: none"> <li>Record breaches of the Code of Conduct</li> <li>Record complaints received from stakeholders in relation to workers accommodation and worker influx</li> <li>Proposed monitoring activities specifically focused on on-site workforce accommodation:               <ul style="list-style-type: none"> <li>Record number of workers accommodated on site</li> <li>Waste records in relation to on-site workforce accommodation</li> <li>Water records in relation to on-site workforce accommodation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Proposed indicators specifically focused on on-site workforce accommodation:               <ul style="list-style-type: none"> <li>Number of workers accommodated on site per day</li> <li>Waste streams, usage, disposal</li> <li>Water usage in litres</li> </ul> </li> </ul>	
Stakeholder and Community	Minimise community angst and concern in relation to the Project to avoid negative impact to community cohesion.	<ul style="list-style-type: none"> <li>Record of engagement with stakeholders, including records of responses or feedback</li> <li>Report on Community Benefit Program</li> </ul>	<ul style="list-style-type: none"> <li>Stakeholder feedback (qualitative) access to sufficient information on activities, impacts, and mitigation and management measures.</li> <li>Number of complaints</li> <li>Percentage of complaints satisfactorily addressed/resolved</li> <li>Percentage of payments to Community Benefit Fund linked to each identified stakeholder group</li> </ul>	Quarterly

## 9. REFERENCES

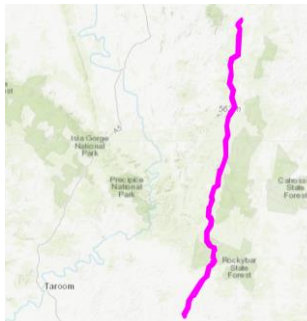
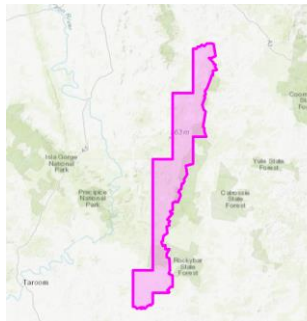
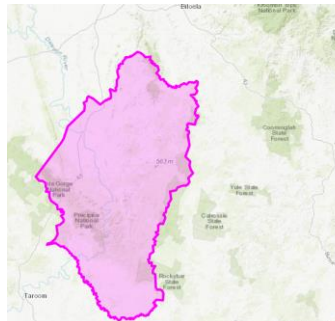
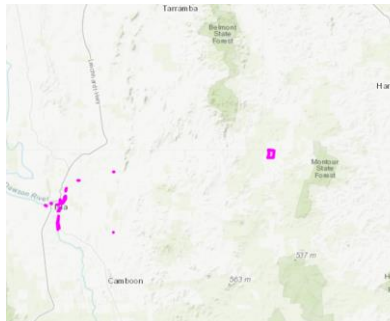
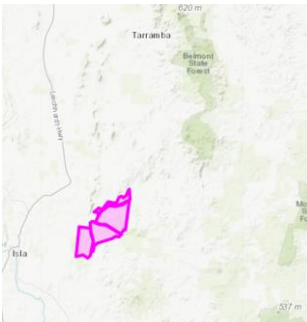
- Australian Bureau of Statistics 2024a, *2021 census community profiles – Gladstone*, Australian Bureau of Statistics, viewed 4 September 2024, <2021 Gladstone, Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024b, *2021 census community profiles – Banana*, Australian Bureau of Statistics, viewed 4 September 2024, < 2021 Banana, Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024c, *2021 census community profiles – Biloela*, Australian Bureau of Statistics, viewed 4 September 2024, < 2021 Biloela, Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024d, *2021 census community profiles – SA130804152801*, Australian Bureau of Statistics, viewed 4 September 2024, < 2021 30804152801, Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024e, *2021 census community profiles – Theodore*, Australian Bureau of Statistics, viewed 4 September 2024, <2021 Theodore (L), Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024f, *2021 census community profiles – Moura*, Australian Bureau of Statistics, viewed 4 September 2024, <2021 Moura, Census All persons QuickStats | Australian Bureau of Statistics (abs.gov.au)>.
- Australian Bureau of Statistics 2024g, *2021 census community profiles – 31902150815*, Australia Bureau of Statistics, viewed 4 September 2024, <<https://www.abs.gov.au/census/find-census-data/quickstats/2021/31902150815>>.
- Australian National University, 2024, *Land requirement for a 100% renewable (zero carbon) economy is 1200 km<sup>2</sup>*, viewed 29 July 2024, <[https://cdn.theconversation.com/static\\_files/files/3234/Detailed\\_landuse\\_calculation.pdf?1714372255](https://cdn.theconversation.com/static_files/files/3234/Detailed_landuse_calculation.pdf?1714372255)>.
- Banana Shire Council, *Sandstone Wonders*, viewed 3 November 2023, <<https://sandstonewonders.com/>>.
- Breitschopf, B., C. Nathani and G. Resch, 2012, "Methodological Guidelines for Estimating the Employment Impacts of Using Renewable Energies for Electricity Generation", "EID-EMPLOY, viewed 29 July 2024, <[www.isi.fraunhofer.de/isi-media/docs/x/de/publikationen/EMPLOY-Guidelines.pdf](http://www.isi.fraunhofer.de/isi-media/docs/x/de/publikationen/EMPLOY-Guidelines.pdf)>.
- Farm Transparency Project, 2024, *Age of animals slaughtered*, viewed on 29 July 2024, <<https://www.farmtransparency.org/kb/food/abattoirs/age-animals-slaughtered>>.
- International Monetary Fund (IMF), 2021, IMF Working Paper WP/21/87, *Building Back Better: How Big Are Green Spending Multipliers?* Prepared by Nicoletta Batini, Mario Di Serio, Matteo Fragetta, Giovanni Melina, and Anthony Waldron, viewed on 3 September 2024, <<https://www.imf.org/en/Publications/WP/Issues/2021/03/19/Building-Back-Better-How-Big-Are-Green-Spending-Multipliers-50264>>

- Lothian, A, 2020, *A survey of the visual impact and community acceptance of wind farms in Australia*, viewed 29 July 2024, <<https://www.tandfonline.com/doi/full/10.1080/07293682.2020.1819355?scroll=top&needAccess=true#abstract>>.
- Meat and Livestock Australia, 2024, *Cattle report export*, viewed 29 July 2024, <<https://www.mla.com.au/prices-markets/cattlephysicalreport/>>.
- National Native Title Tribunal (NNTT), *Search for Registers and Applications*, viewed 4 December 2023, <<http://www.nntt.gov.au/Pages/Home-Page.aspx>>.
- Native Land Digital, *Territories page for the Wuli-wuli*, viewed 4 December 2023, <<https://native-land.ca/maps/territories/wuli-wuli/>>.
- New Hampshire Site Evaluation Committee, 2013, *Evidence of Wind Farms as Tourism Draws*, viewed 29 July 2024, <[https://www.nhsec.nh.gov/projects/2013-02/documents/131212appendix\\_32.pdf](https://www.nhsec.nh.gov/projects/2013-02/documents/131212appendix_32.pdf)>.
- New South Wales (NSW) Department of Planning and Environment 2023, *Social Impact Assessment Guideline*, viewed 4 October 2023, <[https://www.planningportal.nsw.gov.au/sites/default/files/documents/2023/GD1944%20SIA%20Guideline\\_NEW%20VI\\_14\\_02\\_23.pdf](https://www.planningportal.nsw.gov.au/sites/default/files/documents/2023/GD1944%20SIA%20Guideline_NEW%20VI_14_02_23.pdf)>.
- Queensland Government, 2024, *Long Paddock Program Forage Carry Reports*, viewed 29 July 2024, <<https://www.mla.com.au/prices-markets/cattlephysicalreport/>>.
- Queensland Government State Development, Infrastructure, Local Government and Planning 2023, *Planning Guidance, State code 23: Wind Farm development*, viewed 4 October 2023, <[https://planning.statedevelopment.qld.gov.au/\\_\\_data/assets/pdf\\_file/0027/83178/for-consultation-draft-planning-guidance-state-code-23-wind-farm-development.pdf](https://planning.statedevelopment.qld.gov.au/__data/assets/pdf_file/0027/83178/for-consultation-draft-planning-guidance-state-code-23-wind-farm-development.pdf)>.
- Queensland Department of Energy and Public Works 2022, *Queensland Energy and Jobs Plan, Queensland Government*, viewed 4 October 2023, <[https://media.epw.qld.gov.au/files/Queensland\\_Energy\\_and\\_Jobs\\_Plan.pdf](https://media.epw.qld.gov.au/files/Queensland_Energy_and_Jobs_Plan.pdf)>.
- Shannon, B, 2021, *Wind energy and tourism: Industry impacts and opportunities for 'wind farm tourism'*. Unpublished report compiled for C7EVEN Communications. Callaghan, NSW: School of Humanities and Social Science. The University of Newcastle, viewed on 29 July, <<https://engie.com.au/sites/default/files/2022-09/Wind%20energy%20and%20tourism%20-%20Industry%20impacts%20and%20opportunities%20for%20%E2%80%98wind%20farm%20tourism%E2%80%99%2016112021.pdf>>.
- Theodore Wind Farm Community and Stakeholder Engagement Plan (CSEP), 8 April 2024.
- UTS Institute for Sustainable Futures, 2020, *Renewable Energy Employment in Australia: Methodology*, viewed 29 July 2024, <<https://assets.cleanenergycouncil.org.au/documents/resources/reports/Clean-Energy-at-Work/Clean-Energy-at-Work-survey-methodology.pdf>>.





## APPENDIX A      RELEVANT INDIGENOUS LAND USE AGREEMENTS

ILUA Name	Australia Pacific LNG Pty Limited Wullli Wullli Djaku-nde and Jangerie Jangerie ILUA	Surat Gladstone Pipeline (SGP) Wullli Wullli People ILUA	Ergon Energy and Wullli Wullli People ILUA	Wullli Wullli People Revenue Sharing ILUA	Wullli Wullli People/Woolton ILUA
<b>Tribunal file no.</b>	QI2011/040	QI2009/049	QI2015/045	QI2018/008	QI2015/079
<b>ILUA type</b>	Area Agreement	Area Agreement	Area Agreement	Body Corporate	Area Agreement
<b>Representative A/TSI body area(s)</b>	Queensland South Native Title Services Ltd	Queensland South Native Title Services Ltd	Queensland South Native Title Services Ltd	Queensland South Native Title Services Ltd	Queensland South Native Title Services Ltd
<b>Primary subject matter</b>	Pipeline	Pipeline	Consultation protocol	Government	Pastoral
<b>Other subject matter(s)</b>	Petroleum/Gas	Gas	Access, Community, Energy	Extinguishment	Access
<b>Date registered</b>	09/12/2011	29/04/2010	29/01/2016	18/05/2018	29/01/2016
<b>Map</b>					
<b>Source</b>	<a href="https://nntt.gov.au/register/indigenous-land-use-agreements/details/2011-040">Register of Indigenous Land Use Agreements Details (nntt.gov.au)</a>	<a href="https://nntt.gov.au/register/indigenous-land-use-agreements/details/2009-049">Register of Indigenous Land Use Agreements Details (nntt.gov.au)</a>	<a href="https://nntt.gov.au/register/indigenous-land-use-agreements/details/2015-045">Register of Indigenous Land Use Agreements Details (nntt.gov.au)</a>	<a href="https://nntt.gov.au/register/indigenous-land-use-agreements/details/2018-008">Register of Indigenous Land Use Agreements Details (nntt.gov.au)</a>	<a href="https://nntt.gov.au/register/indigenous-land-use-agreements/details/2015-079">Register of Indigenous Land Use Agreements Details (nntt.gov.au)</a>



APPENDIX B      THEODORE WIND FARM  
ACCOMMODATION OPTIONS REPORT



# Accommodation Options Report

Theodore Wind Farm

PREPARED FOR

**RWE**

Theodore Energy Development Pty  
Ltd

DATE

5 September 2024

REFERENCE

0661706



DOCUMENT DETAILS

DOCUMENT TITLE	Accommodation Options Report
DOCUMENT SUBTITLE	Theodore Wind Farm
PROJECT NUMBER	0661706
Date	5 September 2024
Version	3.0
Author	Loucky Spit, Abbey Fitzroy
Client name	Theodore Energy Development Pty Ltd

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
1.0	01	L. Spit	L. Penny	D. Dique	22.12.2023	Draft
2.0	01	L. Spit	L. Penny	D. Dique	13.08.2024	Final Draft
3.0	01	L. Spit	M. Rookwood	D. Dique	05.09.2024	Final

# Accommodation Options Report

Theodore Wind Farm

0661706



---

**Jessica Kwok**

Managing Consultant / Project Manager



---

**David Dique**

Partner-in-Charge



---

**Loucky Spit**

Managing Social Performance Consultant

Environmental Resources Management

Australia Pty Ltd

Level 14, 207 Kent Street

Sydney NSW 2000

T +61 2 8584 8888

© Copyright 2024 by The ERM International Group Limited and/or its affiliates ('ERM'). All Rights Reserved.

No part of this work may be reproduced or transmitted in any form or by any means, without prior written permission of ERM.

## CONTENTS

<b>1.</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	BACKGROUND	1
1.2	PURPOSE AND OBJECTIVE	1
1.3	DOCUMENT STRUCTURE	2
1.4	LIMITATIONS	2
<b>2.</b>	<b>LEGISLATIVE FRAMEWORK</b>	<b>3</b>
2.1	PLANNING ACT 2016	3
2.2	STATE CODE 23: WIND FARM DEVELOPMENT	3
2.3	BANANA SHIRE PLANNING SCHEME 2021	5
2.4	EXISTING APPROVALS	6
<b>3.</b>	<b>PROJECT DESCRIPTION</b>	<b>7</b>
3.1	KEY PROJECT DATES AND PLANNING	9
3.2	WORKFORCE GENERATION ESTIMATES	9
3.2.1	Construction	10
3.2.2	Operation	10
3.2.3	Decommissioning	11
<b>4.</b>	<b>SOCIAL AND ECONOMIC PROFILE</b>	<b>12</b>
4.1	LOCAL PROFILE	12
4.2	REGIONAL PROFILE	15
4.2.1	Banana Shire LGA	15
4.2.2	Gladstone Region LGA	15
<b>5.</b>	<b>ACCOMMODATION CONSIDERATIONS</b>	<b>17</b>
5.1	AVAILABILITY OF EXISTING ACCOMMODATION	17
5.1.1	Short-Term Accommodation	19
5.1.2	Long-Term Accommodation	26
5.2	COMMUTING ON LOCAL ROADS	29
5.3	OTHER DEVELOPMENTS IN THE AREA	32
5.3.1	Other Developments' Accommodation Requirements	34
<b>6.</b>	<b>COMMUNITY AND STAKEHOLDER ENGAGEMENT</b>	<b>37</b>
6.1	OVERVIEW OF ENGAGEMENT ACTIVITIES CONDUCTED	37
6.2	COUNCIL CONSULTATION	38
6.3	FUTURE ENGAGEMENT	38
<b>7.</b>	<b>KEY MATTERS ASSESSMENT</b>	<b>41</b>
7.1	ASSESSMENT REFERENCE FRAMEWORK	41
7.2	ASSESSMENT METHODOLOGY	42
7.3	WORKFORCE MANAGEMENT	43



7.3.1	On-Site Workforce Accommodation Option	44
7.3.2	Short-Term Accommodation Option	45
7.3.3	Long-Term Accommodation Option	46
7.4	HOUSING AND ACCOMMODATION	47
7.4.1	On-Site Workforce Accommodation Option	48
7.4.2	Short-Term Accommodation Option	49
7.4.3	Long-Term Accommodation Option	50
7.5	LOCAL BUSINESS AND INDUSTRY PROCUREMENT	51
7.5.1	On-Site Workforce Accommodation Option	52
7.5.2	Short-Term Accommodation Option	52
7.5.3	Long-Term Accommodation Option	53
7.6	HEALTH AND COMMUNITY WELLBEING	54
7.6.1	On-Site Workforce Accommodation Option	55
7.6.2	Short-Term Accommodation Option	56
7.6.3	Long-Term Accommodation Option	58
7.7	PRIORITISATION OF ACCOMMODATION OPTIONS	59
8.	MANAGEMENT AND PRELIMINARY PLANNING	61
8.1	MANAGEMENT MEASUREMENTS	61
8.2	PRELIMINARY WASTE MANAGEMENT PLAN	63
8.2.1	Legislative Requirements	63
8.2.2	Waste Streams	65
8.2.3	On-site Storage of Waste	67
8.2.4	Sewage Treatment	67
8.3	POTABLE WATER	67
9.	REFERENCES	68

## APPENDIX A BANANA SHIRE PLANNING SCHEME: DEVELOPMENT DESIGN CODE

## LIST OF TABLES

TABLE 2-1 ALIGNMENT WITH DRAFT PLANNING GUIDANCE 'SUPPORTING ACTION' REQUIREMENTS	4
TABLE 4-1 SUMMARY OF RELEVANT ABS DATASETS	12
TABLE 5-1 PRIVATE DWELLING OCCUPANCY, 2021	17
TABLE 5-2 DWELLING TENURE, 2021	18
TABLE 5-3 SHORT-TERM ACCOMMODATION IN THE AOI	20
TABLE 5-4 MAJOR FESTIVALS AND ANNUAL EVENTS	25
TABLE 5-5 LONG-TERM RENTAL HOUSING AVAILABILITY	28
TABLE 5-6: CRASHES ALONG RELEVANT SECTIONS OF A5 AND STATE ROUTE 60	29
TABLE 5-7 DEVELOPMENTS IN THE AREA	34
TABLE 6-1 ENGAGEMENT TOOLS	38
TABLE 7-1 SOCIAL IMPACT SIGNIFICANCE MATRIX	43
TABLE 7-2 WORKFORCE MANAGEMENT: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT	45
TABLE 7-3 WORKFORCE MANAGEMENT: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	46
TABLE 7-4 WORKFORCE MANAGEMENT: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	47
TABLE 7-5 HOUSING AND ACCOMMODATION: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT	48
TABLE 7-6 HOUSING AND ACCOMMODATION: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	50
TABLE 7-7 HOUSING AND ACCOMMODATION: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	50
TABLE 7-8 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT	52
TABLE 7-9 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	53
TABLE 7-10 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	54
TABLE 7-11 HEALTH AND COMMUNITY WELLBEING: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT	56
TABLE 7-12 HEALTH AND COMMUNITY WELLBEING: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	57
TABLE 7-13 HEALTH AND COMMUNITY WELLBEING: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT	58
TABLE 7-14 PRIORITISATION OF ACCOMMODATION OPTIONS	59
TABLE 8-1 MANAGEMENT MEASURES: LOCAL EMPLOYMENT	61
TABLE 8-2 MANAGEMENT MEASURES: ACCOMMODATION	62

## LIST OF FIGURES

FIGURE 3-1 THEODORE WIND FARM REGIONAL CONTEXT	8
FIGURE 3-2 THEODORE WIND FARM KEY PROJECT DETAILS	8
FIGURE 3-3 THEODORE WIND FARM SITE BOUNDARY	9
FIGURE 3-4 THEODORE WIND FARM PRELIMINARY KEY DATES <b>DEFINED.</b>	<b>ERROR! BOOKMARK NOT</b>
FIGURE 4-1 PRIMARY AND SECONDARY AREA OF INFLUENCE	13
FIGURE 4-2 POPULATION DEMOGRAPHIC SNAPSHOT (2021 CENSUS)	16
FIGURE 5-1 THEODORE RESIDENTIAL VACANCY RATES	27
FIGURE 5-2 MOURA RESIDENTIAL VACANCY RATES	27
FIGURE 5-3 BILOELA RESIDENTIAL VACANCY RATES	28
FIGURE 5-4 SURROUNDING RENEWABLE ENERGY PROJECTS IN BANANA LGA	33

## ACRONYMS AND ABBREVIATIONS

Acronyms	Description
ABS	Australian Bureau of Statistics
AoI	Area of Influence
AOR	Accommodation Options Report
CEC	Community Engagement Committee
CoC	Code of Conduct
CSEP	Community and Stakeholder Engagement Plan
DA	Development Approval
DIDO	Drive-In Drive-Out
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning
EP Act	Environmental Protection Act 1994
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
ERM	Environmental Resources Management Australia Pty Ltd
FIFO	Fly-In Fly-Out
Ha	Hectares
km	Kilometres
LGA	Local Government Area
LiDAR	Light Detection and Ranging
MCU	Material Change of Use
MW	Megawatt
NEPC Act	<i>National Environment Protection Council Act 1994</i>

Acronyms	Description
NEPM Regulation	National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998
NSW	New South Wales
OpW	Operational Works
Planning Scheme	Banana Shire Planning Scheme 2021
QLD	Queensland
RAI	Rental Affordability Index
RWE	RWE Renewables Australia Pty Ltd
SA1	ABS Statistical Area 1
SDAP	State Development Assessment Provisions
SEIA	Socio-Economic Impact Analysis
SET	Stakeholder Engagement Tools
SIA	Social Impact Assessment
State Code 23	State Code 23: Wind Farm Development
TAFE	Technical and Further Education
TMP	Traffic Management Plan
UCL	Urban Centres and Localities
WHS Act	<i>Work Health and Safety Act 2011</i>
WMP	Waste Management Plan
WRR Act	<i>Waste Reduction and Recycling Act 2011</i>
WTG	Wind Turbine Generator

# 1. INTRODUCTION

## 1.1 BACKGROUND

Environmental Resources Management Australia Pty Ltd (ERM) has been engaged by Theodore Energy Development Pty Ltd (TED) to undertake a Construction Workers Accommodation Options Report (hereafter referred to as 'AOR' or 'Accommodation Options Report') for the proposed Theodore Wind Farm ('the Project').

The Project is located approximately 22 kilometres (km) east of the township of Theodore and approximately 50 km south-west of Biloela, over an area of approximately 46,830 hectares (ha). A map of the regional context of the Project Area is provided in **Figure 3-1** with key Project details outlined in **Figure 3-2**.

## 1.2 PURPOSE AND OBJECTIVE

The purpose of this AOR is to assess the Project's accommodation options, and how those may potentially have an impact on its surrounding communities, in accordance with the draft updates to State Code 23 and associated Planning Guidance, dated 07 August 2023 (refer to **Section 2**).

The scale and nature of wind farm developments necessitate multi-year construction timeframes and typically require a construction workforce beyond what is available in the local area. As such, this AOR will consider the timeline of the Project, as well as the expected number of workers to be employed during the construction and operation phases of the Project.

The AOR includes appropriate consideration of accommodation availability, focusing on any impacts to existing services or recreational facilities, and commuting distances to the Project. This assessment will be undertaken against the key matters included in the Queensland Social Impact Assessment (SIA) Guideline (2018) relating to community and stakeholder engagement, workforce management, and health and wellbeing.

Further, this AOR provides detail as to prior consultation and/or agreements with the local Council, assessment of positive and negative implications of using and/or supplementing accommodation options in existing communities and will provide an overview as to how an on-site workforce accommodation facility, including preliminary waste management plan and a proposed strategy for providing potable water, could be considered.

It is intended that this AOR will form part of the supporting documentation considered for the Socio-Economic Impact Analysis (SEIA) associated with the Project. As such, it is the SEIA that will explore the potential socio-economic impacts relevant to the Project and provide suitable management and/or enhancement measures.

## 1.3 DOCUMENT STRUCTURE

The remainder of the AOR is structured as follows:

- **Section 2** provides an overview of the legislative framework associated with the Project, including a brief description of State Code 23, and how each section within this report aligns with the requirements as stated in the Draft Planning Guidance document. It also provides a description of existing approvals directly relevant to the AOR.
- **Section 3** provides a description of the Project, including main Project components, location, an overview of the preliminary key dates for primary activities associated with the Project, and workforce estimates for each Project phase.
- **Section 4** provides an overview of the local and regional social and economic context.
- **Section 5** provides an overview of the Project's accommodation considerations, including the available existing short-term and long-term accommodation options in the region, as well as dates of major festivals and annual events, the local road network, and other developments in the area.
- **Section 6** provides an overview of community and stakeholder engagement activities undertaken to date, council consultation, and planned engagement proposed for future stages of the Project.
- **Section 7** provides a key matters assessment to present how each accommodation option may impact workforce management, housing and accommodation, local business and industry procurement, and health and wellbeing. This section ends with recommendations on the accommodation hierarchy.
- **Section 8** provides an overview of management measures developed to encourage and prioritise local employment and accommodation, as well as a preliminary waste management plan and commentary as to the supply of potable water supply.

## 1.4 LIMITATIONS

This AOR has been prepared using a combination of on publicly available information and Project-related detail provided by TED.

It is highlighted that the AOR seeks to identify and consider the impacts of workers accommodation facilities and the implications for existing townships and communities only and therefore should not be taken as a comprehensive legal assessment of the ability to use these options.

It is also noted that ERM's findings are accurate and complete only to the extent that information sourced, and/or provided to ERM, was itself accurate and complete.

Finally, ERM's findings reflect the current Project status. It is noted that a number of key decisions have not yet been made, such as the selection of contractors or suppliers. Once such decisions have been made the predicted impacts should be reviewed and updated accordingly.

## 2. LEGISLATIVE FRAMEWORK

### 2.1 PLANNING ACT 2016

The *Planning Act 2016* and associated Planning Regulation 2017, require a Development Approval (DA) for Material Change of Use (MCU) for a wind farm to be assessed in accordance with the State Development Assessment Provisions (SDAP) State Code 23: Wind Farm Development (State Code 23).

In accordance with State Code 23 (refer **Section 2.2**), the Project will be 'Code Assessable' with all turbines located a minimum 1.5 km from any non-host sensitive receptor. Operational Works (OpW) for Native Vegetation Clearing will be included in the Wind Farm DA, assessed by the Department of Resources, in accordance with State Code 16: Native Vegetation Clearing.

This AOR is to be submitted as an attachment to the DA to assist the Project in addressing the requirements of State Code 23 (refer to **Section 2.2**).

### 2.2 STATE CODE 23: WIND FARM DEVELOPMENT

The Queensland Government is delivering on a commitment to review the planning framework for renewables. On 07 August 2023, it introduced a draft update of State Code 23, which includes requirements aimed at ensuring that the impacts arising from the construction, operation and decommissioning of wind farms do not result in unacceptable adverse impacts on individuals, communities and the natural environment.

Amongst other things, compliance with the code ensures that workforce accommodation associated with the construction of a wind farm does not cause unacceptable adverse impacts on individuals and surrounding communities. In that respect, Performance Outcome (PO) 14 of the draft update to State Code 23 states:

*On-site workforce accommodation of greater than 50 beds associated with the construction of the wind farm, does not result in adverse impacts on surrounding communities and townships.*

Based on current workforce predictions, TED is anticipating the creation of approximately 300 to 500 jobs during the construction phase and 15 to 50 jobs during the operation phase of the Project. One potential option for TED to cater for the workers employed during the construction phase is the development of an on-site accommodation facility with a capacity greater than 50 beds. Given this potential option for TED, an AOR is required to be prepared under the provisions of the draft Update to State Code 23.

This AOR has been designed in order to address the requirements of the draft updates to State Code 23, the associated Planning Guidance (Queensland State Development, Infrastructure, Local Government and Planning, 2023), as well as the Queensland Energy and Jobs Plan (Queensland Department of Energy and Public Works, 2022) and requisite components of the Queensland SIA Guideline (2018).

**Table 2-1** provides an overview of the draft Planning Guidance 'Supporting Action' requirements for PO14 and where this is addressed within the AOR.

**TABLE 2-1 ALIGNMENT WITH DRAFT PLANNING GUIDANCE 'SUPPORTING ACTION' REQUIREMENTS**

<b>PO14 'Supporting Action' Requirement</b>	<b>Reference in AOR</b>
The expected number of construction workers to be accommodated during different phases of construction.	Refer to <b>Section 3.2</b>
The expected construction period for the wind farm.	Refer to <b>Section 3.1</b>
An assessment against selected key matters in the Queensland Government 'Social Impact Assessment Guideline' (Queensland Government 2018), including: <ul style="list-style-type: none"> <li>Community and stakeholder engagement – include details of the community and stakeholder engagement to be undertaken and details of the ongoing engagement proposed during construction.</li> <li>Workforce management – include details of the workforce profile for the construction phases, including an analysis of the local and regional labour markets, an assessment of opportunities for local workers.</li> <li>Health and wellbeing – include an analysis of the availability and accessibility to healthcare and emergency services for the proposed construction workforce.</li> </ul>	Refer to <b>Section 6</b>  Refer to <b>Section 7.3</b> and <b>Section 4</b>  Refer to <b>Section 7.6</b>
Details of any consultation and/or agreements with the local government.	Refer to <b>Section 6.2</b>
An assessment of positive and negative implications of using and/or supplementing accommodation options in existing townships/communities. This analysis should explore the implications of all, or part, of the workers accommodation being located in exiting townships and should address: the availability of existing accommodation options; implications of commuting on local roads and implications of commuting distances and time from a workplace health and safety perspective;	Refer to <b>Section 5</b> and <b>Section 7</b> , with <b>Section 5.2</b> focused on commuting on local roads.
If the options analysis recommends on-site construction workers accommodation of greater than 50 beds, further details have to be provided to demonstrate how the facility can be suitably delivered and managed on the site. These details should include: <ul style="list-style-type: none"> <li>A preliminary waste management plan outlining: relevant legislative requirements and how these will be met; how all waste streams generated at the facility will be managed and particular details in relation to sewage treatment. If on-site sewage treatment is not proposed, details must be provided that demonstrate that relevant local governments have been consulted and are supportive of off-site sewage disposal options.</li> <li>Proposed strategy for serving the facility with potable water. Specific details can be pursued following approval, but the lodged application needs to provide a level of confidence that, if approved, potable water can be viably supplied to the facility.</li> </ul>	Refer to <b>Section 8.2</b>  Refer to <b>Section 8.3</b>



## 2.3 BANANA SHIRE PLANNING SCHEME 2021

The Banana Shire Planning Scheme 2021 (the 'Planning Scheme') establishes the land use and development priorities for the Banana Shire Local Government Area (LGA) for the period of 2021 to 2026. The Planning Scheme has identified the following goals to ensure that development within the region is appropriate:

- A fair, orderly, and sustainable pattern of development;
- A strong sense of community identity;
- A viable, complex, and diverse economy;
- The enhancement of infrastructure to meet the needs of the community;
- The preservation of economic and environmental values in rural areas; and
- The protection of the natural environment, and the mitigation of both natural and human-made hazards.

The Banana Shire Council ('Council') as made commitments to meet the above goals through the development of strategic direction plans, as well as the creation of objectives and strategies which identify the key steps and resources required to achieve the vision.

Consideration of the Planning Scheme requirements will be given through the assessment process for the Project and addressed in the DA (refer to **Section 2.2**). While Council is not the Assessment Manager for the Project, Council has an important role to play for the Project as it:

- Plays an important role in supporting the economic, social and environmental wellbeing of its community;
- Remains a key stakeholder in TED's Community and Stakeholder Engagement Plan (CSEP);
- Will be consulted as part of the DA process directly by Department of State Development, Infrastructure, Local Government and Planning (DSDILGP); and
- Is the Assessment Manager for related approval requirements including the met mast, and construction approvals (e.g. civil and road works, temporary on-site accommodation facilities, temporary concrete batching etc.).

Under the Planning Scheme, on-site workforce accommodation for a renewable energy project is most commensurate with the 'Rural Workers' Accommodation' use, which is defined as:

*The use of premises as accommodation, whether or not selfcontained, for employees of a rural use, if:*

*(a) the premises, and the premises where the rural use is carried out, are owned by the same person, and*

*(b) the employees are not nonresident workers*

Accordingly, the future development of on-site workforce accommodation will need to consider the relevant provisions of the Planning Scheme, including the Development

Design Code (Part 6 of the Planning Scheme). The provisions of the Development Design Code have been considered as part of this AOR, with a copy of the Code attached in Appendix A.

## 2.4 EXISTING APPROVALS

It is understood that there are no existing DAs associated with the Project. TED are currently in the process of obtaining the relevant primary approvals under the EPBC Act and *Planning Act 2016* for the Project.

### 3. PROJECT DESCRIPTION

TED is developing the Project approximately 22 km east of the township of Theodore, 50 km south-west of Biloela and 150 km south-west of Gladstone in the Banana Shire LGA, as shown in **Figure 3-1**.

The Project Area is comprised of nine lots on three properties, comprising approximately 46,830 ha. TED has signed agreements with all the Project landowners. Cattle grazing is the dominant land use in the Project Area, with largely cleared areas associated with lower slopes dominating the landscape.

The road network near the Project Area incorporates a range of local and state sealed and unsealed roads including Defence Road, Crowsdale-Camboon Road, and the Leichardt Highway. Access points will be created to facilitate entry into the site for construction and operation purposes and will stem from public roads.

The Project lies adjacent to and within the locality (10 km) of several state forests including Belmont State Forest to the east, Montour State Forest to the north and Trevethan State Forest to the south.

Key Project details include:

- **Wind Turbines** – up to 170 Wind Turbine Generators (WTGs) with a tip height of up to 270 m and a rotor diameter of up to 175 m.
- **Wind Monitoring** – temporary or permanent wind monitoring towers to be determined with Light Detection and Ranging (LiDARs) on site and met masts installed.
- **Ancillary Infrastructure** – including, but not limited to, access tracks, substations, overhead and underground electrical cabling, hardstands, and an operation and maintenance compound.
- **Operational Date** – target date of Quarter 4, 2027 for commercial operations to commence.
- **Battery Storage** – to co-locate with on-site substations.
- **Nearby dwellings** – No non-associated dwellings were identified 3.09 km of the nearest WTG associated with the Project. 11 non-associated dwellings have been identified within 3.09 km - 6.18 km of the proposed WTGs, and 6 non-associated dwellings have been identified within 6.18 km and the 10 km.
- **Homes Powered** – the Project proposes to power more than 500,000 homes.

**Figure 3-2** shows key details of the Project, and **Figure 3-3** presents the Project's site boundaries.

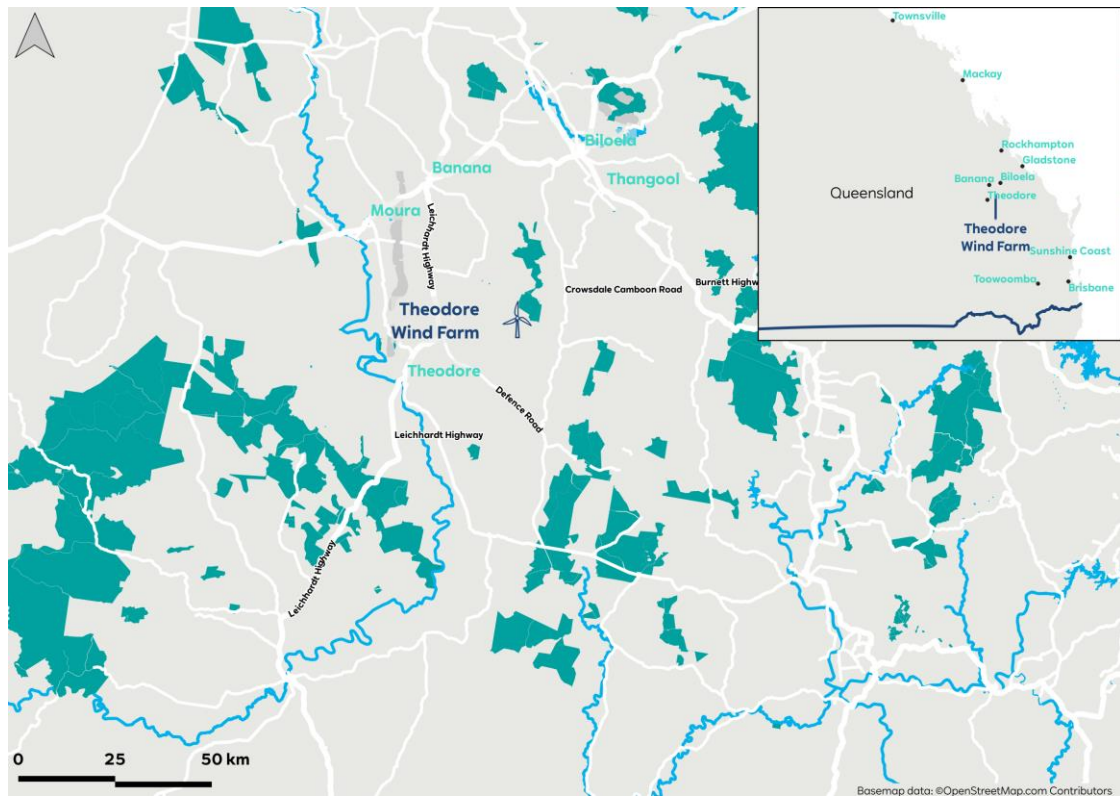


FIGURE 3-1 THEODORE WIND FARM REGIONAL CONTEXT

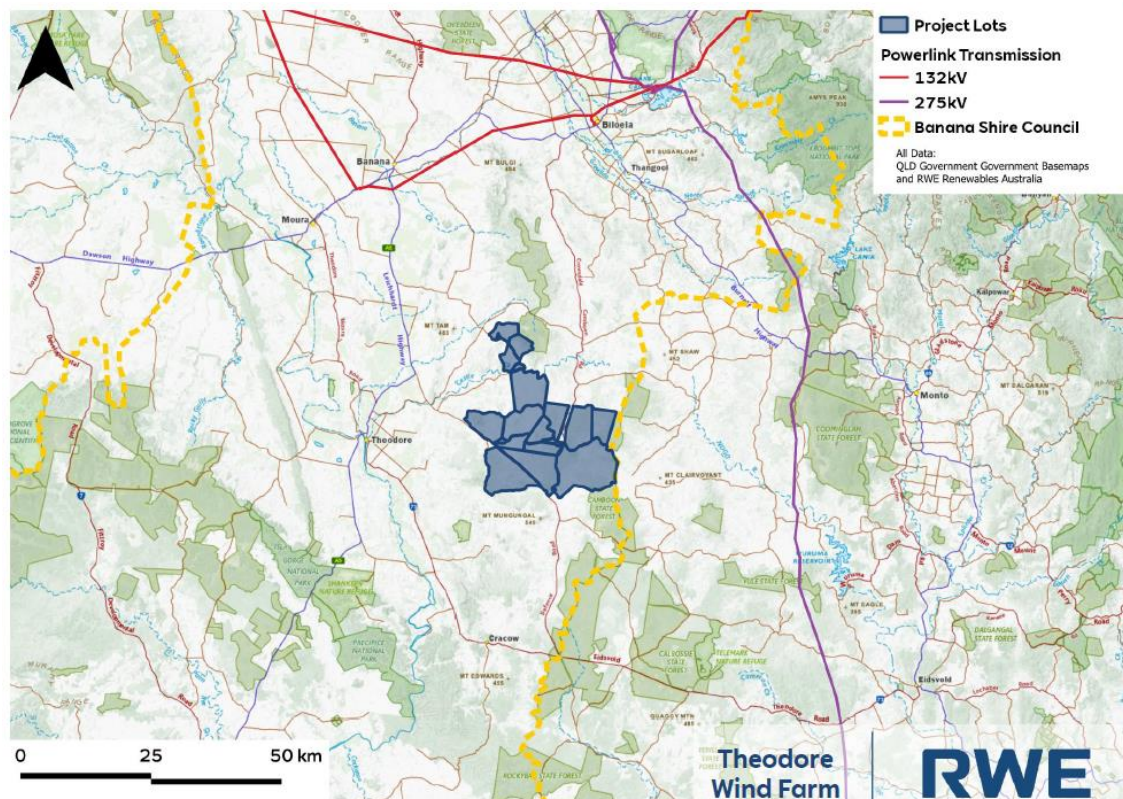


FIGURE 3-2 THEODORE WIND FARM KEY PROJECT DETAILS



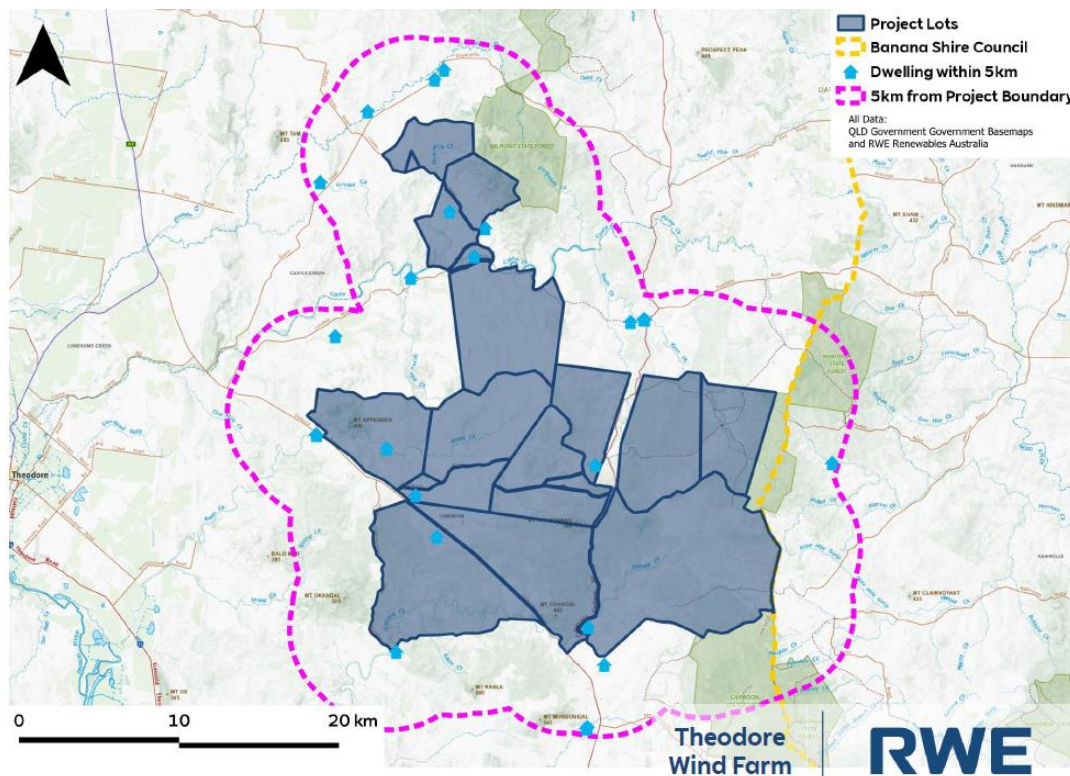


FIGURE 3-3 THEODORE WIND FARM SITE BOUNDARY

### 3.1 KEY PROJECT DATES AND PLANNING

**Table 3-1** presents the preliminary key dates for the primary activities associated with the Project, including stakeholder engagement, approvals, infrastructure upgrades, and construction and operation commencement targets.

TABLE 3-1 THEODORE WIND FARM PRELIMINARY KEY DATES

Key Item	Date
Traditional Owner and Community Consultation	2023 -> Onwards
Engagement with Chambers of Commerce and Local Business	Q3 2024 -> Onwards
EPBC Submission	March 2024
Construction Commencement Target	Q1 2026
Commercial Operation Target	Targeting 2027 for initial operations

### 3.2 WORKFORCE GENERATION ESTIMATES

TED anticipates that there will be 300-500 jobs during the construction phase, and 15-50 permanent jobs during 30 years of operations, with ongoing economic benefit from the multiplier effect of a major project (CSEP 2024).

TED have also established the following milestones that will help to guide development:

- Community and stakeholder engagement commenced in August 2023, with the project team undertaking early consultation with landowners, Traditional Owners, Local Council, and the community.
- Engagement with Local Businesses is planned for Quarter 3, 2024 and will be ongoing.
- EPBC Submission and Approval Target is scheduled for Quarter 4, 2024 – Quarter 1, 2025.
- State DA Submission and Approval Target is scheduled for Quarter 4, 2024 – Quarter 2, 2025.

### 3.2.1 CONSTRUCTION

The Project's construction commencement target is scheduled for Q2 2026 and the total construction period is anticipated to be approximately 18 months.

The following types of labour and skills required align with the construction phase of the Project: project managers, civil engineers, electrical engineers, mechanical engineers, medium voltage and high voltage electricians, linesmen, construction workers, heavy equipment operators, technicians, safety experts, environmental experts, logistics and supply chain managers, surveyors, quality control inspectors, welders, cranes, local support staff.

The Project is committed to employing from the local region where possible, however is looking into construction working accommodation possibilities for those who are to be employed from outside of the local region.

The following actions are planned to encourage local employment: hiring mandates, partnerships, contracting.

### 3.2.2 OPERATION

The Commercial Operation Date is scheduled for after Quarter 4, 2027, with the operational lifespan of the Project to be in the order of 30 years. Throughout operations, a workforce of up to 50 FTEs will be required.

It is anticipated that the facility will require regular maintenance throughout its operational life. This will include, but is not limited to, the following ongoing tasks:

- Inspecting and repairing blades;
- Monitoring electrical systems;
- Ensuring proper lubrication of components;
- Inspecting tower structure for wear or corrosion; and
- Managing the braking system.

The operational workforce will also be responsible for ongoing monitoring of, amongst other things, the overall safety of the site, regular data analysis and software updates for efficient operation.

### 3.2.3 DECOMMISSIONING

At the end of life, the WTG towers and other above ground infrastructure will be removed, and the area rehabilitated in accordance with good practice at the time and where not required for ongoing grazing or agricultural uses.

A detailed Rehabilitation and Decommissioning Plan will be prepared during the early stages of operation as a part of the post-construction activities, and will include overarching principles for the decommissioning phase, to be reviewed prior to decommissioning of the proposed development.

## 4. SOCIAL AND ECONOMIC PROFILE

This section provides an overview of the socio-economic profile of the local and regional surroundings of the Project. The socio-economic profile of the Area of Influence (AoI) is described in detail in the SEIA.

For the purposes of this AOR, the Project AoI is comprised of a Primary AoI and Secondary AoI, with the Primary AoI comprising an area of 5 km from the site boundary, including Australian Bureau of Statistics (ABS) SA1 No. 30804152801, ABS SA1 No. 31902150815 and the Urban Centres and Localities (UCL) of Theodore, Moura, and Biloela. The Secondary AoI comprises the areas within the ABS LGA Boundaries including Banana Shire LGA and Gladstone Region LGA. **Figure 4-1** illustrates the Primary and Secondary AoIs for the Project, and provides an overview of the relevant ABS datasets, as presented in **Table 4-1**.

Both AoIs and the surrounding stakeholders who may be impacted as a result of the Project were determined based on potential interactions between the Project and the surrounding communities. For the AOR, this is particularly relevant in relation to the area's capacity to handle the Project's workforce and accommodation needs.

**TABLE 4-1 SUMMARY OF RELEVANT ABS DATASETS**

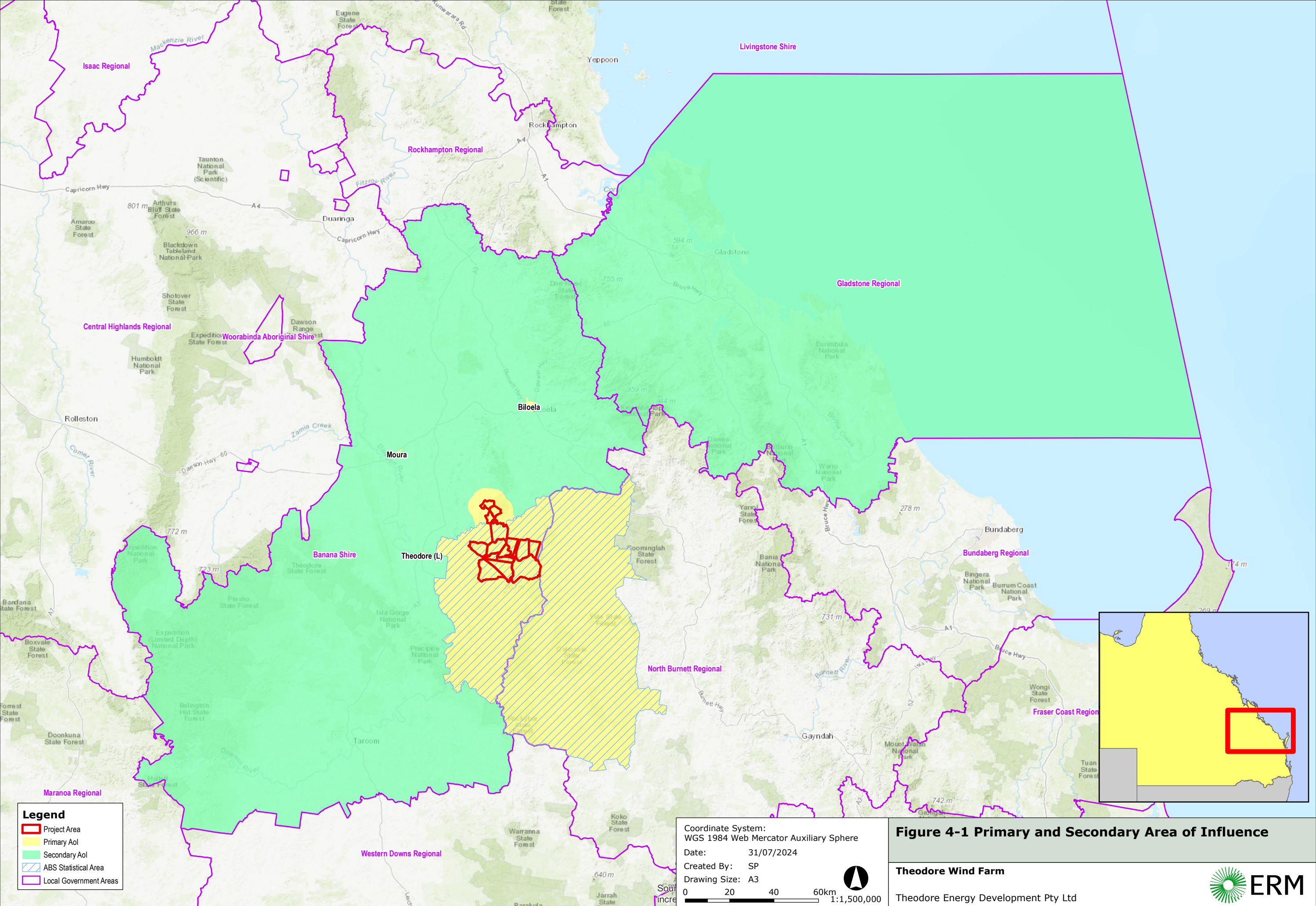
Location	2016 ABS Reference	2021 ABS Reference
SA1	SA13152801	SA130804152801
SA1	SA1 3150815	SA1 31902150815
Theodore (UCL)	UCL322123	UCL322120
Moura (UCL)	UCL315068	UCL315070
Biloela (UCL)	UCL314006	UCL314005
Banana Shire (LGA)	LGA30370	LGA30370
Gladstone Region (LGA)	LGA33360	LGA33360
QLD (State)	Area code 3 (State)	Area code 3 (State)

### 4.1 LOCAL PROFILE

The Project is located in an area noteworthy for its agriculture, in particular, beef cattle production. In addition, the local area supports dry land and irrigated cropping, horticulture, forestry, mining and resources, tourism and construction sectors.

The closest towns to the Project Area comprise of Theodore (approximately 25 km west, travel distance by road), Banana (approximately 49 km north, travel distance by road), Moura (approximately 58 km north-west, travel distance by road), and Biloela (approximately 94 km north-east, travel distance by road). These are all relatively small and rural communities, with Banana and Theodore mainly servicing rural activities, and Moura local coal mining activities. Compared to Theodore and Moura, Biloela is more densely populated and hosts a tourist centre.







Theodore lies on the eastern side of the Great Dividing Range, boasts a tropical character and lies 140 m above sea level. The population of Theodore as of 2021 is 451 people, with 15.1% identifying as Aboriginal and/or Torres Strait Islander. In 2021, Theodore's median age was recorded at 38 years with 20.2% of the population aged 14 and under, and 22.4% of the population aged 65 years and over. The top industry of employment was log saw-milling (8.2%), and the top occupation was labourers (19.3%) (ABS 2024e).

Banana's population as of 2021 is 348<sup>1</sup>, with 7.8% identifying as Aboriginal and/or Torres Strait Islander. In 2021, Banana's median age was recorded at 40 years with 20.9% of the population aged 14 and under, and 15.2% of the population aged 65 years and over. The top industry of employment was Beef Cattle Farming (Specialised) (16.4%), and the top occupation was manager (30.4%) (ABS 2024g).

Moura recorded a population of 1,843 in 2021, with 8% of the population identifying as Aboriginal and/or Torres Strait Islander. The median age of Moura is 33 years old with 12.7% of the population aged 65 and over and 24.8% of the population aged under 14. Coal mining is pivotal to the town with the highest industry of employment at 26.6%, with Machinery Operators and Drivers the highest occupation at 24.6% (ABS 2024f).

Biloela is Banana Shire's largest town with a population of 5,667 (ABS 2023c) and is the main residential base for workers from the Callide Coal Mine (approximately 92 km from the Project Area) and Callide Power Station (approximately 87 km from the Project Area). The Callide Power Station produces approximately 20% of QLD's electricity (CSEP 2024). The highest industry of employment is coal mining (14.1%) with technicians and trades workers contributing for the top occupation (19.1%) (ABS 2021c). Only 27 km<sup>2</sup> of the Shire's 28,577 km<sup>2</sup> are urbanised, creating the need for unique, tailored communications and engagement strategies that may potentially leverage existing hubs, such as major employers, to access the community (CSEP 2024).

In 2021, SA1 (SA130804152801), which includes the Project Area, recorded a population of 192, with 2.6% identifying as Aboriginal and/or Torres Strait Islander. The population is split between 57% males and 43% females with a median age of 48 years, contrasting with the Queensland and Australian average of a median age of 38 years. 4.8% of the SA1 have a bachelor's degree level or above and 19.4% have a certificate level III. The top industry of employment is beef cattle farming (51.1%) with the top occupation being managers (42.4%) (ABS 2024d).

The second SA1 (SA131902150815), which is to the east of the Project Area, recorded a population of 183, with 2.2% identifying as Aboriginal and/or Torres Strait Islander. The population is split between 53.4% males and 46.6% females with a median age of 39 years. 4.8% of the population hold a Bachelor Degree level or above with 13.1% holding a certificate level III. Beef cattle farming was the top industry of employment (71.5%), followed by aged care residential services (2.4%). The top occupation for the SA1 was managers (54.5%) (ABS 2024h).

<sup>1</sup> As a result of the small size of the township of Banana, there is no Urban Centre and Locality available on ABS. Therefore, ABS Suburbs and Localities (SAL) for Banana has been used instead.

## 4.2 REGIONAL PROFILE

The Project Area is situated within the Banana Shire LGA, however there is potential for economic benefits from both the construction and operation phases to be experienced in the Gladstone Region LGA.

A snapshot of the key demographic statistics for the Banana Shire and Gladstone Region LGAs, compared with those of Queensland and Australia is provided in **Figure 4-2**. The information presented is based on the ABS 2021 Census information, with additional detail on the two LGAs provided in the following sections.

### 4.2.1 BANANA SHIRE LGA

The Banana Shire LGA is situated in central Queensland, Australia, 120 km west of the Port of Gladstone. The LGA boasts a blend of rural landscapes and national parks.

Between 2016 and 2021 the population of the Banana Shire LGA increased from 14,319 to 14,513 people (an increase of about 200 people). The population dynamics as of 2021, showed a 50/50 split of males and females, with a median age of 39, which is relatively typical for a rural area. The 2021 Census recorded 63.3% of the population in the labour force and 2.8% unemployed. The main occupations of usual residents<sup>2</sup> were managers (19.5%), and technicians and trades workers (15.5%) (ABS 2024a). The major industries throughout the area include beef cattle farming (12.7%), coal mining (12.2%), and meat processing (3.6%), and now more recently power generation (both renewable and non-renewable resources).

The Banana Shire LGA has extensive natural resources, with several major coal deposits (including in the Theodore area). Two gas transmission pipelines run through the Banana Shire, from the Surat and Bowen Basins to Gladstone. Coal mining is one of the Shire's major industries, as are power generation and farming enterprises including beef production and cropping (lucerne and cotton) (CSEP 2024).

The Banana Shire LGA is serviced by six hospitals including Biloela Hospital, Moura Multipurpose Health Service, Theodore Multipurpose Health Service, Taroom Hospital, Baralaba Multipurpose Health Service and Wowan/Dululu Multi-Purpose Centre. Private practices exist throughout the LGA along with Medical Centres. Both Theodore and Moura Multipurpose Health Services are open 24/7 and their services include emergency, general medical and surgical. In addition, the township of Biloela has the options of Biloela Hospital, Biloela Medical Centre, Gladstone Hospital and Calliope Medical Centre as the closest health services.

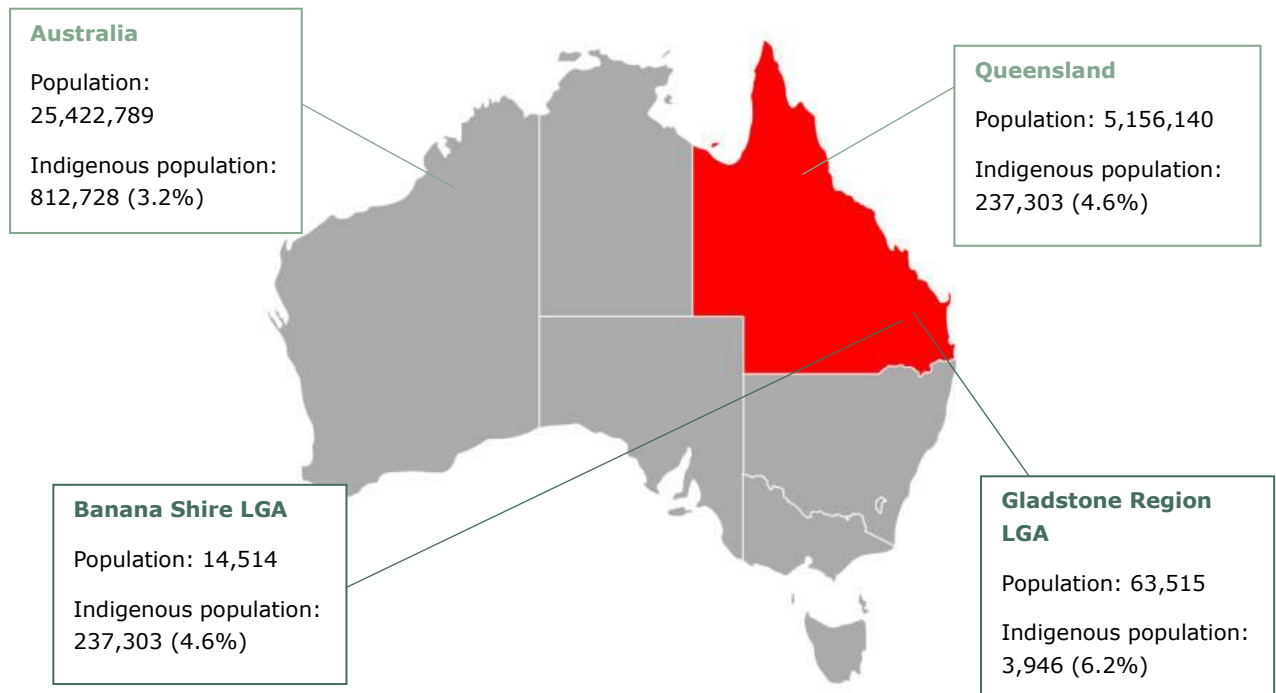
### 4.2.2 GLADSTONE REGION LGA

Gladstone is a growing industrial city along the Queensland coastline, and the local airport is a gateway to industry and tourism. Gladstone Airport will be essential for non-local workers travelling to and from the Project Area.

---

<sup>2</sup> Usual residence refers to the address at which a person lives or intends to live for six months or more. However, the data is self-reported and sometimes, the address that is reported may be what respondents consider their 'usual address' rather than the technical definition.

Between 2016 and 2021, the Gladstone Region LGA saw a population increase from 61,640 to 63,515 people (1,875 additional people). Similar to the Banana Shire LGA, the population has a 50/50 gender split, with a median age of 38. There was a comparable percentage of workers in the labour force at 61.8%, though a higher percentage of the population unemployed at 7.4% (ABS 2024b). The main occupation of the residents were technicians and trades workers (20.6%) and professionals (14.4%). The major industries in the area include, aluminium smelting (5.7%), alumina production (3.6%) and other heavy and civil engineering construction (3.2%).



Source: ABS 2024a, ABS 2024b

FIGURE 4-2 POPULATION DEMOGRAPHIC SNAPSHOT (2021 CENSUS)

## 5. ACCOMMODATION CONSIDERATIONS

TED expects that a component of the Project's construction and operation workforce will not be sourced from local workers within the neighbouring Banana Shire and Gladstone Region LGAs, and as such will require accommodation within the either the Primary or Secondary AoI (described in the SEIA for the Project).

In order to determine the likelihood for an on-site accommodation facility to be required, the following has been considered:

- The availability of existing short-term and long-term accommodation options (refer to **Section 5.1**);
- The existing road network and the commuting requirements (refer to **Section 5.2**); and
- Other nearby large-scale developments, including renewable energy projects (refer to **Section 5.3**).

### 5.1 AVAILABILITY OF EXISTING ACCOMMODATION

This section presents an overview of housing and accommodation indicators relevant to dwelling tenure, occupancy, and accommodation availability.

The local and regional areas are characterised by a relatively high proportion of occupied dwellings as presented in **Table 5-1**. Based on the 2021 Census, the SA1 (SA130804152801) where the Project is located, and the SA1 (SA131902150815) to the east of the Project Area, both recorded the highest proportion of unoccupied dwellings (25% and 27.8%). However, both SA1s also include the smallest amount of total private dwellings at only 96 dwellings and 89 dwellings, relatively. Compared to the rest of the State, the whole AoI has a higher percentage of unoccupied private dwellings.

It should be noted that there are various factors that can contribute to unoccupancy, such as dwellings requiring maintenance, dwellings soon to be on the market for lease, or newly completed dwellings not yet occupied.

**TABLE 5-1 PRIVATE DWELLING OCCUPANCY, 2021**

Locality	Occupied Private Dwellings (%)	Unoccupied Private Dwellings (%)	Total Private Dwellings (no.)
Banana Shire LGA	81.6%	18.4%	7,200
Gladstone Region LGA	85.0%	15.0%	29,780
Theodore UCL	80.8%	15.8%	287
Moura UCL	78.6%	21.9%	1,000
Biloela UCL	85.2%	14.8%	2,714
SA130804152801	73.6%	25.0%	96

Locality	Occupied Private Dwellings (%)	Unoccupied Private Dwellings (%)	Total Private Dwellings (no.)
SA131902150815	64.4%	27.8%	89
Queensland	90.7%	9.3%	2,190,424

Source: ABS 2024, Census of Population and Housing: General Community Profile

As evidenced in **Table 5-2**, SA1 (SA130804152801), in which the Project is located, is characterised by relatively high levels of home ownership compared to the rest of the AoI. In general, the AoI has a higher percentage of homes that are owned outright or mortgaged, compared to people renting in the area. Compared to the State, the AoI also presents a significantly higher ownership of homes.

Most of the private dwellings in the AoI are rented either through a real estate agent or through 'other landlord type'. There are six real estate agencies in the Theodore, Moura, and Biloela UCLs. These include:

- Moura Real Estate;
- Elders Real Estate Theodore;
- First National Real Estate Biloela;
- Ray White Biloela;
- Hourn & Bishop QLD (property & livestock agents, Moura);
- Link Properties Australia (Moura).

**TABLE 5-2 DWELLING TENURE, 2021**

Locality	Owned Outright or with a Mortgage (no.)	Rented (no.)			
		Total Rented	Real Estate Agent	Social Housing <sup>3</sup>	Other Landlord Type (including Employer) <sup>4</sup>
Banana Shire LGA	3,032 (60.7%)	1,499 (30%)	555	215	268
Gladstone Region LGA	14,785 (63.8%)	7,731 (33.4%)	5,271	845	283
Theodore UCL	102 (52.6%)	80 (41.2%)	12	8	16
Moura UCL	308 (50.2%)	276 (45%)	145	39	56

<sup>3</sup> Includes state housing authority and community housing

<sup>4</sup> Includes Government and other employers

Locality	Owned Outright or with a Mortgage (no.)	Rented (no.)			
		Total Rented	Real Estate Agent	Social Housing <sup>3</sup>	Other Landlord Type (including Employer) <sup>4</sup>
Biloela UCL	1,131 (57.5%)	758 (38.5%)	354	147	115
SA130804152801	34 (64.1%)	13 (24.5%)	N/A	N/A	N/A
SA131902150815 <sup>5</sup>	42 (72.4%)	6 (10.3%)	N/A	N/A	N/A
Queensland	543,285 (29.1%)	618,442 (33.1%)	409,207	61,277	36,412

Source: ABS 2024, Census of Population and Housing: General Community Profile

### 5.1.1 SHORT-TERM ACCOMMODATION

At the time of writing (September 2024), there are 31 commercially operated short-term accommodation options available across the Primary AoI and Banana Shire LGA.

These short-term accommodation options, along with their locations and capacity are outlined in **Table 5-3**. These accommodation options include workforce accommodation facilities, hotels and motels, Airbnb's, caravan parks and cabins.

It should be noted that the capacity of accommodation options including motels, hotels and cabins may change as a result of other large-scale projects in the AoI that are simultaneously competing for workforce accommodation (including renewables and mining companies). These large-scale projects are discussed in **Section 5.3**.

<sup>5</sup> Community Profiles are not available for SA1s in 2021.

TABLE 5-3 SHORT-TERM ACCOMMODATION IN THE AOI

Location	Short-Term Accommodation Provider	Description / Approximate Capacity
<b>Biloela</b> (1 hour from Theodore)	<b>Location:</b> Discovery Workstay Biloela <b>Accommodation Type:</b> Workforce accommodation facility	<b>Capacity:</b> Unknown (approximately 215 rooms) <b>Website:</b> <a href="https://www.discoveryworkstay.com.au/village/queensland/biloela">https://www.discoveryworkstay.com.au/village/queensland/biloela</a> <b>Address:</b> 1-31 Valentine Plains Road, Biloela
	<b>Location:</b> Biloela Apollo Motel <b>Accommodation Type:</b> Rooms, apartments and units	<b>Capacity:</b> Unknown <b>Website:</b> <a href="https://apollomotel.com.au/">https://apollomotel.com.au/</a> <b>Address:</b> 36 Gladstone Rd, Biloela
	<b>Location:</b> Biloela Hotel <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> Unknown <b>Website:</b> <a href="https://biloelahotel.com.au/">https://biloelahotel.com.au/</a> <b>Address:</b> 60 Callide St, Biloela
	<b>Location:</b> Biloela Centre Motel <b>Accommodation Type:</b> Motel	<b>Capacity:</b> Unknown <b>Website:</b> <a href="http://centre-motel.queenslandhotelmotel.com/en/">http://centre-motel.queenslandhotelmotel.com/en/</a> <b>Address:</b> 52 Grevillea St, Biloela
	<b>Location:</b> Biloela Country Motel <b>Accommodation Type:</b> Motel rooms and cabins	<b>Capacity:</b> Unknown <b>Website:</b> <a href="https://www.biloelacountryman.com.au/">https://www.biloelacountryman.com.au/</a> <b>Address:</b> 75-83 Burnett Hwy, Biloela
	<b>Location:</b> Biloela Palms Motor Inn <b>Accommodation Type:</b> Motel	<b>Capacity:</b> 25 ground floor rooms to accommodate overnight travellers or longer stays, as well as corporate and group bookings. <b>Website:</b> <a href="https://www.biloelapalms.com.au/">https://www.biloelapalms.com.au/</a> <b>Address:</b> 69-71 Dawson Hwy, Biloela



Location	Short-Term Accommodation Provider	Description / Approximate Capacity
	<b>Location:</b> Biloela <b>Accommodation Type:</b> Two Airbnb's	<b>Capacity:</b> 2 and 4 people <b>Website:</b> N/A <b>Address:</b> N/A until booked
	<b>Location:</b> Callide Motor Inn <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> Accommodation includes 18 executive rooms <b>Website:</b> <a href="https://www.callidemotorinn.au/">https://www.callidemotorinn.au/</a> <b>Address:</b> 88-92 Callide St, Biloela
	<b>Location:</b> Hotel Settlers <b>Accommodation Type:</b> Hotel rooms, cabins	<b>Capacity:</b> Hotel features a wide range of rooms and cabins (number unknown) <b>Website:</b> <a href="https://www.hotelsettlers.com.au/">https://www.hotelsettlers.com.au/</a> <b>Address:</b> 58 Dawson Hwy, Biloela
	<b>Location:</b> Raintree Motel Biloela <b>Accommodation Type:</b> Motel	<b>Capacity:</b> 22 units <b>Website:</b> <a href="https://www.raintreemotelbiloela.com.au/">https://www.raintreemotelbiloela.com.au/</a> <b>Address:</b> 2-4 Clark Dr, Biloela
	<b>Location:</b> Biloela Silo Motor Inn <b>Accommodation Type:</b> Motel	<b>Capacity:</b> 25 motel rooms <b>Website:</b> <a href="https://biloelasilomotorinn.com.au/">https://biloelasilomotorinn.com.au/</a> <b>Address:</b> 75 Dawson Hwy, Biloela
	<b>Location:</b> Sun Valley Motel <b>Accommodation Type:</b> Motel	<b>Capacity:</b> 28 rooms <b>Website:</b> <a href="http://sun-valley-motel.queenslandhotelmotel.com/en/">http://sun-valley-motel.queenslandhotelmotel.com/en/</a> <b>Address:</b> 57-59 Dawson Highway, Biloela
	<b>Location:</b> The Haven Biloela <b>Accommodation Type:</b> Townhouses	<b>Capacity:</b> Executive self-contained serviced apartments (sleeps 5) <b>Website:</b> <a href="http://thehavenbiloela.com.au/">http://thehavenbiloela.com.au/</a> <b>Address:</b> 64 Kroombit St, Biloela

Location	Short-Term Accommodation Provider	Description / Approximate Capacity
<b>Calliope</b> (2 hours 10 mins from Theodore)	<b>Location:</b> Home Ground Villages (Calliope) <b>Accommodation Type:</b> Workforce accommodation facility	<b>Capacity:</b> 1392 rooms <b>Website:</b> <a href="https://www.homegroundvillages.com.au/accommodation-calliope/">https://www.homegroundvillages.com.au/accommodation-calliope/</a> <b>Address:</b> 101 Calliope River Road, Calliope
<b>Banana</b> (39 minutes from Theodore)	<b>Location:</b> Banana Hotel Motel <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> 20 ensuite motel rooms <b>Website:</b> <a href="https://www.bananahotel.com.au/">https://www.bananahotel.com.au/</a> <b>Address:</b> Dawson Highway, Banana
	<b>Location:</b> Banana Accommodation Village <b>Accommodation Type:</b> Workforce accommodation facility	<b>Capacity:</b> Unknown <b>Website:</b> <a href="https://bananaaccommodation.com/">https://bananaaccommodation.com/</a> <b>Address:</b> Lot 45 Barfield Road, Banana
<b>Baralaba</b> (1 hour 10 mins from Theodore)	<b>Location:</b> Baralaba Hotel <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> Unknown <b>Website:</b> Unknown <b>Address:</b> 30 Stopford St, Baralaba QLD 4702
	<b>Location:</b> Myella Farm Stay <b>Accommodation Type:</b> Rural accommodation	<b>Capacity:</b> 17 double ensuite rooms <b>Website:</b> <a href="https://myella.weebly.com/">https://myella.weebly.com/</a> <b>Address:</b> 1591 Baralaba Rannes Rd, Kokotungo
<b>Jambin</b> (1 hour 10 from Theodore)	<b>Location:</b> Jambin Hotel <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> Unknown <b>Website:</b> Unknown <b>Address:</b> Burnett Highway, Jambin
<b>Thangool</b> (1 hour 15 mins from Theodore)	<b>Location:</b> On Kariboe Cabins Apartment Thangool <b>Accommodation Type:</b> Rural apartments	<b>Capacity:</b> Unknown <b>Website:</b> <a href="http://on-kariboe.queenslandhotelmotel.com/en/">http://on-kariboe.queenslandhotelmotel.com/en/</a> <b>Address:</b> 1 Parkers Lane, Thangool

Location	Short-Term Accommodation Provider	Description / Approximate Capacity
	<b>Location:</b> Hotel Thangool <b>Accommodation Type:</b> Hotel	<b>Capacity:</b> Unknown <b>Website:</b> Unknown <b>Address:</b> 55 Ramsay Rd, Thangool
Taroom (1 hour from Theodore)	<b>Location:</b> Taroom Caravan & Tourist Park <b>Accommodation Type:</b> Caravan Park	<b>Capacity:</b> Taroom Caravan Park offers a number of alternative accommodation types, including fully self-contained Cabins, Units and other accommodation to meet your specific requirements. <b>Website:</b> <a href="https://www.ozzyparks.com.au/locations/taroom-caravan-park/overview/">https://www.ozzyparks.com.au/locations/taroom-caravan-park/overview/</a> <b>Address:</b> 1 Short Street, Taroom
	<b>Location:</b> Country Rest Cabins <b>Accommodation Type:</b> Cabins	<b>Capacity:</b> Single, twin and family cabins (unknown capacity) <b>Website:</b> <a href="https://www.countryrestcabins.com.au/">https://www.countryrestcabins.com.au/</a> <b>Address:</b> 23 Bridge Street, Taroom
	<b>Location:</b> Leichardt Hotel Motel <b>Accommodation Type:</b> Rural apartments/cabins	<b>Capacity:</b> 6 Standard rooms and 6 family rooms <b>Website:</b> <a href="https://leichhardtтарoom.com.au/accommodation.html">https://leichhardtтарoom.com.au/accommodation.html</a> <b>Address:</b> Dawson Street, Taroom
	<b>Location:</b> Cattle Camp motel – Taroom <b>Accommodation Type:</b> Motel rooms and cabins	<b>Capacity:</b> Unknown (approximately 12 units) <b>Website:</b> <a href="https://bookings.centiumsoftware.com/QLD/Taroom/Cattle-Camp-Motel">https://bookings.centiumsoftware.com/QLD/Taroom/Cattle-Camp-Motel</a> <b>Address:</b> 8 Taroom Street, Taroom
Theodore	<b>Location:</b> Hotel Theodore <b>Accommodation Type:</b> Suites, hotel and motel rooms, cabins	<b>Capacity:</b> 8 self-contained cabins, 11 ensuite motel rooms, 8 single suites <b>Website:</b> <a href="https://hoteltheodore.com.au/accommodation/">https://hoteltheodore.com.au/accommodation/</a> <b>Address:</b> 27 The Boulevard, Theodore

Location	Short-Term Accommodation Provider	Description / Approximate Capacity
<b>Cracow</b> (located 35 minutes from Theodore)	<b>Location:</b> Cracow Hotel <b>Accommodation Type:</b> Themed Hotel Rooms	<b>Capacity:</b> Unknown <b>Website:</b> Unknown <b>Address:</b> Third Ave and Tenth Ave, Cracow
	<b>Location:</b> Cracow Station <b>Accommodation Type:</b> Self-contained cabin at Cracow Station, a working cattle property, 10 minutes outside of Cracow	<b>Capacity:</b> One room <b>Website:</b> <a href="https://www.cracowstation.com/">https://www.cracowstation.com/</a> <b>Address:</b> 1174 Cracow Sta, Cracow, Queensland
<b>Moura</b> (located 35 minutes from Theodore)	<b>Location:</b> Coal N Cattle Hotel Motel <b>Accommodation Type:</b> Motel rooms and cabins	<b>Capacity:</b> 60 rooms <b>Website:</b> <a href="http://coal-n-cattle-motel.queenslandhotelmotel.com/en/">http://coal-n-cattle-motel.queenslandhotelmotel.com/en/</a> <b>Address:</b> 63 Dawson Highway, Moura
	<b>Location:</b> Moura Meridian Motel <b>Accommodation Type:</b> Motel rooms	<b>Capacity:</b> 32 rooms <b>Website:</b> <a href="https://mourameridianmotel.com.au/">https://mourameridianmotel.com.au/</a> <b>Address:</b> 29 Dawson Highway, Moura
	<b>Location:</b> Moura Motel <b>Accommodation Type:</b> Motel rooms	<b>Capacity:</b> 22 deluxe rooms and 16 standard rooms <b>Website:</b> <a href="https://mouramotel.com.au/">https://mouramotel.com.au/</a> <b>Address:</b> 65 Dawson Highway, Moura
	<b>Location:</b> Moura Accommodation Village & Caravan Park <b>Accommodation Type:</b> Rooms and cabins	<b>Capacity:</b> Unknown <b>Website:</b> <a href="https://mouraavcp.com.au/">https://mouraavcp.com.au/</a> <b>Address:</b> 95 Dawson Highway, Moura

### 5.1.1.1 FESTIVALS AND EVENTS

**Table 5-4** presents the major festivals and events within the Primary AoI, as well as in Banana Shire LGA. The scale of the events and festivals is dependent on various factors occurring within the local area and wider region, however, they act as 'drawcards' for visitors and tourists within the Primary AoI.

The dates that the festivals and annual events occur is of importance when considering the short-term accommodation options identified previously in **Table 5-3**. In particular, if event timeframes overlap with construction periods the demand may outstrip the supply, impacting upon the ability for tourists or visitors to attend. Furthered assessment is provided in the Project SEIA in relation to this potential impact.

**TABLE 5-4 MAJOR FESTIVALS AND ANNUAL EVENTS**

Location	Event	Date (latest)	Details
Callide	Rotary Car, Ute and Bike Show	February 2023	Targeted to automobile admirers
Callide	Lake Callide Family Fishing Classic	October 2023	Family camping event at Lake Callide camping area
Callide	Callide Valley Agricultural Show	May 2024	Annual event, held at Biloela Showgrounds
Biloela	The Old Wheels in Motion Rally	July 2023	Targeted to automobile admirers
Biloela	Brigalow Arts Festival	Announced for October 2024	Annual open art exhibition, held at various locations
Biloela	Biloela Markets in the Park	Third Saturday of the month	Crafts market held near the Biloela Information Centre on Callide Street
Biloela	Biloela Auto Fest	Usually October, cancelled in 2023	Held at Biloela Showgrounds, organized by local Rotary. Unclear whether the event will resume in coming years
Biloela	Biloela Christmas Festival	Announced for November 2024	Held at Biloela Lions Park in late afternoon/early evening
Theodore	Bull's 'N' Barrels Bonanza	July 2024	Annual rodeo event held at Theodore Showgrounds
Theodore	Theodore Trail Ride	Announced for June 2025	Motorcycling dirt track event
Theodore	'Hooked on Theodore' Fishing Competition	October 2023	Weekend Fishing Competition at Dawson River
Theodore	Spindles and Spurs Campdraft	July 2024	Annual Campdraft event

Location	Event	Date (latest)	Details
Theodore	Theodore Centennial Celebration	July 2024	A series of events scheduled over 4 years, beginning in 2021 through to 2024

In addition to the various festivals within the region, there is the potential for other events within the Primary AoI to influence short-term accommodation availability. This includes the maintenance or “shut down” periods for the Callide Power Station. When these “shut down” events occur, they result in the temporary influx of workers to Biloela and surrounds for the period prior to, and during, the event. These events may last up to a few months, during which time the availability of accommodation in and around Biloela considerably diminishes.<sup>6</sup>

### 5.1.2 LONG-TERM ACCOMMODATION

Consideration of housing vacancy rates provide a window into the prospective long-term accommodation options available in the Primary AoI. SQM Research housing vacancy rate data draws on a combination of ABS data and online data from monitoring major property listing sites to provide a time-series analysis on a monthly and postcode scale (SQM Research 2024). SQM Research has tracked residential vacancy rates from 2006 through to 2024, on a postcode basis.

The postcodes of relevance to the Primary AoI for the Project area:

- Postcode 4719 (containing Theodore);
- Postcode 4718 (containing Moura); and
- Postcode 4715 (containing Biloela).

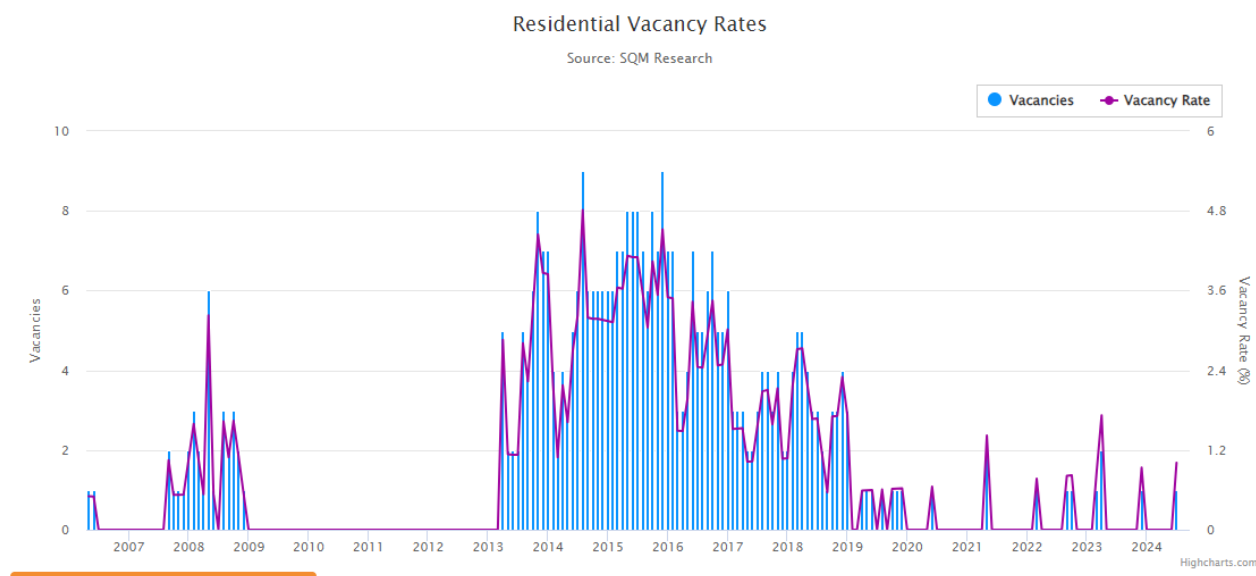
A review of housing vacancy data (SQM Research, 2024a) shows that postcode 4719 (containing Theodore) in August 2014 had the highest vacancy rate at 4.8%, while July 2024 showed the vacancy rate to be at 1.0% (refer to **Figure 5-1**). Postcode 4718 (containing Moura) had a peak vacancy rate of 16.2% in February 2016. By July 2024 the vacancy rate has dropped to 1.3% (refer to **Figure 5-2**) (SQM Research 2024b). Postcode 4715 (containing Biloela) had the highest vacancy rate in January 2017 at 7.5%, while July 2024 shows the vacancy rate to be at 0.0%.

Regarding latest rental availability in the Primary AoI, at the time of writing in September 2024, Theodore (postcode 4719) had one rental property available, Moura (postcode 4718) had five rental properties available, and Biloela (postcode 4715) had no rental properties available.

<sup>6</sup> This information was confirmed through interviews with local authorities in 2022.

# RESIDENTIAL VACANCY RATES

POSTCODE 4719

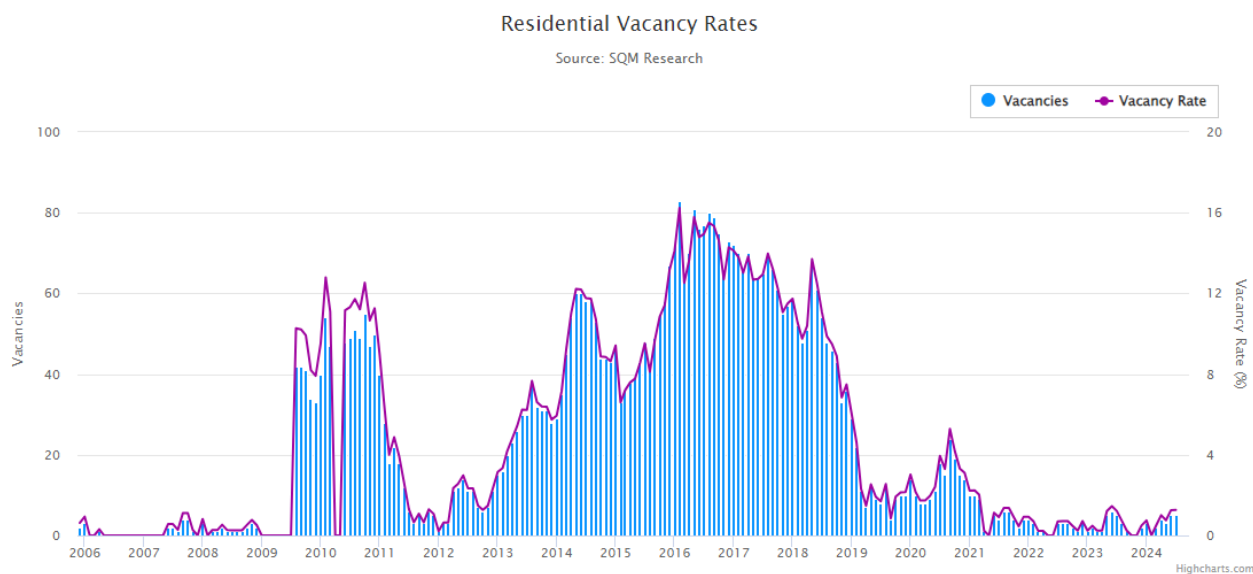


Source: SQM Research 2024a

FIGURE 5-1 THEODORE RESIDENTIAL VACANCY RATES

# RESIDENTIAL VACANCY RATES

POSTCODE 4718

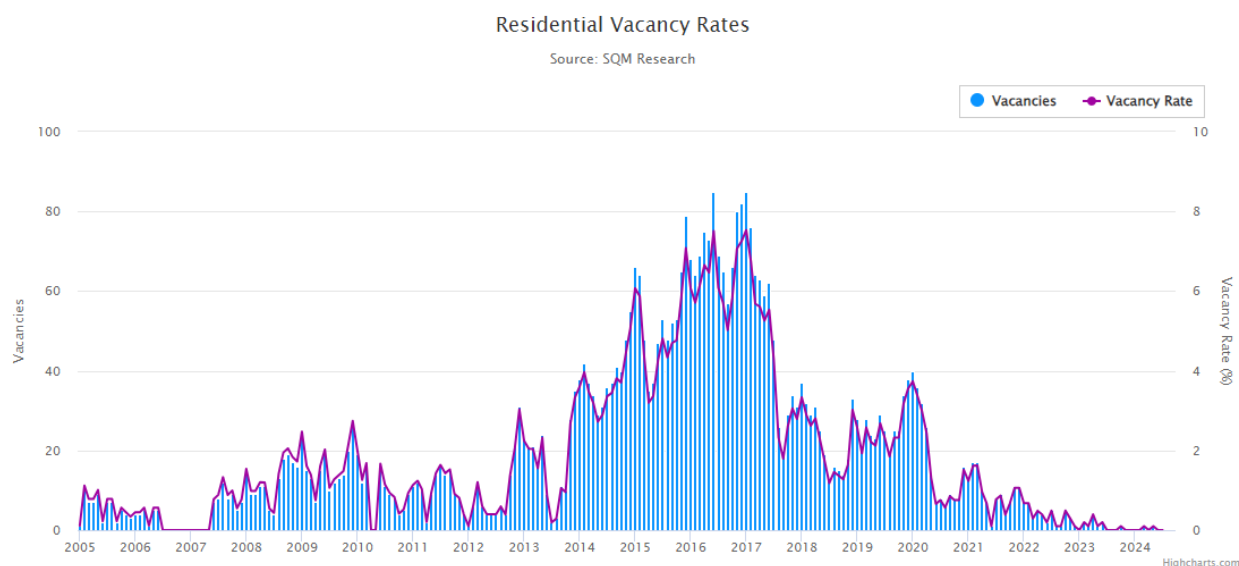


Source: SQM Research 2024b

FIGURE 5-2 MOURA RESIDENTIAL VACANCY RATES

# RESIDENTIAL VACANCY RATES

## POSTCODE 4715



Source: SQM Research 2024c

**FIGURE 5-3 BILOELA RESIDENTIAL VACANCY RATES**

At time of writing (September 2024), Moura Real Estate has a total of nine rental properties available, while Ray White Biloele has no rental property available. An overview of these listings is provided in **Table 5-5**. Based on this cursory review, it appears that there is a lack of potential rental properties available for rent within the Primary AoI. The other real estate companies mentioned in **Section 5.1** did not have any available accommodation at the time of writing.

**TABLE 5-5 LONG-TERM RENTAL HOUSING AVAILABILITY**

Location	Details
Moura	3 bedroom, one shower, one car, \$350
Moura	3 bedroom, one shower, one car, \$350
Moura	3 bedroom, one shower, two cars, \$400
Moura	3 bedroom, one shower, two cars, \$380
Moura	3 bedroom, one shower, one car, \$400
Moura	3 bedroom, one shower, three cars, \$390
Moura	3 bedroom, one shower, two cars, \$320
Moura	3 bedroom, one shower, four cars, \$410
Moura	2 bedroom, one shower, five cars, \$439



With respect to the affordability of any rental properties that are on the market, SGS in partnership with National Shelter, Beyond Bank, and Brotherhood of St Laurence have published the Rental Affordability Index (RAI) since 2015 (SGS, 2024). The findings identify that in Quarter 2, 2023 the data for the towns of Theodore, Moura and Biloela within the Banana Shire LGA were unavailable. However, the two closest postcodes in Quarter 2, 2023 were identified as 'Acceptable' for rental affordability (postcode 4680) and 'Unaffordable' for rental affordability (postcode 4702).

## 5.2 COMMUTING ON LOCAL ROADS

The CSEP (2024) notes a range of matters of importance to them and/or the local community. Of importance, one key matter raised was the road network. The detail in the CSEP (2024) includes the following:

*Work is underway on a transport route study which will investigate and identify appropriate routes to site for wind farm components. Oversize vehicles will be required for blades, towers and transformers. In parallel, a traffic impact assessment is also underway to ascertain traffic flows during construction and the impact this will have on the road network. TED will work with the community to manage traffic impacts and gain local knowledge on existing road usage, including – for example – school bus routes, if the project proceeds to construction.*

The key main roads in proximity to the Project, and relevant to this AOR as they will most likely be used as routes for commuting from and to the Project Area, are the following:

- **State Highway A5 (Leichhardt Highway):** a major transport route and State-controlled Road (i.e. managed by the Queensland Government) in Queensland. Of key importance to this AOR is its section of the Leichhardt Highway that runs between Theodore and Banana; and
- **State Route 60 (Dawson Highway):** a rural highway and (partially) State-controlled Road that connects Emerald with Gladstone. The route of the Dawson Highway passes through several small towns, rural areas, and bushland, with some sections of the route quite isolated. Of key importance to this AOR is the section of the highway that runs from Moura, through Banana and Biloela, to Gladstone.

The Queensland Road Crash Location data provided in **Table 5-6** shows that on these two highways within the areas defined as relevant to the AOR, one fatal accident and 83 non-fatal accidents (with at least one hospitalised person) occurred between 2018 and May 2023. Of these accidents, 76 (including the fatal accident) happened on the Dawson Highway, and eight on the Leichhardt Highway.

**TABLE 5-6: CRASHES ALONG RELEVANT SECTIONS OF A5 AND STATE ROUTE 60**

Crash Type	Year	Crash Reference Number	Road	Postcode
Fatal	2022	242422	Dawson Highway	4680
Hospitalised	2018	241612	Dawson Highway	4715
Hospitalised	2018	241618	Dawson Highway	4715
Hospitalised	2018	246367	Dawson Highway	4680

Crash Type	Year	Crash Reference Number	Road	Postcode
Hospitalised	2018	246374	Dawson Highway	4680
Hospitalised	2018	246381	Dawson Highway	4680
Hospitalised	2018	247972	Dawson Highway	4718
Hospitalised	2018	254377	Dawson Highway	4702
Hospitalised	2018	325906	Dawson Highway	4680
Hospitalised	2018	325908	Dawson Highway	4680
Hospitalised	2018	325909	Dawson Highway	4680
Hospitalised	2018	325933	Dawson Highway	4680
Hospitalised	2018	325935	Dawson Highway	4680
Hospitalised	2018	325938	Dawson Highway	4680
Hospitalised	2018	34305	Dawson Highway	4715
Hospitalised	2018	343053	Dawson Highway	4715
Hospitalised	2018	344957	Dawson Highway	4702
Hospitalised	2018	344958	Dawson Highway	4702
Hospitalised	2018	344961	Dawson Highway	4702
Hospitalised	2018	344963	Dawson Highway	4718
Hospitalised	2019	247978	Leichhardt Highway	4702
Hospitalised	2019	247980	Leichhardt Highway	4702
Hospitalised	2019	241623	Dawson Highway	4715
Hospitalised	2019	241634	Dawson Highway	4715
Hospitalised	2019	241639	Dawson Highway	4715
Hospitalised	2019	242381	Dawson Highway	4680
Hospitalised	2019	242382	Dawson Highway	4680
Hospitalised	2019	242383	Dawson Highway	4680
Hospitalised	2019	242383	Dawson Highway	4718
Hospitalised	2019	325968	Dawson Highway	4680
Hospitalised	2019	325983	Dawson Highway	4680
Hospitalised	2019	325993	Dawson Highway	4680
Hospitalised	2019	343057	Dawson Highway	4715
Hospitalised	2019	344967	Dawson Highway	4702
Hospitalised	2019	344965	Dawson Highway	4718
Hospitalised	2020	247985	Leichhardt Highway	4702
Hospitalised	2020	247986	Leichhardt Highway	4702
Hospitalised	2020	247987	Leichhardt Highway	4702
Hospitalised	2020	247988	Leichhardt Highway	4702
Hospitalised	2020	254944	Leichhardt Highway	4719
Hospitalised	2020	241655	Dawson Highway	4715

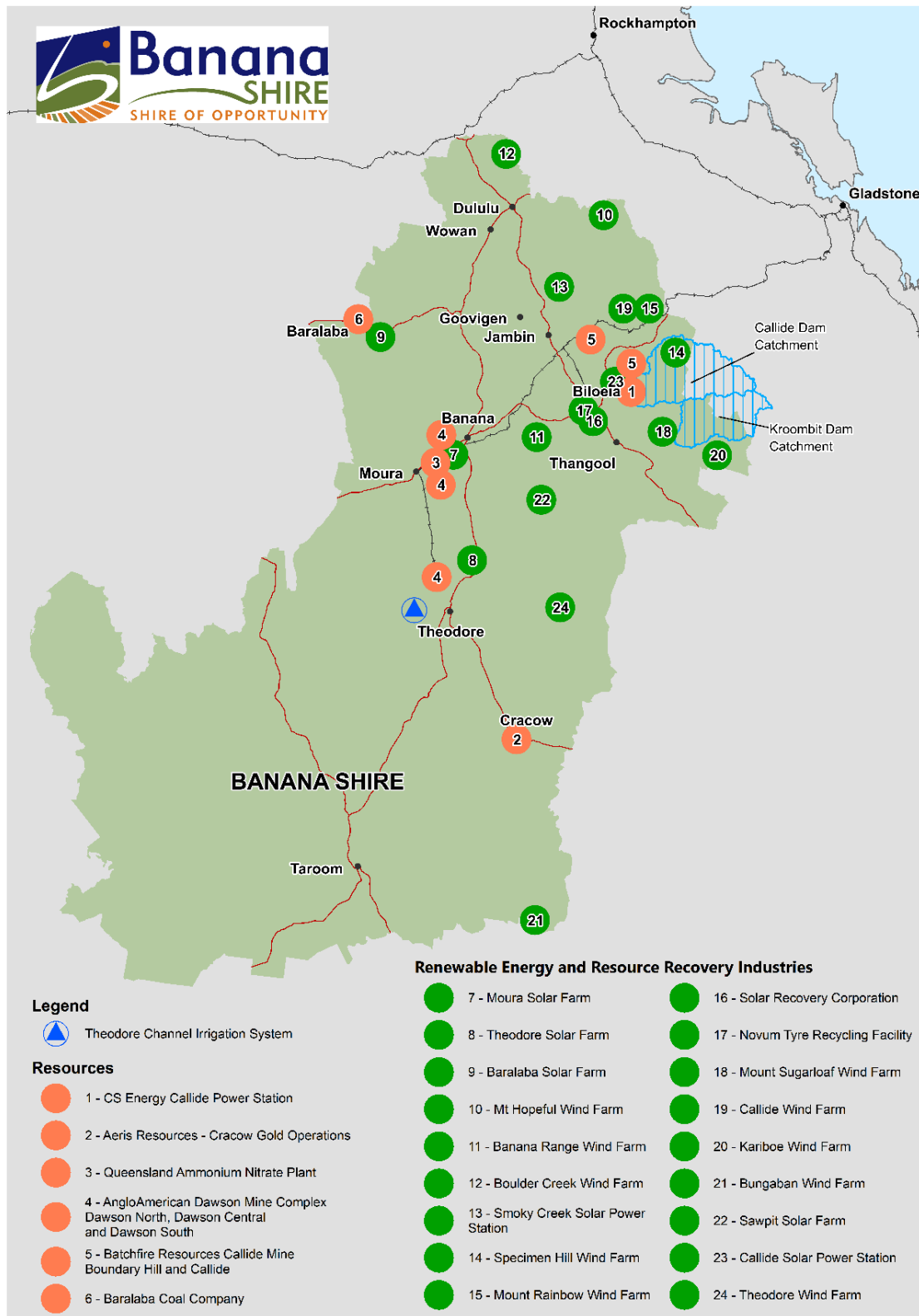
Crash Type	Year	Crash Reference Number	Road	Postcode
Hospitalised	2020	241657	Dawson Highway	4715
Hospitalised	2020	242401	Dawson Highway	4680
Hospitalised	2020	242404	Dawson Highway	4680
Hospitalised	2020	247983	Dawson Highway	4718
Hospitalised	2020	343059	Dawson Highway	4715
Hospitalised	2020	343061	Dawson Highway	4715
Hospitalised	2020	241648	Dawson Highway	4702
Hospitalised	2020	247984	Dawson Highway	4702
Hospitalised	2020	247990	Dawson Highway	4702
Hospitalised	2020	344970	Dawson Highway	4718
Hospitalised	2020	361177	Dawson Highway	4680
Hospitalised	2020	361211	Dawson Highway	4680
Hospitalised	2020	361213	Dawson Highway	4680
Hospitalised	2020	361224	Dawson Highway	4680
Hospitalised	2021	247995	Leichhardt Highway	4702
Hospitalised	2021	241660	Dawson Highway	4715
Hospitalised	2021	241673	Dawson Highway	4715
Hospitalised	2021	242414	Dawson Highway	4680
Hospitalised	2021	242415	Dawson Highway	4680
Hospitalised	2021	242416	Dawson Highway	4680
Hospitalised	2021	242417	Dawson Highway	4680
Hospitalised	2021	345318	Dawson Highway	4680
Hospitalised	2021	345326	Dawson Highway	4680
Hospitalised	2021	345332	Dawson Highway	4680
Hospitalised	2021	345335	Dawson Highway	4680
Hospitalised	2021	345353	Dawson Highway	4680
Hospitalised	2021	345359	Dawson Highway	4680
Hospitalised	2021	361232	Dawson Highway	4680
Hospitalised	2021	361236	Dawson Highway	4680
Hospitalised	2022	241679	Dawson Highway	4715
Hospitalised	2022	241682	Dawson Highway	4715
Hospitalised	2022	241683	Dawson Highway	4715
Hospitalised	2022	241684	Dawson Highway	4715
Hospitalised	2022	242429	Dawson Highway	4680
Hospitalised	2022	242434	Dawson Highway	4680
Hospitalised	2022	248002	Dawson Highway	4718
Hospitalised	2022	248004	Dawson Highway	4718

Crash Type	Year	Crash Reference Number	Road	Postcode
Hospitalised	2022	344976	Dawson Highway	4702
Hospitalised	2022	344978	Dawson Highway	4718
Hospitalised	2022	345367	Dawson Highway	4680
Hospitalised	2022	345395	Dawson Highway	4680
Hospitalised	2022	345400	Dawson Highway	4680
Hospitalised	2022	345432	Dawson Highway	4680

Source: Queensland Government Open Data Portal, Road Crash Locations, 2023

### 5.3 OTHER DEVELOPMENTS IN THE AREA

There are six resource and 17 renewable energy and resource recovery industries projects located in the vicinity of the Project within the Banana Shire LGA that have been identified as larger scale on the Banana Shire Council website (Banana Shire 2024b). These projects are depicted in **Figure 5-4**.



Source: Banana Shire 2024b

FIGURE 5-4 SURROUNDING RENEWABLE ENERGY PROJECTS IN BANANA LGA

Additionally, Queensland's eight coal-fired power stations are dotted across the southern corner of the state, from Rockhampton to the west of Toowoomba. The closest power stations to the Project include Callide B, Callide C, and Gladstone (closure date: 2023). Callide B and C subcritical power stations, close to Biloela, are owned by CS Energy, on behalf of the state government. Callide B was commissioned in 1988, and Callide C in 2001. The 740-megawatt Callide B is scheduled to close in 2028, and a closure date for the 840-megawatt Callide C has not yet been submitted. Both stations are fed by the nearby Callide Mine (ABC News 2023).

It should be noted that while the North Burnett Regional LGA is located to the east of the Project Area, and includes SA1 No. 31902150815, which is included within the Primary AoI of the Project (refer to the SEIA for further details), no (anticipated) developments within a radius of approximately 40 km from the Project Area were identified on the North Burnett Regional Council website.

### 5.3.1 OTHER DEVELOPMENTS' ACCOMMODATION REQUIREMENTS

In order to understand the additional pressure these prospective renewable and non-renewable projects can have on the communities, infrastructure and accommodation options available in the Primary AoI, understanding the likely construction period, approximate number of workers, and distance from the Project is key.

Accordingly, **Table 5-7** identifies this information, highlighting those which are located in the immediate vicinity of the Project and/or will overlap with the Project's construction phase.

**TABLE 5-7 DEVELOPMENTS IN THE AREA**

Development	Development Details <sup>7</sup>				Approximate Distance from Project <sup>8</sup>
	<i>Anticipated Construction Period</i>	<i>Approx. # of workers</i>	<i>Anticipated Start of Operation</i>	<i>Approx. # of workers</i>	
Renewable					
Specimen Hill Wind Farm	Q4 2023 – Q3 2026	250-350	After Q3 2026	15-30	69 km
Moura Solar Farm	Nov 2021 – Aug 2022	250	After Aug 2022	4	32 km
Theodore Solar Farm	Pending	Pending	Pending	Pending	12 km
Baralaba Solar Farm	Pending	Pending	Pending	Pending	72 km
Mount Hopeful Wind Farm	Q1/Q2 2024 – 2026	220+	After 2026	8-12	102 km

<sup>7</sup> Green = (partial) known overlap with Project's anticipated construction timeline (Quarter 2, 2026 – Quarter 4, 2027).

<sup>8</sup> Green = (partial) known overlap with Project's anticipated construction timeline AND within a radius of approximately 40 km from Project Area's boundary.

Development	Development Details <sup>7</sup>				Approximate Distance from Project <sup>8</sup>
	Anticipated Construction Period	Approx. # of workers	Anticipated Start of Operation	Approx. # of workers	
Banana Range Wind Farm	2024 - 2027	150-200	After 2027	10-15	30 km
Boulder Creek Wind Farm	Q1 2024 - 2026	250-350	After 2026	10-20	113 km
Smoky Creek Solar Power Station	Q1 2024 – Q3 2025	350	After Q3 2025	10	74 km
Mount Rainbow Wind Farm	Q4 2025 - Q2 2027	200-450	After Q2 2027	15	75 km
Calvale BESS Wind Farm	Unknown	Unknown	Unknown	Unknown	Unknown
Mount Sugarloaf Wind Farm (Thangool)	Dec 2026 – June 2029	250 – 500	After June 2029	15	35 km
Callide Wind Farm	Q1 2025- Q4 2026	280	After Q4 2026	30	73 km
Kariboe Wind Farm	Pending	400	Pending	40	55 km
Sawpit Solar Farm	2025 – 2026/2027	Pending	After 2026/2027	Pending	24 km
Solar Recovery Corporation	Unknown	Unknown	Unknown	Unknown	Unknown
Novum Tyre Recycling Facility	Completed	Unknown	After 2020	11-15	50 km
Bungaban Wind Farm	Q4 2025 - 2029	600 at peak	After 2029	10-15	70 km
Callide Solar Power Station	FY 2025/2026-FY 2027/2028	250	After 2028	6-10	64 km
<b>Non-renewable</b>					
CS Energy Callide Power Station	n/a	n/a	B = since 1988 (close in 2028) C = since 2001	246	87 km
Aeris Resources – Cracow Gold Operations	n/a	n/a	Since 2005	*	44 km



Development	Development Details <sup>7</sup>				Approximate Distance from Project <sup>8</sup>
	Anticipated Construction Period	Approx. # of workers	Anticipated Start of Operation	Approx. # of workers	
Queensland Ammonium Nitrate Plant	n/a	n/a	*	75	38 km
Batchfire Resources Callide Mine Boundary Hill and Callide	n/a	n/a	Since 1944	700 (includes all aspects of the mine)	92 km
Baralaba Coal Company	n/a	n/a	*	*	90 km
AngloAmerican Dawson Mine Complex	n/a	n/a	Since 1960s	660 *as of 2021 statement	36 km

\*Information unavailable or limited for public consumption.

As per **Table 5-7**, the following developments have a (partial) known overlap with Project's anticipated construction timeline, and are located within a radius of approximately 40 km from the Project:

- Banana Range Wind Farm;
- Mount Sugarloaf Wind Farm (Thangool);
- Sawpit Solar Farm; and
- AngloAmerican Dawson Mine Complex.

Accordingly, it is important that the potential cumulative impact associated with these projects is considered as part of the Key Matters Assessment in **Section 7**. It should be noted that it is currently unknown whether these developments will make use of an on-site workforce accommodation facility.

## 6. COMMUNITY AND STAKEHOLDER ENGAGEMENT

TED commenced stakeholder engagement for the Project in August 2023. This section summarises the engagement activities relevant to the AOR, and their associated engagement outcomes.

### 6.1 OVERVIEW OF ENGAGEMENT ACTIVITIES CONDUCTED

A variety of consultation activities have been carried out for the Project to-date. Stakeholder engagement undertaken by TED has included Project feedback from local residents, local Councils, and the wider community, helping to determine the sentiment of those likely to be impacted by the Project.

Stakeholder engagement undertaken by TED to-date, has included:

- Meetings with landowners, near neighbours, the community and other interested parties;
- Meetings with and site visits by Traditional Owners;
- Letterbox drops to all homes within 10 kilometres (km) of the project;
- A newsletter to introduce the project and TED to the community;
- Community drop-in sessions attended by about 90 community and other key stakeholders;
- Formal presentations to Banana Shire Council;
- Regular 'shopfronts' at the Theodore Community Hall for two consecutive days; and
- A dedicated website that includes project information, news, updates and engagement opportunities.

The Community Engagement Drop-In Sessions were conducted in the towns of Theodore and Banana, with a turnout of approximately 90 attendees. The key takeaways and feedback from the sessions included the following:

- TED is to remain as the primary point of contact for stakeholders;
- One-on-one meetings to determine the most appropriate grid route connection will be essential;

Actions arising from the Community Engagement Drop-In Sessions included the following:

- TED to investigate a 'shopfront' to foster local relationships;
- The potential for TED to sponsor local events was highly desired by the community; and
- Future Community Engagement Sessions are to be conducted to foster community feedback.

The CSEP (2024) notes that previous stakeholder engagement identified workforce accommodation during the construction phase of the Project as an area of concern, stating:

*Workforce accommodation during construction, and the impact on the local housing market, has been identified as a key concern. This is a particular topic of interest for the Theodore district community due to the significant number of mining camps and fly-in fly-out (FIFO) workers in the area. RWE will work with Council and seek feedback from community on the potential ways to accommodate a workforce of up to 500 people at peak construction periods.*

## 6.2 COUNCIL CONSULTATION

TED have been undertaking regular briefing sessions for the Project with the Banana Shire Council since 2023. The briefing sessions centred on the Project location and outlined consultation undertaken to-date, and generally considered the following:

- Community input/benefit will be discussed with the local community in order to understand how a Community Benefit Fund would be most useful;
- TED is committed to seeking employment within the region where possible;
- Potential jobs generated during construction; and
- Potential jobs generated during operation.

## 6.3 FUTURE ENGAGEMENT

The Stakeholder Engagement Tools (SET) set out in **Table 6-1** has been developed as part of TED's commitment to genuine dialogue with stakeholders and will be employed as part of ongoing engagement with the community for the Project, including when engaging with the local community in relation to workforce accommodation opportunities and/or impacts.

**TABLE 6-1 ENGAGEMENT TOOLS**

Engagement Tool	Objective
Personal phone calls	<ul style="list-style-type: none"> <li>• Personal phone calls will be a significant aspect of stakeholder engagement, particularly with those stakeholder groups most interested in a project. Direct phone calls are a deliberative engagement tool to facilitate immediate and direct conversations.</li> </ul>
Meetings	<ul style="list-style-type: none"> <li>• Personal meetings with individuals and sometimes groups will be a key avenue of personalised engagement. These may be one-on-one meetings with landowners or near neighbours, or meetings with a local community groups. Meetings provide an opportunity to educate, inform, and listen to issues and concerns.</li> </ul>
Emails/letters	<ul style="list-style-type: none"> <li>• Emails and letters will be used to provide notification of important information, such as works, surveys or other activities, or provide stakeholder-specific information and engagement.</li> </ul>
Briefings	<ul style="list-style-type: none"> <li>• Briefings will take place as and when required with representatives of stakeholder groups including local Councillors and Council executives, Members of Parliament and government departments. Briefings allow stakeholders to stay informed about a project's progress.</li> </ul>
Door knocks	<ul style="list-style-type: none"> <li>• Door knocks can be used to speak personally with neighbours within a pre-determined distance band of the Project. Direct outreach allows community members to engage and interact in their own environment.</li> </ul>
Letterbox drops	<ul style="list-style-type: none"> <li>• Letterbox drops provide the opportunity to directly contact residents and/or ratepayers within a certain geographical boundary depending on the delivery method employed. Letterbox drops can be used to distribute newsletters, flyers, FAQs, and other project information.</li> </ul>
Shopfront (permanent or 'pop up')	<ul style="list-style-type: none"> <li>• A shopfront in a project area can take on a variety of forms. It can be a fixed space that is open one or multiple days per fortnight. Another option is a temporary 'pop up' venue which could include a stall in a public space such as a Council office, shopping centre or public library. This option is usually more informal and may occur as a one-off or for shorter periods.</li> </ul>

Engagement Tool	Objective
Drop-in sessions/ pop-ups	<ul style="list-style-type: none"> <li>Drop-in sessions provide an opportunity for stakeholders to meet with members of the Project team and Subject Matter Experts (SMEs) about the Project. Drop-in sessions are advertised in the local community and generally held over multiple days (often two consecutive days) in a local hall or halls. These drop-in sessions do not have a formal structure, but usually incorporate project poster and fact sheets, industry materials, and catering. Subject materials should be selected in response to the community's interests.</li> </ul>
Attendance at community events	<ul style="list-style-type: none"> <li>This may include information stands at agricultural shows, sporting, and other events, providing a platform for community members to ask questions and provide feedback.</li> </ul>
Workshops	<ul style="list-style-type: none"> <li>Workshops can create a space for stakeholders to discuss any questions or concerns with the Project team and/or SMEs, as well as positively contribute to the development of the Project by brainstorming ideas and community-led problem solving.</li> </ul>
Focus groups	<ul style="list-style-type: none"> <li>Create an opportunity for key stakeholders, selected by the Project team, the project team, to provide detailed community feedback in a group setting, as well as raise project-related concerns, considerations, or issues with the TED team and/or SMEs.</li> </ul>
Free call 1800 number	<ul style="list-style-type: none"> <li>A free call 1800 number, 1800 879 435, has been established for the Project.</li> </ul>
Electronic direct mail (EDMs)	<ul style="list-style-type: none"> <li>EDMs will be an important part of communications and could be used to share information such as newsletters, flyers, invitations to upcoming events, fact sheets and more. A sign-up list will be made available on the Project website and at community events.</li> </ul>
SMS notifications	<ul style="list-style-type: none"> <li>SMS notifications can be used for time critical notifications, such as works and deadlines for public submissions.</li> </ul>
RWE website	<ul style="list-style-type: none"> <li>The RWE Renewables Australia Pty Ltd (RWE) website is live and can be found at <a href="http://www.au.rwe.com">www.au.rwe.com</a>. This site contains information about RWE globally, RWE Renewables Australia and Australian projects, as well as links to Project-specific sites.</li> </ul>
Project website	<ul style="list-style-type: none"> <li>A Project website has been established at <a href="http://theodorewindfarm.com.au">theodorewindfarm.com.au</a> and will be regularly updated to provide more information, as well as digital versions of Project collateral. The website URL is included on printed and digital collateral.</li> </ul>
Media releases and advertisements	<ul style="list-style-type: none"> <li>Media releases will be prepared and shared with media outlets based on communications objectives throughout the Project timeline. Advertisements will be booked when required.</li> </ul>
Project email address	<ul style="list-style-type: none"> <li>A Project-specific email address, <a href="mailto:theodorewindfarm@rwe.com">theodorewindfarm@rwe.com</a> has been created and will be used as a central point of obtaining community feedback.</li> </ul>
Newsletters	<ul style="list-style-type: none"> <li>Project newsletters should be developed and distributed regularly. These should provide Project updates and be posted to all landowners within a pre-determined Project radius (suggested to be 10 kilometres from the Project boundary). They can also be delivered electronically.</li> </ul>

Engagement Tool	Objective
Flyers	<ul style="list-style-type: none"> <li>Flyers can be used to promote information sessions or events. Flyers can reach community members who may not have access to digital communications or online platforms.</li> </ul>
Information packs	<ul style="list-style-type: none"> <li>Information packs can include a combination of Project collateral, such as newsletters, fact sheets, maps, information on upcoming events, photo montages, independent third-party studies and more. These can be tailored to the specific needs of the community or individual stakeholders and can include information on topics of particular focus for the Project community. These could be posted to individuals as required or left at key locations, such as Council offices.</li> </ul>
Surveys	<ul style="list-style-type: none"> <li>Surveys are a useful data collection tool to understand community issues, needs and preferences. Surveys can help gauge public opinion on a variety of topics, including framing of benefit sharing initiatives, the Project, and renewable energy in general.</li> </ul>

Source: CSEP 2024

In addition, TED has committed to the following stakeholder engagement initiatives:

- Community Engagement Committee (CEC):** It is TED's intention to establish a CEC, assuming there is interest from Theodore and surrounding communities to do so. The CEC's purpose would be to capture the voice and sentiments of the community, to help to inform the Project, and direct how TED engages with the community as well as the content of such engagement. The CEC will provide a tool to share information with the community and to build a sense of trust. It is anticipated the CEC would be established in 2025 and run beyond the Planning Phase, into construction, operations and potentially decommissioning.
- Community Benefit Fund:** Development of a Community Benefit Fund of at least \$500,000 per year (\$17.5 million over the operation life of the Project).
- Complaints Management:** Development and implementation of a Theodore Wind Farm Complaints and Grievance Management System (in accordance with the Australian Standard AS/NZS 10002:2014 – Guidelines for Complaint Management in Organisations). The TED Complaints Handling Procedure will ensure that complaints are dealt with in a timely and effective manner, and includes the below:
  - Stage One: Receiving
  - Stage Two: Responding
  - Stage Three: Managing
  - Stage Four: Closing, and
  - Stage Five: Continuous Improvement

All instances are recorded within TED's internal SET, with the intent to archive, allocate, monitor, action, resolve, close and analyse all relevant enquiries. TED aims to resolve complaints within 10 working days. If this is not possible TED commits to continued engagement with the stakeholder.

## 7. KEY MATTERS ASSESSMENT

### 7.1 ASSESSMENT REFERENCE FRAMEWORK

As outlined in **Section 3.2**, the Project will employ a combination of local and non-local workers during its construction, operation and decommissioning phases, with the largest volume of workers employed during the construction phase (an estimated 300-500 FTEs). The potential to accommodate the non-local construction phase workers within the Primary AoI therefore forms the basis of the key matters assessment undertaken in this section.

Whilst there are a range of social impacts than may be experienced by local communities associated with a temporary worker influx into the Primary AoI, the significance of these impacts is dependent upon the size of the workforce, the extent to which accommodation demand exceeds the level of occupancy for existing accommodation, the movement of that workforce to and from the Project Area, and the pressure placed on infrastructure, services, and facilities. As such, the nature and location of the accommodation used to house workers is of vital importance to understanding the social impacts that may be experienced by the local communities within the Primary AoI.

In determining the most appropriate accommodation solution for the construction phase workforce, TED has adopted the following Accommodation Solution Principles:

1. Accommodation solutions are to minimise negative social and economic impacts to potentially impacted communities.
2. Potentially impacted communities are to be consulted on accommodation solutions prior to them being decided.
3. Accommodation solutions will contribute social and economic value to potentially impacted communities.

In order to meet the above principles and address the draft Planning Guidance 'Supporting Action' requirements (refer to **Table 2-1**), this section of the AOR provides an assessment of the potential social impacts related to worker influx during the construction phase, in the context of the various accommodation options available to TED – on-site workforce accommodation; short-term accommodation; and long-term housing stock.

The assessment has been conducted with reference to the key matters as outlined in the Queensland SIA Guideline (Queensland Government 2018), comprising:

- Workforce Management (refer to **Section 7.3**);
- Housing and Accommodation (refer to **Section 7.4**);
- Local Business and Industry Procurement (refer to **Section 7.5**); and
- Health and Community Wellbeing (refer to **Section 7.6**).

The impact assessment methodology used in this key matters assessment aligns with that of the SEIA for the Project and is outlined in **Section 7.2**.

In addition, it should be noted that the key matter for Community and Stakeholder Engagement has already been considered in **Section 6** of this AOR.

## 7.2 ASSESSMENT METHODOLOGY

This section describes how the level of significance of impacts were determined, and how they relate to the key matters assessed.

The social impacts were analysed to determine their level of significance based on the likelihood of an impact occurring, and the magnitude of impact, both positive and negative, and prior to the application of any mitigation or management measures.

The likelihood level refers to the probability of a social impact occurring as a result of the Project, while the magnitude is considered as a combination of the following characteristics:

- **Extent:** Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any potential vulnerable people<sup>9</sup>? Which location(s) are affected (e.g. local, regional)?
- **Duration:** When is the social impact expected to occur? Will it be time-limited (e.g. over particular Project phases) or permanent?
- **Severity:** What is the likely scale or degree of change (e.g. mild, moderate, severe)?
- **Intensity:** How sensitive or vulnerable (or how adaptable or resilient) are affected people to the impact? How important are positive impacts to them? This might depend on the value they attach to the matter, whether it is rare or unique or replaceable, the extent to which it is tied to their identity, and their capacity to cope with or adapt to change.
- **Level of Concern or Interest:** How concerned or interested are people? Any perceived impacts are considered as impacts for this assessment, even when concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or severity.

Baseline indicators were then used inform an understanding of the social impacts across five magnitude characteristics:

- **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 or improvement to something that people value highly (e.g. their house or their health), either lasting for an indefinite time, or affecting many people in a widespread area.
- **Moderate:** Noticeable deterioration or improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people.
- **Minor:** Mild deterioration or 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 AoI.

<sup>9</sup> This may include 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 (Department of Planning, Housing and Infrastructure 2023)



The likelihood of an impact occurring along with its magnitude of impact combine to provide a rating of social impact significance, as described in **Table 7-1**.

Where a positive social impact is identified, it is designated as 'positive', despite the varying likelihood levels.

**TABLE 7-1 SOCIAL IMPACT SIGNIFICANCE MATRIX**

		Magnitude Level					
		1 Minimal	2 Minor	3 Moderate	4 Major	5 Transformational	6 Positive
Likelihood Level	A Almost Certain	Medium	Medium	High	Very High	Very High	Positive
	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	

### 7.3 WORKFORCE MANAGEMENT

The workforce management key matter relates to assessment and management of potential social impacts associated with the Project workforce, with the objective being to prioritise local recruitment, reduce FIFO workers, and support workforce health and wellbeing. The Project workforce includes employees of the Project, as well as personnel engaged by principal contractors and subcontractors.

Potential workforce management impacts relevant to population influx and accommodation may include:

- Increased demand for labour creates direct and indirect employment opportunities for the local community.
- Reduced community cohesion as a result of the potential ill-discipline of the construction workforce.
- Risk of traffic-related injury, or in the worst case a fatality, to workers or members of the local community, resulting from increased vehicle movements during the transportation of workers to and from the Project Area.

An assessment of these potential impacts relevant to the three accommodation options is provided in the following sections.

Regardless of the accommodation option, the following measures are recommended to be implemented by TED in relation to the workforce management key matter:

- Preparation and implementation of a **Workforce Management Plan**, developed in accordance with the Queensland SIA Guideline, and outlines:
  - Objectives and key performance indicators relevant to the workforce;
  - Shift arrangements for local, regional and FIFO/Drive-In Drive-Out (DIDO) workers;
  - Measures to enhance potential employment opportunities for local and regional communities, and to mitigate potential negative social impacts;

- Provisions to achieve a recruitment hierarchy that prioritises communities, as well as recruitment of workers from the local and regional communities, then recruitment of workers who will live in regional communities;
- Training and development initiatives to improve local and regional skills and capacity including, where relevant, initiatives for traditionally underrepresented groups; and
- Programs to support the physical and mental health and wellbeing of workers.
- Preparation and implementation of a **Code of Conduct** (CoC) applicable to all Project workers during the construction phase. The CoC will be required to align with TED's policies, and should include, amongst other things:
  - **Principles of behaviour:** Guideline for appropriate behaviour that apply to interactions of all workers whether at work or out of work.
  - **Anti-harassment, bullying and discrimination:** Sets out the provisions for appropriate conduct, and outlines potential consequences of breach to these provisions.
  - **Occupational health and safety:** Requires that all workers understand their obligations to comply with the relevant TED occupational health and safety procedures and legislative requirements.

### 7.3.1 ON-SITE WORKFORCE ACCOMMODATION OPTION

Key Project benefits perceived by the local community include local jobs, related training opportunities, and local economic benefits more generally (e.g. for local shops). TED anticipates that there will be 300 to 500 jobs created for the Project during the construction phase, with TED looking to provide opportunities to recruit workers locally within the Primary AoI and Secondary AoI for the Project. The use of an on-site workforce accommodation facility will be of greater importance for the Project if the number of FIFO/DIDO workers are to be greater than the number of employees recruited locally.

In addition, if TED was to develop an on-site workforce accommodation facility, the construction of the facility would necessitate the employment of a number of skilled and semi-skilled workers, in addition to those already employed for the construction of the wind farm. As with the general Project workforce, it is anticipated that TED would seek to provide opportunities to local workers in first instance, which will have a positive impact on the economy of the Primary AoI and Secondary AoI.

If an on-site workforce accommodation facility was to be used for the Project, most non-local workers would be housed away from the local communities within the AoI – Theodore, Moura, Banana, and Biloela. Locating workers away from the local township areas will reduce the contact between non-local workers and local communities, and thereby reduce the potential for negative impacts to be experienced by locals from inappropriate worker behaviour, and subsequently help to reduce the impact on community cohesion.

For worker / community interaction, the proper implementation of the CoC will assist in reducing this impact further through policies and processes that address alcohol and substance abuse, as well as respectful behaviour and guidelines for community interactions.

With respect to transportation, while FIFO/DIDO workers will still need to transit to and from the Project Area at the beginning and end of their shifts, the overall number of vehicle movements will be reduced with the on-site workforce accommodation facility option. This

reduction in vehicle movements will be due to the reduction in daily commutes as non-local workers will spend most of their time on-site, lessening the need to travel during morning and afternoon peak periods.

A summary of the workforce management key matter assessment, in relation to the on-site workforce accommodation option, is provided in **Table 7-2**.

**TABLE 7-2 WORKFORCE MANAGEMENT: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increased demand for labour creates direct and indirect employment opportunities for the local community.	Positive	Almost Certain	<b>Positive</b>
Reduced community cohesion as a result of potential ill-discipline of the construction workforce.	Minor	Unlikely	<b>Low</b>
Risk of traffic-related injury, or in the worst case a fatality, resulting from increased vehicle movements during the transportation of workers to and from the Project Area	Major	Unlikely	<b>Medium</b>

### 7.3.2 SHORT-TERM ACCOMMODATION OPTION

If TED was to pursue a short-term accommodation solution the number of workers employed by the Project for the construction phase, whilst still being in the region of 300 to 500 persons, this would not include those engaged to construct and operate the on-site workforce accommodation facility. If the short-term accommodation options were used for the Project, workers will be housed within the various townships within the AoI, including Theodore, Moura, Banana, and Biloela. Accordingly, non-local workers would be housed near local members of the community in various types of accommodation typically frequented by tourists, such as motels, hotels, cabins, and caravan parks.

Given the close proximity of construction workers and community members, the potential for interaction is greater, and therefore the potential for negative experiences to result is increased. Whilst the CoC would be implemented, and apply to all members of the construction workforce, TED would have less control over worker living conditions, options for leisure outside working hours, and worker actions and behaviour, which making it more likely that instances of ill-discipline may occur within the various communities within the AoI.

If accommodation is dispersed throughout the AoI in various short-term accommodation options, the number of daily vehicle movements to and from the Project Area will also increase, particularly during peak periods. This increase in vehicle movements carries with it a greater risk of a traffic-related injury occurring to both a worker and the local community, as the result of an accident.

A summary of the workforce management key matter assessment, in relation to the short-term accommodation option, is provided in **Table 7-3**.

**TABLE 7-3 WORKFORCE MANAGEMENT: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increased demand for labour creates direct and indirect employment opportunities for the local community.	Positive	Almost Certain	<b>Positive</b>
Reduced community cohesion as a result of potential ill-discipline of the construction workforce.	Moderate	Possible	<b>Medium</b>
Risk of traffic-related injury, or in the worst case a fatality, resulting from increased vehicle movements during the transportation of workers to and from the Project Area	Major	Possible	<b>High</b>

### 7.3.3 LONG-TERM ACCOMMODATION OPTION

If long-term accommodation options were to be used for the Project, workers would likely be housed within the same townships of the AoI, as with the short-term option. Given the limited number of rental properties at the time of writing (September 2024), expectation would be that options within Biloela would be prioritised over the other communities.

Similarly, to the short-term accommodation option scenario, the use of long-term accommodation options would reduce the number of workers to be employed by the Project (as no on-site accommodation facility would be required), but the number employed for the construction phase would still remain in the region of 300 to 500 workers.

The use of existing long-term housing will, like the short-term accommodation scenario, result in the close proximity of construction workers and community members, which will have the potential to result in a greater number of negative experiences related to inappropriate worker behaviour. Furthermore, the dispersal of long-term rental accommodation throughout the AoI will require a greater number of daily vehicle movements to cater for workers travelling to and from the Project Area, which increases the risk of a traffic-related injury occurring.

A summary of the workforce management key matter assessment, in relation to the long-term accommodation option, is provided in **Table 7-4**.

**TABLE 7-4 WORKFORCE MANAGEMENT: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increased demand for labour creates direct and indirect employment opportunities for the local community.	Positive	Almost Certain	<b>Positive</b>
Reduced community cohesion as a result of potential ill-discipline of the construction workforce.	Moderate	Possible	<b>Medium</b>
Risk of traffic-related injury, or in the worst case a fatality, resulting from increased vehicle movements during the transportation of workers to and from the Project Area	Major	Possible	<b>High</b>

## 7.4 HOUSING AND ACCOMMODATION

The housing and accommodation key matter relates to the potential social impacts arising from housing and accommodation arrangements for the Project workforce, with the objectives being:

- To not contribute to significant affordability and availability impacts on housing and accommodation in local and regional communities; and
- To ensure that Project housing and accommodation arrangements are well planned, enhance worker wellbeing, and do not place an excessive burden on existing infrastructure, facilities and services used by local and regional communities.

Large construction projects have the potential to contribute to tight rental markets if sizeable construction workforces are brought into the area. This can increase the demand for short and long-term accommodation, which in turn can exacerbate accommodation shortages and cost of living pressures through increased rents in areas with low vacancy rates.

Accordingly, as the Project is anticipated to generate 300-500 jobs during the construction phase, it has the potential to:

- Increase the demand for short-term accommodation within the AoI, which may reduce the accessibility for community members/tourists to rent accommodation options;
- Generate potential opportunities for local accommodation providers to capitalise on the demand for short and long-term accommodation; and
- Increase in the demand for long-term housing stock which may contribute to housing market changes for local communities within the AoI and reduce housing affordability.

An assessment of these potential impacts relevant to the three accommodation options is provided in the following sections. It should be noted that an assessment of impacts relevant to existing infrastructure, facilities and services is provided in **Section 7.6**.

Regardless of the accommodation option, the following measures are recommended to be implemented by TED in relation to the housing and accommodation key matter:

- Preparation and implementation of a **Workforce Housing and Accommodation Plan**, developed in accordance with the Queensland SIA Guideline, and that outlines:
  - Objectives and key performance indicators;
  - Measures to enhance potential benefits for project workers and the community, and to mitigate potential negative social impacts; and
  - Policies regarding housing and accommodation support to be provided to project workers and their families who wish to live locally.

#### 7.4.1 ON-SITE WORKFORCE ACCOMMODATION OPTION

Construction and occupancy of an on-site workforce accommodation facility is expected to have the least impact on the availability and affordability of housing within the Primary AoI, as the majority of workers employed would be housed in purpose-built accommodation. With most workers located within this purpose-built accommodation, TED will not have to compete with members of the local community for access to housing (both open market and rental), which could result in greater housing availability and/or affordability for the community.

Despite the reduced impact in relation to housing availability, this accommodation option would also limit potential benefits for local accommodation providers. With most of the 300 to 500 workers housed on-site, the demand for short-term or long-term housing options within the Primary AoI will be reduced, which will negatively impact the ability for accommodation providers or local residents to financially capitalise on an increase in demand for accommodation or existing housing stock. It is noted however that this may also have the secondary impact of generating negative sentiment between local community members involved and not involved in providing accommodation for the Project (i.e. those seen as taking advantage of potential Project benefits, that those who are not).

A summary of the housing and accommodation key matter assessment, in relation to the on-site workforce accommodation option, is provided in **Table 7-5**.

**TABLE 7-5 HOUSING AND ACCOMMODATION: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for short-term accommodation within the Primary AoI, which may reduce the accessibility for community members/tourists to purchase or rent accommodation options	Minor	Unlikely	Low
Generate potential opportunities for local accommodation providers to capitalise on the demand for short and long-term accommodation/housing stock.	Positive	Unlikely	Positive
Increase in the demand for long-term housing stock which may contribute to housing market changes for local	Minor	Unlikely	Low

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
communities within the AoI and reduce housing affordability.			

#### 7.4.2 SHORT-TERM ACCOMMODATION OPTION

If workers during the construction phase are to use short-term accommodation options within the Primary AoI there is a greater potential that impacts will be experienced by the communities within the townships of Theodore, Banana, Moura, and Biloela.

Whilst short-term accommodation providers may financially benefit from the use of their accommodation facilities to house the construction workforce for the Project, the loss of short-term accommodation options has the potential to impact vulnerable groups within the Primary AoI, such as the elderly, those facing financial hardship, or those with lesser disposable incomes. The lack of available short-term housing may impact the ability for family and friends to stay close by to elderly familial relations during extended periods of visitation, which may result in reduced visitation and contribute to social isolation. Similarly, if there is a lack of affordable accommodation options to support short-term rentals this may reduce the accessibility for those more transient lifestyles from residing within the local area.

Furthermore, the positive economic impact on short-term accommodation will only be experienced during the construction phase of the Project. Once the Project transitions to the operation phase, accommodation providers may experience a loss of rental income (dependent upon future take-up rates of the short-term accommodation) and the community may be encumbered with an influx of available housing that could have negative consequence for housing/rental prices.

The reduction in short-term accommodation options within the Primary AoI would also have the potential to impact upon tourism operations (refer to **Section 5.1.1.1**) as the number of accommodation options available to support these ventures will be reduced. A reduction in tourist accommodation availabilities can lead to a loss of revenue for local businesses that heavily depend on the tourism sector. This loss of revenue may also result in those businesses struggling to cover operational costs, subsequently reducing their contribution to the local economy. Tourist ventures typically rely on a steady stream of visitors, and a decrease in accommodation options for travellers may threaten the viability and long-term sustainability of these businesses, and in doing so, negatively affect the social fabric of the community.

In addition, these impacts to housing/accommodation will be further exacerbated when considering the other developments within the Primary AoI. As stated in **Section 5.3**, there are at least four other projects with (partial) overlapping anticipated construction timeframes within a 40 km radius of the Project. Of these, the anticipated number of construction workers is known for two of these projects, with a combined total of more than 700 persons to be employed. It is currently unknown how many of these workers will be sourced locally, however given the limited short-term accommodation stock within the Primary AoI and Banana Shire LGA (31 commercially operated short-term accommodation options), the potential for impacts to be experienced by the local community is amplified.



A summary of the housing and accommodation key matter assessment, in relation to the short-term accommodation option, is provided in **Table 7-6**.

**TABLE 7-6 HOUSING AND ACCOMMODATION: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for short and long-term accommodation within the Primary AoI, which may reduce the accessibility for community members/tourists to purchase or rent accommodation options	Major	Likely	High
Generate potential opportunities for local accommodation providers to capitalise on the demand for short and long-term accommodation/housing stock.	Positive	Almost Certain	Positive
Increase in the demand for long-term housing stock which may contribute to housing market changes for local communities within the AoI and reduce housing affordability.	Minor	Unlikely	Low

#### 7.4.3 LONG-TERM ACCOMMODATION OPTION

If long-term accommodation options were to be used for the Project, workers would likely be housed within the same townships of the Primary AoI, as with the short-term option, but with greater emphasis on Biloela, given the higher potential for rental property availability.

Similarly, to the short-term accommodation option scenario, the impacts experienced by the local communities of these townships would be associated with the increased demand for accommodation via long-term housing stock. The increase in demand for long-term housing, while positively impacting those who are looking to sell their properties or leave the area, and will negatively impact housing availability and affordability for local residents and/or those seeking to relocate to the Primary AoI for non-Project related reasons.

A summary of the housing and accommodation key matter assessment, in relation to the long-term accommodation option, is provided in **Table 7-7**.

**TABLE 7-7 HOUSING AND ACCOMMODATION: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for short-term accommodation within the Primary AoI, which may reduce the accessibility for community members/tourists to purchase or rent accommodation options	Minor	Unlikely	Low

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Generate potential opportunities for local accommodation providers to capitalise on the demand for short and long-term accommodation/housing stock.	Positive	Almost Certain	<b>Positive</b>
Increase in the demand for long-term housing stock which may contribute to housing market changes for local communities within the AoI and reduce housing affordability.	Major	Likely	<b>High</b>

## 7.5 LOCAL BUSINESS AND INDUSTRY PROCUREMENT

The local business and industry procurement key matter relates to assessment and management of potential social impacts associated with the procurement of goods and services for the Project. The objective of this key matter is to maximise opportunities for competitive and capable local businesses to provide goods and services to the Project, as well as reduce barriers to entry for local businesses where feasible.

Potential positive impacts relevant to construction phase workforce accommodation may be linked to opportunities to enhance the capacity of local businesses and supply chain through supply and/or service contracts. In addition, the increased demand for goods and services from the workforce will help to stimulate the local economies, and businesses within the Primary AoI may benefit from increased economic activity associated with the construction workforce and Project material requirements.

An assessment of these potential positive impacts relevant to the three accommodation options is provided in the following sections.

Regardless of the accommodation option, the following measures are recommended to be implemented by TED in relation to the local business and industry procurement key matter:

- Preparation and implementation of a **Local Business and Industry Procurement Plan**, developed in accordance with the Queensland SIA Guideline, which includes:
  - Objectives and key performance indicators;
  - Procurement strategies and initiatives for local and nearby regional suppliers, including Aboriginal and Torres Strait Islander owned businesses, and actions to facilitate participation;
  - Proposed policies and programs to build local and regional capacity and capability, and reduce barriers to entry;
  - Processes that embed the local business and industry procurement strategies into the contracting model for the project;
  - Measures to mitigate any potential negative social impacts on local industries (refer to **Table 8-1** for examples); and

- Details of any established industry guidelines or codes of practice which the proponent has committed to complying with.

### 7.5.1 ON-SITE WORKFORCE ACCOMMODATION OPTION

As noted in **Section 7.3.1**, if TED was to develop an on-site workforce accommodation facility, the construction of the facility would necessitate the employment of a number of skilled and semi-skilled workers, in addition to those employed for the construction of the wind farm. As with the general Project workforce, it is anticipated that TED would seek to provide opportunities to local workers and businesses in first instance which will have a positive impact on the economy of the Primary AoI and Secondary AoI.

The use of an on-site workforce accommodation facility will also necessitate the engagement of various material supply and service companies to facilitate ongoing operation and management of the facility for the period of construction. As such, there is the potential for local companies to be involved either through procurement or direct engagement, in aspects such as cleaning, catering, laundry, transportation, etc. The opportunity for local businesses to be involved will generate economic benefits for the AoI.

Despite the potential for procurement opportunities to be realised, the accommodation facility will have its own on-site amenities and will be physically distanced from the various townships within the Primary AoI. This physical distance, coupled with workforce management controls (refer to **Section 7.3.1**) will mean that workers are less likely to make use of local shops, cafes, recreational facilities, etc. in nearby townships, reducing the potential for economic benefits to be realised by these types of establishments.

A summary of the local business and industry procurement key matter assessment, in relation to the on-site workforce accommodation option, is provided in **Table 7-8**.

**TABLE 7-8 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Opportunities to enhance the capacity of local businesses and supply chain through supply and/or service contracts.	Positive	Possible	<b>Positive</b>
Increased demand for goods and services helps to stimulate the local economies. Businesses within the Project AoI benefit from increased economic activity associated with the construction workforce and Project material requirements.	Positive	Possible	<b>Positive</b>

### 7.5.2 SHORT-TERM ACCOMMODATION OPTION

If TED was to pursue a short-term accommodation solution for the construction workforce, rather than an on-site workforce accommodation facility, the number of workers employed by the Project for the construction phase would be reduced, given that a facility would not be

required. Furthermore, options to support local supply chains through supplier and service company contracts would also be reduced given that no on-site accommodation facility is to be developed/operated.

Despite this however, there would still be flow-on economic benefits associated with the construction phase, such as increased demand for goods and services, warehousing/storage, transport/logistics, and administrative support. Opportunities for local business procurement would be available across these areas.

Additionally, if short-term accommodation is to be used, workers will be housed close to local shops, cafes, recreational facilities, etc. within each of the townships of the Primary AoI, increasing the potential for economic benefits to be realised by these types of establishments. It should be noted however, that the increased demand for goods and services has the potential to negatively impact the local community through creation of supply shortages.

A summary of the local business and industry procurement key matter assessment, in relation to the short-term accommodation option, is provided in **Table 7-9**.

**TABLE 7-9 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Opportunities to enhance the capacity of local businesses and supply chain through supply and/or service contracts.	Positive	Possible	<b>Positive</b>
Increased demand for goods and services helps to stimulate the local economies. Businesses within the Project AoI benefit from increased economic activity associated with the construction workforce and Project material requirements.	Positive	Likely	<b>Positive</b>
Increased demand for goods and services has the potential to negatively impact the local community through creation of supply shortages.	Moderate	Possible	<b>Medium</b>

### 7.5.3 LONG-TERM ACCOMMODATION OPTION

If TED was to pursue a long-term accommodation solution for the construction workforce, rather than an on-site workforce accommodation facility, the potential benefits will be similar to that of the short-term accommodation option.

Accordingly, whilst the number of workers employed by the Project for the construction phase would be reduced, and the extent of supplier and service company contracts limited, there will still be flow-on economic benefits associated with the construction phase, such as increased demand for goods and services, warehousing/storage, transport/logistics, and administrative support. Each of these areas will provide opportunities for local business procurement.

Furthermore, if long-term accommodation is to be used, workers will be located near local shops, cafes, recreational facilities, etc. within each of the townships of the Primary AoI, increasing the potential for economic benefits to be realised. It should be noted however, that the increased demand for goods and services has the potential to negatively impact the local community through creation of supply shortages.

A summary of the local business and industry procurement key matter assessment, in relation to the long-term workforce accommodation option, is provided in **Table 7-10**.

**TABLE 7-10 LOCAL BUSINESS AND INDUSTRY PROCUREMENT: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Opportunities to enhance the capacity of local businesses and supply chain through supply and/or service contracts.	Positive	Possible	<b>Positive</b>
Increased demand for goods and services helps to stimulate the local economies. Businesses within the Project AoI benefit from increased economic activity associated with the construction workforce and Project material requirements.	Positive	Likely	<b>Positive</b>
Increased demand for goods and services has the potential to negatively impact the local community through creation of supply shortages.	Moderate	Possible	<b>Medium</b>

## 7.6 HEALTH AND COMMUNITY WELLBEING

The health and community wellbeing key matter relates to the health and wellbeing of potentially impacted communities during the construction phase and includes physical and mental health, as well as social, cultural, and economic wellbeing.

The objective of the key matter is to ensure avoidance or mitigation of negative social impacts whilst capitalising on opportunities to improve the health and wellbeing of local and regional communities. As such, the Project should ensure that it does not adversely impact on the level of service to local and regional communities from existing social services, facilities and infrastructure.

As a result of the influx of 300 to 500 workers in the construction phase of the Project, there is the potential for the following impacts to be experienced:

- Increase the demand for medical, emergency, and social services and recreational facilities within the various townships of the AoI, which may place a strain on these services/facilities, and in doing so, reduce accessibility for community members;
- Potential to cause congestion along the roads used by the community resulting from increased vehicle movements associated with the transportation of workers to and from the Project Area; and

- Reduction in stakeholder amenity arising from the use of accommodation by workers (e.g. noise, visual, dust, etc.), which may potentially cause an impact on community health and wellbeing.

An assessment of these potential impacts relevant to the three accommodation options is provided in the following sections.

Regardless of the accommodation option, the following measures are recommended to be implemented by TED in relation to the health and community wellbeing key matter:

- Preparation and implementation of a **Health and Community Wellbeing Plan**, developed in accordance with the Queensland SIA Guideline, which includes:
  - Objectives and key performance indicators;
  - Measures to ensure that the level of service provided to the local community by existing social services, facilities and infrastructure is not reduced;
  - Measures to mitigate potential health and wellbeing impacts on local communities, and enhance potential benefits;
  - The level of on-site health services to be provided for workers;
  - Details of any workforce CoC to govern worker interactions with local communities;
  - Emergency response arrangements and management measures agreed with local emergency service providers, for incidents involving workers, both on and off the Project Area; and
  - Details of any community development programs to be implemented, and the outcomes to be achieved.

### 7.6.1 ON-SITE WORKFORCE ACCOMMODATION OPTION

If TED was to construct and operate an on-site workforce accommodation facility, the impact on local services and recreational facilities within the Primary AoI and Secondary AoI would be less than the other accommodation options, as TED would be able to manage worker wellbeing internally via amenities provided within the facility. Doing so will avoid and/or reduce pressure placed on existing external social infrastructure, facilities and services used by local and regional communities, such as medical clinics or recreational establishments.

With respect to the potential for congestion on the road network, while FIFO/DIDO workers will still need to transit to and from the Project Area at the beginning and end of their shifts, the overall number of vehicle movements along routes frequented by the local communities within the Primary AoI (refer to **Section 5.2**) will be reduced with the on-site workforce accommodation facility option. This reduction in vehicle movements will be due to the decrease in daily commutes, with non-local workers spending most of their time on-site, lessening the need to travel during morning and afternoon peak periods, and avoiding travel through township areas.

Dependent upon the location of the on-site workforce accommodation option within the Project Area there is the potential for negative impacts (such as noise, dust, and diminished visual amenity) to be experienced by surrounding landowners. In order to address these concerns, the on-site workforce accommodation facility should be designed in accordance with the Banana Shire Council Planning Scheme 2021 Development Design Code (refer to [Appendix A](#)), and with the appropriate Waste Management Plan in place (refer to **Section 8.2** for a

preliminary plan). In addition, the CoC developed and implemented for the Project (refer to **Section 7.3**) is recommended to remain in force throughout the entire period of operation to reduce the severity or extent of any potential amenity impact.

A summary of the health and community wellbeing key matter assessment, in relation to the on-site workforce accommodation option, is provided in **Table 7-11**.

**TABLE 7-11 HEALTH AND COMMUNITY WELLBEING: ON-SITE WORKFORCE ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for services and recreational facilities within the various townships of the Primary AoI, which may place a strain on these services/facilities, and in doing so, reduce accessibility for community members.	Minor	Unlikely	Low
Potential to cause congestion along the roads used by the community resulting from increased vehicle movements associated with the transportation of workers to and from the Project Area.	Minor	Unlikely	Low
Amenity impacts arising from the use of the accommodation (e.g. noise, visual, dust, etc.), which may potentially cause an impact on community health and wellbeing.	Moderate	Possible	Medium

### 7.6.2 SHORT-TERM ACCOMMODATION OPTION

If TED was to pursue the short-term accommodation option for the Project, it is anticipated that the pressure placed on local services and facilities would be higher than that of the on-site workforce accommodation. The reasoning for this determination is that there are already known challenges for rural-based services (e.g. medical clinics, emergency services, and social services), such as worker retention and accessibility, which are being managed by Local Councils and the State Government. As such, the influx of a large number of workers during the construction phase of the Project has the potential to place additional strain on these services, and in doing so, reduce accessibility further for community members within the Primary AoI. The impact of this reduced accessibility has the potential to impact vulnerable groups within community more seriously, including the elderly, youth, and Indigenous peoples.

As workers will be located within the various communities of the Primary AoI, the influx of workers during the construction phase has the potential to increase pressure on recreational facilities, with heightened demand for leisure activities placing a strain on resources and restricting access for members of the local community. This heightened demand may lead to overcrowding, extended wait times, and impact on recreational experiences, which may lead to a sense of frustration and dissatisfaction among the community, impacting the health and wellbeing of residents.



It should be noted however, that this impact is likely to be experienced differently within the Primary AoI. Some communities may be better able to cope with the influx of persons into their township. This enhanced ability to cope with population influx is largely based on either the size of the town (e.g. Biloela) or the existing financial and servicing arrangements apparent within the township (e.g. Moura's connection with the multiple mining operations).

Regardless, it is important to consider that the potential impacts to local services and facilities will be further exacerbated when considering the other developments within the Primary AoI. As stated in **Section 5.3**, there are at least four other projects with partially overlapping anticipated construction timeframes within a 40 km radius of the Project. Whilst it is unknown as to the number of workers to be employed by these projects, it is likely to be over 700 persons (refer to **Table 5-7**). If these projects all occur at once, the pressure on local services and facilities within the Primary AoI will be worsened.

The potential for this option to cause congestion on the road network within the AoI is also higher than that of the on-site workforce accommodation option. The rationale for this is that short-term accommodation options are dispersed throughout the Project AoI. As such, travel from the accommodation locations to the Project Area will be required on a twice daily basis, with routes likely taking workers through townships and along movement corridors during peak periods. This increase in vehicle movements increases the potential for congestion to occur within the Primary AoI, which will subsequently impact community wellbeing.

Amenity impacts arising from the use of short-term accommodation options within the Primary AoI are likely to be limited. Accommodation providers within the Primary AoI are primarily existing hotels, motels, caravan parks, and cabins, and therefore are already suitably located to manage amenity related impacts. In addition, the CoC developed and implemented for the Project (refer to **Section 7.3**) is recommended to remain in force throughout the entire period of operation to manage worker behaviour.

A summary of the health and community wellbeing key matter assessment, in relation to the short-term workforce accommodation option, is provided in **Table 7-12**.

**TABLE 7-12 HEALTH AND COMMUNITY WELLBEING: SHORT-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for services and recreational facilities within the various townships of the Primary AoI, which may place a strain on these services/facilities, and in doing so, reduce accessibility for community members.	Moderate	Likely	High
Potential to cause congestion along the roads used by the community resulting from increased vehicle movements associated with the transportation of workers to and from the Project Area.	Moderate	Possible	Medium

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Amenity impacts arising from the use of the accommodation (e.g. noise, visual, dust, etc.), which may potentially cause an impact on community health and wellbeing.	Minor	Possible	<b>Medium</b>

### 7.6.3 LONG-TERM ACCOMMODATION OPTION

If TED was to pursue a long-term accommodation solution, the potential social impacts are likely to be similar to that of the short-term accommodation option.

Accordingly, the influx of construction phase workers will reduce local community accessibility to local township services (medical, emergency and social) and/or recreational facilities, which may have detrimental impact on community wellbeing.

The potential to cause congestion on the road network within the Primary AoI is similar to that of the short-term accommodation scenario in that travel from worker accommodation to the Project Area will be required on a twice daily basis, with routes likely taking workers through townships and along movement corridors during peak periods.

Amenity impacts arising from the use of long-term accommodation options within the Primary AoI are, like with the short-term accommodation option, likely to be limited. Accommodation will be in approved locations, zoned accordingly under the Planning Scheme. Furthermore, potential impacts linked to the ill-discipline of the workforce can be mitigated through a well-functioning CoC, developed and implemented for the Project (refer to **Section 7.3**).

A summary of the health and community wellbeing key matter assessment, in relation to the long-term accommodation option, is provided in **Table 7-13**.

**TABLE 7-13 HEALTH AND COMMUNITY WELLBEING: LONG-TERM ACCOMMODATION OPTION IMPACT ASSESSMENT**

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Increase the demand for services and recreational facilities within the various townships of the Primary AoI, which may place a strain on these services/facilities, and in doing so, reduce accessibility for community members.	Moderate	Likely	<b>High</b>
Potential to cause congestion along the roads used by the community resulting from increased vehicle movements associated with the transportation of workers to and from the Project Area.	Moderate	Possible	<b>Medium</b>

Potential Impact	Impact Significance Rating		
	Magnitude	Likelihood	Impact Significance
Amenity impacts arising from the use of the accommodation (e.g. noise, visual, dust, etc.), which may potentially cause an impact on community health and wellbeing.	Minor	Possible	<b>Medium</b>

## 7.7 PRIORITISATION OF ACCOMMODATION OPTIONS

As per the outcomes of the key matters assessment conducted and in consideration of TED's Accommodation Solution Principles, the following is recommended with respect to the construction phase workforce accommodation for the Project:

- TED is to consider and consult on the accommodation priority hierarchy as denoted in **Table 7-14**; and
- TED is to encourage local employment as part of construction phase hiring practices, particularly for those located in the Primary AoI.

**TABLE 7-14 PRIORITISATION OF ACCOMMODATION OPTIONS**

Priority	Accommodation Option
1	<b>On-site workforce accommodation</b> – construction and operation of an on-site workforce accommodation facility within the Project Area to cater for the majority of workers anticipated to be employed during the construction phase.
2	<b>Short-term accommodation</b> – use of e.g. motels, hotels, cabins, caravan parks, and existing workforce accommodation facilities, within the Primary AoI and wider Banana Shire LGA. The intent will be to use the short-term accommodation either for contractors not associated with the main construction workforce, visiting TED employees, or for workforce overflow during peak construction periods.
3	<b>Long-term accommodation</b> – rental and/or purchase of existing housing stock within Theodore, Banana, Moura or Biloela is to be limited, and should only be considered where short-term accommodation options cannot be procured.

The prioritisation reflected in **Table 7-14** has been determined based on the following:

- The number of workers anticipated to be employed for the construction phase of the Project (i.e. between 300 and 500 workers);
- The limited number of short-term and long-term accommodation options available within the Primary AoI and wider Banana Shire LGA (i.e. 31 commercially operated short-term accommodation options);
- The extent of negative impacts likely to be experienced by the communities within the Primary AoI as a result of the using short-term and long-term accommodation option scenarios, comparative to that of the on-site workforce accommodation option; and

- The potential for cumulative impacts to impact communities as a result of the other developments within the vicinity of the Project and/or those which overlap with the Project's construction phase.

In particular, it is important to note that the recommendation provided is not an 'all-in-one' solution, but rather a prioritisation. Whilst the main recommendation is for TED to construct and operate an on-site accommodation facility that will house most of the Project's construction phase workforce, the utilisation of short-term accommodation options will allow for economic benefits to be experienced by local communities, provide flexibility for TED at times of peak construction, and reduce the exposure of local community stakeholders within the Primary AoI to some of the negative social impacts identified in the key matters assessment.

Prior to implementing these strategies however, TED is recommended to engage in further discussion with the owners/operators of the existing Banana Accommodation Village as well as the mining companies who operate within the vicinity of the Project (i.e. Anglo American). The potential to use existing accommodation villages and/or workers camps within the AoI of may also reduce the scale of the on-site workforce accommodation facility required for the Project, however this will be subject to future availability.

## 8. MANAGEMENT AND PRELIMINARY PLANNING

### 8.1 MANAGEMENT MEASUREMENTS

As per **Section 7.7** of this AOR, a prioritisation of accommodation options is recommended for the Project, with the majority of the construction workforce to be accommodated within an on-site workforce accommodation facility, with short-term accommodation options within the Primary AoI and Banana Shire LGA to be used on a limited basis.

Accordingly, in order to simultaneously minimise social impacts and maximise the social benefits for the local communities within the Primary AoI, a suite of management measures have been developed.

The management measures proposed in **Table 8-1** and **Table 8-2**, seek to provide an opportunity to encourage local employment (and thereby reduce the requirement for non-local FIFO/DIDO workers, and subsequently reduce the demand for accommodation) whilst minimising potential negative impacts for local accommodation owners within the Primary AoI.

**TABLE 8-1 MANAGEMENT MEASURES: LOCAL EMPLOYMENT**

No.	Management Measure	Timeline
1.	Host information sessions to engage with the community and local businesses who can provide inputs or services and other prospective contractors/subcontractors, regarding construction timing, workforce estimates and accommodation requirements.	Prior to construction
2.	Engage local media including radio, newspaper, and social media to advertise expressions of interest for employment or provision of services or materials.	Prior to construction
3	Engage with the local employment agencies to identify access pathways for local workers. Assess the candidate pool to determine suitable labour, trade, or other employment on the Project.	Prior to construction
4	Set up a dedicated employment opportunity platform on the Project's website [ <a href="https://au.rwe.com/projects/theodore-wind-farm/">https://au.rwe.com/projects/theodore-wind-farm/</a> ] in consultation and coordination with the Engineering, Procurement, and Construction (EPC) contractor. Relevant worker details will then be shared with the main subcontractor(s) for direct engagement through their own employment processes.	Prior to construction and during construction
5	Consult with the Banana Shire Council and Gladstone Regional Council, as well as any Business Chambers to provide their members with relevant details such as Project construction timing, workforce estimates and accommodation requirements.	Prior to construction
6	In case of short-term accommodation, implement shuttle bus services where practical to enable local workforce in the respective locations to easily commute to the Project Area. These services may discontinue depending on demand.	Prior to construction and during construction
7	Provide opportunities for local businesses to submit proposals and tenders and prioritise the use of goods and services that can be sourced locally and are competitive for price and quality.	Prior to and during construction

No.	Management Measure	Timeline
8	Encourage subcontractors to employ local workers wherever possible and reasonable.	Prior to and during construction
9	Identify positions where training would allow additional local workers to join the workforce, and encourage local workers and businesses to undertake training to provide for specialist works.	Prior to and during construction
10	Collaborate with local trade/training organisations (such as TAFE) to promote job opportunities with the Project, with enough time to give local community members with enough notice to receive training in Project related skill sets, if desired.	Prior to construction
11	Inform non-local workers about shops, cafes, recreational facilities, etc. and make access easy.	During construction

TABLE 8-2 MANAGEMENT MEASURES: ACCOMMODATION

No.	Management Measure	Timeline
1	Explore available accommodation options around the Theodore, Banana, Moura, and Biloela (i.e. Primary AoI).	Prior to construction
2	Host information sessions to engage with the community and local businesses, in order to determine who can provide inputs or services and other prospective contractors or subcontractors, regarding construction timing, workforce estimates and accommodation requirements.	Prior to construction
3	Investigate local and regional community social media options to disseminate information to local accommodation operators and rental property owners, such as construction timing, workforce estimates and accommodation requirements.	Prior to construction
4	Preparation and implementation of a Workforce Management Plan.	Prior to construction
5	Preparation and implementation of a CoC applicable to all Project workers during the construction phase	Prior to construction
6	Preparation and implementation of a Workforce Housing and Accommodation Plan	Prior to construction
7	Preparation and implementation of a Local Business and Industry Procurement Plan	Prior to construction
8	Preparation and implementation of a Health and Community Wellbeing Plan, including on how to manage traffic injuries	Prior to construction
9	The on-site workforce accommodation facility should be designed in accordance with the Banana Shire Council Planning Scheme 2021 Development Design Code and have a Waste Management Plan in place.	Prior to construction
10	Host information sessions to engage with Banana Shire Council, the community and local businesses regarding construction timing, workforce estimates and accommodation requirements.	Prior to and during construction

No.	Management Measure	Timeline
11	Consult with the Banana Shire Council and Gladstone Regional Council to minimise pressure on local resources, and to address worker influx concerns during the construction phase.	Prior to and during construction
12	Contact the local accommodation operators to provide Project information such as construction timing, workforce estimates and accommodation requirements.	Prior to and during construction
13	Provide a register of local accommodation options and contact details to contractors and subcontractors.	Prior to and during construction
14	Maintain a register of local property owners who have expressed interest in offering dwellings for rent (if this occurs in the future). Provide this register to contractors and subcontractors.	Prior to and during construction
15	Review workforce predictions every six months during construction to ensure that accommodation requirements are met in accordance with the objectives of this AOR.	Prior to and during construction
16	Identify any overlaps with peak demand periods for accommodation during the following six months and engage with key stakeholders.	Prior to and during construction
17	Maintain a register of local, regional and national workforce breakdown by company on site.	Prior to and during construction
18	Regularly consult with local property owners and accommodation providers to manage occupancy to maximise use of local accommodation, without preventing its use for major event and holiday purposes.	Prior to and during construction
19	Engage with other Project developers to mitigate potential cumulative impacts which may put additional pressure on the area.	Prior to and during construction
20	Engage with local health care, social and emergency service providers to monitor the Project's use (if any) of these facilities.	Prior to and during construction

## 8.2 PRELIMINARY WASTE MANAGEMENT PLAN

As this AOR has recommended the use of an on-site workforce accommodation facility for the Project, a preliminary Waste Management Plan (WMP) has been developed.

The on-site workforce accommodation facility forms part of the Development Application for the wind farm as it is considered an ancillary use. It is intended that this preliminary WMP will be further developed into a WMP as part of post-approval works by TED or the EPC contractor in concert with the Department of Housing, Local Government, Planning and Local Works.

### 8.2.1 LEGISLATIVE REQUIREMENTS

#### 8.2.1.1 ENVIRONMENTAL PROTECTION ACT 1994 (QLD)

The *Environmental Protection Act 1994* (EP Act) outlines the legal objectives and aims relevant to protect Queensland's environment in the context of development. Its subordinate regulation, the *Environmental Protection Regulation 2019* (QLD) (the Environmental



Regulation), seeks to define and categorise waste, handling and storage processes, and management. The EP Act and Environmental Regulation also provide a range of tools to ensure objectives are met, including a licensing system for Environmentally Relevant Activities (ERAs) and environmental protection orders.

Under the EP Act, TED has a General Environmental Duty – such that TED must not carry out any activity that causes, or is likely to cause, environmental harm unless all reasonable and practical measures to prevent or minimise the harm have been taken.

Environmental Authorities (EAs) and associated ERAs may be required to carry out proposed works as part of the Project.

#### 8.2.1.2 ESR/2015/1836 - DES APPLICATION REQUIREMENTS FOR ACTIVITIES WITH WASTE IMPACTS

Under the Environmental Regulation, a prescribed ERA may have to be applied for where a waste activity requires approval and monitoring by either Local Government or State Government due to its potential to impact the environment. This requires an EA to carry out the ERA. They relate to waste processing, burning, processing and reprocessing. As part of the Project an ERA may be required for the transport of regulated waste should these activities be undertaken by any TED designated operators.

#### 8.2.1.3 WASTE REDUCTION AND RECYCLING ACT 2011 (QLD)

The *Waste Reduction and Recycling Act 2011* (WRR Act) establishes a framework for waste management and resource recovery practices in Qld. It also serves as a function for waste control, treatments and disposals facility obligations, end of waste frameworks and codes, issuing of licenses and waste tracking requirements. The Waste Reduction and Recycling Regulation 2011 (QLD) (the 'Waste Regulation') sits under the WRR Act and includes applicable fees under the WRR Act, waste categorisation, treatment of waste, management of used packaging materials, and planning and reporting requirements.

The WRR Act also outlines provisions for 'End of Waste' under Chapter 8, promoting resource recovery opportunities with the aim to transfer waste products into valued resources. The Act includes End of Waste codes and approvals for waste that can be approved as a resource if the department considers that it meets the specified criteria for its specific use. The Project could potentially benefit from these End of Waste Codes (e.g. for concrete) (Business Queensland, 2024).

#### 8.2.1.4 NATIONAL WASTE POLICY 2018 (CWTH)

The National Waste Policy 2018 outlines a framework for collective action by business, governments, communities and individuals until 2030. The policy aims to respond to the challenges facing waste management and resource recovery in Australia, enabling shifts towards a circular economy particularly in waste management, and provides a framework for business to embrace innovation and develop technologies and create new opportunities. It also incorporates Australia's international obligations, supporting Australia's engagement in the United Nations' Sustainable Development Goal 12 on responsible construction and production.

The Project will utilise the National Waste Policy 2018 to assist in implementing waste management principles. These include:

- Avoiding waste;
- Improving resource recovery;
- Increasing the use of recycled materials; and
- Better management of material flows to benefit human and environmental health.

#### 8.2.1.5 NATIONAL ENVIRONMENT PROTECTION COUNCIL ACT 1994 (CWTH)

The movement of controlled waste is also regulated by the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998 (Cwth) (the 'NEPM Regulation'), made under the *National Environment Protection Council Act 1994* (NEPC Act).

The NEPC Act, and in particular the NEPM Regulation, assist the Project in achieving the desired environmental outcomes so that controlled wastes are properly identified, transported, and otherwise handled in ways that are consistent with environmentally sound practices for the management of these wastes.

#### 8.2.1.6 WORK HEALTH AND SAFETY ACT 2011 (QLD)

The *Work Health and Safety Act 2011* (WHS Act) and the associated regulation Work Health and Safety Regulation 2011 (Qld) (the 'WHS Regulation'), restricts the use of hazardous substances and dangerous goods.

TED is required to ensure that the relevant provisions of the Work Health and Safety Act 2011 are acted upon, as applicable, to the extent of employees/workers engaged during the pre-construction, construction and operation phases of the Project.

#### 8.2.1.7 BANANA SHIRE WASTE MANAGEMENT MASTERPLAN

Banana Shire Council has identified waste management infrastructure as a strategic priority for the community. The purpose of the Banana Shire Waste Management Masterplan (Banana Shire 2024c) is to create a comprehensive plan of action for the next 15 years to provide the community with sustainable waste management services. Council provides kerbside collection of general waste in bins for all townships. In addition to this, there are eight Council-owned waste transfer stations and three landfills within the Shire.

The Project will align its waste strategy with the relevant local waste plans so that there is consistency with all levels of legislation.

Additionally, be referred to [Appendix A](#) for the Banana Shire Development Design Code, for which provisions have been considered.

### 8.2.2 WASTE STREAMS

For the WMP, the main waste streams identified for an on-site workforce accommodation facility are likely to comprise the following:

- Solid waste (food packaging, containers);
- Wastewater (from showers, toilets); and
- Hazardous waste (chemicals, used materials).

The Project may follow the principles of the waste hierarchy:

### **1. Avoid and Reduce**

- Reducing waste by minimising scope of activities which create waste where possible;
- The purchasing and utilisation of products that are recycled, recyclable, repairable, refillable, re-usable or biodegradable;
- Developing and implementing systems to identify, quantify and monitor waste generation;
- Implementing office/administrative sustainability measures by making choices that pertain to sustainable energy and resource efficient goods and equipment;
- Ordering goods in bulk to minimise packaging waste and develop contract conditions and/or arrangements with suppliers to reduce the quantity of packaging materials supplied with building materials and return of packaging materials to the supplier;
- Arrangements made with suppliers to return any construction materials not used; and/or
- Training staff to avoid and reduce waste.

### **2. Reuse**

- Beneficially reuse materials, and if required, utilise treatment to achieve compliance with environmental standards;
- Fostering conditions which facilitate the recovery of materials for reuse and segregation of materials for recycling;
- Reusing material where practicable;
- Training staff to identify opportunities to reuse materials.

### **3. Recycle and Compost**

- Collection of materials and transport to recycling plants;
- Provision of recycling facilities for general rubbish, including glass, plastic, waste paper and metals, using colour coded bins;
- Composting materials where appropriate; and/or
- Segregation of waste materials by type to facilitate resource recovery efforts.

### **4. Recovery**

- Recovery of fuel and energy where applicable;
- Recovery of fixtures such as lights and other electrical fittings, doors, toilets, windows, and sheds through sales and/or charity organisations; and/or
- Engaging external specialist consultants to identify opportunities for resource recovery.

### 8.2.3 ON-SITE STORAGE OF WASTE

General on-site storage of waste will conform to the following requirements:

- General waste and recyclables will be disposed of in containers or bins and collected on a regular basis;
- Facility areas will be free of litter and good standards of housekeeping will be maintained throughout construction. Regular inspections will be undertaken to ensure a high standard is maintained;
- Waste classified as 'regulated waste' will be securely handled and stored in accordance with the Project and legislative requirements;
- Waste fuel, oils and other hazardous chemicals will be stored in well ventilated, bunded areas prior to removal by licensed waste contractors.

### 8.2.4 SEWAGE TREATMENT

Subject to furthered engineering investigations, sewage infrastructure is to be connected to the existing network, where possible. If this is not possible, on-site sewage treatment will be required.

Wastewater generated through construction would include grey water and sewage from site amenities and washdown water used for vehicles and equipment. Management of these impacts will be outlined in the Operational Management Plan for surface and groundwater, particularly as this water could also include low levels of contaminants such as hydrocarbons/oils, diesel, detergents, cleaning fluids and sediment.

Stormwater, run-off from dust suppression and washdown water is likely to be generated from construction areas. This water would be captured in sediment control devices and construction retention ponds or tanks. Further detail in relation to sediment control devices will be included in an erosion and sediment control plan for the construction phase of the Project.

## 8.3 POTABLE WATER

Subject to furthered engineering investigations, potable water will be supplied to the on-site workforce accommodation facility either through connection to the existing water supply network, or through independent delivery of potable water via a service contractor.

TED will prepare a Potable Water Strategy for the on-site workforce accommodation facility. The key principles to be adopted are associated with efficient water use and management, and comprise:

- Compliance with local regulations;
- Protocols for sanitation, storage, and hygiene;
- Prioritisation of hydration for worker wellbeing (e.g. provide easily accessible water stations with clean containers; educate workers on water hygiene, etc.); and
- Contingency planning for emergencies and shortages.

## 9. REFERENCES

- ABC News 2023, *Queensland has eight coal-fired power stations. What's their future?* - ABC News, viewed 4 September 2024, <<https://www.abc.net.au/news/2022-06-12/queensland-coal-fired-power-stations/101143552>>.
- Australian Bureau of Statistics 2024a, *2021 census community profiles – Gladstone*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 Gladstone, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024b, *2021 census community profiles – Banana*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 Banana, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024c, *2021 census community profiles – Biloela*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 Biloela, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024d, *2021 census community profiles – SA130804152801*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 30804152801, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024e, *2021 census community profiles – Theodore*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 Theodore \(L\), Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024f, *2021 census community profiles – Moura*, Australian Bureau of Statistics, viewed 4 September 2024, <[2021 Moura, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024g, *2021 census community profiles – Banana, Suburbs and Localities*, Australia Bureau of Statistics, viewed 4 September 2024, <[2021 Banana, Census All persons QuickStats | Australian Bureau of Statistics \(abs.gov.au\)](#)>.
- Australian Bureau of Statistics 2024h, *2021 census community profiles – 31902150815*, Australia Bureau of Statistics, viewed 4 September 2024, <<https://www.abs.gov.au/census/find-census-data/quickstats/2021/31902150815>>.
- Banana Shire 2024a, *Planning Scheme*, Banana Shire, viewed 4 September 2024, <<https://www.banana.qld.gov.au/council-services/planning-and-development/planning-scheme>>.
- Banana Shire 2024b, *Renewable Energy Projects*, Banana Shire, viewed 4 September 2024, <<https://www.banana.qld.gov.au/renewable-energy-projects>>.
- Banana Shire 2024c, *Waste Management Masterplan*, viewed 4 September 2024, <<https://www.banana.qld.gov.au/homepage/317/waste-management-masterplan>>.
- Business Queensland, 2024, *End of Waste Codes*, viewed 4 September 2024, <<https://www.business.qld.gov.au/running-business/environment/waste-management/regulated-waste/eow-codes>>
- Queensland Government Open Data Portal, *Road Crash Locations January 2001 to 31 May 2023*, viewed 14 December 2023, <<https://www.data.qld.gov.au/dataset/crash-data-from-queensland-roads/resource/e88943c0-5968-4972-a15f-38e120d72ec0>>

- Queensland Government State Development, Infrastructure, Local Government and Planning 2023, *Planning Guidance, State code 23: Wind Farm development*, viewed 4 October 2023, <[https://planning.statedevelopment.qld.gov.au/\\_\\_data/assets/pdf\\_file/0027/83178/for-consultation-draft-planning-guidance-state-code-23-wind-farm-development.pdf](https://planning.statedevelopment.qld.gov.au/__data/assets/pdf_file/0027/83178/for-consultation-draft-planning-guidance-state-code-23-wind-farm-development.pdf)>.
- Queensland Department of Energy and Public Works 2022, *Queensland Energy and Jobs Plan, Queensland Government*, viewed 4 October 2023, <[https://media.epw.qld.gov.au/files/Queensland\\_Energy\\_and\\_Jobs\\_Plan.pdf](https://media.epw.qld.gov.au/files/Queensland_Energy_and_Jobs_Plan.pdf)>.
- TED Theodore Community & Stakeholder Engagement Plan (CSEP), 2023.
- SGS Economics & Planning 2024, *Rental Affordability Index*, 4 September 2024, <<https://sgsep.com.au/projects/rental-affordability-index>>.
- SQM Research 2024a, *Residential Vacancy Rates Theodore*, SQM Research, viewed 4 Sept 2024, <[https://sqmresearch.com.au/graph\\_vacancy.php?postcode=4719&t=1](https://sqmresearch.com.au/graph_vacancy.php?postcode=4719&t=1)>.
- SQM Research 2024b, *Residential Vacancy Rates Moura*, SQM Research, viewed 4 October 2024, <[https://sqmresearch.com.au/graph\\_vacancy.php?postcode=4718&t=1](https://sqmresearch.com.au/graph_vacancy.php?postcode=4718&t=1)>.
- SQM Research 2024c, *Residential Vacancy Rates Theodore*, SQM Research, viewed 4 Sept 2024, <[https://sqmresearch.com.au/graph\\_vacancy.php?postcode=4715&t=1](https://sqmresearch.com.au/graph_vacancy.php?postcode=4715&t=1)>.



## APPENDIX A BANANA SHIRE PLANNING SCHEME: DEVELOPMENT DESIGN CODE



**Table 6.2.3 For assessable development**

Performance Outcomes
<b>Rehabilitation</b>
<b>PO12</b> Disused storage tanks are decommissioned in accordance with current Australian Standards. and <b>PO13</b> Following cessation of the service station: <ul style="list-style-type: none"> <li>(a) all disused buildings, enclosures and infrastructure are removed from the site;</li> <li>(b) contaminated soil is remediated or removed from the land;</li> </ul>

## 6.3 Other Development Codes

### 6.3.1 Development Design Code

#### 6.3.1.1 Application

This code applies to assessing a material change of use, reconfiguring a lot or operational works where the code is identified as an assessment benchmark in the Categories of Assessment Table. When using this code, reference should be made to Section 1.6.1.

#### 6.3.1.2 Purpose

- (1) The purpose of this code is to provide for:
  - (a) the efficient supply of non-trunk development infrastructure that supports the intended use of the site, integrates with existing networks and maintains or enhances the environment, public safety and visual amenity;
  - (b) the control of operational works;
- (2) The purpose of the Code will be achieved through the following overall outcomes:
  - (a) infrastructure services development in a cost-effective, safe, efficient and co-ordinated manner to a standard ordinarily expected in the locality;
  - (b) development is planned, designed, constructed and operated to manage stormwater and wastewater in ways that protect environmental values and achieve water quality objectives;
  - (c) safe and functional transport networks meet the reasonable demands generated by development;
  - (d) development is serviced by a suitable standard of vehicle access, parking, servicing and manoeuvring areas that enhance streetscape appeal and character and discourage crime and anti-social behaviour;
  - (e) landscaping enhances visual amenity, integrates the built and natural environments, maximises water efficiency, minimises soil loss, provides shade in large paved areas and does not adversely impact on infrastructure;
  - (f) filling or excavation maintains the safety, amenity and health of the community and environment;
  - (g) infrastructure responds to the environmental constraints and avoids or safely manages the adverse impacts of floodwaters to mitigate the effects of a natural hazard event;
  - (h) generated waste is stored in an environmentally friendly and nuisance free manner;

#### 6.3.1.3 Requirements for accepted development or assessment benchmarks

**Table 6.3.1 For accepted development**

Acceptable Outcomes
<b>Filling and excavation</b>
<b>AO1.1</b> Earthworks do not result in any change beyond the property boundaries to: <ol style="list-style-type: none"> <li>(a) the path of overland water flow or where floodwater enters or exits the property; and</li> <li>(b) the flow velocity of water off-site; and</li> <li>(c) the flooded area off-site; and</li> <li>(d) the flood height off-site;</li> </ol> and <b>AO1.2</b> A retaining wall is set back at least half the height of the wall from any boundary of the site. and

**Table 6.3.1 For accepted development**

Acceptable Outcomes
<p><b>AO1.3</b> Retaining walls over 1.5m are stepped a minimum depth of 0.75m for every 1.5m in height, and landscaped.</p> <p>and</p> <p><b>AO1.4</b> The fill material comprises any of the following:</p> <ul style="list-style-type: none"> <li>(a) soil or earth;</li> <li>(b) rocks less than 150mm diameter;</li> <li>(c) sand;</li> <li>(d) gravel; or</li> <li>(e) other clean, inert material free of organic, putrescible or refuse material;</li> </ul> <p>and</p> <p><b>AO1.5</b> Works occur in accordance with AS3798 Guidelines on Earthworks for Commercial and Residential Developments.</p> <p>and</p> <p><b>AO1.6</b> Contaminated material is not used for filling purposes.</p> <p>and</p> <p><b>AO1.7</b> There is no filling or excavation on land included on the Contaminated Land Register or Environmental Management Register under the <i>Environmental Protection Act 1994</i>.</p> <p>or</p> <p><b>AO1.8</b> Filling or excavation on land included in the Contaminated Land Register or Environmental Management Register occurs in accordance with an approved site management plan or disposal permit issued under the <i>Environmental Protection Act 1994</i>.</p> <p>and</p> <p><b>AO1.9</b> Dust emissions and other air emissions stay within the site boundaries in accordance with a management plan detailing measures such as:</p> <ul style="list-style-type: none"> <li>(a) water spraying of exposed areas (where in accordance with an erosion and sediment control plan);</li> <li>(b) placing of protective coverings or sealing of exposed earthworks; and</li> <li>(c) installation of wind barriers;</li> </ul> <p>and</p> <p><b>AO1.10</b> Haul routes used for transportation of fill or excavated material to or from the site avoid land included in a Residential Zone where possible and are otherwise the most direct routes via the highest order roads.</p> <p>and</p> <p><b>AO1.11</b> Filling or excavation operations occur only between 7am to 6pm Monday to Saturday.</p>
Vehicular access and driveway crossovers
<p><b>AO2.1</b> For a caretaker's accommodation, dual occupancy, dwelling house or home-based business a vehicular access and driveway crossover provides a single access to the property.</p> <p>and</p> <p><b>AO2.2</b> In all circumstances, a vehicular access and driveway crossover:</p> <ul style="list-style-type: none"> <li>(a) is not on a bend in the road of more than 45 degrees;</li> <li>(b) is designed and constructed in accordance with the relevant sections of the CMDG;</li> <li>(c) is separated from an intersection by a minimum of 10m;</li> <li>(d) is separated from any street signage, street trees, power poles, street lights, manholes, stormwater gully pit transitions, or other Council asset by a minimum of 1m;</li> <li>(e) does not front a car parking bay or bus stop;</li> <li>(f) does not require any change to the level of the existing footpath or verge profiles;</li> </ul>
Note: Council approval is required for minor works on road reserves.
On-site parking and movement
<p><b>AO3.1</b> The number of parking spaces provided for the use is consistent with Table 7.3.3 - Vehicle parking rates.</p> <p>and</p> <p><b>AO3.2</b> Parking spaces comply with the requirements of AS/NZS 2890.1-2004.</p> <p>and</p> <p><b>AO3.3</b> The development design allows service and collection vehicles to enter and exit in a forward gear with a maximum of 3 on-site manoeuvres. The use of staff car parking areas to accommodate internal manoeuvring is permissible.</p>

**Table 6.3.1 For accepted development**

Acceptable Outcomes
Landscaping
<p><b>AO4.1</b> Landscaping within 6m of an intersection has a maximum mature height of 500mm. and</p> <p><b>AO4.2</b> Landscaping along all road frontages has either a maximum height of 0.5m or a minimum clear trunk height of 1.5m at maturity, except as required by AO4.1. and</p> <p><b>AO4.3</b> Non-residential development that adjoins a sensitive land use or land in a residential zone provides a 3m wide landscaped buffer along all adjoining land boundaries. and</p> <p><b>AO4.4</b> Landscaping is provided along the street frontage of car parking areas and includes one shade tree, or alternative shade structure, for every 8 parking spaces, distributed evenly throughout such areas. and</p> <p><b>AO4.5</b> Landscaping is clear of any separation areas established by utility service providers. and</p> <p><b>AO4.6</b> Plant species for landscaping include acceptable species identified in Schedule 5.3.</p>
Street lighting and street signs
<p><b>AO5.1</b> Street lighting is provided in accordance with the relevant parts of the CMDG. and</p> <p><b>AO5.2</b> Street signs are provided for all new roads in accordance with the relevant parts of the CMDG.</p>
Water supply infrastructure
<p><b>If in a water supply area</b></p> <p><b>AO6.1</b> The premises is connected to the reticulated water supply system in accordance with Table 7.3.4 - Provision of Infrastructure. and</p> <p><b>AO6.2</b> The design and construction of the water distribution network is in accordance with the relevant parts of the CMDG. and</p> <p><b>AO6.3</b> The installation of water meters occurs in accordance with the relevant parts of the CMDG.</p> <p><b>If outside a water supply area</b></p> <p><b>AO6.4</b> The premises connect to an on-site water supply with a minimum capacity of 45kL that meets the accepted quality for drinking water. and</p> <p><b>AO6.5</b> A separate storage system that permanently holds a minimum of 5,000L (e.g. dam, swimming pool, or water tank) is located within 50m of new buildings, exclusively for firefighting purposes.</p>
Sewerage infrastructure
<p><b>If in a reticulated sewerage area</b></p> <p><b>AO7.1</b> The premises connect to the Council's reticulated sewerage system in accordance with Table 7.3.4 - Provision of Infrastructure. and</p> <p><b>AO7.2</b> The design and construction of the reticulated sewerage system is in accordance with the relevant parts of the CMDG.</p> <p><b>If outside a reticulated sewerage area</b></p> <p><b>AO7.3</b> The provision of on-site sewerage facilities is in compliance with:</p> <ul style="list-style-type: none"> <li>(a) the Plumbing and Drainage Act 2002;</li> <li>(b) the Queensland Plumbing and Wastewater Code; and</li> <li>(c) AS/NZS 1547:2000 On-site domestic Wastewater Management;</li> </ul>
Stormwater drainage
<p><b>AO8.1</b> Stormwater and irrigation runoff diverts to a wet retention and sedimentation pond that:</p> <ul style="list-style-type: none"> <li>(a) provides permanent retention for first flush capture equivalent to the amount of runoff occurring during a 1%AEP storm event over a period equal to the time of concentration plus five minutes;</li> <li>(b) provides a permanent retention component for first flush capture of suspended matter;</li> <li>(c) retains for a period of not less than 24 hours;</li> </ul> <p>and</p> <p><b>AO8.2</b> Uses and associated works are confined to areas outside overland flow paths and natural drainage features.</p>

**Table 6.3.1 For accepted development**

Acceptable Outcomes	
and	
<b>AO8.3</b>	The provision of stormwater drainage, including inter-allotment drainage and subsurface drainage is in accordance with the <i>CMDG</i> and the <i>Queensland Urban Drainage Manual (QUDM)</i> .
and	
<b>AO8.4</b>	There is no increase in the volume, frequency, duration and velocity of stormwater at the premises boundaries.
and	
<b>AO8.5</b>	Overland flow paths cater for the water from a 1 per cent AEP storm event.
and	
<b>AO8.6</b>	Stormwater flows are directed away from areas of exposed soil.
and	
<b>AO8.7</b>	Soil exposure and construction works are staged to minimise the area of exposed soil at any one time.
and	
<b>AO8.8</b>	Exposed soil areas are effectively stabilised preceding any predicted rainfall, before the removal of sediment control controls and at the completion of construction.
and	
<b>AO8.9</b>	Where involving exposure of soil of more than 2,500m <sup>2</sup> :
	(a) prepare a sediment and erosion control plan for Council approval; and
	(b) implement the requirements of the approved plan;
and	
<b>AO8.10</b>	All discharged waters are free from gross pollutants, litter, oils or chemical contaminants.
Waste	
<b>AO9.1</b>	On-site waste storage areas are:
	(a) located no closer than 5m to any site boundary;
	(b) segregated from the site's stormwater drainage;
	(c) provided with an impervious base that is drained to an approved waste disposal system;
	(d) provided with a dedicated hose cock; and
	(e) enclosed on 3 sides to a minimum height of 0.2m above the height of the waste bins;
and	
<b>AO9.2</b>	All organic food waste is composted or provided to a facility specifically dedicated to the transformation of organic waste to energy.
and	
<b>AO9.3</b>	Vegetation that is removed to accommodate the development is mulched on-site.
and	
<b>AO9.4</b>	No waste is to be burned on the development site.
and	
<b>AO9.5</b>	Non-organic waste that is recyclable is separated and disposed of to an approved facility or provider.
and	
<b>AO9.6</b>	Trade waste discharge to Council's reticulated sewerage system is in accordance with Council's adopted Trade Waste Policy.
and	
<b>AO9.7</b>	Contaminants, including contaminated water, are not directly or indirectly released from the premises except as approved by an administering authority.

**Table 6.3.2 For assessable development**

Performance Outcomes	
Vehicular access and driveway crossovers	
<b>PO1</b>	Access arrangements protect the efficient functioning of the transport network and provide safe access to development in direct response to the demonstrated demand of the development.
and	
<b>PO2</b>	There is no damage to or interference with the location, function or access to any utility infrastructure.

**Table 6.3.2 For assessable development**

<b>Performance Outcomes</b>	
<b>Filling and excavation</b>	
<b>PO3</b>	Any off-site impact from earthworks is minimised and acceptable having regard to: (a) the environment in which the earthworks are located; (b) the measures proposed to mitigate any off-site impact; (c) any compensation measures for an impact that are proposed by the applicant;
and	
<b>PO4</b>	The earthworks are safe and stable
and	
<b>PO5</b>	Community safety is ensured in the event that Category 3 earthworks fail.
and	
<b>PO6</b>	Retaining walls protect the visual amenity of development on adjoining premises.
and	
<b>PO7</b>	Fill material provides support for the proposed development in accordance with certified geotechnical engineering requirements.
and	
<b>PO8</b>	Filling or excavation does not result in the contamination of land or water bodies, wetlands and waterways.
and	
<b>PO9</b>	Filling or excavation does not cause environmental nuisance impacts.
<b>Roads</b>	
<b>PO10</b>	Road infrastructure is: (a) of a width and standard as detailed in Table 6.3.4 - Provision of Infrastructure; or (b) of a width and standard as detailed in an infrastructure agreement; and (c) designed and constructed in accordance with the relevant part of the CMDG;
<b>On-site parking and movement</b>	
<b>PO11</b>	The development provides car parking spaces to accommodate the demonstrated demand generated by the use.
and	
<b>PO12</b>	The site provides safe and convenient movement areas for pedestrians and persons in wheelchairs.
and	
<b>PO13</b>	The movement of vehicles on to and from the site does not create a traffic hazard.
and	
<b>PO14</b>	Vehicle parking areas protect the character of surrounding development.
<b>Landscaping</b>	
<b>PO15</b>	Landscaping does not interfere with motorists' sightlines.
and	
<b>PO16</b>	Landscaping provides buffering and screening, shades activity areas and allows casual surveillance of the street.
and	
<b>PO17</b>	Landscaped areas with species selected to suit the streetscape are provided adjacent to all road frontages (excluding crossover and pedestrian access).
and	
<b>PO18</b>	Landscaping provides shading for the majority of spaces in outdoor parking areas.
and	
<b>PO19</b>	Landscaping does not pose a potential risk to the ongoing operation of public infrastructure.
<b>PO20</b>	Plant species used in landscaping are suited to the local climate and proposed purpose and do not increase the risk of pest species infestation. Editor's Note: Schedule 5.3 provides assistance in the selection of suitable species.
and	
<b>PO21</b>	Existing native vegetation that already contribute to these requirements are retained where their removal is not required to site the use.
<b>Street lighting and street signs</b>	
<b>PO22</b>	If reconfiguring a lot –street lighting is provided to meet public safety needs in compliance with Australian best practice standards, methodology and design.

**Table 6.3.2 For assessable development**

<b>Performance Outcomes</b>
and <b>PO23</b> If reconfiguring a lot – street signage identifies street names in compliance with Australian best practice standards, methodology and design.
<b>Water supply infrastructure</b>
<b>If in a water supply area</b> <b>PO24</b> The reticulated water supply has sufficient capacity and water quality to meet the development demand for potable use, operational use and emergency purposes without interfering with supply to existing development.
and <b>PO25</b> The installation and location of water meters allows lawful access by the relevant authority.
<b>If outside a water supply area</b> <b>PO26</b> A water supply is provided to meet the development demand of the intended use.
<b>Sewerage infrastructure</b>
<b>If in a reticulated sewerage area</b> <b>PO27</b> The reticulated sewerage has sufficient capacity to meet the development demand of the proposed use without interfering with supply to existing development.
<b>In all circumstances</b> <b>PO28</b> The disposal of effluent and other wastewater protects public health and safety and the environment.
<b>Developments accessed by common private title</b>
<b>PO29</b> Development is located on streets where fire hydrants are provided at no more than: (a) 90m intervals for non-residential streets; or (b) 120m intervals for residential streets; and (c) at each street intersection; or <b>PO30</b> Development provides internal fire hydrants at intervals no less than as identified in PO29.
and <b>PO31</b> Fire hydrants are identified by reflective blue road surface markers or reflective marker posts.
and <b>PO32</b> Road access minimum clearances of 3.5m width and 4.8m height are provided.
<b>Stormwater drainage</b>
<b>PO33</b> Stormwater drainage: (a) detains, collects, reuses or otherwise manages stormwater without adversely affecting upstream or downstream premises; (b) directs stormwater to one or more legal points of discharge or to downstream properties, subject to the consent of the affected landowners; (c) protects the efficiency of downstream drainage; (d) protects and maintains environmental values and quality of downstream water by removing or reducing sediment, nutrients and other pollutants; and <b>PO34</b> Development has no significant impact on the concentration or discharge rate of surface water flows from a development site.
and <b>PO35</b> Works effectively control onsite erosion and the release of sediment or sediment-laden stormwater from the site.
and <b>PO36</b> Works do not result in an increased risk to people and property from the effects of stormwater drainage or containment structure failure.
<b>Parks</b>
<b>PO37</b> The design and construction of parks and park infrastructure is in accordance with current Australian standards.
and <b>PO38</b> No land is dedicated open space recreation parkland that is subject to inundation during a 2% AEP rainfall event.

**Table 6.3.2 For assessable development**

Performance Outcomes
<b>Waste</b>
<p><b>PO39</b> Waste generated by the development is collected and stored in a manner that:</p> <ul style="list-style-type: none"> <li>(a) prevents the intrusion of vermin;</li> <li>(b) does not create an odour nuisance;</li> <li>(c) contains all litter and refuse;</li> <li>(d) is kept clean;</li> <li>(e) screens the storage area and waste receptacles from view from external to the site;</li> <li>(f) does not result in any contamination of the environment;</li> </ul> <p>and</p> <p><b>PO40</b> The development utilises waste management systems that promote recycling, reuse and reduction of waste being disposed of to landfill.</p> <p>and</p> <p><b>PO41</b> The discharge of trade waste protects:</p> <ul style="list-style-type: none"> <li>(a) the health and safety of people working in and around the sewerage system;</li> <li>(b) receiving environments from harmful substances;</li> <li>(c) the sewerage treatment plants and sewage systems from damage from harmful substances;</li> <li>(d) assists treatment plants to process sewage and produce recycled water and bio-solids of a guaranteed quality;</li> </ul>

**Table 6.3.3 Vehicle parking rates**

Development	Parking space rate	Service vehicle provision
Agriculture supplies store	1 per 25m <sup>2</sup> GFA	1 AV
Animal keeping	1 per employee plus 5 additional	1 SRV
Aquaculture, Intensive animal industry, Intensive horticulture, Renewable energy facility	1 per employee	No rate specified
Bulk landscape supplies	1 per 200m <sup>2</sup> of total use area with a minimum of 5 spaces	1 HRV
Caretaker's residence	1	Nil
Car wash	1 per 2 wash bays	No rate specified
Cemetery	30 plus one 1 per 2 employees	Nil
Child care centre	1 per 5 children	Nil
Club	No rate specified	1 SRV
Community care centre	No rate specified	Nil
Community residence	2	Nil
Community use, Food and drink outlet, Function facility, Hotel	1 per 20m <sup>2</sup> GFA	1 SRV
Dual occupancy, Dwelling house	2 per dwelling; may be provided in tandem	Nil
Dwelling unit	1 per 1 or 2 bedroom unit; 2 for each unit of 3 or more bedrooms	Nil
Educational establishment	Pick-up/drop-off (2minutes max) – 20% of short term supply Short-term (15 minutes max) – 1 per 15 students Long-term (staff/visitor) – 0.7 per staff member Preparatory/special education – 1 per 8-10 students	1 SRV
Emergency services	No rate specified	No rate specified
Environment facility	No rate specified	No rate specified
Extractive industry	No rate specified	No rate specified
Funeral parlour, Place of worship	0.3 per each square metre of GFA	1 SRV
Garden centre, Wholesale nursery	1 per 100m <sup>2</sup> of use area open to the public	1 HRV



**Table 6.3.3 Vehicle parking rates**

Development	Parking space rate	Service vehicle provision
Hardware and trade supplies	1 per 50m <sup>2</sup> GFA	Up to 500m <sup>2</sup> GFA – 1 HRV; 500m <sup>2</sup> – 1,999m <sup>2</sup> GFA – 1 AV; otherwise – no rate specified
Health care service	5 for each practitioner	1 ambulance space if more than 2 practitioners
High impact industry, Low impact industry, Medium impact industry, Service industry, Special industry	1 space per employee plus one 1 per 100m <sup>2</sup> GFA	Up to 500m <sup>2</sup> GFA – 1 HRV; 500m <sup>2</sup> – 1,999m <sup>2</sup> GFA – 1 AV; otherwise – no rate specified
Home-based business	1 per non-resident employee plus 1 customer space	Nil
Hospital	1 per 4 beds, plus 1 per 2 employees, plus 1 per staff doctor	1 ambulance space
Indoor sport and recreation	No rate specified	No rate specified
Market	8 per 100m <sup>2</sup> of stall area (excluding access paths)	Nil
Motor sport facility	No rate specified	No rate specified
Multiple dwelling	1 per 1 and 2 bedroom dwelling, 2 for each dwelling with 3 or more bedrooms and 1 visitor space for every 5 dwelling of developments of 5 or more dwellings	1 SRV where more than 10 units
Nature-based tourism	1 per cabin/site plus 1 per manager	Nil
Office, Sales office	1 space per 30m <sup>2</sup> GFA	No rate specified
Outdoor sales	1 space per 150m <sup>2</sup> of total use area	No rate specified
Outdoor sport and recreation	No rate specified	No rate specified
Relocatable home park, Retirement facility	1 per dwelling unit site, plus 1 visitor space for every 5 dwelling unit sites where development contains 5 or more dwelling sites	No rate specified
Residential care facility	1 space per 10 beds, plus 1 visitor space per 2 beds, plus 1 per 2 employees	No rate specified
Rooming accommodation	0.5 per bedroom, plus 0.25 visitor spaces per bedroom, plus 1 per manager	Nil
Rural industry, Winery	2 spaces plus 1 space per 100m <sup>2</sup> of GFA	No rate specified
Rural workers' accommodation	No rate specified	No rate specified
Service station	2 plus one 1 space per 25m <sup>2</sup> GFA	1 AV
Shop	1 space per 20m <sup>2</sup> total use area	Up to 500m <sup>2</sup> GFA – 1 HRV; 500m <sup>2</sup> – 1,999m <sup>2</sup> GFA – 1 AV; otherwise – no rate specified
Shopping centre, Showroom	1 space per 50m <sup>2</sup> total use area	Up to 500m <sup>2</sup> GFA – 1 HRV; 500m <sup>2</sup> – 1,999m <sup>2</sup> GFA – 1 AV; otherwise – no rate specified
Short-term accommodation	1 space per unit plus 50% of the requirement for each ancillary use	1 SRV
Theatre	2 per 5 seats	No rate specified
Tourist park	1 per dwelling unit site, plus 1 visitor space for every 10 dwelling unit sites	1 SRV

**Table 6.3.3 Vehicle parking rates**

Development	Parking space rate	Service vehicle provision
Transport depot	No rate specified	No rate specified
Veterinary services	5 per practitioner	1 SRV
Warehouse	1 per 200m <sup>2</sup> of total use area	1 HRV
Wholesale nursery		
Winery		

**Table 6.3.4 Provision of infrastructure**

Zone	Roads			Off-street car parking	Water reticulation	Sewerage reticulation
	Width	Kerb & channel	Seal	Seal		
General Residential	Refer to CMDG	Yes	Yes	Yes	Yes	Yes
Centre		Yes	Yes	Yes	Yes	Yes
Recreation & Open Space		No	No	Yes	No, except for Banana, Baralaba and Thangool	No
Environmental Management & Conservation	Refer to the Rural Design Criteria in the CMDG	No	Refer to the Rural Design Criteria in the CMDG	No	No	No
Industry	Refer to CMDG	Yes	Yes	Yes	Yes	Yes
Special Industry		Yes	Yes	Yes	As per surrounding development	
Community Facilities		As per surrounding development				
Mixed Use	Refer to the Urban Design Criteria in the CMDG	Yes	Yes	Yes	Yes	Yes
Rural	Refer to CMDG	No	Refer to CMDG	No	No	No
Rural Residential		Yes	Yes	Yes	As per surrounding development	
Township		Yes	Yes	Yes	No, except for Banana, Baralaba and Thangool	No

## 6.3.2 Reconfiguring a Lot Code

### 6.3.2.1 Application

This code applies to assessing reconfiguring a lot where the code is identified as an assessment benchmark in the Categories of Assessment Table. When using this code, reference should be made to Section 1.6.1.



ERM HAS OVER 160 OFFICES ACROSS THE FOLLOWING  
COUNTRIES AND TERRITORIES WORLDWIDE

Argentina	The Netherlands
Australia	New Zealand
Belgium	Peru
Brazil	Poland
Canada	Portugal
China	Puerto Rico
Colombia	Romania
France	Senegal
Germany	Singapore
Ghana	South Africa
Guyana	South Korea
Hong Kong	Spain
India	Switzerland
Indonesia	Taiwan
Ireland	Tanzania
Italy	Thailand
Japan	UAE
Kazakhstan	UK
Kenya	US
Malaysia	Vietnam
Mexico	
Mozambique	

**ERM's Brisbane Office**

Level 9  
260 Queen Street  
Brisbane, Qld 4000  
T +61 7 3839 8393  
F +61 7 3839 8381

**[www.erm.com](http://www.erm.com)**